The Brains of the Air Force: Laurence Kuter and the Making of the United States Air

Force

Dissertation

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By

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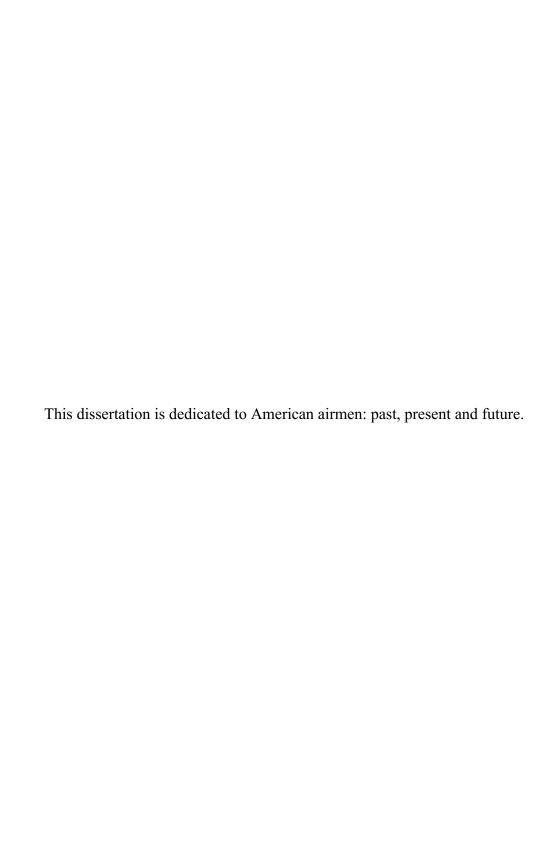
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Abstract

This study examines the establishment of the United States Air Force as an independent service, through the lens of General Laurence Kuter. Covering from his birth through the end of the Second World War, it yields five observations. First, Laurence "Larry" Kuter played an unappreciated role in shaping the United States Air Force and its antecedents. Second, the Air Corps Tactical School's impact on its students was likely minimal, but the school's impact on its faculty—particularly its most junior members was almost inestimable. Third, fighter pilots dominated the senior ranks of the Air Force and its antecedents from the Interwar Period through well into the 1950s. Fourth, the Army's interwar personnel policies had disproportionately negative impacts on Air Corps development, but very positive impacts on Kuter's career. The effects of those policies, combined with the massive army air corps/army air forces expansion from 1939 through 1944, provided a greater justification for service independence than strategic bombing did. Finally, the first major war that the Air Force fought, wherein it had reasonably full control over the selection and professional development of its people, all the way up to its senior leaders, was the First Gulf War in 1991.



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Chapter 1: Introduction—the Forgotten General

Studying General Laurence Sherman "Larry" Kuter's life and career provides insights into one of the U.S. Air Force's more influential early leaders, and by extension the service that he helped to organize, build and lead. His career timing (including his time as a West Point cadet, from 1923 through 1962—the interwar period, the Second World War, the Berlin Airlift, the Korean War and the Eisenhower and early Kennedy eras), the positions he held (as an interwar bomber advocate, prewar mobilization planner, wartime air strategist and commander, and Cold War commander of diverse commands), his role in advocating and planning for an independent air force, his record of successfully centralizing command and control of airpower, and the doctrines he promulgated all deserve greater scrutiny. No scholar or popular author has closely studied Kuter's career, despite the substantial manuscript collection he donated to the Air Force Academy. This dissertation seeks to fill in historiographical gaps regarding Kuter's life and career, as well as the independent air force he helped to establish and lead during its formative years.

Career Summary

Airpower historian Philip Meilinger calls Laurence Kuter "one of the more accomplished air planners and staff officers in Air force history." This is only partially correct; he was a highly successful commander, too. Regardless, Kuter seems to almost always be present during major events in air corps/air force history from the 1930s through the early 1960s. He was a key Eastern Zone Army Air Corps Mail Operations (EZAACMO) staffer during the 1934 Airmail Crisis. He was a member of the Air Corps Tactical School "Bomber Mafia," teaching bombardment doctrine at the school from 1935 to 1939. In 1941, he was one of four coauthors of AWPD-1: the prewar strategy and mobilization planning document upon which subsequent air plans were largely based. In February 1942, at age 36, Kuter became the army's youngest general (by ten years). A month later, he and just three other principal staff officers led the War Department reorganization that (at least conceptually) made army airpower coequal with ground power by dividing the army into the Army Air Forces (AAF), Army Ground Forces (AGF), and Army Service Forces (ASF). From late 1942 through mid-1943,

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¹ Phillip S. Meilinger, *Airmen and Air Theory: A Review of the Sources* (Maxwell AFB, AL: Air University Press, 2012), 34.

² "Manuscript Record" (USAF Academy Special Collections, November 1978), 1, Kuter Collection, USAF Academy Library Special Collections.

³ Peter Faber, "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower," in *The Paths of Heaven: The Evolution of Airpower Theory* (Maxwell AFB, AL: Air University Press, 1997), 216.

⁴ James C. Gaston, *Planning the American Air War: Four Men and Nine Days in 1941* (Washington D.C.: National Defense University Press, 1982).

⁵ Laurence S. Kuter, Interview of Brigadier General Laurence S. Kuter, interview by C. W. Williams, October 21, 1942, 251–252, Reel K1019, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

⁶ "Manuscript Record," 2.

Kuter briefly commanded a strategic bomb wing in England before he went to Northwest Africa and helped lead tactical fighters and bombers in that theater. By the time he left, Rommel was defeated and the Axis was ejected from the African continent.⁷

When Kuter returned from his combat tour, he led the effort to publish Field Manual (FM) 100-20, airpower's "Declaration of Independence," which boldly and officially proclaimed that air power is coequal with ground power. He then proceeded to lead the AAF's planning for postwar service independence. Simultaneously, he played key roles in centralizing army airpower in the Mediterranean, European and Pacific theaters. In 1945, when a heart attack kept five star general Henry "Hap" Arnold from attending the Malta and Yalta conferences, he sent two-star general Kuter—not one of his more senior generals—to represent him. In May 1945, Kuter deployed overseas again, this time to the Pacific, where he served as the Deputy Commander-in-Chief, Army Air Forces Pacific Oceans Area (DCINC AAFPOA). After the Japanese capitulated, he organized the first airlift of the U.S. Army troops into Japan following the armistice before making his way back to the United States.

After the war, Kuter took command of the newly-formed Air Transport Command (ATC) Atlantic Division, consolidating three wartime divisions into one organization.

While in that job, he also served in diplomatic roles. First, he served as the U.S. military

⁷ Ibid.

⁸ Daniel R. Mortensen, "The Legend of Laurence Kuter: Agent for Airpower Doctrine," in *Airpower and Ground Armies: Essays on the Evolution of Anglo-American Air Doctrine, 1940-43*, ed. Daniel R. Mortensen (Maxwell AFB, AL: Air University Press, 1998); War Department, *FM 100-20: Command and Employment of Air Power* (Washington D.C.: US Government Printing Office, 1943), http://cgsc.contentdm.oclc.org/cdm/singleitem/collection/p4013coll9/id/933/rec/1.

⁹ Perry M. Smith, *The Air Force Plans for Peace, 1943-1945* (Baltimore, MD: Johns Hopkins Press, 1970). Laurence S. Kuter, *Airman at Yalta* (New York: Duell, Sloan and Pierce, 1955).

¹¹ Kuter, Interview of Brigadier General Laurence S. Kuter, 411–412.

¹² Ibid., 424–431.

representative to the 1946 U.S.-U.K. Bermuda Conference, and then shortly thereafter helped negotiate American access to an airfield in the Azores. In 1946, President Truman appointed Kuter as the U.S. representative to the Provisional International Civil Aviation Organization (PICAO). When the organization ceased to be merely provisional in 1947, Kuter was given ministerial rank and served as the first U.S. representative to the ICAO, working for the State Department under his old boss, George C. Marshall.¹³

In 1948, Kuter returned to the full-time air force fold, selected as the first commander of the Military Air Transport Service (MATS). Kuter took command of MATS just prior to the Berlin Airlift and led it through the first year of the Korean War. From 1951 through 1955, Kuter took a leading role in air force personnel management and education. In October 1951, Kuter returned to the Pentagon, where he served for two years as Deputy Chief of Staff for Personnel during a period of substantial manpower turmoil. In that job, he also temporarily held the positions of acting vice chief of staff and even acting chief of staff. In 1953, he took command of the Air University (AU), where he increased the stature of AU's schools and drove the publication of numerous new doctrine manuals.

From 1955 through the end of his career in 1962, Kuter led fighter-centric commands as a four-star general. In 1955, Kuter pinned on his fourth star while en route to taking command of Far East Air Forces (FEAF) in Tokyo. In 1957, he took command of the newly-formed Pacific Air Forces (PACAF), which combined the theater's disparate commands—FEAF in Japan and Pacific Command in Hawaii—into one

¹³ "Manuscript Record," 2.

organization. Kuter commanded PACAF during the 1958 Taiwan Straits Crisis, wherein American-backed forces prevented mainland Chinese forces from invading and taking the nationalist Chinese islands of Quemoy and Matsu. Kuter's last military assignment was as Commander-in-Chief, North American Air Defense Command (CINCNORAD), from August 1959 to July 1962. Kuter led this multiservice Canadian-American homeland air defense command during a period of high tensions between the United States and Soviet Union: the Bay of Pigs Invasion occurred while he was CINCNORAD, and the Cuban Missile Crisis came a month and a half after he retired.¹⁴

Kuter retired from the Air Force in July 1962, but his aviation career did not end there. He went on to be Pan Am's executive vice president, where from 1966 to 1970 he played a central role in coordinating the Pan Am-Boeing project to design and build the iconic 747 jumbo jet. ¹⁵ In addition to his Pan-Am duties, he served in a leadership role for the Air Force Association and participated in numerous blue-ribbon panels. Kuter had a remarkable career, even when compared to his contemporaries. One would think that a popular biography, at the very least, would have been written on him. Such is not the case.

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¹⁴ Ibid., 3.

¹⁵ Laurence S. Kuter, *The Great Gamble: The Boeing 747; the Boeing-Pan Am Project to Develop, Produce, and Introduce the 747* (Tuscaloosa, AL: University of Alabama Press, 1973).

Memorialization

Rather than being celebrated, Kuter seems to have been forgotten by the air force he helped build and lead. No air force base is named after Kuter, but there are bases named after four-star contemporaries Cannon, Fairchild, Schriever and Vandenberg. No major buildings at the air force's primary educational centers, Maxwell Air Force Base and the United States Air Force Academy, are named after him. At Maxwell, where Kuter taught bombardment doctrine for four years before the war and served as the Air University (AU) commander for two years after the war, Kuter has a minor side street named for him. AU's center for doctrine development and education, which "develops and publishes Air Force doctrine, teaches doctrine through resident and on-line courses, and advocates airpower through visionary wargaming," is instead named after Curtis LeMay (who never taught or commanded at the school). The official oil painting of Kuter does, however, hang in the Muir S. Fairchild Research Information Center.

At the Air Force Academy, Kuter's ACTS classmates Hoyt Vandenberg and Muir Fairchild—both of whom graduated behind him at Maxwell Field—have buildings in the cadet area (a dormitory and the main academic building, respectively) named after them. Kuter is memorialized by his headstone at the Air Force Academy cemetery. The academy usually also maintains the Kuter Trophy, which is given to the winner of the Air Force Falcons and Hawaii Rainbow Warriors whenever they meet on the football gridiron. When the two teams met in 2012—the first time in eleven years—the trophy

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¹⁶ U.S. Air Force, "The LeMay Center," *Air University*, January 25, 2016, http://www.au.af.mil/au/lemay/main.htm.

was "a memento the team didn't even know existed." Apparently, the Hawaii team had forgotten, too. Hawaii won the 2001 game, but Air Force inadvertently held onto the trophy until summer 2012, at which time they apparently realize the error and shipped the trophy back to its rightful owner. Air Force won the trophy back in the fall, though. Every Air Force Academy cadet class since the class of 2000 has selected an exemplar who typifies the traits the class wants to emulate. The class of 2005 picked General George S. Patton, Jr.: a ground commander who benefited from the effective application of tactical airpower. Kuter, "Opie" Weyland, "Spike" Momyer and other air commanders who substantially enabled Patton's success have not been so honored. Kuter Avenue on Elmendorf Air Force Base in Alaska seems to be the only other official memorial to his life and legacy.

Civilian organizations dedicated to advocating for airmen and preserving air force memory have likewise mostly forgotten Kuter. The National Aviation Hall of Fame, collocated with the National Museum of the Air Force at Wright-Patterson Air Force Base in Dayton, Ohio every year enshrines air and space pioneers. Its goal is to use them as "role models, inspiring today's youth toward their own service, achievement and excellence, no matter their field of choice." Kuter is not an enshrinee, but Bertrand "Bert" Acosta is. Born a decade before Kuter, Acosta was an early test pilot and aviation

¹⁷ "Air Force Beats Hawaii to Become Bowl Eligible," *CBSSports.com*, accessed May 23, 2016, http://www.cbssports.com/collegefootball/gametracker/recap/NCAAF_20121116_HAWAII@AF. ¹⁸ Ibid.

¹⁹ Air Force Academy Association of Graduates, "USAFA Class Exemplars," text, *Association of Graduates, United States Air Force Academy*, accessed May 15, 2015, http://www.usafa.org/Connect/ClassExemplars.

²⁰ "Our Enshrinees," *The National Aviation Hall of Fame*, January 25, 2016, http://www.nationalaviation.org/enshrinees/.

record holder who, in the 1930s, "was in and out of jail, the charges ranging from flying without a license, drunkenness, to non-payment of alimony."²¹

Kuter is, however, memorialized at Scott Air Force Base, Illinois—a base, like Elmendorf, where Kuter never served. In 1990 Kuter, who is typically remembered as a bomber zealot—was posthumously inducted into the Airlift/Tanker Association (A/TA) hall of fame.²² The A/TA is a nonprofit organization "dedicated to ensuring that American military forces continue to have the air mobility capability required to implement U.S. national security strategy."²³ Lieutenant General William Tunner, of World War II "Hump" airlift and postwar Berlin Airlift fame, was the organization's first (and in 1989 only) inductee. Kuter was inducted the second year, along with Donald Douglas, whose C-47, C-54 and C-124 cargo planes were workhorses of the Army Air Forces and early air force air transportation fleets. Interestingly, Kuter was inducted ahead of Lieutenant General Harold L. "Hal" George (who headed the Air Transport Command throughout the Second World War), C.R. Smith (George's deputy throughout much of the war) and a host of other notable airlifters. ²⁴ Since the arc of Kuter's career indicates his legacy extends well beyond air transportation and deserves more attention than a trophy given to the winner of an infrequently played football game and a bronze bust on an air force base that is closed to the public, one would think he would at least be well-represented in military historiography. Regrettably, this is not the case.

²¹ "Bertrand 'Bert' B. Acosta," *The National Aviation Hall of Fame*, January 25, 2016, http://www.nationalaviation.org/z-acosta-bertrand-bert-b/.

²² Airlift/Tanker Association, "Hall of Fame," text, *Home*, accessed May 15, 2015, http://www.atalink.org/content/hall-of-fame/.

²³ Airlift/Tanker Association, "Airlift/Tanker Association: America's Wings of Freedom," text, *Home*, accessed May 15, 2015, http://www.atalink.org/content/.

²⁴ Airlift/Tanker Association, "Hall of Fame."

Historiography

Laurence Kuter has gotten little focused historical attention in scholarly or popular presses. The closest anyone has come to producing a Kuter biography is a fifty page monograph by air force Major Leland Kinsey Cowie, II, titled "Pattern for Victory: Forging and Leading Air Power at War."²⁵ It only covers Kuter's West Point graduation in 1927 through the end of the Second World War in 1945. Cowie has valuable insights, but his work is too short to provide a good picture of Kuter as a person, how he developed his thinking, or how he managed to translate his ideas into actual plans. Problematically, Cowie concludes that Kuter's greatest impact came during the Second World War, but cites Kuter's work on AR 95-5 and AWPD-1—both prewar documents—to support his case. Helpfully, he highlights how Kuter's advocacy for functional commands—particularly Kuter's work in producing FM 100-20, then making 20th Air Force and the U.S. Strategic Air Forces in the Pacific realities—laid the intellectual foundations for the postwar Strategic Air Command (SAC), Tactical Air Command (TAC) and even MATS. Unfortunately, Cowie does not fully explain how Kuter's ideas survived the postwar drawdown, a period of fierce competition for ideas and resources within and outside of the Army Air Forces regarding proper airpower employment. Also, Cowie notes that Kuter successfully transitioned between staff and command during the war, but does not address what it was about Kuter's personality or

²⁵ Leland Kinsey Cowie, "Pattern for Victory: Forging and Leading Air Power at War" (Monograph, School of Advanced Military Studies, 2012).

experiences that enabled him to do so. Cowie provided a valuable service to airpower historiography, but mostly by indicating that much research remains to be done.²⁶

Only one secondary historical work explicitly focuses on Kuter: Daniel R. Mortensen's "The Legend of Laurence Kuter: Agent for Airpower Doctrine" in Airpower and Ground Armies: Essays on the Evolution of Anglo-American Air Doctrine.²⁷ Mortensen offers a less sanguine view of Kuter and his wartime service. He describes Kuter as "the epitome of a headquarters type with very limited operational experience." 28 Of course, when Kuter deployed overseas in November 1942, the same thing could have be said of the majority of AAF generals, even Hap Arnold. Few had seen combat to that point, and for most of those who had, their experience had come two and a half decades before, during the First World War. Mortensen then goes on to describe Kuter as more a salesman than an airpower practitioner, asserting that Kuter got undue credit for writing Army Field Manual (FM) 100-20 (airpower's "Declaration of Independence): "I think that, partly through self-promotion and with the aid of Air Force historians writing in the early 1950s, Kuter has gained undeserved credit, particularly for the authorship of official doctrine. On the other hand, he had an important role in merchandising the radically new conceptual model for tactical aviation."²⁹ Mortensen's work is the product of far more rigorous scholarship than Cowie's, but is even more narrowly focused, covering just six months of Kuter's thirty-five year career. The truth of Kuter's legacy is somewhere

²⁶ Ibid.

²⁷ Mortensen, "The Legend of Laurence Kuter: Agent for Airpower Doctrine."

²⁸ Ibid., 104.

²⁹ Ibid., 109.

between that of masterful strategist and opportunistic propagandist, as depicted in these two works.³⁰

Kuter never published an autobiography, but he did write a partial memoir, "Growth of Air Power." He died before completing it. He dictated the memoir to his wife Ethel from some time in 1978 when he was sick with emphysema, until November 1979, when he died from it. Ethel typed his narrative, which was written in the isolation of the Kuter's home and only covers through mid-1943, and had it bound. 32 It has factual errors and is not footnoted, and thus must be crosschecked carefully to validate its accuracy. It nonetheless provides Kuter's invaluable insights as an insider, and does much to shed light on the Kuters, other senior air leaders before and during the war, and the environment in which the Air Force was established.³³

³⁰ Mortensen, "The Legend of Laurence Kuter: Agent for Airpower Doctrine"; B. Michael Bechthold, "A Question of Success: Tactical Air Doctrine and Practice in North Africa, 1942-43," The Journal of Military History 68, no. 3 (July 1, 2004): 821-51, doi:10.2307/3396729. Michael Bechthold's 2004 article helps clarify why Mortensen took such issue with Kuter. Kuter pronounced that it was British, not American, doctrine and command structures that proved decisive in turning the tide after the Kasserine Pass debacle. This implies that American air-ground cooperation doctrine was flawed, and by extension so were the interwar American airmen (in particular fighter pilots) who wrote it. Mortensen's work is an apparent attempt to correct this negative historical view. Mortensen makes a strong case that American prewar airmen already had an effective doctrine for supporting ground armies; but they lacked the requisite rank, equipment and adequately-trained personnel to implement it. American air-ground cooperation improved in concert with improvements in experience, people and equipment. Left unaddressed in Mortensen's narrative is what the effect would have been had Kuter returned from Africa and touted the air contribution to the Allied victory as being rooted in American ideas. The best example of air-ground coordination to that point was the British Coningham-Montgomery team, and both the Northwest African Tactical and Coastal Air Forces had been commanded by British airmen throughout the campaign.

31 Laurence S. Kuter, "Growth of Air Power" (unpublished manuscript, n.d.), Kuter Collection, USAF

Academy Library Special Collections.

³² Ibid.; Ethel Kuter, "Along with Larry" (unpublished manuscript, n.d.), 1, Kuter Collection, USAF Academy Library Special Collections. ³³ Kuter, "Growth of Air Power."

Ethel Kuter also wrote her own memoir, "Along with Larry." Her work is also problematic. Larry Kuter did not share much about his work with Ethel, she never intended to publish her personal story (it was meant for family and friends, and hence largely consists of personal anecdotes rather than insights into military history), and—like her husband's work—she never finished it. "Along with Larry" ends in August 1946. Her work is nonetheless valuable, in that she clearly identifies particular dates for key events in the Kuters' lives and directly quotes from diaries, letters and other material she kept. Given that Larry and Ethel were high school sweethearts who remained devoted to each other until Larry's death, her insights—although biased—are worthwhile in helping to understand who Larry Kuter was as a person, and what shaped him throughout his life. Both of those works can be found in the Kuter collection in the U.S. Air Force Academy's Clark special collections branch. 35

Larry Kuter was a well-published author, though, so if "Growth of Air Power" were combined with his other published works, a reasonably complete autobiography could be spliced together. He published two books and a number of articles that were autobiographical in nature. In those works, he only focused on particular events or time periods, so they fail to give a full picture of who he was. His first book, *Airman at Yalta*, primarily describes the Malta and Yalta conferences 1945, in which he was General of the Army "Hap" Arnold's representative. ³⁶ His second book, *The Great Gamble: The Boeing 747; the Boeing-Pan Am Project to Develop and Introduce the 747*, describes the

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³⁴ Kuter, "Along with Larry."

³⁵ Ibid.

³⁶ Kuter, Airman at Yalta.

project that he led as Vice President of Pan Am to build the 747 between 1966 and 1970.³⁷ Added to these books are numerous articles Kuter wrote of his experiences. His notable works include the article "Goddamm It, Georgie!" (Air Force Magazine, February 1973), in which Kuter attacks the notion that tactical airpower was ineffective in Northwest Africa, as depicted in Francis Ford Coppola's film *Patton*. 38 In "How Hap Arnold Built the AAF," (Air Force Magazine, September 1973), Kuter describes Arnold's chaotic—yet surprisingly effective and necessary—wartime management style.³⁹ His 1977 Aerospace Historian article, "Truman's Secret Management of the Airlines," in spite of its controversial title, gave a very positive account of the president. In the article Kuter (a lifelong republican) recounted how the democrat who nominated him to be Civil Aeronautics Board chairman in 1948 wanted nothing more than for Kuter to exercise his best judgment in service of American civil aviation. 40 His 1979 article "D-Day: June 6, 1944," also in Air Force Magazine, was a clear defense of the World War II European air campaign. 41 Together, these works give the impression that Kuter was highly intelligent, an effective communicator, and an intellectual leader within the Air Force. They do not explain how he developed his skills and talents, or why Kuter was promoted instead of others who were also smart and good with a pen.

Kuter published some lesser-known articles that showed a lighter side to his personality. In "Roosevelt Did Not Shoot Churchill in the Chateau Frontenac," in The

³⁷ Kuter, *The Great Gamble*.

Laurence S. Kuter, "Goddamm It, Georgie!," Air Force Magazine, February 1973.
 Laurence S. Kuter, "How Hap Arnold Built the AAF," Air Force Magazine, September 1973.
 Laurence S. Kuter, "Truman's Secret Management of the Airlines," Aerospace Historian, September 1977.

⁴¹ Laurence S. Kuter, "D-Day: June 6, 1944," Air Force Magazine, June 1979, http://www.airforcemag.com/MagazineArchive/Documents/1979/June%201979/0679d-day.pdf.

American Legion, he recounted a story from the 1943 Quebec conference, wherein Kuter and others momentarily thought the U.S. president had shot the British prime minister. The truth was only slightly less bizarre: British Admiral Lord Mountbatten, wanting to sell the idea to build an iceberg aircraft carrier out of Pykrete (an ice/sawdust mixture that is stronger than pure ice itself), shot a block of Pykrete. The ricocheting bullet almost struck British Air Chief Marshall Sir Charles Portal. The joke was complete when a litter was rolled out, with a form under a sheet that might have been Churchill's body. Articles like this, along with humor interspersed throughout his other works, never seemed to dent the historical view of Kuter as cold and reserved.

Kuter published a number of articles, typically in *Air Force Magazine*, that focused on activities in which he was intimately involved. They were typically far from bomber-myopic. After his return from Northwest Africa, his "Air-Ground Cooperation in North Africa" appeared in the July 1943 edition of *Air Force* and underscored the value of a new concept—the tactical air force. As commander of the Military Air Transport Service, he wrote "Vittles, the Air Supply of Berlin, on Every Count the Greatest Air Transport Operation the World has Seen" in 1949, which touted the value of strategic air transport. As Air University commander, he wrote "No Room for Error" in 1954, which argued for forces and doctrine that could be applied all levels of war, not just a nuclear

⁴² Laurence S. Kuter, "Roosevelt Did Not Shoot Churchill in the Chataeu Frontenac: A True Tale of Mysterious Doings Behind Closed Doors in Quebec in 1943," *The American Legion*, December 1972. Kuter had a way with words; he recalled in the article, "It was never clear who uttered the barely audible double blasphemy, "Winston Churchill! Jesus Christ!"

⁴³ Laurence S. Kuter, "Air-Ground Cooperation in North Africa," *Air Force*, July 1943.

⁴⁴ Kuter, Laurence S., "Vittles: The Air Supply of Berlin, on Every Count the Greatest Air Transport Operation the World Has Seen," *U.S. Air Services*, February 1949.

one with the Soviet Union. 45 Kuter's "Pacific Air Forces" was published in September 1959, shortly after he concluded his term as PACAF's first commander. He highlighted the value of centralized theater airpower and the value of working with nonnuclear Pacific allies to counter the communist threat in the region. 46 In August 1962, immediately after retiring from the air force as the NORAD commander, Kuter wrote "The Gaps in our Aerospace Defense," which argued for improving America's air and missile defensive capabilities. 47 After he retired and joined Pan Am as its vice president, he penned "Auxiliary to Air Defense—Civil Aviation" in 1964. He highlighted Pan-Am's (and other airlines') readiness to augment the military through the Civil Reserve Air Fleet program (CRAF—a program he helped establish while in MATS and which was used to its full effect nearly three decades later during the Gulf War of 1990-1991). 48

Taken together, the body of Kuter's published work helps one to understand that Larry Kuter approached airpower more comprehensively than "Bomber Mafia" narratives suggest, but they do little to get at his personality or shaping influences. They do yield some clues, though. His writing is almost invariably dispassionate. In both *Airman at Yalta* and *The Great Gamble*, Kuter refers to himself in the third person. In *Airman at Yalta*, for instance, he calls himself "General Arnold's representative," in an attempt to assess events in as detached a manner as possible. It was a unique literary choice. Even his daughter Roxanne, who deeply admired her father and achieved professional prominence as an architecture professor, "always found his writing in the third person

⁴⁵ Kuter, Laurence S., "No Room for Error," Air Force Magazine, November 11, 1954.

⁴⁶ Laurence S. Kuter, "Pacific Air Forces," *Air Force Magazine*, September 1959.

⁴⁷ Laurence S. Kuter, "The Gaps in Our Aerospace Defense," *Air Force Magazine*, August 1962.

⁴⁸ Kuter, Laurence S., "Auxiliary to Common Defense--Civil Aviation," *Sperryscope*, Third Quarter 1964.

strange."⁴⁹ This writing style does further indicate not only what kind of man Kuter was, but also his style of advocacy—dispassionate, but thoroughly researched and tightly written, such that few could argue against it.

There are a few secondary works in which Kuter figures prominently. He is a major figure in James Gaston's *Planning the American Air War: Four Men and Nine Days in 1941*, since he was one of the four principal coauthors of the initial World War II mobilization and strategic bombing campaign plan. Gaston eloquently captures another typical image of Kuter; instead of being an airpower huckster who sold Marshall on FM 100-20 (as in Mortensen's narrative), he appears to be an analytical, driven mastermind:

Larry Kuter reminded people of an acetylene torch. Intelligence, dedication. ambition, and drive, mixed just right and burning hot enough to cut steel, yet never blazing out of control, never showing more than a cool, blue glow. Marshall had told several people he wanted to promote some young people early, wanted to mix more fresh ideas and intensity at the highest levels of the War Department. Those are the qualities that always make youth desirable in a headquarters, but of course there's the cost. If the benefits of youth are going to be worth what you pay in inexperience, the intensity will have to be metered, restrained, controlled—always. That was Larry Kuter. ⁵¹

While Kuter had plenty of detractors, the traits that were not associated with him seem the most pertinent. One searches in vain to find stories wherein Kuter is described as lazy, unintelligent, a drunkard, a womanizer, easily angered, disloyal or an incompetent aviator. The same could not be said about many of his contemporaries, even air force chiefs of staff.⁵²

⁴⁹ Roxanne Kuter Williamson, "Letter from Roxanne Kuter Williamson to Joel Higley," July 9, 2015.

⁵⁰ Gaston, Planning the American Air War.

⁵¹ Ibid., 38–39.

⁵² Frank Everest, Interview with Gen Fran "Hank" Everest, January 6, 1970, 17, Murray Green Collection, USAF Academy Library Special Collections. In an oral history interview, General Everest asserted that Spaatz, "next to Vandenberg, Spaatz is the laziest guy that I know that ever wore 4 stars."

Kuter figures prominently in a number of secondary sources. He appears frequently in Robert F. Futrell's *Ideas, Concepts, Doctrine*, which traces developments in air force institutional thought, indicating Kuter was an intellectual leader. ⁵³ He makes frequent appearances in DeWitt Copp's *Forged in Fire* and Geoffrey Perret's *Winged Victory*—both provide overarching narratives of the World War II air war—indicating Kuter played a substantial role in leading the wartime Army Air Forces. ⁵⁴ Kuter also appears in air force racial integration narratives. Alan Gropman's *The Air Force Integrates* and Alan Osur's *Blacks in the Army Air Forces during World War II: The Problem of Race Relations*, in describing Kuter's actions as AAF plans chief during the Freeman Field "Mutiny" in 1945, both imply that Kuter was a closet racist. ⁵⁵ Gropman's narrative, however, also portrays Kuter positively in his support for air force integration in 1948 as MATS commander, and Benjamin O. Davis—the Air Force's first African-American general—notes great support from Kuter in 1956, when Davis led the air defense of Formosa and Kuter was Far East Air Forces commander. ⁵⁶

Kuter figures very prominently in narratives about the Air Force's push for postwar service independence, such as Herman Wolk's *Planning and Organizing the Postwar Air Force, 1943-1947* and Perry M. Smith's *The Air Force Plans for Peace*—

⁵³ Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force, 1907-1960* (Maxwell AFB, AL: Air University Press, 1989).

⁵⁴ Dewitt S. Copp, Forged in Fire: Strategy and Decisions in the Air War over Europe 1940-1945 (Garden City, N.Y: Doubleday, 1982); Geoffrey Perret, Winged Victory: The Army Air Forces in World War II (New York: Random House, 1993).

⁵⁵ Alan Gropman, *The Air Force Integrates* (Washington, DC: Office of Air Force History, 1985); Alan M. Osur, *Blacks in the Army Air Forces during World War II: The Problem of Race Relations* (Washington, D.C.: Office of Air Force History, 1977).

⁵⁶ Gropman, *The Air Force Integrates*; Benjamin O. Davis Jr., *Benjamin O. Davis, Jr. American: An Autobiography* (Washington D.C.: Smithsonian Institution Press, 1990).

indicating he was a key air force architect.⁵⁷ Smith makes a remarkable observation, which is worth quoting extensively:

Most of the interviews for this book revealed that, of the men close to Arnold, Kuter must be considered the most brilliant and most influential. Admiration for him, though almost universal among the participants, was not unqualified, for he was described as "extremely able, but personally ambitious" and an "empire builder." In my attempt to determine on whose counsel Arnold most heavily relied, I found that most of those interviewed responded with Kuter's name, but quickly followed it with a qualification like that given above. There seemed to be a compelling need to evaluate Kuter, even though such an evaluation was not solicited.⁵⁸

Oddly, Hap Arnold biographer Dik Daso seems to indicate the opposite; in his narrative, Kuter never penetrated Arnold's inner circle of confidants.⁵⁹ Hal George, in an interview with Arnold biographer Murray Green, also indicated that Arnold and Kuter were never personally close, although George suspected Arnold liked Kuter.⁶⁰

Kuter also features prominently in the shaping of official air force history. The official eastern zone airmail history he wrote in 1934 was the most complete account of any of the zones, and continues to substantially inform accounts of the airmail fiasco. The foreword to volume one of Craven and Cate's seven-volume *The Army Air Forces in World War II* highlights that Kuter established the AAF history program, writing that: "It is important that our history be recorded while it is hot and that personnel be selected and an agency set up for a clear historian's job without an axe to grind or defense to

⁵⁷ Herman S. Wolk, *The Struggle for Air Force Independence, 1943-1947* (Washington, DC: Air Force History and Museums Program, 1997), http://www.afhso.af.mil/shared/media/document/AFD-100929-056.pdf; Smith, *The Air Force Plans for Peace*.

⁵⁸ Smith, *The Air Force Plans for Peace*, 8–9.

⁵⁹ Dik Alan Daso, *Hap Arnold and the Evolution of American Airpower* (Washington D.C.: Smithsonian Institution Press, 2000), 175.

⁶⁰ George, Harold Lee, Interview with Lieutenant General Harold L. George, interview by Green, Murray, n.d., 56, Murray Green Collection, USAF Academy Library Special Collections.

⁶¹ Byron Q. Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," May 28, 1934, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

prepare." Kuter—along with his ACTS colleague Muir "Santy" Fairchild—also shows up as a major player in establishing the U.S. Strategic Bombing Survey, in David MacIsaac's *Strategic Bombing in World War Two: The Story of the United States Strategic Bombing Survey*. ⁶³ If nothing else, Kuter was the Cleo of air force history.

Books by and about Kuter's contemporaries provide good insights into Kuter himself. Since few of Kuter's contemporaries shunned the limelight, and even those who shied away from public attention had compelling stories, books by and about his peers abound. These include (but are not limited to): autobiographies and biographies of chiefs of staff under whom Kuter served (George C. Marshall, Carl Spaatz, Hoyt Vandenberg and Curtis LeMay), Air Corps/AAF chiefs (Benjamin Foulois and Hap Arnold), fellow ACTS instructors (Claire Chennault, Haywood Hansell, Vernon G. Olsmith and Kenneth Walker), other military and civilian bosses (Arthur Coningham, Ira Eaker, B.Q. Jones and Bedell Smith), military coworkers and/or subordinates (Charles P. Cabell, Benjamin O. Davis, Lauris Norstad, Elwood Quesada, William Tunner and Albert Wedemeyer), and prominent civilians who served on the Air Staff during the war (Guido Perera, "Tex" Thornton and Robert McNamara). 64 To these can be added biographical compilations,

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⁶² James Lea Cate et al., *The Army Air Forces in World War II: Plans and Early Operations, January 1939 to August 1942* (Office of Air Force History, 1983), ix.

⁶³ David MacIsaac, Strategic Bombing in World War Two: The Story of the United States Strategic Bombing Survey (New York: Garland Publishing, 1976).

⁶⁴ Forrest C. Pogue, *George C. Marshall: Ordeal and Hope, 1939-1942* (New York: The Viking Press, 1966); Forrest C. Pogue, *George C. Marshall: Organizer of Victory, 1943-1945* (New York: The Viking Press, 1966); Richard G. Davis, *Carl A. Spaatz and the Air War in Europe* (Washington D.C.: Center for Air Force History, 1993); ibid.; Phillip S. Meilinger, *Hoyt S. Vandenberg, the Life of a General* (Bloomington, IN: Indiana University Press, 1989); Curtis E. LeMay and MacKinlay Kantor, *Mission with LeMay: My Story*, 1st edition (Garden City, NY: Doubleday & Company, 1965); Thomas M. Coffey, *Iron Eagle: The Turbulent Life of General Curtis LeMay* (New York: Crown Publishers, 1986); John F. Shiner, *Foulois and the U.S. Army Air Corps, 1931-1935*, First Edition edition (Office of Air Force History, 1983); Thomas M. Coffey, *Hap: The Story of the U.S. Air Force and the Man Who Built It, General Henry H.*

like Puryear's *Stars in Flight* (a biography of AAF and USAF chiefs from Arnold to White) and Frisbee's *Makers of the United States Air Force*. Interestingly, Frisbee's volume, which was written as a compilation of short biographies of influential figures for whom a book-length biography had yet to be written, did not include Kuter. Arguably less influential figures of the service, notably Bernard Schriever and Robinson Risner, were included, however. The only way Kuter's relative importance can be properly understood is with a more extensive and holistic treatment of his life. ⁶⁵

Kuter and his legacy cannot be understood without wading into the extensive literature on strategic bombing, because he is typically remembered as a key member of the "bomber mafia," which advocated strenuously for the development and production of bombardment aircraft during the interwar period. In 1976, John Keegan noted in *The*

[&]quot;Hap" Arnold (New York: The Viking Press, 1982); Daso, Hap Arnold and the Evolution of American Airpower; Martha Byrd, Chennault: Giving Wings to the Tiger (Tuscaloosa, AL: University Alabama Press, 2003); Charles R. Griffith, The Quest: Haywood Hansell and American Strategic Bombing in World War II (Maxwell AFB, AL: Air University Press, 1999); Haywood S. Hansell, The Air Plan That Defeated Hitler (Atlanta, GA: Higgins-McArthur/Longino & Porter, Inc., 1972); Vernon G. Olsmith, Recollections of an Old Soldier. (San Antonio, Texas, 1963), http://hdl.handle.net/2027/mdp.39015016754700; Martha Byrd, Kenneth N. Walker: Airpower's Untempered Crusader (Maxwell AFB, AL: Air University Press, 1997); Vincent Orange, Coningham: A Biography of Air Marshal Sir Arthur Coningham (Washington, D.C: Center for Air Force History, 1992); James Parton, "Air Force Spoken Here": General Ira Eaker and the Command of the Air (Maxwell AFB, AL: Air University Press, 2000); Dan Heaton, Forgotten Aviator: The Byron Q. Jones Story (Wellesley, MA: Branden Books, 2012); D. K. R. Crosswell, Beetle: The Life of General Walter Bedell Smith (The University Press of Kentucky, 2010); Charles Cabell, A Man of Intelligence: Memoirs of War, Peace and the CIA, ed. Charles Jr Cabell (Colorado Springs, CO: Impavide Publications, 1997); Davis, Benjamin O. Davis, Jr.; Thomas Alexander Hughes, Over Lord: General Pete Quesada and the Triumph of Tactical Air Power in World War II (New York: Free Press, 1995); Robert S. Jordan, Norstad: Cold War NATO Supreme Commander: Airman, Strategist, Diplomat (New York: St. Martin's Press, 2000); Robert A Slayton, Master of the Air: William Tunner and the Success of Military Airlift (Tuscaloosa, AL: University of Alabama Press, 2010); General Albert C. Wedemeyer, Wedemeyer Reports! (New York: Henry Holt & Company, 1958); Guido R. Perera, Leaves From My Book of Life, Vol. II: Washington and War Years (Boston: The Stinehour Press for Guido R. Perera, 1975); Beirne Lay, Someone Has to Make It Happen: The Inside Story of Tex Thornton, the Man Who Built Litton Industries (Englewood Cliffs, NJ: Prentice-Hall, 1969); Henry L. Trewhitt, McNamara (New York: Harper & Row,

⁶⁵ Edgar F. Puryear, *Stars in Flight: A Study in Air Force Character and Leadership* (Novato, CA: Presidio Press, 1981); John Frisbee, *Makers of the United States Air Force* (Washington, DC: Office of Air Force History, 1987).

Face of Battle that, "The strategic-bombing campaign against Germany, its costs and benefits, its rights and wrongs, engages the energies of some of the most powerful minds at work in the field of military history today and has fomented one of the subject's few real intellectual antagonisms."66 The debate continues to rage four decades later. Studies include (but are not limited to) how strategic bombing doctrine came to be developed and accepted, how aircrews dealt with the high death rates, whether or not the Second World War bombing campaigns were effective, if they were moral, how those campaigns influenced Cold War strategies and technology development, and whether or not there should even be an independent U.S. Air Force. Even a partial list of books that engage with the strategic airpower debate indicate the challenges Kuter and his fellow airmen faced in shaping and leading American air strategy. Ronald Schaffer's Wings of Judgment and Michael Sherry's The Rise of American Air Power cast the World War II strategic bombing campaigns as inherently immoral.⁶⁷ Richard Frank's *Downfall*, Adam Tooze's Wages of Destruction, Robert Ehlers' Targeting the Third Reich and Conrad Crane's American Air Strategy in World War II all indicate that those same air campaigns—while certainly horrific—were morally sound, and in fact prevented even worse human carnage. 68 Mark Wells' Courage and Air Warfare provides an excellent picture of the challenges bomber commanders and their crews faced in the air war over

⁶⁶ John Keegan, *The Face of Battle: A Study of Agincourt, Waterloo and the Somme* (New York: Penguin Books, 1976)., 26.

⁶⁷ Ronald Schaffer, *Wings of Judgment: American Bombing in World War II* (New York; Oxford: Oxford University Press, 1988); Michael S. Sherry, *The Rise of American Air Power: The Creation of Armageddon* (New Haven, CT: Yale University Press, 1989).

⁶⁸ Richard B. Frank, *Downfall: The End of the Imperial Japanese Empire* (New York: Penguin Books, 1999); Adam Tooze, *The Wages of Destruction: The Making and Breaking of the Nazi Economy* (New York: Penguin Books, 2006); Robert Ehlers, *Targeting the Third Reich: Air Intelligence and the Allied Bombing Campaigns* (Lawrence, KS: University Press of Kansas, 2009).

Europe.⁶⁹ Mark Clodfelter's *The Limits of Air Power* and Tami Davis Biddle's *Rhetoric* and *Reality in Air Warfare* are excellent works that describe how the World War II-driven thinking affected the air force for decades afterward.⁷⁰ Kuter's experiences help further illustrate how the leaders from his generation pursued the above debates and interacted with the various forces at work.

As closely associated with the debates over tactical airpower, particularly longrange fighter escorts and air support to ground armies, Kuter was at the center of
interwar, wartime and postwar debates regarding tactical aircraft. He fought over the
relative virtues of fighter vs. bomber aircraft as an ACTS instructor, drove fighter vs.
bomber allocation decisions as a prewar mobilization planner, lost numerous bomber
crews due to absence of long-range escort fighters as a bomber commander, led the
organizational division of airpower between tactical and strategic air forces, led fighter
and light bomber forces in northwest Africa from January through May 1943, led the
codification of tactical airpower concepts through the publication of FM 100-20, and
spent from 1955 to 1962 leading fighter-centric commands as the four-star commander of
Far East Air Forces, Pacific Air Forces and NORAD. Notable works in this field include
Daniel Mortensen's A Pattern for Joint Operations (1987) and his edited volume
Airpower and Ground Armies, B. Michael Bechthold's article "A Question of Success,"
Christopher Rein's The North African Air Campaign, and Robert Ehlers' The

⁶⁹ Mark K. Wells, *Courage and Air Warfare: The Allied Aircrew Experience in the Second World War* (Portland, Or: Routledge, 1995).

⁷⁰ Mark Clodfelter, *The Limits of Air Power: The American Bombing of North Vietnam* (New York: The Free Press, 1989); Tami Davis Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945* (Princeton University Press, 2004).

Mediterranean Air War.⁷¹ Considering that Kuter's "Goddamm it, Georgie,"—his strongest and most public defense of tactical airpower doctrine—was written more than a decade after this military retirement, he considered tactical airpower doctrine very much part of his legacy.⁷²

A final group of secondary works is also important for this study. These are the ones that examine the impact army and air force personnel (compensation, accession, training and education) policies had on shaping airmen's thinking before, during and after the Second World War. This is especially true when these policies (particularly the impact of seniority-driven promotions) are placed alongside the interrelated effects of interwar manpower stagnation, rapid wartime mobilization and postwar demobilization. These policies substantially help to explain Kuter's rapid rise in professional prominence through the interwar period, his extremely rapid promotion to brigadier general, and the positions of substantial influence he held during and after the war. Noteworthy works in this genre include Craven and Cate's *Army Air Forces in World War II, Volume Six: Men and Planes*, Maurer Maurer's *Aviation in the U.S. Army, 1919-1939*, James Tate's *The Army and its Air Corps*, and Rebecca Hancock Cameron's *Training to Fly.* Also relevant, for the way they highlight how the Air Corps/AAF's rapid growth impacted

⁷¹ Daniel R. Mortensen, A Pattern for Joint Operations: World War II Close Air Support, North Africa (Government Printing Office, 1987); Daniel R. Mortensen, ed., Airpower and Ground Armies: Essays on the Evolution of Anglo-American Air Doctrine 1940-1943 (Maxwell AFB, AL: Air University Press, 1998); Bechhold, "A Question of Success"; Robert S. Jr Ehlers, The Mediterranean Air War: Airpower and Allied Victory in World War II (Lawrence, KS: University Press of Kansas, 2015).

⁷² Kuter, "Goddamm It, Georgie!"

⁷³ Wesley Frank Craven and James Lea Cate, eds., *The Army Air Forces in World War II, Volume Six: Men and Planes* (Chicago: The University of Chicago Press, 1955); Maurer Maurer, *Aviation in the U.S. Army 1919-1939* (Washington, D.C: Office of Air Force History, 1987); James P. Tate, *The Army and Its Air Corps: Army Policy Toward Aviation, 1919-1941* (Maxwell AFB, AL: Air University Press, 1998); Rebecca Hancock Cameron, *Training To Fly: Military Flight Training, 1907-1945* (Washington, D.C.: Air Force History and Museums Program, 1999).

other army branches, are Palmer, Wiley and Keast's *The Procurement and Training of Ground Combat Troops* (1948) and Peter Mansoor's *The G.I. Offensive in Europe* (1999).⁷⁴ These interwar and wartime personnel dynamics help to explain the flying backgrounds of air force leaders through the years, although not entirely in the way described by Michael Worden's *Rise of the Fighter Generals*.⁷⁵ A study of Kuter's career suggests that airmen had substantially more justification for service independence than simply the advent of nuclear bombers, and that bomber pilots held sway over the air force for significantly less time than is currently understood.

Archival Sources

While the wealth of secondary sources related to Kuter's life is both a boon and a bane, the extent of relevant archival sources is equally so. The first and most important archive for researching Kuter is the Clark Special Collections Branch in the U.S. Air Force Academy's McDermott Library. The Kuter collection alone consists of 50,000 documents, to include correspondence, speeches, oral history interviews, publications, daily diaries, scrapbooks, Laurence and Ethel Kuter's respective memoirs, photographs, oral history interviews, publications and other noteworthy documents. A substantial portion of collection has been microfilmed or digitized, but in a number of cases the

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⁷⁶ "Manuscript Record."

⁷⁴ Robert R. Palmer, Bell I. Wiley, and William R. Keast, *United States Army in World War II: The Army Ground Forces, the Procurement and Training of Ground Combat Troops* (Washington, D.C: Historical Division Department of the Army, 1948); Peter R. Mansoor, *The GI Offensive in Europe: The Triumph of American Infantry Divisions* (Lawrence, KS: University Press of Kansas, 1999).

⁷⁵ R. Michael Worden, *Rise of the Fighter Generals: The Problem of Air Force Leadership, 1945-1982* (Maxwell AFB, AL: Air University Press, 1998).

microfilms are difficult, if not impossible, to read. Anyone seeking to do in-depth research into Kuter must go to the Air Force Academy, where many of the documents are only available in their original hard-copy form.

Other collections at the Air Force Academy are also valuable. The Murray Green "Hap" Arnold collection there is as extensive as Kuter's, and is almost equally as valuable, given Kuter's close working relationship with Arnold. Green's oral history interviews, and the extensive notes he kept that go with those interviews, are especially helpful. The Haywood Hansell collection is also immensely valuable, given that Kuter and Hansell were friends, coworkers and of much the same mind regarding airpower throughout much of their respective careers. Many other contemporaries of Kuter's have collections there, too: James H. Doolittle, Eugene Eubank, Haywood Hansell, Hubert R. Harmon, James Parton, Delmar Spivey and George Stratemeyer. Helpfully, the library also has copies of transcripts from the Columbia University Oral History Interview Program (CUOHI), which also provide great insights.

The next most substantial archive relevant to Kuter is the Simpson Historical Research Center at Maxwell Air Force Base, Alabama. This center agency, which Kuter helped to establish, houses substantial archives that cover events from the interwar period through the end of Kuter's career. These include organizational histories for essentially every flying organization of which Kuter was a part, oral history transcripts, voice recordings and other media. Helpfully, AFHRA has copies of Kuter's official military personnel record, which—due to Kuter being a "person of exceptional prominence"—are releasable to the public.

The Library of Congress Manuscript Division is another important resource, since it houses the papers of multiple contemporaries of Kuter's: Lieutenant General Frank M. Andrews, General of the Air Force Henry H. "Hap" Arnold, General Ira C. Eaker, General Muir S. Fairchild, General Curtis E. LeMay, General Carl A. Spaatz, General Nathan F. Twining, General Hoyt S. Vandenberg and General Thomas D. White. The National Archives and Records Administration II nearby in College Park, Maryland, contains substantial records that are relevant to Kuter's wartime service. Most of the records directly associated with the Air Force can be found at AFHRA, but those pertaining to the Joint and Combined Chiefs of Staff organizations are located at NARA II. The Air Mobility Command historian's office at Scott Air Force Base, Illinois, has valuable archives related to Kuter's tenure as the Military Air Transport Service commander, particularly regarding organizational histories and headquarters correspondence.

Summary

Given Kuter's substantial involvement in building and leading the Air Force, the way in which he seems to have been forgotten by the service he helped create, the absence of a Kuter biography (scholarly or otherwise), the many historiographical debates in which his life and career are directly relevant, and the substantial archival sources that remain to be fully explored, a closer study of General Laurence Kuter's life and career is long overdue. This study will examine from Kuter's early childhood through

the end of the Second World War. The conclusion will include a discussion of how Kuter's experience to that point drove and enabled him to continue shaping the United States Air Force from its official birth in 1947 through its adolescence (Kuter did not retire from service until just prior to the air force's fifteenth birthday), and how he continued to mentor the service beyond its 25th anniversary.

Formative years

On December 17, 1903, at Kill Devil Hill, Kitty Hawk, North Carolina, the Wright Brothers made the first manned, powered, controlled flight in history. Although visionary science fiction authors like H.G. Wells, in his 1898 book *War of the Worlds*, had presented frightful visions of destruction half a decade before the Wrights first flew, most Americans came to view the airplane as emblematic of technological salvation. A year and a half later, on 28 May 1905 in Rockford, Illinois, Laurence Sherman Kuter was born to Maynard and Minna Kuter. Neither of the two, both of German stock, could have imagined the way their son would use the Wright's invention to visit apocalyptic destruction on their ancestral German homeland while flying from the English countryside—and later still employ airpower to save Berlin from Soviet domination. It would have been equally unimaginable that their son would later circumnavigate the

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¹ H. G. Wells, *The War of the Worlds* (Dover Publications, 2012); Professor Robert Wohl, *A Passion for Wings: Aviation and the Western Imagination, 1908-1918* (New Haven: Yale University Press, 1994); A. Bowdoin Van Riper, *Imagining Flight: Aviation and Popular Culture* (College Station, Tex: Texas A&M University Press, 2003); Joseph Corn, *The Winged Gospel: America's Romance with Aviation, 1900-1950* (New York, NY: Oxford University Press, 1983). *War of the Worlds* was published in book form in 1898, but appeared in serialized form in British and American magazines before then. Wells was not alone in imagining destruction by airborne technology. Scholarly works like Wohl's *A Passion for Wings* and Van Riper's *Imagining Flight* note the dual nature of people's thinking toward airplanes; they could be forces for great good or terrible evil. They tend to agree with scholars like Joseph Corn, who in *Winged Gospel* argues that optimism exceeded pessimism. Corn goes so far as to say that Americans at the time were absorbed in technological messianism, thinking that airplanes would help usher in a more utopian future.

² "Winnebago County Alpabetic Listing of Births, 1855-1931," *Genealogy Trails: Finding Illinois Ancestos*, accessed August 15, 2015, http://genealogytrails.com/ill/winnebago/births-K.html.

globe aboard a 747 jumbo jet that he had helped make a reality as Pan Am's vice president, flying over civil air routes and using procedures that he helped negotiate as the first United States minister to the International Civil Aviation Organization (ICAO).

Tracing Laurence Kuter's life and career allows one to simultaneously follow the conceptualization, growth and professionalization of American airpower.

Little about young Laurence's early life and circumstances prefigured the life and career he would later embrace. His parents were neither wealthy nor politically well-connected, having both grown up as children of farmers in DeKalb County, Illinois. Their families were acquainted with each other, however. When Simon A. "S.A." Kuter, Maynard's father, joined the Union Army as a cavalryman, he bought his horse from Minna's father Peter Beisner. Maynard and Minna shared an independent streak in their personalities, in that they both rejected farming and sought educations at Northwestern Academy, a preparatory school on Northwestern University's campus. Maynard tried to get even further from home by applying to West Point, but poor eyesight in one eye precluded him from joining the service.³

It is unclear when Maynard started pursuing Minna (he was born four years earlier than she, so it seems unlikely they overlapped at Northwestern), but they married in June 1904. Maynard could have done well working for his father, either as a farmer or running one of S.A. Kuter's side businesses, since the elder Kuter also owned a furniture store and was the local undertaker and coroner. The newlyweds instead moved out of DeKalb County to Rockford, where Maynard worked at a book and stationery store for a

³ Kuter, "Growth of Air Power," 4–5.

after the newlyweds were married. After that first low-paying job, the Kuters tried their hands at farming outside of Hinckley, Illinois, for three years, before returning to Rockford to work at a different book and stationery store. Maynard's big break came in 1912, when at the age of thirty-five he was hired as a manager for the Atlantic & Pacific Tea Company (A&P) when the company opened its first Rockford store. He remained with the same company until he retired as a regional superintendent at age seventy-four. Laurence spent his first five years as an only child, until his sister Faith was born while they were still on the farm. He was eleven when his youngest sister and only other sibling, Ruth Frances (better known as "Pat"), was born in Rockford. The Kuters hardly fit the description of globe spanning societal elites who would be their son's peers years later.

One thread through the Kuter family history (despite Maynard's failed attempt) was army service. Maynard's great grandfather, Lieutenant Valentine Kuter, had served alongside his brother Captain Elias Kuter at West Point under Colonel "Mad Anthony" Wayne during the Revolutionary War. S.A. Kuter was a Civil War veteran, having served in the 17th Illinois Cavalry. It seems young Laurence's grandfather was happy to embellish his accounts. He liked to tell tales of fighting above the clouds at Chattanooga, a battle which occurred in November 1863, even though S.A. Kuter enlisted in 1864 at

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⁴ Ibid., 5–6.

⁵ Laurence S Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., interview by Hugh N. Ahmann and Tom Sturm, October 3, 1974, 8, USAF Oral History Program, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

⁶ "Winnebago County Alpabetic Listing of Births, 1855-1931"; Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 8

⁷ Kuter, "Growth of Air Power," 1–3.

age seventeen.⁸ Maynard never pushed Laurence toward the U.S. Military Academy at West Point, however, and never told his son the story about his abortive application to the school until after his son was already a West Pointer himself.⁹ Although the Army meant much to the Kuters, the Kuter name meant little to the Army.

More than just a somewhat martial family background vectored young Laurence Kuter toward military service. At age eight or nine, he marched—with a red fez, red cap and wooden rifle—in the Decorations Day parade. During the Great War, he watched as the Army's Camp Grant was built on the outskirts of Rockford, and thousands of men trained there before heading off to war. Many died there, too, due to a Spanish Flu outbreak; S.A. Kuter was called out of retirement to serve as an assistant undertaker. Laurence Kuter's experience at Rockford Central High School, however, was the most decisive in directing him toward the Army and achieving career success.

Rockford Central High gave Kuter a strong education, connected him with mentors, and introduced him to his future bride and driving force behind his career, Elizabeth Ethel Lyddon. The school is itself historically noteworthy. In 1892, it became the second high school in the country to establish a yearbook, and in 1907 it was the first in the United States with a marching band. It was a very large school for its day, and as a result won a number of state championships within the Illinois High School Association

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⁸ Ibid., 3; James M. McPherson, *Battle Cry of Freedom: The Civil War Era*, 1 edition (New York: Oxford University Press, 2003), 679.

⁹ Kuter, "Growth of Air Power," 5.

¹⁰ Ibid., 8–9.

¹¹ Miriam Carlson, "The Rise and Fall of Rockford Central High School," *Illinois History*, December 1998, http://www.lib.niu.edu/1998/ihy981217.html.

during the first half of the twentieth century. ¹² It had a strong enough academic reputation that those with Rockford High diplomas did not need to take the West Point entrance exams. Kuter was able to take courses which prepared him for a scientific or technical college, and three teachers altered his life significantly. His physics teacher, Sarah Aleta McEvoy, inspired his interest in science and technology—a fascination which continued throughout his career in aviation. Ada Kruger and Faye Cleveland, his English teachers, taught him to enjoy reading, writing and word play. ¹³ Kuter's prolific writing and speaking would benefit greatly from their influence.

Likely due to Rockford's highly competitive athletic programs, Kuter primarily sought success off the athletic fields. He tried out for, but did not make, the basketball and football teams. Recognizing he would achieve greater success by developing his mind than his muscles, he improved his rhetorical skills as the debate team's captain and a member of the drama club. He was further motivated to participate in those extracurriculars because Ethel Lyddon, who had a locker near his and had the same English classes as he, was very active in the dramatics program and was also a debate team member. In 1921, both Laurence and Ethel acted in "The Golden Doom." Laurence played the Greek King, but Ethel was interested in someone else. In February 1922, Laurence took Ethel to a play—with her real love interest sitting directly behind them. Laurence was undeterred, perhaps because he saw the same ambition and work ethic in her and her family as he did in his own.

¹² Illinois High School Glory Days, "The History of Rockford High School," *The "Original" Rockford High School*, August 15, 2015, http://www.illinoishsglorydays.com/id86.html.

¹³ Kuter, "Growth of Air Power," 11–13.

¹⁴ Kuter, "Along with Larry," 15–16.

Ethel Lyddon was a witty, vivacious young lady from a prominent local family. Her father, Benjamin Arnold Lyddon, was born in England in 1866 and emigrated to the United States with his mother, brother and stepfather in 1877. They also settled in DeKalb County. Realizing that "Benny Arnold" had a negative connotation in America, the boy formerly known as Benny elected to go by his middle name Arnold instead. Arnold, despising his stepfather, ran away and ended up in Rockford along with his brother in the construction business. He proved successful enough that when Arnold's stepfather disappeared, Arnold took care of his mother. While primarily self-educated, he was well-read. Lyddon's construction firm built Rockford High School, and all seven of his children (five boys and two girls) graduated from college—a significant feat, since some attended during the Great Depression. The Kuters and Lyddons were and would remain close family friends.

While continuing to pursue Ethel, who thought herself "too serious to be attractive," Laurence Kuter served as a member of the student council, and in his last semester as a senior was elected class president. As late as February 1923 (their senior year), Ethel was unsure about her suitor. In her diary, she wrote, "Positively, Laurence is the most wonderful fellow. . . He never gets mushy or anything like that. I don't get crazy over him, just like him, good and steady." Ethel's impressions mirror how many would feel toward her future husband: while many would greatly respect him, few would ever

¹⁵ The Rockford Morning Star, "Rockford To-Day" (The Clark Company Press, 1903), 162, https://ia802607.us.archive.org/8/items/rockfordtodayhis00rock/rockfordtodayhis00rock_bw.pdf. ¹⁶ Kuter, "Along with Larry," 6.

¹⁷ Roxanne Kuter Williamson, "Letter from Roxanne Kuter Williamson to Joel Higley."

¹⁸ Kuter, "Along with Larry," 20.

¹⁹ Ibid.

go crazy over Laurence Kuter. Ethel could see his character, and knew from whence it came. She was very impressed by Minna Kuter's easy grace and beauty and Maynard's businesslike dignity (although Ethel was a bit afraid of Laurence's father).²⁰

While Ethel would become the driving force behind Laurence Kuter's military career, it was Captain Harold H. Fisher, Kuter's Junior Reserve Officer Training Corps (JROTC) commander, who made it possible. Kuter's relationship with Captain Fisher deserves special mention, both for its impact on Kuter's career and the bizarre way it ended. Fisher ran an excellent JROTC detachment, which won Fifth Corps area first honors every year he ran it.²¹ He led through example and got his cadets' compliance through respect. As Kuter later recalled, "Without ever using the words, Captain Fisher gave us foundations in organization, human relations, delegation of authority, team pride and the exercise of responsibility." Young Laurence Kuter moved up the cadet ranks, and by his senior year was captain of the detachment's Company B. He had no intention to pursue West Point, however. Rather, he planned to attend the University of Cincinnati and become a mechanical engineer.²³

At some point during their senior year—apparently after the normal application deadline, Fisher encouraged Kuter and two of his classmates, Lester B. Wright and Robert W. Brolin, to apply to West Point. After going home and discussing the idea with their respective parents, all three decided to apply. Fisher acted quickly, and he soon found and secured alternate appointments for all three candidates. The senators and

²⁰ Ibid.

²¹ Kuter, "Growth of Air Power," 14.

²² Ibid.

²³ Ibid., 15.

congressmen had already selected their primary candidates, but with the alternate slots in hand, Fisher then arranged for physical exams, ninety miles and a train ride away in Fort Sheridan. Upon returning from their physicals in mid-March, Wright and Brolin learned that they would be part of the West Point class entering on 2 July. Their congressmen's primary appointees had failed their respective physicals, so they became the primary appointees. Kuter had no such luck, so he readied himself for Cincinnati, even as Fisher remained undeterred.²⁴

On 16 June, five days before high school graduation and two weeks before West Point's class of 1927 was to enter, Kuter got a long-distance call from Springfield, Illinois—two hundred miles south. Fisher, on his own time and dime, had found Senator William B. McKinley, who had no qualified applicants, as all had failed at some point in the process. Kuter accepted the appointment, with no pressure from his father and much concern from his mother. It was an emotional two weeks. On the 19th, Laurence Kuter and Ethel Lyddon led the grand march at the senior prom. On the way home, Laurence stopped the car. Ethel asked what was wrong, and he said, "Ethel, do you know that I've gone with you for a year and a half. I can't exactly propose to you or ask you to become engaged, but I wonder if there couldn't be something besides just a fellow and his best girl?" Ethel "was in heaven," and she wondered later how the two young people kept their hands off each other that night. Laurence Kuter demonstrated the forward thinking and remarkable restraint that would be his career hallmark—he did not kiss her that night,

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²⁴ Ibid., 15–16.

²⁵ Ibid., 17; Willaim B. McKinley, "Letter from Senator William B. McKinley to the Adjutant General, War Department," June 16, 1923, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL. ²⁶ Kuter, "Along with Larry," 27.

nor had he done so at any time previously. They finally did kiss for the first time five days before he left for West Point, however.²⁷ They would remain devoted to each other for the rest of their lives.

Laurence Kuter boarded the train with his two friends on 30 July 1923, headed for a school that would reorient his life forever. 28 Given his circumstances, he was an unlikely candidate for the Academy. He had no political connections; while the Arnolds and Vandenbergs (Laurence Kuter would work closely with West Point graduates "Hap" Arnold and Hoyt Vandenberg) were from prominent political families, the Kuter surname had no such aura.²⁹ Aside from his grandfather's brief, low-ranking stint in the cavalry, Kuter had no family members with recent military experience—unlike the Hansells, Cabells, and many other future peers with close senior Army relatives. 30 Even Captain Fisher would distance himself from young Laurence. Kuter was not much of an athlete, as he would affirm on West Point's fields of friendly strife. Even among the three from his school, he was the last to get an appointment, and once there he would compete against others who already had college experience, if not diplomas from civilian universities. The only relative strengths he had going into West Point were strong support from his family, a sound education, an appreciation for (but unawareness of actual) Army life, and the love of a special girl. In other words, Laurence Kuter—a big fish in his high

²⁷ Ibid., 28.

²⁸ Kuter, "Growth of Air Power," 19.

²⁹ Dik A. Daso, *Architects of American Air Supremacy: Gen. Hap Arnold and Dr. Theodore von Kármán* (Maxwell AFB, AL: Air University Press, 1997), 9; Meilinger, *Hoyt S. Vandenberg, the Life of a General*, 4. Political connections helped secure West Point appointments for both Arnold and Vandenberg, both of whom Kuter would work with very closely during his career.

³⁰ U.S. Air Force, "Major General Haywood S. Hansell, Jr.," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106813/major-general-haywood-s-hansell-jr.aspx; Cabell, *A Man of Intelligence*.

school pond—was at best no better (and in many cases worse) prepared than the other 362 young men who entered with him. Throughout his formative years, the notion of becoming an Army aviator had never crossed his mind. Even if he were motivated toward becoming a pilot, the physical exam he had gotten as a cadet candidate did not include an assessment of his suitability for flying duty. Even if he did want to fly, and knew he was physically qualified, Kuter's West Point experience would do little to spur his interest in Army aviation.

West Point

The U.S. Military Academy at West Point did much to shape Laurence Kuter as an officer. He established disciplined study habits while getting a strong academic and military education, came to know and be known by many future senior Army and air force leaders, became "Larry" instead of Laurence, and made Ethel a full partner in his career before they were even married. Two things West Point did not encourage were intellectual pursuits or interest in Army aviation. While he was at West Point, Ethel established herself as an actress in her university programs.

While Rockford High had given Laurence Kuter a solid academic foundation, he had never been forced to study. His study habits changed dramatically during his first ("Plebe") year. West Point's pedagogical approach did little to spark intellectual curiosity or enable subject mastery, but it forced cadets to prepare well for their daily lessons and exposed them to a wide range of academic fields. As Kuter recalled, "At West Point

instructors were primarily referees who called on each of the twelve or so cadets in the class to recite each day and graded him from 0.0 to 3.0 on the extent to which he had absorbed the material for study."³¹ West Point's pedagogy was decried by educators at the time, but more recently works like Jörg Muth's, *Command Culture* highlight how the school's practices had a long-lasting, negative impact on the Army which it served. ³² If anything, West Point graduates succeeded during the Second World War in spite of their undergraduate experiences at the school. The good news for Kuter, however, was that the system rewarded broad-minded individuals with strong work ethics. This fit Laurence Kuter perfectly. Despite having been less well prepared than many of his classmates, he would graduate #44 (the top twenty-five percent) in his class, which by graduation day had dwindled from 363 to 203.³³

Laurence Kuter and his peers were weighed and measured socially, too. The degree to which he came to know his classmates and those in the classes above and below him is difficult to discern. Nonetheless, in a class that graduated approximately two hundred officers, he knew most of his classmates well after the four-year West Point crucible, and they knew him. Those relationships would prove vital for the remainder of his career, since many reached senior military rank. Kuter was one of three 4-star generals to emerge from the West Point class of 1927; he made the rank in the Air Force,

³¹ Kuter, "Growth of Air Power.", 20.

³² Jörg Muth, Command Culture: Officer Education in the U.S. Army and the German Armed Forces, 1901-1940, and the Consequences for World War II (Denton, TX: University of North Texas Press, 2011). Muth's work, primarily in Chapter 2, does an excellent job describing how the West Point curriculum was antithetical to intellectual and leadership development.

³³ Michael Krisman, ed., *Register of Graduates and Former Cadets of the United States Military Academy,* 1802-1974 (West Point, N.Y.: Association of Graduates U.S.M.A., 1974), 381–385; Kuter, "Growth of Air Power," 22. Kuter quotes that 363 entered and 198 graduated while the register of graduates does not indicate how many entered and lists 203 as graduates. The source of the discrepancy is unclear.

while the other two, Guy Stanley Meloy (one of Kuter's Plebe year roommates) and James Francis Collins (a flying training school classmate of Kuter's in 1929—albeit briefly), both made their rank in the regular Army.³⁴ Kuter was one of thirteen from his class who earned twenty-six total stars in the Army Air Forces during war and/or the Air Force that succeeded it: one 4-star (Kuter), two 3-stars, six 2-stars and four 1-stars.³⁵ This record is all the more impressive when one realizes that only a fraction of his class ended up in the Air Corps. It helped that Kuter and his classmates were fourteen years into their careers when the Japanese struck Pearl Harbor (and hence rode the wave of wartime expansion) and had twenty years in service when the Air Force became an independent service (with the rank expansion that followed the creation of service structures that formerly had been managed by the Army).

The list of Kuter's likely West Point associates is even more impressive considering that Kuter likely knew many from the classes ahead and behind him. Over half (including Kuter) of the Air Force's first twenty-five 4-star generals were cadets at the same time as he, and five of them graduated within a year of him. West Point '26 produced few—just five—air force general officers (for a total of eleven stars). West Point's '28 class, however, was the class the air force stars fell on. The twenty-seven of

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³⁴ During this time period, teaching people to fly airplanes was called flying training. In later years, it would be called flight training or pilot training. This chapter will typically use the contemporary term flying training.

³⁵ Krisman, Register of Graduates and Former Cadets of the United States Military Academy, 1802-1974, 381–385; Kuter, "Growth of Air Power," 40.

³⁶ Krisman, Register of Graduates and Former Cadets of the United States Military Academy, 1802-1974, 377–380.

its graduates who earned air force general officer rank earned sixty-one total stars, of which four earned four stars.³⁷

USMA Class	Total AF Generals	4-Star Generals	3-Star Generals
1924	9	Partridge, E.E.	Harper, R.W.
			Nugent, R.E.
1925	6	Cabell, C.P.	Barnes, E.W.
1926	5	Johnson, L.W.	
1927	13	Kuter, L.S.	Asensio, M.J.
			Stone, C.B.
1928	27	Anderson, S.E.	Boatner, B.L.
		Everest, F.F.	Briggs, J.E.
		Landon, T.H.	Rainey, R.M.
		O'Donnell, E.E. Jr.	Samford, J.A.
			Thatcher, H.B.
			Todd, W.E.
			Tunner, W.H.
1929	8	McKee, W.F.	Hall, W.E.
		Smith, F.H. Jr.	Wetzel, E.S.
1930	7	Bradley, M.E.	
		Norstad, L.	
		Sweeney, W.C. Jr.	

Table 1. Air Force Generals by USMA Graduation Year³⁸

Through West Point, Kuter thus got the opportunity to know and be known by many of the Air Force's early senior leaders. Of those whose cadet experience overlapped with Kuter's, the classes of 1924-30, none would pin on general earlier than Kuter.

³⁷ Ibid., 385–389.

³⁸ Ibid., 381–389. Total AF Generals includes those who reached temporary or permanent general officer rank either in the Army Air Forces or United States Air Force. From the classes of 1924-30, only Norstad and Partridge pinned on 4-star General rank ahead of Kuter, and Norstad was the only one to earn his third star earlier than Kuter.

Frederick L. Anderson, class of '28, would pin his second star ahead of Kuter, but never got a third.³⁹ Only Lauris "Larry" Norstad, class of '30, would take fewer years to earn four stars than Laurence Kuter.⁴⁰ Why the class of '28 produced significantly more air force generals than the classes before or after it is a question that remains unexplored. Regardless, for a significant number of early air force generals, Kuter outranked them from the first time they met, and would remain senior to them throughout their careers. Many of those who knew Kuter from West Point, such as '27 classmates and future major generals E. Blair Garland and Matthew Deichelmann, would serve under Larry Kuter.⁴¹

Character assessment did not happen solely between cadets. Kuter and George Stratemeyer came to know each other by 1926 at the latest, when then-Major Stratemeyer was the tactical officer in charge of Kuter's first class (senior) year cadet company. Neither Stratemeyer nor Kuter could have missed a particular "Cow" (junior) in their company—William Tunner, who would later prove himself an airlift savant and serve in the Military Air Transport Service (MATS) under Kuter. Kuter also got an early start in showcasing his staff and oratory skills. During the final semester of his first class year, he

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³⁹ U.S. Air Force, "Major General Frederick Lewis Anderson Jr.," Text, *Biographies*, accessed August 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107839/major-general-frederick-lewis-anderson-jr.aspx.

⁴⁰ "General Lauris Norstad," Official Website of the United States Air Force, *Biographies*, accessed August 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106085/general-lauris-norstad.aspx.

⁴¹ U.S. Air Force, "Major General Matthew K. Deichelmann," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107255/major-general-matthew-k-deichelmann.aspx; U.S. Air Force, "Major General E. Blair Garland," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107001/major-general-e-blair-garland.aspx; U.S. Air Force, "General Laurence S. Kuter," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106523/general-laurence-s-kuter.aspx. The generals' official biographies, as well as other sources, such as oral history interviews, underscore the multiple ways in which their careers intersected.

⁴² West Point, *The Howitzer of 1927: The Annual of the United States Corps of Cadets* (Rochester, NY: The DuBois Press, 1927), 86.

⁴³ Ibid., 87.

was on a six-cadet committee which arranged Sunday afternoon speeches for the first

class cadets. The intent was to improve relations between the post's officers and the

senior cadets who would soon join their ranks. Kuter was responsible for seating

arrangements for 250 officers and cadets, from one-star general to cadet private. Kuter

was the first cadet to speak on the first Sunday event in that series, following the

Superintendent and the Chaplain. Kuter's reputation as a good staff officer and

noteworthy speaker thus began before he even graduated.⁴⁴

At West Point, Laurence Kuter forever became "Larry." Ethel had always known

him as Laurence, but Kuter's military peers were disinclined to use such a formal title. As

Larry wrote Ethel in March 1926, "... I'll explain my name. 'Larry'—well really out of

every hundred times I'm spoken to, I'm Larry ninety seven times—Laurie twice and

Kuter once. So I have trouble keeping my Rockford-Kuter, Champaign-Laurence,

Milwaukee-Son, Boy, Lad and West Point-Larry personalities straight."⁴⁵ Few called him

by his last name, perhaps because of its pronunciation: his last name sounded like

"Cuter," rather than "Cooter" or "Cutter." As a Plebe, Kuter quickly developed a

response to hazing over his name. As Larry explained in a letter to Ethel, it went

something like this:

"Upper classman: Kuter! Cuter than what?"

"Plebe: Kuter than Hell, Sir." 46

⁴⁴ Kuter, "Along with Larry." 68.

⁴⁶ Ibid., 48.

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Cuteness and cadetdom did not mesh well, so Larry was the name by which everyone in the Army knew him. He asked Ethel to do the same. Even after he transitioned into military aviation, he never picked up another professional moniker, unlike many of his eventual aviator friends and/or bosses: "Hap" Arnold, "Mary" Coningham, "Possum" Hansell, "Rosie" O'Donnell, "Santy" Fairchild and "Tooey" Spaatz. Somehow, no other handle stuck other than the bland but comfortably familiar "Larry."

In the midst of his transformation into a soldier, Larry sought to stay in contact with Captain Fisher. Kuter expressed his gratitude for opportunity Fisher's great efforts had afforded him and gave him progress updates. Fisher initially wrote brief letters back, encouraging him to do his best. By his third year, Larry's efforts had him comfortably in the top half of his class. Fisher wrote back that, since Kuter would clearly go on to graduate from West Point and Fisher was not a West Point graduate himself, they could have no further relationship. Fisher's response was nonsensical, since West Point graduates were a minority within the officer corps and rank always trumped pedigree. Kuter would have been proud to serve his higher-ranking mentor. As Kuter wrote later, Based on a misunderstood and false standard, Captain Fisher had exhibited the most extreme case of class consciousness that I had ever known . . . [his] attitude might be called an intense reverse snobbery, an enormous inferiority complex, or a gross underestimation of the quality of his own education and training. On one point there can be no doubt. He was motivated by only one fierce desire—to protect and enhance his

⁴⁷ Kuter, "Growth of Air Power," 19.

protégés."⁴⁸ While Kuter made further attempts to contact his former mentor, he never got a response. Although Larry Kuter would remain proud of his membership in West Point's Long Gray Line, he would exhibit no prejudice against those from other commissioning sources. He would experience anti-West Point bias later in his career, however.

One person that remained a regular correspondent throughout Larry's cadet experience was Ethel Lyddon, as the stacks of letters in the Air Force Academy's Kuter Collection attest. While very much in love, they also established a partnership that was very progressive for the day. While Larry established himself at West Point, Ethel made her own name first at Northwestern University, then as a transfer student at the University of Illinois, as an actress and leader within her Pi Beta Phi sorority. A list of Ethel's activities and accolades at her university would make one wonder which of the two was more ambitious. ⁴⁹ In a unique twist, the West Point Alma Mater and the Pi Phi Sweetheart song were the same tune. ⁵⁰ Likely unaware of this coincidence, Cadet Corporal Kuter proposed to Ethel Lyddon at Fort Putnam with a miniature of his West Point ring from Tiffany's in June 1926. He achieved a personal victory at the same site where his ancestor Valentine Kuter had once stood watch. After Ethel said "yes," they

⁴⁸ Ibid., 18.

⁴⁹ Kuter, "Along with Larry," 35–77. Ethel was a leader in her sorority, directed and acted in multiple plays and carried a twenty-one credit hour academic load during her last semester. Late in Ethel's senior year, a couple graduate students asked Ethel to go on tour with them, playing the part of Mrs. Linde in "The Doll's House." She would have been one of just two undergraduate students on the tour.

⁵⁰ Kuter, "Along with Larry." 78.

walked to the cadet chapel, where the organist was giving a recital. In unheroic, yet typically cadet fashion, Cadet Kuter fell fast asleep next to his bride-to-be.⁵¹

Even before they graduated, Larry made Ethel a full partner in his Army career, for he knew the effect she could have on his professional future. In a letter five months before graduation, he acknowledged their interdependence and ambitions when he wrote, "A couple of cadets, Army children, have been discussing the great effect that an officer's wife has on his career. It seems that in the Army the wife plays a bigger part than on the outside . . . I hope that is true—and everything indicates that it is. I may be Chief of Staff, yet!" When Kuter learned that he would likely have to do a stint in the Air Corps at some point after graduation, he solicited Ethel's input:

"Today was a day of unexpected events. The [Secretary] of War published an order that ninety percent of all officers in the service must be flying officers which means that I will get a detail (of at least two years) with the Air Service within the next two years. If we want it I can get that detail right after graduation. When do you want it? . . . Now if we get this detail now, it will be over—and that seems to be the main benefit. While there is very little chance—there are casualties in the air service—that is your consideration. Please let me know your idea before I express my firm belief." [emphasis added]

Larry Kuter ultimately decided upon Field Artillery, having gotten little guidance as to which branch might be a good fit. West Point provided plenty of exposure to infantry and cavalry throughout the year, through local training and horsemanship classes. During summer exercises, he was exposed to the other ground branches—engineer corps, signal corps, field artillery and the like. His brief experience with the Air Corps, a weeklong familiarization trip to Mitchel Field, did more to dissuade him from

⁵¹ Kuter, "Growth of Air Power.", 2.

⁵² Kuter, "Along with Larry." 68.

⁵³ Ibid., 68-69.

than direct him toward aviation.⁵⁴ On his first flight, his pilot flew their World War I-era DH-4 under the Brooklyn Bridge with just feet to spare.⁵⁵ On the second flight, he went up in a Great War-era "Jenny" and flew tight turns around the Singer building. On the last flying day, he watched his classmate Bill Point die when he and his pilot crashed in a polo field shortly after takeoff.⁵⁶ Kuter was unimpressed by the airmen, who hardly showed themselves to be disciplined military professionals. His preference for the ground arms was buttressed by the fact that most map exercises at West Point were still "fought" on three dimensional maps of Gettysburg.⁵⁷ An Army that was still re-fighting a half-century old battle—despite the fact that the Spanish-American War, Philippine War and the Great War had been fought since then—had little interest in promoting military aviation within its ranks.

With little clear professional guidance beyond thinking it was imperative to avoid a long-term career in Army aviation, Kuter ultimately chose Field Artillery. His friend, junior-year roommate and frequent boxing partner Reynolds "Mid" Condon's influence was decisive. Mid's biological father was Clarence M. Condon, who had won the Medal of Honor in the Philippine War. He earned the award as a sergeant, but ultimately retired

⁵⁴ Cradle of Aviation Museum and Education Center, "The History of Mitchel Field," text, *Cradle of Aviation Museum and Education Center*, accessed May 15, 2015,

http://www.cradleofaviation.org/history/air_fields/mitchel_field.html. Mitchel Field was an airfield in Long Island established during the First World War. It was named after former New York City Mayor John Purroy Mitchel, and was the site of many major aviation events. It remained in use until 1961, when several highly-publicized aircraft crashes forced its closure.

⁵⁵ Kuter, "Growth of Air Power," 26.

⁵⁶ Ibid.

⁵⁷ Ibid., 28.

as an artillery lieutenant colonel in 1916, the year he died.⁵⁸ Mid had gotten his nickname because he spent a year at the Naval Academy before deciding he preferred West Point, with its stricter Honor Code.⁵⁹ Mid's mother, whom Kuter affectionately called "Mother Fan," was very concerned about her son's career, visited her son often, and was much impressed with Larry and Ethel. Mother Fan was well connected in Washington, since not only was she a Medal of Honor recipient's widow, but she had married Colonel Henry Mervale Morrow of the Army's Judge Advocate Corps after her first husband's death.⁶⁰ Due to her current husband's position in Washington and her former husband's fame and artillery background, Mother Fan had some ability to influence Mid's and Larry's assignments.⁶¹ According to Kuter, "Mother Fan told us that, if Mid and I would choose the Field Artillery, she would arrange to have us assigned to the army post with the most romantic name on the map, the Presidio of Monterey, California."⁶²

Although Kuter's class standing gave him a wide variety of options, he selected the field artillery because the Presidio was the ideal location for him and his soon-to-be bride. He passed on the Corps of Engineers, Cavalry and other more typically favored branches, because: "As the home base of a leading cavalry regiment, we would have all the swank of life in the cavalry and all the polo we could want." The 76th Field Artillery, while a tenant on the cavalry post, was a horse-drawn organization which also had a polo

⁵⁸ The Official Army Register for 1916 and the gravestone at Arlington Cemetery indicate that Condon retired as a captain. Other online sources, however, indicate that he retired as a lieutenant colonel; he likely held temporary lieutenant colonel rank while on active duty, while retaining the permanent rank of captain. ⁵⁹ Kuter, "Growth of Air Power." 29.

^{60 &}quot;Morrow-Condon," *Army and Navy Register*, January 1, 1921.

⁶¹ Kuter, in "Growth of Air Power," indicates that Reynolds Condon's father was the Army Judge Advocate General. The man whom Kuter identifies as his roommate's father was in fact his stepfather. Reynolds Condon's father, Clarence M. Condon, died in 1916.

⁶² Kuter, "Growth of Air Power," 30.

team, Maxwell boots and swagger sticks.⁶³ Ethel was excited to learn that there was a local theater near the Presidio. The field artillery seemed a perfect fit for the young couple. Meanwhile, twenty-seven of Kuter's classmates selected the Air Corps, although they were commissioned in other ground branches.⁶⁴ Graduation rates from flying training were so low that they needed a ground branch to return to if (more appropriately when) they did not earn their wings.

Larry and Ethel were unable to see each other graduate from their respective schools, since their graduations were just one day apart. Larry graduated from West Point on 14 June, and was commissioned as a second lieutenant in the field artillery. The next day, Ethel got her degree in English and Public Speaking. The caption under Kuter's picture in the West Point *Howitzer* yearbook aptly described young Larry Kuter. While hyperbolic, as is the norm for such tomes, it belies the cold, austere impression given of him in historiography:

One Larry: laughing, quick-witted, generous, eagerly-obliging—all that a man or woman could wish. Nothing in his life has been or will be so sorrowful as to make him cease to smile. A cheerful shrug of the shoulders dispenses with any unpleasant event. Larry has forgotten sorrow for joy.

He has the gift of appropriate repartee. Those who seek to penetrate his guard of humor always find themselves blushing confusedly at an instinctive yet perfect riposte. Yet with his humor he has a manner compelling enough to make a school girl believe the moon is not romantic, if he chooses.

Although he quickly became addicted to bridge he later expanded the theory that cards, barrack ballads, and academic work do not make a harmonious mixture. He never learned to be a low-ranking scholar. His love for study does not prevent him from being a good two-fisted scrapper and a real man.

Friendship begets friendship, so one does not wonder that Larry is surrounded by sincere comrades. No truer gentleman than he is alive.

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⁶³ Kuter, "Growth of Air Power."

⁶⁴ George Washington Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930*, ed. William H. Donaldson (Chicago: The Lakeside Press, 1930), 2033–2081.

Withal, the old, old saying that one person's loss is another's gain brings little consolation for us when we bid good-bye to Larry. ⁶⁵

Larry Kuter's peers knew him as laughing, gregarious and witty. At the same time, however, he was serious, scholarly, and hard to read. He was a gentleman with a wide circle of friends. Wit, charm and academic prowess would only carry him so far in his marriage and as a leader of artillerymen, however. He still had much personal and professional growth ahead of him.

Marriage and the Field Artillery

Second Lieutenant Larry Kuter learned many lessons during his first duty assignment that he would carry with him throughout his career. He learned through practical experience how to run a military unit, transitioned from teetotaler to brewmaster, accommodated his wife's acting career while furthering his own, started a family with Ethel, and grew motivated to pursue a flying career (albeit only temporarily). Larry and Ethel first needed to get married and make it to the Presidio.

Larry Kuter's financial situation made it difficult for the new lieutenant to make Ethel his wife as soon as he would have liked. Due to Larry and Ethel's abhorrence of debt and their respective families' low financial clout, they had to be married on 8 September. They could not afford a wedding any sooner, and Larry's report date precluded anything later. Larry had built up too much debt as a cadet (in part due to the

⁶⁵ West Point, The Howitzer of 1927: The Annual of the United States Corps of Cadets., 87.

large amount of high-quality Tiffany's stationery he bought in writing to Ethel), he had to purchase a number of new items to look the part of a proper new field artillery officer, and neither of their respective parents had funds to spare. ⁶⁶ He needed funds. Larry made his way to Rockford, where he and Ethel formally announced their engagement and attended local parties to celebrate the news. ⁶⁷ Shortly thereafter, he went to Milwaukee, where his parents had moved while he was away at West Point. He spent the next six weeks working in a job his father had helped arrange, as a manual laborer for A&P.⁶⁸ Larry worked in Milwaukee so that he could pay off his debts and start married life with a modest sum of cash, while Ethel planned the wedding in Rockford. Some time shortly before their 8 September wedding date, Larry returned to Rockford for the wedding. Ethel recalled that, "In planning our wedding ceremony Dr. Connolly . . . was aware of the limitations on military salaries, especially a Second Lieutenant's, so instead of having Larry say, 'With all my worldly goods I thee endow,' he would pledge 'With all my love I thee endow.",69 Looking on were two of Larry's classmates: his best man, Lieutenant James D. Curtis, and groomsman Charles P. Bixel. 70

The Kuter's honeymoon was indicative of much of their married life. After having seen little of each other over the prior four years or even in the month and half

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⁶⁶ Kuter, "Growth of Air Power," 31–33.

⁶⁷ Kuter, "Along with Larry," 77.

⁶⁸ Kuter, "Growth of Air Power," 34.

⁶⁹ Kuter, "Along with Larry." 79.

^{70 &}quot;Kuter-Lyddon Nuptials Celebrated in Military Wedding at Bride's Home on Thursday," *Rockford Register Gazette*, September 10, 1927, Kuter Collection, Volume 1, Page 6, USAF Academy Library Special Collections; Krisman, *Register of Graduates and Former Cadets of the United States Military Academy*, 1802-1974, 382; West Point Association of Graduates, "James D. Curtis 1927," accessed August 15, 2015, https://apps.westpointaog.org/Memorials/Article/8100/. Curtis separated from the service in 1929 and became a banana importer, but he returned to active duty in 1942 and served throughout the war. Bixel eventually reached the rank of brigadier general in the Army, retiring in 1957. The Kuters would see him again at Brooks Field in 1929 for flying training.

since Larry started his two months of post-graduation leave, Larry and Ethel married on Thursday, 8 September 1927. They spent their first night as a married couple in a cabin at Rock Lake. The next day, they drove to Milwaukee and spent the night visiting with the Kuters. They then drove to Rockford to celebrate Larry's grandparents' sixty-second wedding anniversary. On Sunday the 11th, they boarded a train and started their honeymoon, in conjunction with the move to their first duty station. They made their way slowly, and had all of a week alone together before Larry arrived at the Presidio on 18 September—nine days and half a continent away from their wedding.⁷¹

Kuter formally reported for duty on Monday, 19 September. By the end of the day, he had met the post and 11th Cavalry Regiment commander, Colonel (later Major General) Leon Kromer; his 76th field artillery battalion commander Major John Starkey, and his battery commander, Captain Stanley Richardson.⁷² Richardson would quickly become (after Captain Fisher) Kuter's second significant professional mentor. Before the day was out, Richardson had Kuter sign the first order of his career. Kuter, as the newly-appointed battery adjutant, signed a special order wherein he assigned himself the duties of battery executive, mess officer, supply officer, stables officer and athletic and schools officer.⁷³ Richardson's was the only battery on the post with just one lieutenant, so Kuter had the dubious distinction of getting to carry twice the workload of his peers.⁷⁴ Importantly, Richardson paid close attention to Kuter's fulfillment of his responsibilities, remaining in the background whilst ensuring that everything the young lieutenant did was

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⁷¹ Kuter, "Growth of Air Power," 35–36; Kuter, "Along with Larry," 79–81.

⁷² Kuter, "Growth of Air Power," 37.

⁷³ Ibid., 38.

⁷⁴ Ibid., 40.

performed well. When necessary, the captain gave his lieutenant behind-the-scenes advice. It was a pattern Kuter would often use in his career; delegating significant authority to subordinates and staying out of the limelight, while subtly guiding morejunior officers' actions to yield superior results. Furthermore, the breadth of responsibilities Richardson exposed Kuter to as a second lieutenant would be invaluable later when Larry arrived to his first duty station as an aviator.

Richardson also encouraged Kuter in his professional studies. While at the Presidio, Kuter completed every correspondence course he could get his hands on. He also developed hands-on skills, even learning to shoe horses. He not only took classes, but also taught them, since many of his soldiers were illiterate. 75 Although Kuter was learning a great deal about leadership and was gaining excellent practical management experience, the Presidio was hardly a center for innovation. David Adams Shugart, in his Ph.D. dissertation "On the Way: The U.S. Field Artillery in the Interwar Period," argues persuasively that those in the Army's interwar field artillery branch were more forwardthinking and imaginative than historiography suggests. Colonel Kromer's command at the Presidio tends to belie this assertion. He clung to the Army's horse-drawn traditions; "On . . . afternoons of every day, including Sundays and holidays, there was polo whether one liked it or not."⁷⁶ This was indicative of the Army's overall doctrinal conservatism. Larry was reimbursed more handsomely for owning a horse than he was for having a wife—a fact which Ethel found distressing.⁷⁷ Kuter's experience was primarily one of

⁷⁵ Ibid., 39. ⁷⁶ Ibid., 48.

⁷⁷ Ibid., 49.

doctrinal and procedural stagnation than innovation. Field artillerymen's use of aircraft for artillery spotting—the idea was to use aircraft to perform essentially the same missions balloons did previously—was important and eventually effective, but hardly indicative of radical new thinking.⁷⁸

Another of Richardson's significant lessons that the Kuters would carry with them for the rest of their lives regarded the consumption of alcohol. Although the eighteenth amendment was very much still in effect in 1927, the Kuters had a shock when they made their first social call to their battery commander's home. Kuter recalled that after inviting Larry and Ethel to stay for dinner: "He also stated that we would relax and have a drink together . . . With some embarrassment I explained that we didn't drink. He then named three officers' families at the post who were teetotalers, who did not participate in post activities and nobody liked. He concluded that we could not be in that category and that I just had to learn how to drink."⁷⁹

Richardson did a thorough job of teaching Kuter and others the finer points of alcohol consumption. Given that drinking was very much a part of officer culture (despite that it was contrary to the Constitution which those officers had sworn to uphold and defend), Richardson likely saved Kuter's budding Army career. Larry quickly became something of a home brewing beer expert, since it was cheaper to produce than whiskey.

⁷⁸ Warfighting and Disruptive Technologies: Disguising Innovation, 1 edition (London; New York: Routledge, 2004). In this book, Terry Pierce makes a convincing case that radical new technologies are almost invariably used in conservative ways which sustain the status quo: the aircraft carrier was initially sold and used as an adjunct to well-worn battleship warfare, and helicopters were initially used as little more than flying trucks. The use of airborne artillery spotters primarily served to sustain the status quo. Field artillerymen's efforts appear quite limited when compared with new air concepts—particularly strategic bombing—being explored in the Air Corps, which entailed disruptive new combinations of aircraft technologies.

⁷⁹ Kuter, "Growth of Air Power," 44.

Ethel planned German-themed dinner parties, so as to offer beer as the alcoholic beverage to go with the meal. 80 At least until their daughter was born, the Kuter's schedules were governed by a sucrometer—a critical tool for brewing quality beer. The Kuters' social adaptability would serve them well throughout their lives.

Larry Kuter's career was not the only one that moved forward during those two years at the Presidio. On the first night, when the Kuters made their first social call at Colonel Kromer's home, the Colonel learned that Ethel had majored in dramatics. Kromer thus directed her to attend rehearsals with the Presidio Players the very next morning. 81 By the end of the next day, Ethel was already cast in a role and rehearsing her part. This set another common pattern for the Kuter's marriage and career. While her husband built his military career, she pursued a parallel career in drama and the arts. Ethel's social status would come to rival her husband's, to the extent that they would have side-by-side entries in Who's Who in America. 82 Her career nonetheless did not compete, but rather complemented, her husband's; Ethel (and occasionally Larry) acted alongside Colonels Hazzard or Kromer in plays at the Presidio.⁸³

Captain Richardson remained Kuter's battery commander for the entirety of the Presidio assignment. Kuter's efficiency reports clearly indicate that Richardson came to be guite impressed with the lieutenant, even as some more-senior officers were not guite so positive. From late 1927 through the last report as a field artilleryman in 1929, Richardson consistently rated Kuter as "excellent" in the categories of performance of

⁸⁰ Kuter, "Along with Larry," 88.

⁸² Roxanne Kuter Williamson, "Letter from Roxanne Kuter Williamson to Joel Higley."

^{83 &}quot;Playbill: The Presidio Players," 1927, Kuter Collection, Volume 1, Page 10, USAF Academy Library Special Collections.

field duties, administration and executive duties, and as an instructor. ⁸⁴ He was frequently rated "superior" for tact and/or attention to duty. The last report Richardson wrote on Kuter identified him as, "One of the very best young officers I have ever served with, in every respect." The 76th Field Artillery commanders, Major Starkey and his successor, Major (later Major General) Horace H. Fuller, were not quite so impressed. Both downgraded ratings Richardson gave to Kuter. ⁸⁶ Perhaps this gave Kuter the added motivation to seek duty in the Air Corps. Other factors were at work, too.

In the midst of the busyness of Larry Kuter learning his jobs as an Army lieutenant and Ethel navigating through life as a new Army wife, they added a new member to the family. On 5 November 1928, Ethel gave birth to their daughter Roxanne. Although they did not know it at the time, the young bundle of joy would be their only child. Roxanne quickly rearranged the Kuters' life, as diaper changes interrupted social engagements and feeding took precedence over beer bottling. She would become a great joy to her father and a tremendous project for her mother. Fortunately, Roxanne fit as well as could be expected into the Kuters' active lives. By virtue of Ethel's God-given capacity to feed her daughter, the Kuters were able to move on with life, unhindered by the frustrations of sterilizing bottles, chilling milk or mixing formula.

⁸⁴ "PEP Record: Kuter, Laurence S.," July 30, 1962, Folder 2, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ Kuter, "Growth of Air Power," 56.

⁸⁸ Ibid

On New Year's Eve, Major Fuller published "Special Order number 162," directing Roxanne and another new battalion recruit, young Jack Heninger, to "report with the persons responsible . . . for instructions and issuance of recruit kits" on New Year's Day at the battalion commander's home. All the battalion's officers and ladies were invited to the event, where Roxanne and her fellow recruit were presented with silver spoons. ⁸⁹ It was another party in the steady stream of plays, parties, polo and other social engagements which defined much of interwar Army officer life.

Poor advancement opportunities and undesirable duty locations led Kuter to look outside of the field artillery, albeit temporarily, for his next assignment. The interwar field artillery branch was no place for forward advancement. The Presidio's most-junior battery commander had eleven years of service, including wartime experience, and other field artillery units would likely be the same. Kuter, by the end of his first tour, had essentially done everything within his battery but command it. This meant that, by virtue of low seniority, Kuter reasonably expected to spend the first decade of his career doing the same jobs he had already done under Richardson. Worse still were the likely follow-on locations: Fort Sill, Oklahoma, and Schofield Barracks, Hawaii. The most likely location, Fort Sill, was home to the yearlong Field Artillery Battery Officers' School. Attendance at the school was unlikely any time soon due to Kuter's low seniority, and Lawton was much less desirable than Monterrey. Schofield Barracks would be much

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⁸⁹ Headquarters 2nd Battalion, 76th Field Artillery, "Special Order No. 162," December 31, 1928, Kuter Collection, Volume 1, Page 18, USAF Academy Library Special Collections.

⁹⁰ Kuter, "Growth of Air Power," 51.

more pleasant location-wise, but meant more of the same (without the Presidio's cavalry emphasis). There had to be other options.

Lieutenant Wilfred J. Paul's poor airborne artillery spotting inspired Kuter to pursue aviation as a third option for his next assignment. During the second year of his Presidio assignment, an Air Corps DH-4 flew in from Crissy Field to participate in live-fire artillery spotting. Although noteworthy as an attempt to integrate airpower into ground operations, it was all the more notable for its failure to achieve results. With the pilot flying in the front and the observer (Lieutenant Paul) acting as observer in the back seat, the intent was for the aircraft to: spot the target; fly over the artillery battery toward the target to give the artillerymen a general direction for firing; then, with each successive round fired from the ground, the observation aircraft would provide corrections (too far, too short, right or left). After some iterations of this process, the target would be bracketed and the battery could fire for effect, with multi-tube salvoes. Air-ground communications usually consisted of panel signals from the ground and elevator and wing movements from the aircraft, because the airborne radio rarely worked. 91

The exercise ended in futility, but inspired Kuter to become an aviator in order to become a better artilleryman. Whether due to incorrect signaling from the aircraft or misapprehension of Lieutenant Paul's directions, Kuter's Battery D steadily marched its fire further away from the target, using the season's full allotment of live ammunition in the process. Mid Condon, in Battery E, experienced the same frustration, and both

⁹¹ Ibid., 52.

decided to apply for flying training. They, as trained artillerymen who became aviators, might be able to bridge communications gaps between the ground and flying communities. They simultaneously could avoid the inevitable frustrations that would attend doing the same duties during their second assignments as they did throughout the first. Larry Kuter passed his flight physical and got a report date of 1 July 1929. Mid failed his physical and was assigned to Schofield Barracks. Again, Mother Fan apparently had something to do with his getting the assignment. 92 Kuter was about to enter the world of military aviation. One cannot, however, understand his subsequent career without first understanding how Army personnel policies shaped it.

Interwar Army Personnel Policies and Establishment of the Air Corps

While the experience of war set the early Army airmen apart from those who entered service after the Armistice, Army personnel policies—particularly seniority-based promotion—significantly shaped the airmen's experience and by extension their service subculture. Kuter and his aviator peers were arguably as much products of personnel policies as they were leaders in developing doctrines for a very new form of warfare. Understanding how personnel policies shaped Kuter and his contemporaries—and hence how those policies might have impacted doctrinal and technological developments—lies in understanding the "waiting for dead men's shoes" dynamic.

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⁹² Ibid., 54.

In Waiting for Dead Men's Shoes: Origins and Development of the U.S. Navy's Officer Personnel System, 1793-1941, Donald Chisholm describes how the Navy tried to strike the optimal balance between equity (equal treatment), efficiency (military competence) and economy (fiscal discipline) in developing its professional officer corps over the first century and a half of its history. For too long in the maritime service's history, the Navy embraced a seniority-based promotion system, which seemed to provide an optimal solution. It appeared equitable (promotion was driven by time in service, rather than patronage), efficient (greater experience should generally lead to higher competence), and economical (it was cheaper to retain experienced sailors than it was to constantly train new ones). The concept read well, but lacked in execution.

The seniority-based promotion system ultimately failed in its purpose. It was inequitable to those who put in greater effort and achieved superior results but saw no faster promotions, inefficient (it rewarded mediocrity—the lazy and/or incompetent could remain in their sinecures) and—especially when war came—grossly uneconomical (incompetence proved costly in both men and materiel). The negative qualities of seniority-based promotion were exacerbated all the more when new types of naval officers entered the service, such as engineers after the Civil War and aviators after the First World War. Capable, ambitious naval officers, rather than enjoying rapid promotion due to their greater energy and ability, found themselves "waiting for dead men's shoes." It was not until well after the crises of the Mexican and Civil Wars that the Navy at last

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Donald Chisholm, Waiting for Dead Men's Shoes: Origins and Development of the U.S. Navy's Officer Personnel System, 1793-1941, 1 edition (Stanford, Calif: Stanford University Press, 2002).
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won political support for "rules to eliminate the unqualified and unscrupulous . . . embodied in a formal code of ethics."95

Chisolm's work is useful, because the same dynamic was very much at work in the Army. The Army grew significantly during the Great War, but no other branch grew as quickly as aviation: the Air Service went from having 311 airmen (0.3% of the Army's overall strength) on 30 June 1916, to 195,023 (5.3% of the Army) by 11 November 1918—a more than six hundred-fold increase, in just two a half years. ⁹⁶ The Air Service was born in the chaos of rapid expansion, dizzying technological advancements and learning air combat—literally—on the fly. Rather than being prized for their wartime flexibility, airmen were penalized (albeit not always intentionally) during the static doldrums of the interwar period. Airmen had the same impulse to reform and improve the service in the aftermath of a wartime crisis as the Navy did decades earlier, but they lacked the mass and institutional support that their naval peers enjoyed. This was likely due to the fact that Billy Mitchell was no William Moffett. Rather than working in and through the Army system to push for expansion of the air arm, William "Billy" Mitchell likely set Army aviation progress back by adopting a caustic, publicly confrontational approach toward Army leadership.

Considering the timing and the push for change, it is unsurprising that airmen are sometimes labeled as "progressives." The Wright Brothers made their first flight in

⁹⁵ Ibid. 779.

⁹⁶ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II" (Office of Air Force History, 1945), http://www.afhso.af.mil/shared/media/document/AFD-110331-045.pdf. 14.

⁹⁷ Mark Clodfelter, Beneficial Bombing: The Progressive Foundations of American Air Power, 1917-1945 (Lincoln, NE: University of Nebraska Press, 2010). Clodfelter essentially argues that the Army Air Service's culture was established during the Progressive Era, and that the Air Service's progeny—the Air

1903, in the middle of the generally accepted temporal confines of the Progressive Era. Airmen's underlying motives dovetail well, too; just as the Progressive movement seems to have been a reaction to the disorder and restructuring driven by the Industrial Revolution and the Civil War, airmen's interwar efforts might be understood as a response to the turmoil they experienced during and after the First World War. 98 Correlation does not equal causation, however. Human efforts to bring order to chaos have a much wider temporal and geographic pedigree than a particular movement or party that centered on early twentieth century in America. Likewise, professionalization—a Progressive hallmark—had been ongoing in the American military long before progressive reformers were even born. 99 The impact of wider societal movements cannot be ignored, however. The bulk of the U.S. Army's early aviators were born in the 1890s, and could not help but be influenced by the world around them. It could not have hurt airmen's rationalization efforts to know that the broader society was moving in the same general direction.

While societal pressures mattered in shaping the experiences of interwar Army aviators, the particulars of internal Army policies were much more consequential. In Foulois and the U.S. Army Air Corps, 1931-1935, John F. Shiner describes how the Air

Corps, Army Air Forces, then independent United States Air Force, still have very much the same culture, even today. Faber echoes the same sentiments in "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of Air Power."

⁹⁸ Robert H. Wiebe, *The Search for Order, 1877-1920* (New York: Hill and Wang, 1966). Wiebe's work is just one example of a massive body of works that focus on Progressivism, but his work makes a strong case that local through national governments grew increasingly centralized and bureaucratized during the Progressive Era, in response to tectonic shifts in civil society.

⁹⁹ William B. Skelton, An American Profession of Arms: The Army Officer Corps, 1784-1861 (Lawrence, Kan.: University Press of Kansas, 1993). Skelton's work is just one in this genre. In this work, he argues convincingly that the Army embraced professionalization following the War of 1812. By this timeline, the Army would seem to lead the Progressives, rather than the other way around.

Service (later Air Corps) officers' careers went from high wartime entropy, to postwar regression, to stasis. The "dead men's shoes" dynamic was hard at work in the Army. Most First World War airmen entered service late in the war relative to their ground counterparts, since it took time to build the apparatus necessary to grow the Air Service over 60,000 percent. Not only did those men enter service later in the war, but their precommissioning training took longer than that of their ground counterparts. Training for ground officers took three months, whereas aviation officers required nine months of training before pinning on officer rank. By the end of the war, the Army's officer corps was comprised largely of men commissioned in 1917 and 1918, and Air Service officers largely occupied the bottom of the seniority list. Their career prospects only worsened with postwar demobilization.

The Army's seniority-based system combined with a congressionally-imposed ceiling of 12,000 officers, congressional limits on the number of officers who could serve in each grade, and the lack of a mandatory thirty-year retirement to bring career advancement almost to a standstill. The whole Army suffered, but airmen's careers were disproportionately affected. Multi-month differences in commissioning dates translated into multi-year promotion delays. This was unsurprising, since such is the reality of any seniority-based system that suffers a contraction. What did prove a source of contention, however, was the disparity between airmen and their ground counterparts. Airmen's ranks quickly became disassociated from their authority and responsibility, because even though only aviators could command air units, the Army refused to create a

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¹⁰⁰ Shiner, Foulois and the U.S. Army Air Corps, 1931-1935. 110.

¹⁰¹ Shiner, Foulois and the U.S. Army Air Corps, 1931-1935. 108.

separate Air Corps promotion list. Consequently, Air Corps captains and even first lieutenants commanded squadrons, and lieutenant colonels and majors commanded wings, while their peers enjoyed relatively faster promotion rates with less responsibility.

In 1934, when Kuter started at the Air Corps Tactical School (ACTS), Major General Benjamin "Benny" Foulois, the Chief of the Air Corps, and Brigadier General Oscar Westover, one of his assistants, only held the permanent ranks of colonel and lieutenant colonel, respectively. Foulois and Westover wore stars only because of the offices they held. Seven though it was demoralizing to airmen that they could not enjoy the same rank and pay of ground officers with similar responsibilities, a core of air professionals emerged—some of whom were given the opportunity to command, attend service schools and otherwise build knowledge and skills that would be desperately needed in a future conflict. Unfortunately, the number of men who received these opportunities was very small compared to any reasonable estimate of likely wartime requirements.

Relative Size of the Air Corps

The negative synergy of the postwar drawdown and seniority-based promotions, both of which disproportionately affected airmen, was further exacerbated by the slow growth of the air arm during the interwar period. The air weapon only grew in military

War Department, *The Adjutant General's Office: Official Army and Air Force Register, January 1, 1934.* (Washington D.C.: Government Printing Office, 1934), https://archive.org/details/officialarmyregi1934unit.

¹⁰³ Shiner, Foulois and the U.S. Army Air Corps, 1931-1935; War Department, The Adjutant General's Office: Official Army and Air Force Register, January 1, 1934.

importance in the interwar years, as aircraft capabilities and doctrines for employing them grew more sophisticated. Airmen remained grossly underrepresented, however. From its aforementioned wartime peak of 195,000 men (5.3% of Army total strength) in 1918, the Air Service dropped to 9,000 men (4.5% of the Army) by 1920, so demobilization bred its own form of chaos. ¹⁰⁴ On 2 July 1926, Congress helped improve airmen's position within the Army with the U.S. Army Air Corps Act, which changed the name of the air arm from the Air Service to the Air Corps, implying a greater degree of autonomy within the service. It also created an Assistant Secretary of War for Air position, two additional brigadier general billets, and included other organizational changes. Significantly for Kuter, the act authorized a five-year Air Corps expansion; the air arm was to grow to 1,800 aircraft, 1,650 officers and 15,000 enlisted men. ¹⁰⁵

Due to inadequate funding, the Army never remotely approached Congress's lofty goals within the established timeframe. The expansion did not even begin until 1927 (the year Kuter graduated from West Point), when the Air Corps comprised only 7.5% of the Army (10,000 men). Five years later, the Air Corps was still 2,000 short of its goal, at 14,650 total men. It had, however, grown to 10.5 percent of the Army total strength. Although the air arm was expanding, both numerically and proportionally within the Army, its slow growth meant that little new blood entered the service in the decade and a half following the First World War. The better part of 9,000 active duty airmen in 1920 had entered service during or before the war—with the bulk of them having entered in

¹⁰⁴ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II." 15.

¹⁰⁵ Maurer, Aviation in the U.S. Army, 196.

¹⁰⁶ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II." 15.

1917 or 1918. This meant that about 6,000 airmen—enlisted and officers (Kuter among them)—joined the service in the decade and a half following the war: around one and a half times as many men entered the Air Service/Air Corps in the two war years as did in the next fifteen in peacetime. This was no formula for long-term success, for an organizational time bomb had been planted. Slow interwar growth would necessitate all the more rapid and painful growth in wartime.

The large cohort of First World War airmen was positioned to dominate the interwar Air Service/Air Corps' midgrade through senior ranks, and in so doing block opportunities for those who followed behind them. Great War airmen would fill command billets and professional schools until such time that this senior group retired—largely en masse. The small cohort that followed them would have to take the reins of an organization for which they had been systematically prevented from practicing leadership at higher levels and in many cases without attending Army professional military education programs. The only way to break this promotion logjam would be a crisis (likely another war), which would spur significant growth and make room for younger officers. This kind of growth would hardly be considered healthy for those who endured it.

The air arm's stunted growth dramatically affected Air Corps officers. Air Service/Air Corps officer strength grew from 883 in June 1923, just before Kuter entered West Point, to 1,271in June 1930, the year he graduated flying training. Total Air

¹⁰⁷ Secretary of War, *Annual Report of the Secretary of War to the President: 1923* (Washington, D.C: U.S. Government Printing Office, 1923), 123,

Corps officer strength remained essentially unchanged for the next eight years, hovering around 1,300 from 1930 to 1938. In other words, the Army only added about 500 officer aviators to its end strength in seven years, and then stagnated for the next eight. Much of that end strength growth, moreover, consisted of reserve airmen who, upon earning their wings and commissions, generally remained on active duty for just one year before returning to the civil sector. Those reserve officers limited the number of professional regular officers that could be accessed, and thus build the knowledge, skills and culture that the budding air arm desperately needed. Reserve airmen furthermore provided a drain on resources; flying hours that could otherwise have been used to develop regular officers' flying proficiency, or to try new and innovative tactics, were instead used to train and develop reserve airmen who took their experience to the budding airline industry. 109

Those reservists ultimately helped the Air Corps grow more rapidly during the prewar buildup, but they were so few in number that could have had little overall impact. Air Corps flying schools produced approximately 150 pilots per year, between 1927 and 1939. This implies that approximately 1,950 pilots graduated during this period. Over 600 Air Corps pilots died, and an indeterminate number were injured, in aircraft

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Report of the Secretary of War to the President: 1930 (Washington, D.C: U.S. Government Printing Office, 1930), 309, http://babel.hathitrust.org/cgi/pt?id=mdp.39015024071717;view=1up;seq=1.

Secretary of War, Annual Report of the Secretary of War to the President: 1938 (Washington, D.C: U.S. Government Printing Office, 1938), 52,

http://babel.hathitrust.org/cgi/pt?id=mdp.39015012257567;view=1up;seq=3.

Cameron, Training To Fly. 245.

¹¹⁰ Ibid., 242.

accidents during this during that thirteen-year stretch. 111 At best, then, about 1,300 Air Corps flying training graduates were alive and available in 1939, on the eve of the Air Corps' massive expansion. Five hundred of them are accounted for by the Air Corps' slow expansion during this time. Optimistically, then, about about eight hundred reserve officer pilots, some of whom could not be released from war-critical civilian jobs, were available to further flesh out the officer ranks. U.S. airlines, for instance, contracted with the government to provide critical air transportation support. Deaths and injuries while flying in the civil sector, not to mention more mundane causes like age-induced vision loss and other physical maladies, further limited the pool of available reserve airmen. Even if every reserve aviator trained during the interwar period was activated, the supply of experienced military aviators would have been exhausted well before mid-1940, as the Air Corps' officer corps grew by 1,800 men between June 1939 and June 1940.

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¹¹¹ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 305. The actual number was 627 deaths, in 421 fatal accidents from 1927 to 1939. These were a subset of 5,072 aircraft accidents during this period, which destroyed 1,435 aircraft.

¹¹² Ibid., 16.

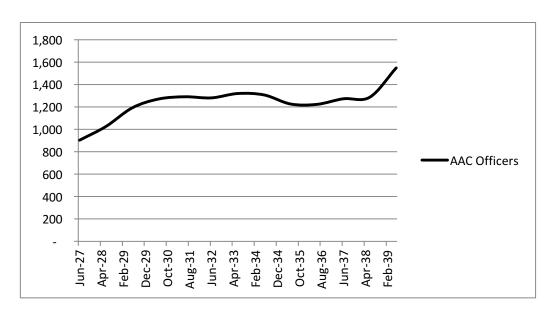


Figure 1. Interwar Army Air Corps Officer Growth 113

Kuter graduated from flying training right at the tail end of Air Corps officer expansion, and the officer corps remained essentially unchanged for the first nine years of his flying career. The Air Service/Air Corps was so limited in its ability to train and retain officer aviators that it made allowance for an enlisted pilot (better known as "sergeant pilot") program. Enlisted aviators had no impact on Congressionally-imposed officer strength limits, so this provided an additional avenue for growing the pilot force. Arguably two of the Air Corps' best pilots in the mid-1930s were enlisted airmen—Sergeants Luke Williamson and Billy MacDonald, who were the other two members of Claire Chennault's "Three Men on a Flying Trapeze" aerial demonstration team. They had earned reserve commissions as second lieutenants through the air cadet program, and when their

Compiled from charts in the Annual Reports of the Secretary of War to the President, for fiscal years 1927 to 1939. http://catalog.hathitrust.org/Record/000078451.

initial yearlong active duty officer stints were up, they enlisted to remain on active duty. They flew on active duty as sergeants, while they retained their reserve lieutenant rank. When they participated in airshows, the Air Corps activated them as lieutenants without pay, so as to avoid the embarrassment of having enlisted airmen represent the air arm's best and brightest before the American public. ¹¹⁴ It was a stopgap measure, however, and it is unlikely the Air Corps could have retained its sergeant pilots, had the American economy not entered the Great Depression. ¹¹⁵ If the Air Corps was to form the professional core of a wartime air force, it needed men who were more than just good pilots. It needed men who could lead the air arm during global, industrial-age air warfare.

In sum, the postwar drawdown stunted all Army officers' career prospects, because of the service's seniority-driven system. Later commissioning dates meant that most airmen's promotion prospects were even more limited than the ground officers who entered service at the same time they did. World War I-era airmen, by their relative mass, created a further logjam for the airmen who followed them, which made career progression more difficult still for those who entered service in the 1920s. Air Corps growth helped mitigate these negative factors by making some room for young officers, but Reserve Air Corps pilots limited the growth of a professional core of airmen, both by limiting the number of billets that regular officers could fill and through the training bill

¹¹⁴ Claire Lee Chennault, *Way of a Fighter: The Memoirs of Claire Lee Chennault*, ed. Robert Hotz (New York: G. P. Putnam's Sons, 1949). 28. When Williamson and MacDonald competed for regular commissions, they were among 400 applicants vying for 52 commissions. Chennault blamed their non-selection on senior officers' jealousy; the fact that neither had more than two years' worth of college could not have helped their chances.

¹¹⁵ Lee Arbon, *They Also Flew: The Enlisted Pilot Legacy 1912-1942*, Reprint edition (Washington: Smithsonian Institution Scholarly Press, 1998). 79-89.

they incurred. Enlisted pilots helped provide an additional pool of experienced aviators who could be commissioned during wartime expansion, but this created its own problems. It is unsurprising, then, that airmen passionately argued for an independent service.

The Army's personnel policies severely hindered airmen's prospects, and by extension kept the air weapon from fully attaining its military potential. In the face of Army policies, the most notable of which was seniority-based promotion, service independence seemed a reasonable option. In retrospect, it is noteworthy that the early-to-mid 1920s commissioning year groups produced as many prominent wartime Army Air Forces and postwar air force leaders as they did. The talent pool was narrow, but surprisingly deep. It is all the more surprising, too, since Larry Kuter and many of his peers had no intention of remaining in the air arm.

The Kuters Leave for Flying Training

Kuter had known since his cadet days how dangerous Air Corps flying was, and his time in Monterrey would have done little to alter his perception of how little the Army valued its air arm. The prospect of death, or at the very least career suicide, provided a powerful motivation to pursue a different branch. These reasons, together with the opportunity to live in Monterrey (with Mother Fan's help) had driven Kuter to forego the opportunity of going into Army aviation directly out of West Point. Why he would volunteer after two years to do what he had previously avoided, especially considering

the glowing efficiency reports Captain Richardson had written on him, seems a mystery.

Kuter's choice makes much more sense once one realizes he fully intended to return to the field artillery fold after one flying assignment—escaping for one tour to the Air Corps was a "best of both worlds" scenario.

In the midst of Kuter's decision to attend flying training, two significant factors were at play. First, as previously noted, the 1926 Air Corps Act directed that 90 percent of its officers had to be flying officers, and all those who commanded flying units needed to be flyers themselves. Aviation service would open up new command opportunities for the young lieutenant outside of the field artillery community. Furthermore, the field artillery branch and the Air Corps were squabbling over control of the observation aircraft, which Kuter had found so frustrating to work with. If he were to be qualified as an aviator and field artillery won ownership of the observation aviation which supported them, Kuter would be the ideal candidate to lead field artillery and/or observation units. These two significant forces, together with the chance to avoid boredom and career stagnation at Fort Sill or Schofield Barracks, made temporary service in the air arm an attractive option.

Kuter's decision to pursue aviation highlights challenges the Army faced in building a professional air officer corps, particularly one led by West Point graduates.

Rapid Great War expansion of the air arm and seniority-based Army personnel policies had largely cemented a circumstance wherein the Air Corps was primarily led by non-West Pointers. This dynamic was unlikely to change. Few West Point cadets chose to attend West Point in order to become flyers, and their instructors' predominantly ground-

focused instruction did little to spark their enthusiasm for aviation. Cadets were not selected based on their physical qualifications for aviation duty, so only about a quarter of West Point graduates were physically qualified to pursue flying training. Aviation service was voluntary, so only a fraction of those physically qualified decided to pursue aviation careers. A significant number of Kuter's classmates did not even pursue Army careers; the service was so short on cash and flush with pre-existing manpower that it allowed many to depart the service. Kuter's West Point classmate and best man was seeking his fortune in Mexico as a banana exporter about the time Larry and Ethel departed Monterrey. ¹¹⁶ Of the minority of Kuter's classmates who did start flying training, less than half graduated, and those who did graduate tended not to have come from the top half of their West Point class. ¹¹⁷

If Larry Kuter, one of the smarter individuals in his West Point class, who had already established a solid career reputation on active duty, made it through pilot training, he would be invaluable to those concerned about West Point leadership within the Army. More broadly, Kuter would bring a degree of professional perspective and skill that many found lacking within the air arm. A dozen other West Point classmates were already rated pilots, and Kuter would ultimately be one of just twenty-one—ten percent—from his

¹¹⁶ West Point Association of Graduates, "James D. Curtis 1927."

¹¹⁷ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930; George Washington Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VIII, 1930-1940, ed. E. E. Farman (Chicago: The Lakeside Press, 1940). These registers track each graduate's duty assignments, so it is possible to discern which of them attended flying training, and based on their subsequent assignments after training determine if they graduated and went on to serve in the Air Corps.

class who earned their wings.¹¹⁸ He and his fellow aviators would be ideally positioned to lead a rapidly-expanding Air Corps if and when war came. In retrospect, however, getting moved into the air arm was likely more important than actually becoming a pilot. From the West Point class of 1927, six of the nineteen men who became pilots earned air force general officer rank, for a total of twelve stars. Seven of the ten air force nonaviators from Kuter's class also made general, and pinned on a total of fourteen stars.¹¹⁹

Kuter would have scarcely suspected the career opportunities that would be available to him by pursuing flying training. Regardless, he and Mid Condon both secured their respective battery commanders' approvals to apply, and they went to nearby Crissy Field for physical examinations to ensure they were still fit to fly. Kuter saved his own career when he noted that Mid's and his test results had been entered on each others' forms. When the results were forwarded to Washington, word came back that Mid had failed the vision portion of the exam, while Larry had passed. There were some indications that Mother Fan, who was no fan of Army aviation, was once again involved in her son's career. Regardless, Condon got orders to Hawaii, and Kuter was directed to report to Brooks Field. Texas by 1 July 1929.

¹¹⁸ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930; Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VIII, 1930-1940.

Krisman, Register of Graduates and Former Cadets of the United States Military Academy, 1802-1974.
 War Department, "Special Order No. 105," May 6, 1929, 3, Kuter Collection, Volume 1, Page 20, USAF Academy Library Special Collections.

Observations

In retrospect, it is surprising that Larry Kuter chose to pursue a career in Army aviation. Larry Kuter's parents and Rockford Central High School had given him a strong work ethic and a solid academic foundation, which gave him a basis of knowledge and skills that he would need when time came for flying service. Contrary to academic works like Joseph Corn's Winged Gospel, though, apparently nothing from his formative years motivated him to pursue a career in aviation. If America was inundated with airplane advocates selling aviation to America's youth, that trend was missed at Rockford Central High School, one of the largest high schools in Illinois. Neither Larry nor Ethel Kuter, in their respective unpublished memoirs, mention anything about events that might have sparked an early interest in aviation. Larry Kuter's West Point experience indicates that the Army did little to encourage interest in aviation among their military academy cadets. Kuter and his peers were not medically screened for aviation service prior to entering West Point, which led to only a quarter of graduates even being eligible to pursue flying training. Given that such training was voluntary and instruction at the school primarily focused on ground operations, it is unsurprising that few of the Academy's best and brightest chose to enter the Air Corps. Those from West Point's class of 1927 who graduated from flying training came disproportionately from the bottom half of the class. ¹²¹ On a more positive note, at West Point Kuter was introduced to Army life and

¹²¹ Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930*, 2033–2081. Eleven of the nineteen Class of 1927 graduates who earned their wings graduated in the bottom half of the class. Seven (over a third) came from the bottom quartile.

came to know many men with whom he would work very closely over the following three and a half decades.

Air Corps airmen did little to improve cadets' and ground officers' views of their flying brethren. If Kuter's experience is any indication, aviators presented themselves as reckless and undisciplined during the cadets' trips to Mitchel field. Airborne artillery observers came across as incompetent during live-fire artillery spotting training. Army personnel policies provided further negative motivation toward aviation service, since seniority-based promotions locked World War I-era airmen into disproportionately slower promotions when compared to their nonflying peers. The Air Corps expansion, which Congress mandated in 1926 (but did not begin until 1927 and by 1932 still fell short of its goals) provided air officers with room for some promotions and other professional development. Nonetheless, it seemed clear to Larry Kuter—both as a cadet and a field artilleryman—that aviation service should only be entered into temporarily. Remaining in the air arm would likely be career suicide, if his career did not end in death or injury.

Kuter's first assignment at the Presidio provided invaluable organizational leadership experience, even as he learned finer points of officership such as alcohol consumption that existed in no manual, but were nonetheless vital to his advancement. Throughout his early military career, from his initial entry to West Point through his time in Monterrey, Ethel was Larry's supporter and champion. Larry Kuter pursued flying training so that he could serve in it long enough to prove himself as an airman and bring his hard-won knowledge back to his field artillery branch. But his plans would change

radically in the ensuing year. Five days later receiving their orders to Brooks Field, the Kuters packed into their car, setting off on a roundabout trip that included a journey through Yosemite before stopping in Rockford to introduce the Kuters and Lyddons to Roxanne. They arrived in San Antonio on 26 June, over a month after they left California. If he made it through the program, Larry Kuter would be one of about 1,200 Air Corps officers in the entire Army, of whom just fifteen were West Point classmates who had already earned their wings. Kuter would never again return to the field artillery or any other nonflying Army branch.

¹²² Kuter, "Along with Larry," 97-103.

¹²³ War Department, "Report of the Secretary of War to the President, 1929" (U.S. Government Printing Office, June 30, 1929), 195, http://babel.hathitrust.org/cgi/pt?id=mdp.39015024071709;view=1up;seq=3; Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930*, 2033–2081.

Chapter 3: Darwinism—Surviving Flying Training at Brooks Field and Leadership by Negation at Langley Field (1929-1934)

The period from July1929, when Larry Kuter started flying training at Brooks Field, to the end of his first tactical-level flying assignment in February 1934, says much about Kuter, the Air Corps and the Army he served. He would have to adapt to the airman subculture, survive flying training (physically and professionally), build competence as a bomber pilot, embrace rapidly-evolving technologies, and absorb new concepts of how to wage aerial warfare—all while being given levels of responsibility which were unthinkable for equivalent officers in the field artillery, coping with high turnover rates in the junior officer corps, and growing his professional military knowledge through correspondence courses. Kuter's success during this tumultuous time helps indicate how and why his career accelerated so rapidly early in the Second World War.

Brooks Field

The Kuters' move from the Presidio of Monterey, California, to Brooks Field in San Antonio, Texas, presented a major change in physical climate, but the greater challenge they faced was in adapting to Air Corps culture. The air arm, despite being part of the Army, was almost a world of its own. Larry Kuter's initial Air Corps experience—

first as a flying training student in San Antonio, then as a bomber pilot at Langley Field, Virginia—marked a radical change from the tradition-bound ground army he had known to a branch whose only tradition seemed to be that of change—in people, equipment and ideas. Aside from the slow pace of promotions, which was endemic Army-wide, little of what Kuter saw in the first five years of his flying career would remind him of his West Point upbringing and initial field artillery experience.

Upon arrival at Brooks Field, Larry Kuter found that Moss's *Manual of Military Training*, which had served as his professional Bible up to that point, would have little application in the flying branch. When he reported for duty on 1 July, rather than having a full list of calls on successively more-senior commanders, he was greeted by a sergeant who handled all incoming students. The enlisted man perfunctorily told him to go to the hospital for a preflight exam, and if all went well, he need not show up again until the actual training started two days later. The extra days were meant to allow time for flying cadets, unaccustomed to arriving at their appointed date and time in Army fashion, to filter in and start with the rest of their class. The sergeant further told him that, rather than the officers' club being a primary center for the Kuters' social life, they were to pay their dues, but only infrequently use the club's facilities. Functional segregation between instructors and students was very much the norm, even though Kuter and forty-three of his classmates were already commissioned regular officers (and in many cases outranked

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² Kuter, "Growth of Air Power," 61.

¹ James A. Moss, *Manual of Military Training: Second, Revised Edition* (Menasha, Wisconsin: George Banta Publishing Co., 1917). In his unpublished manuscript *Growth of Air Power*, Kuter makes multiple references to Moss's *Manual*, indicating that he referenced it often during his early career.

their teachers).³ Instead of being welcomed by more-senior officers and functioning as second-in-command of an artillery battery that included a couple hundred enlisted men from day one, his responsibilities were simply to learn his trade while caring for himself and his family. Larry Kuter's move from the field artillery to the Air Corps was thus (at least initially) a major step backward in prestige, authority and responsibility.

Kuter's flying training class was large and diverse, at least according to the Army norms of the day. One hundred thirty-nine students entered training on 1 July 1929: the aforementioned forty-four regular officers who varied widely in age, rank and experience; eighty-nine young flying cadets from multiple colleges and universities around the United States who lacked military backgrounds; three enlisted men; and three lieutenants from Columbia. The class's senior officer, field artilleryman Major Walter D. Mangan, was a 1916 West Point graduate who had already attended the field artillery school's battery commanders' course and advanced courses, the Command and General Staff School, and (just prior to starting flying training at Brooks) the Air Corps Tactical School. If he successfully completed training, Mangan would occupy a prominent

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³ Townsend Griffiss, "Roster of Students of the Air Corps Primary Flying Schools: Brooks Field, March Field, Randolph Field, September 1922-October 1932" (Flying Cadet Battalion, Randolph Field, 1932), 23–24, Kuter Collection, Volume 1, Page 27, USAF Academy Library Special Collections; Kuter, "Growth of Air Power," 60. In Kuter's manuscript, he asserts that thirteen of his classmates started training in July 1929. A cross-comparison between the West Point register of graduates and rosters of primary flying school trainees at Brooks Field indicates that only seven were in his class. Regardless, memory of this segregation between instructors and students in 1929 provides insight into Kuter's thinking in 1944, when controversy arose over the issue of separate officers' clubs for instructors and trainees at Freeman Field, Indiana. The difference between his experience in 1929 and at Freeman Field in 1944 was that in the latter case the student pilots were African American.

⁴ No African Americans or women, for instance, were to be found on the class roster, since they could not be army officers, much less pilots, at the time.

⁵ Griffiss, "Roster of Students of the Air Corps Primary Flying Schools," 23–24.

⁶ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 1172.

position in the Air Corps hierarchy. He was not the oldest, however. First Lieutenant Clarence R. Farmer was thirty-nine, had first enlisted in the Army in 1912, and earned his commission during the Great War.⁷ The Army had produced thousands of pilots during the First World War, and thus possessed a stable of talent from which to choose its senior air leaders, but it was still trying to put new wine into old wineskins. Efforts to push senior ground officers with no aviation background through flying training would prove unsuccessful in Kuter's class.

In a sign of the military aviation's changing times, two of Kuter's classmates were already pilots. Captain Karl Axtater and Second Lieutenant Edward White were airship pilots seeking to transition into heavier-than-air flight. Axtater had already graduated from two flying schools: the Army's balloon and airship school in 1923 and the Navy's rigid airship course in 1925. White had been a Brooks Field instructor pilot (but in airships) since he graduated from training in 1926. Just a year before, Axtater and White had teamed up to complete the first airplane-to-train mail transfer in history. It was an impressive feat of airmanship, even if their stunt was of little practical value. The blimp pilots knew all too well that the future lay with heavier-than-air flight. They little suspected, though, that they were not done flying airmail.

⁷ War Department: The Adjutant General's Office, *The Adjutant General's Office: Official Army and Air Force Register, January 1, 1929* (Washington, D.C.: Government Printing Office, 1929), 203.

⁸ Ibid., 21.

⁹ U.S. Air Force, "Major General Edward H. White," Text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105237/major-general-edward-h-white.aspx.

John C. Fredriksen, *The United States Air Force: A Chronology* (Santa Barbara, Ca: ABC-CLIO, 2011),
 Edward H. White, Sr., would go on to reach the rank of major general in the Air Force. His son,
 Edward White, Jr., became the first American to make a spacewalk on Gemini 4, and later died in a launchpad fire while preparing for the Apollo 1 mission.

Most of his officer classmates were close to Kuter in age, rank, and dearth of flying experience. He was one of seven 1927 West Pointers (among thirty-five total Military Academy graduates) in his flying training class. Most of his fellow West Pointers hailed from the classes of '25 through '28, so he likely knew (or at least knew of) many of them, too. 11 The regular officers in the July '29 Brooks Field entering class were high-performing individuals. Eighteen future generals, who would earn a total of thirty stars, started training at Brooks that day. From his West Point class alone, Kuter was one of two future four-star generals in his flying training class, with the other being James F. Collins. Two other classmates, Leander Doan and Charles Bixel, would also earn general officer rank, and two more would eventually pin on colonel's eagles. 12 If flying training success hinged on hard work and/or native intelligence, these men should have had no problem successfully completing the program.

The Kuters did not seem to spend much time with the flying cadets who made up the bulk of the class. Ethel Kuter's unpublished memoir notes how they quickly reconnected with their friends and classmates, and by the Fourth of July (just three days after training started), they hosted "Spahi" Bixel and "Chubby" Doan, despite having little in the way of furnishings or food. ¹³ No mention is made of similar relationships with the class's cadets. This is little surprise, since to an Army traditionalist like Kuter, the

¹¹ Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VIII, 1930-1940*; Griffiss, "Roster of Students of the Air Corps Primary Flying Schools," 23–24; Kuter, "Growth of Air Power," 60. In his unpublished autobiography, Kuter asserts that thirteen of his classmates started training in July 1929. A comparison between the 1927 West Point class roster from the register of graduates and the roster of primary flying school trainees at Brooks Field indicates that only seven were in his class.

¹² Krisman, Register of Graduates and Former Cadets of the United States Military Academy, 1802-1974, 381–385.

¹³ Kuter, "Along with Larry," 106.

relationship with his cadet and enlisted classmates would have been awkward. The cadets' status was somewhere between that of enlisted men and warrant officers, and Kuter was accustomed to a wide gulf between officers and enlisted men. The Kuters' minimal interaction with the cadets might also be due to how relatively unremarkable those individuals were. Despite comprising two-thirds of the class and entering the service just two years behind Kuter, none of his cadet classmates would attend the Air Corps Tactical School prior to the war, and none would reach general officer rank—in the Army Air Forces during the Second World War or in the postwar Air Force.¹⁴

Kuter's enlisted trainee peers marked a significant change, from the days when the erudite second lieutenant had to patiently teach English classes to illiterate soldiers, to flying with sergeant pilots who—at least in the aircraft—did the same job as he. One of his enlisted classmates, Staff Sergeant (later Brigadier General) Maurice M. Beach, would eventually command a troop carrier wing during the Normandy invasion. The high degree of prestige offered to enlisted airmen, the equivalent skill required of both officer and enlisted aviators, and the fact that some enlisted pilots earned their commissions helped explain the more-relaxed relationships between officers and enlisted troops in the air arm he saw from day one. Kuter, along with his peers who had

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¹⁴ Griffiss, "Roster of Students of the Air Corps Primary Flying Schools," 24–24; R. Manning Ancell and Christine Miller, *The Biographical Dictionary of World War II Generals and Flag Officers: The U.S. Armed Forces* (Westport, CT: Greenwood, 1996); Flint O. DuPre, *U.S. Air Force Biographical Dictionary*, First (New York, NY: Franklin Watts, Inc., 1965). When comparing the roster of Kuter's flying cadet classmates with lists of eventual Army Air Forces and United States Air Force general officers, no matches can be found. This does not necessarily indicate that flying cadets were of low quality, but rather further highlights the challenge posed by their short stints (one to two years) on active duty following flying training.

¹⁵ David Polk, World War II Army Airborne Troop Carriers (Paducah, Ky.: Turner Pub. Co., 1992), 35.

previously served in ground units, was happy he had not yet been permanently reassigned to the Air Corps. Airmen seemed too unmilitary in character.¹⁶

A significant benefit of flying duty was the pay that came with it. Kuter welcomed the income, but was soon disillusioned to find how little it contributed to his family's financial bottom line. Aviators (even student pilots) at the time got a fifty percent increase in their base pay. Given such a generous monetary incentive, it is no surprise the Air Corps was able to attract solid talent. Kuter discovered that this influx of cash was less of a boon than anticipated, however. Second lieutenants' base pay was so low, and life insurance premiums for aviators were so high due to death and injury rates, there was little additional money left over once those premiums were paid. The modest sum of extra funds certainly could not buy happiness; as Ethel later recalled, "We hated the heat, the apartment, the crowdedness, the town, the Air Service, Texas, and each other—almost." The pay disparity between flyers and nonflyers would nonetheless remain contentious throughout the remainder of Kuter's career, even though it only provided a marginal monetary incentive for aviation service.

On the first day of instruction, Kuter and his classmates learned few of them would enjoy that extra flying pay for very long. After a dry recitation of the school's rules and the articles of war by the school's commandant and assistant commandant, the director of flying training stood up. Captain (later Major General) Claire Chennault, a fighter pilot's fighter pilot, was a man with whom Kuter would become intimately

¹⁶ Kuter, "Growth of Air Power." 60.

¹⁷ Ibid.

¹⁸ Kuter, "Along with Larry," 104.

familiar.¹⁹ Chennault's focus that day was on "washing out" of (failing) flying training: he discussed the many reasons why a student might wash out, the process through which a student would go before being washed out, the odds of making it through the program successfully, and how washing out of the program should not be considered a disgrace. Kuter would recall Chennault saying about half of the students typically washed out, with regular officers faring worse than flying cadets.²⁰ The actual statistics were even bleaker; the three classes that graduated from primary flight training in fiscal year 1929 (the year prior to Kuter arrival at Brooks) had a cumulative graduation rate of just 37 percent.²¹ Why such a low graduation rate?

Air Corps Training in the late-1920s

A graduation rate this low is difficult to explain as anything other than an organizational failure. If West Point '27 graduates' ultimate career success is any indication, Army leaders convinced more than enough talented individuals to pursue flying training. Multiple physical examinations prior to starting training weeded out most whose physical issues precluded flying service. For Kuter's West Point class, 55 of 203—essentially every physically-qualified officer, given the approximate 25 percent pass rate for flight physicals—attended flying training at some point during their

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¹⁹ Chennault actually died a lieutenant general. He is listed as having just reached major general rank, because that was the highest rank he wore while on active duty; he was honored with a third star well after he retired and nine days before he died.

²⁰ Kuter, "Growth of Air Power," 61–62.

²¹ Griffiss, "Roster of Students of the Air Corps Primary Flying Schools," 50.

careers.²² The United States was not fighting a war, so more than enough high-quality, experienced pilots should have been available to instruct in the training centers. Possible causes for low graduation rates include: (1) the Air Corps' limited ability to absorb new pilots, (2) low student motivation to complete the program, (3) a belief that flying was natural talent rather than an imparted skill, (4) poor flying instruction, (5) job protectionism among the instructors, or (6) some combination of the above. An analysis of these possible causes reveals an Air Corps that had a long way to go in building an adequately sized, professionally-trained military air arm for the nation.

The Air Corps' pilot absorption capacity—the maximum number of pilots the air arm could accept every year, and keep them trained and proficient—was and should have been a major factor in determining how many student pilots graduated.²³ It does not, however, adequately explain why so many began the training. If the Army simply needed fewer pilots, it would have been more efficient to have a smaller number of candidates start the training, devote more time and attention to each individual, and thus enable higher graduation rates. Major Walter G. Kilner, the executive officer in the Office of the Chief of the Air Service, made this recommendation in 1926.²⁴ Major Herbert Dargue, the Chief of the War Plans Section, blamed the air arm's money woes on misallocation of

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to Oscar Westover for the Chief of the Air Corps position after Benjamin Foulois retired.

²² Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 2033–2081; Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VIII, 1930-1940, 695–730.

²³ Absorption capacity was the primary issue of the day. For a pilot to be useful in an operational flying squadron, he had to get trained in how to fly his assigned aircraft; learn the tactics, techniques and procedures his unit used in conducting its mission; and fly often enough to ensure he not only remained individually proficient as an aviator, but furthermore built enough skill to eventually start training others.

²⁴ Cameron, *Training To Fly*, 244. Kilner would be Kuter's Air Corps Tactical School classmate from 1934 to 1935. Kilner was very prominent within the Air Corps—to the point that he was considered a competitor

Army airmen and aircraft to nonmilitary activities, such as airborne fire patrol for the Forest Service, federal and state geological surveys, and unnecessary research and development. The two airmen were both right. The Air Corps suffered significantly from the high fiscal and personnel expense of training many who would never earn their wings, even as its pilots in operational units suffered from the poor, and even negative, training associated with performing ancillary missions instead of practicing their wartime ones. The victims were not just airmen; the two-thirds of those who attended but never graduated wasted their time wallowing in flying training, rather than professionally developing as ground officers. Taking on fewer students would have enhanced the Army's overall officer development programs by allowing more men in to pursue value-added training in their respective branches.

Tightening standards and reducing graduates during times of austerity was, and would remain, a viable short-term management practice. But in the late 1920s the Air Corps was seeking to grow. For classes that started training between September 1925 and November 1931—and thus graduated during the period of Air Corps *expansion*—the overall graduation rate was just 32 percent. Even with this low success rate, the air arm still got more pilots than it could absorb; according to Lieutenant Colonel Frank M. Andrews, the Chief of Training and Operations in 1930, the vast sums spent to train

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²⁶ Griffiss, "Roster of Students of the Air Corps Primary Flying Schools," 51.

²⁵ Ibid. Dargue would become a significant mentor in Kuter's life, as Kuter's group and wing commander at Langley Field, and later as assistant commandant at the Air Corps Tactical School.

pilots "could be 'lost by separation of the pilot from the Air Corps" due to the air arm's inability to retain them on active duty.²⁷

Low student motivation, while difficult to reliably quantify, was another possible factor in low graduation rates. Kuter and his West Point classmates were not recruited for West Point based on their desire to become Army pilots, and their pre-entry physical exams did not include screening for aviation service. At the academy, Kuter and his peers were generally not encouraged to pursue aviation by their long-serving, conservative Army instructors. Air Corps aviators themselves, through their indiscipline during the cadets' trip to Mitchel Field (but even more so the trial of Billy Mitchell while they were cadets), did little to build interest among serious-minded young men. By the time cadets got their senior-year physicals and found out if they were physically qualified for aviation service, they were unlikely to have seriously considered it. Army policies further denigrated the air arm in cadets' eyes. If they did select the Air Corps and made it through training, they were expected to spend just one tour in the branch, either before or after a tour in their primary ground branches. Any branch which was primarily populated by dilettantes (one tour was inadequate for building expertise) and Great War veterans could not be important to the senior Army leaders. Given all the above factors, few cadets would find the air arm attractive.

The clearest indicator of how little West Point leaders, and hence cadets, valued Air Corps service is which branches cadets chose upon graduation. Cadets selected their branches based on class order of merit: the top graduates got their pick of all the possible

²⁷ Cameron, *Training To Fly*, 251. Kuter would come to know Andrews through both an international, multi-aircraft mission to Panama in 1932 and in the War Department General Staff G-3 Division in 1939.

career options, while those at the bottom got what was left. In examining the list of Kuter and his classmates' initial assignments, the only branches available to cadets in the bottom thirty percent of Kuter's class were infantry (traditionally the last branch selected) and (for those physically qualified) the Air Corps. Five of the ten lowest-ranking cadets, and fifteen from the bottom half of the class, selected the Air Corps and started training at Brooks Field in November 1927, the first flying training class available. Just one of the top ten graduates from Kuter's class (Robert Naylor—#6, who washed out within two months), and only thirteen from the top half, were in that November class. If the Army was supportive of its air arm, and/or if American society from whence the cadets came was in the midst of a love affair with aviation, the Class of 1927's career choices gave scant evidence of this.

The point at which Kuter went to flying training further underscores his (and by implication the wider Army's) thinking with regard to aviation service. He was highly ambitious, physically qualified and, based on his class standing, would have gone directly into the Air Corps if he so chose. Instead, he went directly into field artillery, in order to both guarantee a plum first assignment and get his career in the ground arms underway. He intended to use his hard-won flying experience to improve his parent branch, where he intended to spend most of his Army career. Flying service was to be a significant feather in his career cap, which would open up otherwise-unavailable command opportunities. Furthermore, he likely knew that if he failed in his attempt to become an

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²⁸ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 2033–2081. ²⁹ Ibid.

aviator, his career was far from over. Chennault himself reinforced this notion during his opening day speech. If Air Corps service was not valued by West Point instructors or senior Army officers, and hence was something in which an officer could dabble and subsequently exit with little to no negative consequence, it would be unsurprising to find that officers failed out of the program due to putting in less than their full effort. A high washout rate and greater likelihood of death, for little financial benefit, in a service which minimally valued aviation, meant that the Army's long-serving airmen would almost exclusively consist of a small number of talented true believers.

The graver issue was that many airmen believed pilots were born rather than made. Major General Mason Patrick, the first Chief of the Air Corps, subscribed to this view.³⁰ This line of thinking led to flying training becoming less about instruction than it was a weeding-out process wherein students who apparently lacked innate aviation skill were systematically deselected from aviation service. Chennault, during his introductory lecture to the students, reinforced this notion when he noted that "lack of inherent flying ability" was the primary cause for being washed out."31 It seems nobody asked the question that would occur to any mobilization planner: if the Army was meant to rapidly expand in the event of war, and only a third of a highly-vetted interwar group of officers were able to earn their wings, how could the Air Corps mass-produce legions of competent aviators (many times the air arm's interwar size) from lower-quality student stock in time to fight in America's next major war when the service's most talented regular officers were scattered around the country leading the wartime buildup? If three

Cameron, *Training To Fly*, 245.
 Kuter, "Growth of Air Power," 62.

student pilots—with requisite instructors, aircraft, airfields and support agencies to train them—had to enter training for one to graduate, the scale of wartime effort required to produce tens of thousands of pilots was unimaginable. This question was largely mooted by the lack of interwar funds, but it did not make the problem any less profound.

A likely causal, yet poorly understood, factor seemed to further impact graduation rates: instructor competence. Given that the Air Corps was struggling to grow its numbers, and primary flight training was the epicenter for training the individuals who would populate the expanding air arm, it would have seemed reasonable to station the best flight instructors at the primary training bases. After all, instructor pilots were selecting (more often deselecting) the Air Corps' future leaders. Instead, Kuter found that the Brooks Field primary flight instructors were for the most part very junior reserve officers.³² Most had only recently graduated from flying training, having themselves been trained by relatively new aviators. This was perhaps better than the alternative, however. Young, motivated fliers were likely better than old, disinterested ones: in 1930, the Air Corps chief had to send out a letter encouraging his officers to fly at least fifty hours per year—a minimal standard that, even if met, did not sustain piloting proficiency.³³ Inexperienced instructors, who had themselves been trained by inexperienced instructors, who had been brought up to believe that flying was an inherent—rather than learned skill, were unlikely to seek out and effectively incorporate the current-day best practices in flying training. The results of this pedagogical malpractice were painfully obvious in the low graduation rates and high accident rates during and after flying training.

³² Ibid.

³³ Cameron, *Training To Fly*, 251.

Further working against Kuter and his contemporaries was a perceived, if not actual, anti-West Point bias among flying instructors. Especially from the October 1929 stock market crash onward, the reserve officer instructors had good reason to be concerned about regular officer students becoming rated pilots. The Army was limited in the number of officers it could have on active duty, so every regular officer who became a pilot and transferred into the Air Corps limited the number of reserve Air Corps officer pilots who could remain on active duty rolls. All West Point graduates were regular officers, so they represented something of an existential career threat to those charged with teaching them. Nonetheless, while the Twenties were still roaring, West Pointers fared reasonably well in flying training. Of Kuter's thirty-two West Point classmates whose flying training classes finished before the stock market crash, 50 percent graduated—which exceeded the overall graduation rate of 40 percent during that period.³⁴ In contrast, just 26 percent (six of twenty-three) of West Point '27 graduates who went to flying training after the 1929 crash earned their wings, while the overall graduation rate for the period was significantly higher, at 36 percent.³⁵ Kuter could not have known the above statistics, but the anecdotal evidence of anti-West Point bias would start accumulating quickly once school started. He had his work cut out for him if he was to survive the program.

³⁴ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 2033–2081; Griffiss, "Roster of Students of the Air Corps Primary Flying Schools," 43.

³⁵ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 2033–2081; Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VIII, 1930-1940, 695–730; Griffiss, "Roster of Students of the Air Corps Primary Flying Schools," 43.

Training begins

Everyone passed the preflight academic training, but this was aided by a certain moral flexibility toward test-taking. During an initial examination on the articles of war, two flying cadets in front of Kuter were openly cheating. They ignored him when he told them to stop. When Kuter went forward to notify the instructor proctoring the exam, he later recalled, "He curtly told me that I was no longer at West Point and he was in charge."³⁶ It was a further reminder of how far different the Air Corps would be from his prior experience. Once the class started flying, eliminations began in earnest. Less than a week into the flying phase, one classmate was sent to a check flight with Captain Chennault for "lack of inherent flying ability." After a perfunctory washout board, the former infantryman departed Brooks Field and returned to his ground branch.³⁷ He must have had a profound dearth of innate flying skill to experience such a brief aviation career.

Kuter was assigned, along with two flying cadets, to a reserve lieutenant who bore the scars of a recent crash. Progress was anything but smooth. Communication between instructor and student while airborne was largely impossible due to the open cockpit design. What passed for inflight instruction largely consisted of the instructor in the front cockpit demonstrating a maneuver, the student in the rear cockpit attempting to copy it, and the instructor subsequently shouting unintelligible corrections and/or curse words over the engine and wind noise. Verbal instruction primarily happened on the ground,

Kuter, "Along with Larry." 63.
 Kuter, "Growth of Air Power," 65.

between sorties. Compounding the challenge, Kuter experienced blinding migraine headaches. Rather than risking a washout by going to the flight surgeon, he and Ethel sought technological solutions to the problem. They bought dark-shaded, glare-proof goggles (rather than ill-fitting issued clear ones) in order to reduce the inevitable eye strain from the San Antonio summer sun. Ethel also fashioned a looser-fitting, cloth flying helmet to replace the overly-tight and uncomfortably warm issued leather one which was incompatible with the Texas heat. The financial attraction of Air Corps service diminished further. The migraines went away, but Kuter's weight dropped from 192 to 162 pounds.³⁸

Kuter's outlook improved after he saved his own career during the primary phase. Kuter was having trouble flying "patterns of eight," a coordination exercise wherein a pilot flies a figure eight through the sky, using two ground reference points to define the centers of the two loops in the pattern. Like other classmates before him, he went to a check ride with Captain Chennault. Chennault pointed out a farm building and nearby tree, and Kuter performed the maneuver around them. The grizzled pursuit pilot, frustrated, took the controls and flew directly back to the base. During the debrief, Chennault said Kuter's pattern was inadequate, and Kuter surprised him when he agreed. Kuter said that he was merely performing the maneuver the way his instructor Lieutenant Lawson had taught him, rather than the way he felt it should be done. Chennault, surprised by the student's audacity, told Kuter to get back in the airplane and show him how a competent aviator should do it. Kuter evidently did well enough and passed the

³⁸ Kuter, "Growth of Air Power," 64-65.

check ride. The next day, he was assigned a new instructor, Lieutenant Gene Tillery: "a big, pleasant, easy going fellow whom I liked from the very first meeting."³⁹ On 26 August, Ethel recorded—in big, bold letters—that "Larry passed his 20 hour check," and a day later, Lieutenant Tillery took Ethel flying; it must have been a very celebratory flight. With competent instructors for the remainder of training, Kuter prospered. Manning Eugene Tillery, a 1926 Texas A&M graduate and 1927 flying training school graduate and regular officer, would eventually serve as the 1500th Air Transport Wing under Kuter and retire as a major general. 41

While Kuter continued to progress, few other West Pointers did. By late

September, Kuter was the only West Point '27 graduate left. James F. Collins (eventually to become Commander, U.S. Army Pacific) washed out first; by 15 August, he had already reported into Fort Sam Houston as a field artilleryman. Spahi Bixel, an intercollegiate fencing champion and outstanding horseman, was gone a couple weeks later. Three classmates washed out within a week of each other—Arthur L. Cobb,

Robert G. "Bob" Lowe, and Frank T. Ostenberg returned to their ground branches between 6 and 10 September. Chubby Doan lasted until late September, when he washed out (at his own request) due to airsickness during spin training.

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³⁹ Ibid., 67.

⁴⁰ Kuter, "Along with Larry," 108.

⁴¹ U.S. Air Force, "Major General Manning E. Tillery," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105374/major-general-manning-e-tillery.aspx.

⁴² Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 2053.

⁴³ Ibid.. 2051.

⁴⁴ Ibid., 2048–2063.

⁴⁵ Ibid., 2058; Griffiss, "Roster of Students of the Air Corps Primary Flying Schools," 23; Kuter, "Growth of Air Power," 65.

wider trend; Kuter's classmates were among the twenty West Pointers (more than two a week) who washed out between 9 August and 1 October. 46 The anti-West Point bias would be a frequent topic of discussion in senior air force officers' oral history interviews years later.

Although perhaps a bit lonely, since so many friends had washed out, Larry Kuter's outlook improved and his weight steadily rose to his pre-commissioning weight of 172 pounds. 47 On 1 March 1930, he graduated from primary training at Brooks Field. Thirty-seven percent of his overall class remained, with all the student pilot groups regular officers, cadets, sergeants and foreign students—having suffered the approximately the same attrition rate.⁴⁸ The regular officers from commissioning sources other than West Point did notably better than Military Academy graduates, which lends credence to the anti-West Point bias among the instructors. The Kuters moved across town to start advanced training at Kelly Field. There, they found a much more hospitable environment. The Kuters moved into a more comfortable home, washouts from training were rare, and students were even welcome at the officers' club (even though the instructors still did not exactly "buddy up"). 49

Kuter made another life-altering decision during the latter part of flying training. Early in his time at Kelly Field, he and his remaining classmates were given orientation flights in the four primary aircraft types of the day: pursuit (designed for aerial dogfighting), observation (artillery spotting), attack (close support of ground troops) and

⁴⁶ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 1172-2134. ⁴⁷ Kuter, "Growth of Air Power," 65.

⁴⁸ Griffiss, "Roster of Students of the Air Corps Primary Flying Schools," 23–24.

⁴⁹ Kuter, "Growth of Air Power," 68.

bombardment (long-range attacks, beyond the front).⁵⁰ There was no separate track for transport aircraft, likely because there were so few in the Army inventory. Students chose which specialty they desired, spending the last two months of the program training in it.

Rather than selecting observation, the obvious choice for one plotting a return to field artillery, Kuter picked bombers. What drove him toward bombardment is unclear—Kuter offered no good explanation in his memoirs or in oral history interviews other than it "offered the greatest appeal". The bomber instructors' quality likely helped, though. Three of his instructors, First Lieutenants Westside Larson, Ned Schramm, and Ralph Snavely would retire as general officers. The other two, First Lieutenant John W. Monahan and Second Lieutenant Henry R. Baxter, would both retire as colonels. Larson's career was going well enough that he left Brooks in 1930, shortly after Kuter's class graduated from flying training, to attend the Air Corps Tactical School. Kuter's flying training classmates might also have convinced him of bombers' potential. His student flying partner was West Point '28 graduate Second Lieutenant (later Major General) Delmar T. "Del" Spivey. The other officer bombardment student, Second

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⁵⁰ Ibid., 69.

⁵¹ Ibid.

⁵² "ACAFS Kelly Field Bombardment Class of July 1930," July 1930, Kuter Collection, Volume 1, Page 32, USAF Academy Library Special Collections; U.S. Air Force, "Major General Westside T. Larson," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108553/major-general-westside-t-larson.aspx; U.S. Air Force, "Brigadier General Ned Schramm," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105681/brigadier-general-ned-schramm.aspx; U.S. Air Force, "Brigadier General Ralph Adel Snavely," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108682/brigadier-general-ralph-adel-snavely.aspx.

⁵³ Kuter, "Growth of Air Power," 69; U.S. Air Force, "Major General Delmar Taft Spivey," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105568/major-general-delmar-taft-spivey.aspx. Spivey would eventually serve as Air War College commandant when Kuter was the Air University commander.

Lieutenant James K. DeArmond, would retire a brigadier general.⁵⁴ Realistically, though, Kuter's choice likely had much to do with his flying training scores; while he scored quite high academically, his final flying grade was "D"-Satisfactory.⁵⁵ No matter what initially motivated Kuter to choose bombers, that decision—perhaps more than any other—helped ultimately secure his place in air force history.

Graduation day on 21 June 1930 was a mix of the old and new. Colonel Frank
Lahm, one of the Army's first two aviators, was the commencement speaker. When he
handed out diplomas, nobody above the rank of second lieutenant received one (even
Captain Axtater who arrived with so much aviation experience). West Pointers had
fared poorly compared to regular officers from other commissioning sources. Kuter was
the only one from his West Point class to graduate, and less than a third of West Point
graduates (from all years) earned their wings, while over half of the regular officers from
other commissioning sources did. Flying cadets had about the same graduation success
rate as the West Pointers. None of Kuter's West Point classmates were given the
opportunity, however, to "wash back" a class and try again, while three flying cadets

⁵⁴ U.S. Air Force, "Brigadier General James Keller DeArmond," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107270/brigadier-general-james-keller-dearmond.aspx. Kuter would later teach bombardment to many of his Kelly Field instructors and classmates. Schramm would become Kuter's peer in 1934, when the two entered the Air Corps Tactical School as classmates. In a role reversal, Kuter would later teach bombardment at ACTS to former instructors Snavely, Monahan and Baxter, as well as Kelly Field classmate DeArmond. Del Spivey, who had started as a West Point '27 classmate before getting washed back to the class of '28, never attended ACTS.

⁵⁵ "Air Corps Primary Flying School Final Grade Sheet," February 28, 1930, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

⁵⁶ Axtater would return to Brooks and try again in July 1932, but his second attempt would be equally unsuccessful. He must have successfully gotten through on a third attempt at some indeterminate date, since references can be found to Major Axtater flying his own aircraft in to take command of Borinquen Field, Puerto Rico, in 1941.

were given this opportunity. One enlisted aviator, the aforementioned Staff Sergeant Maurice M. Beach, made it through.

Kuter became part of a very small core of professional airmen, few of whom were bomber pilots. Upon graduation, he brought the total number of active-duty Army aviators from his West Point class to fifteen.⁵⁷ Nine more West Point classmates entered training in later classes, but just two of them would have flying careers. Both were prior infantrymen who remained connected to their former branch by going into attack aviation. Those seventeen rated aviators from Kuter's West Point class, most of them fighter (pursuit, attack and observation) pilots, would join a very small professional nucleus within the Air Corps' officer corps. Kuter and his classmates had been trained by their West Point instructors to hold the Air Corps in low esteem. Kuter's experiences at West Point, Giggling Reservation and Brooks Field had largely reinforced his low professional opinion of airmen. The perception, as well as the reality, of job protectionism among flying instructors (with West Pointers particularly unwelcome in the air arm) had discouraged him further. But Kuter's experiences with instructors and fellow students in bombardment started to make a flying career more attractive than a return to the field artillery. Kuter saw that he might be able to bring some professionalism and discipline into the somewhat ragtag Air Corps, given his prior West Point and field artillery experience. He was just one of four bomber pilots to emerge from his entire West Point class.⁵⁸

⁵⁷ Twenty from Kuter's West Point class had graduated from flying training, but three of them were already in the Reserves and one had died in an aircraft accident.

⁵⁸ A total of six West Point '27 graduates got through the Kelly Field bombardment program, but by the time Kuter graduated, there were just four on active duty. Earnest G. Schmidt had died in an aircraft

While Kuter saw himself as a professional officer, he had absorbed some of the Air Corps' ambivalence toward safety and professional qualifications. Twice a year, Army pilots were allowed to take their wives and parents up for thirty minute flights, with the notional purpose of assuaging family members' fears of flying. Right after the graduation ceremony, Kuter took Ethel, his father and his mother up in successive half hour flights. For those flights, he checked out a two-seat Curtiss A-3 "Falcon": an attack aircraft which he had flown only twice before. While Kuter and his passengers greatly enjoyed the airborne tour of San Antonio and the mild acrobatics were thrilling, equal (if not greater) parts luck than skill brought everyone back home safely. It is no wonder that policy and training would become major foci of Kuter's career.

Langley Field

Upon graduation, Kuter and bomber training classmates Del Spivey and James DeArmond were assigned to the Second Bombardment Group at Langley Field, Virginia. Upon arrival, the more-senior DeArmond was made Group Supply Officer, Spivey went to the 20th Bombardment Squadron (a sister squadron within the group) to serve as the quadruple-hatted squadron supply/mess/armament officer and adjutant, and Kuter was assigned to the 49th Bombardment Squadron.⁵⁹ One other flying training classmate,

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accident and David M. Hackman had joined the Reserves. After serving for less than a year as a bomber pilot, he resigned his commission and went to work in Mexico as a representative for the Fairchild Airplane Manufacturing Company.

⁵⁹ U.S. Air Force, "Brigadier General James Keller DeArmond"; Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930*, 703, 768.

Richard P. O'Keefe, was also assigned to the 49th, even though he had graduated as an observation pilot.⁶⁰ Although Kuter and his peers had no control over their initial flying assignments, they could not have picked a better one than Langley Field. For Kuter, the assignment to the 49th would prove especially fortuitous.⁶¹

Langley Field, despite being in the early phase of the Great Depression, was an exciting place to be. The buildings were new, owing to Army aviation still being in its adolescence. The bombers were also new, albeit technologically obsolescent, as the group continued to receive Keystone LB-5 biplane bombers fresh from the assembly line. More importantly, Langley served as a technological and doctrinal development center. The Air Corps Tactical School, the air arm's intellectual hub, was at Langley (at least for another year). The National Advisory Committee on Aeronautics (NACA—forerunner to NASA) had its first research and test facility—the Langley Aeronautical Laboratory—there, too. NACA had won the Collier Trophy the year before with a cowling designed by the lab's engineers and tested in the lab's wind tunnels. It seemed the ideal configuration; the air arm's doctrine center was collocated with an aviation technology development center, along with a flying group which could operationally test aircraft the ACTS thinkers and NACA engineers had helped produce.

⁶⁰ Official Army Register, January 1, 1931. (Washington, D.C.: Government Printing Office, 1931), 512; Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 2105.

⁶¹ O'Keefe would do reasonably well for himself, too, until he died in an aircraft accident on 21 March 1932.

⁶² Robert T. Finney, *History of the Air Corps Tactical School, 1920-1940* (Maxwell AFB, AL: USAF Historical Division, 1955), v.

⁶³ Frank W. Anderson, *Orders of Magnitude: A History of NACA and NASA, 1915-1980* (Washington, D.C.: NASA, 1981).

Unfortunately, when Kuter arrived in the 49th Bomb Squadron, he found the personnel situation to be much bleaker than the physical and intellectual capital found elsewhere at Langley Field suggested. Kuter was unique among his peers, because he was not only a West Pointer who had successfully graduated from flying training, but more importantly he had been an officer for a full three years. Owing to the aforementioned Army personnel policies, wherein the flying cadets who earned their wings and commissions as second lieutenants only spent one or two years in active-duty service before reverting to inactive reserve status, most of the squadron's pilots were as new to the military as the fresh-off-the-assembly-line bombers they flew. Furthermore, they would have been little interested in paperwork or professional development, since they knew they would be civilians within a couple years. Air Corps growth over the preceding three years (the Air Corps had grown 40 percent since Kuter graduated from West Point) also meant that many of the squadron's regular officers were junior to him, too. Unfortunately, there was no equivalent of Captain Stanley Richardson—at least not initially—to show him the ropes.

The Kuters arrived at Langley Field on 10 July, and less than two weeks later Larry permanently transferred into the Air Corps on 23 July 1930.⁶⁴ There, they found that the squadron commander, Captain Henry Pascale, was serving as the group commander.⁶⁵ This was noteworthy by itself; the 2nd Bomb Group was so short on

⁶⁴ Frank W. Anderson, *Orders of Magnitude: A History of NACA and NASA, 1915-1980* (Washington, D.C.: NASA, 1981).

⁶⁵ "PEP Record: Kuter, Laurence S.," Folder 2.; Pascale signed Kuter's first efficiency at Langley Field as both Kuter's squadron commander and group commander. Pascale reverted to squadron commander when Major Dargue arrived and took command of the 2nd Bombardment Group, which indicates Pascale was the squadron commander, temporarily serving as group commander, not the other way around.

experienced personnel that Pascale, who had just thirteen years' military service, had to serve in both roles—commanding a four-squadron group while simultaneously (at least theoretically) providing tactical-level squadron leadership. ⁶⁶ Pascale should have been able to shed his squadron command duties to his next-highest ranking subordinate, but that individual was a mentally ill First World War veteran who spent most of his time at Walter Reed military hospital. Kuter was the squadron's next-highest ranking officer, so he immediately upon arrival he became the de facto commander. ⁶⁷

This was a burden and a boon; while it occupied all this time and energy, and would have done little to enable his own development as a pilot, taking on this weight of responsibility firmly convinced Kuter that aviation was a far better place to be than the field artillery. As he recalled:

Here I found not so much an opportunity as an urgent requirement to command some thirty officers and a couple hundred enlisted men, many of whom were technical specialists. In the Field Artillery, after fifteen or twenty years I could have looked forward to commanding a battery with two or three officers and a couple of hundred ordinary soldiers . . . I transferred for permanent assignment to the Air Corps. My career was firmly and officially redirected into military aviation. ⁶⁸

Kuter served as the acting 49th Bombardment Squadron commander for the first two months of his flying career.⁶⁹ In September, Pascale became Kuter's first full-time

According to both Kuters' narratives, Larry Kuter served as the acting squadron commander until, roughly simultaneously, Major Herbert Dargue took command of the 2nd Bombardment Group, Captain Robert Olds became the group operations officer and Captain Eugene Eubank arrived and took firm command of the squadron. When Eubank took command, he retained Kuter as operations officer and Lieutenant Richard

⁶⁶ Official Army Register, January 1, 1931.;

⁶⁷ Kuter, "Growth of Air Power," 76.

⁶⁸ Ibid

⁶⁹ "PEP Record: Kuter, Laurence S.," Folder 2; Virginia Aeronautical Historical Society, "Henry Pascale: Portsmouth, Virginia," *Virginia Aviation History*, accessed October 15, 2015, http://virginiaaviationhistory.org/wp-content/uploads/2015/04/Pascale.pdf; Kuter, "Growth of Air Power," 76–79; Kuter, "Along with Larry," 116–117. This paragraph is a synthesis of contradictory narratives.

squadron commander when Major Bert Dargue (who would become an important mentor of Kuter's) took command of the 2nd Bomb Group, thus freeing Pascale to serve as the 49th's full-time commander. Kuter then served under Pascale—officially as just squadron adjutant and mess officer, but in practice also operations officer, for three months. In December 1930, the squadron got its third commander in five months, when Captain Theodore Koenig took command and formally designated Kuter as squadron operations officer, but did not relieve him of his other duties. Kuter remained triple-hatted as the operations officer, adjutant and mess officer until January 1931—six months into his first flying assignment, a time when he should have been allowed to focus on flying.

The year 1931 was significant for Kuter, because he got to focus more on flying and got another mentor: Captain Eugene Eubank. His reduction in workload in January to that of just operations officer (squadron second-in-command—still a weighty responsibility) allowed him to focus more on building his flying skills. This was critical, not only for his own personal safety, but also his future as an Air Corps leader. One's competence as an aviator was a key element of determining fitness to serve as a flying

O'Keefe as adjutant. Kuter's efficiency reports contradict this account. Based on the signature blocks in Kuter's reports, Pascale not only served as the group commander until September, but served as squadron commander from September through December. Pascale—who, after he separated from the service, would go on to own the Hampton Roads airport and be honored as a member of the Virginia Aviation Hall of Fame—could not have been the ill commander Kuter described in his narrative. Captain Koenig, who took command after Pascale and is not mentioned in this passage, likewise could not have been the mystery commander; he left Langley Field in 1931 to attend the Air Corps Tactical School, and later served under Kuter in the Military Air Transport Service as the Director of Base Services and Supply. The best way to reconcile these accounts is to assume that the mentally ill officer in Kuter's memory was the 49th's operations officer, who should have moved into the command role when Pascale temporarily moved up to group command. Kuter could not be listed as squadron commander on his first Langley Field report (Pascale formally held that position), and he could not be listed as operations officer (the more-senior, mentally ill officer still held that position, while he awaited medical discharge at Walter Reed). Kuter got the workload, without getting the credit on his reports. Kuter's recollections, written over four decades after the fact while he was dying of emphysema, nonetheless describe the general theme of the time, even if he missed on several particulars.

unit commander. Gene Eubank's arrival (the squadron's fourth commander in just over a year) gave Kuter a career mentor and the squadron a whole new focus. Eubank took command in August 1931, when Koenig left for Maxwell Field to be an Air Corps Tactical School student. In sum, the 2nd Bomb Wing was desperately short of experienced, competent personnel when Kuter arrived in summer 1930. Kuter was thus given a great deal of responsibility early on—becoming squadron operations officer very quickly—due to his three years of Army service and a modicum of talent and ambition that put him well ahead of most squadron officers. Eugene Eubank arrived on the scene after a very busy, tumultuous year and provided a much-needed steady hand at the squadron's helm.

Leadership turmoil was not the only challenge Kuter and his fellow recently-winged peers faced. Not only was Kuter distracted by the weight of his squadron duties, but precious few flying hours were allotted for him and his fellow officers to practice their new trade. In accordance with the Second Bomb Group's training plan, each pilot was to fly a maximum of 205 flying hours per year at Langley, with another 45 hours set aside for annual Air Corps maneuvers. Given that the bombers had two pilots every time they flew and thus split the hands-on flying time between them, this equated to less than ten hours per month of actual stick-and-rudder training—with a significant amount of that time dedicated to performing in public spectacles. While perhaps adequate for

⁷⁰ "PEP Record: Kuter, Laurence S.," Folder 2; Finney, *History of the Air Corps Tactical School, 1920-1940*, 121. Colonel Theodore J. Koenig would later serve as the Director of Base Services and Supply within Major General Laurence S. Kuter's Military Air Transport Service in 1948.

⁷¹ "Second Bombardment Group Annual Training Program Fiscal Year 1932-33," 1932, 6, Reel B0042, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

experienced aviators simply seeking to maintain their flying proficiency, this was no way to build a competent Air Corps.

Given Eubank and Dargue's influence on Kuter's career, they both deserve special attention. Major Herbert A. Dargue was a 1911 West Point graduate who earned his wings in 1913, making him one of a very small group of military aviators at the time. He flew in support of General Pershing's expedition into Mexico in 1916 and made the Army's first planned night flight and landing in 1917. He had graduated from the Air Service Engineering School (1920), Army Command and General Staff School (1924), Army War College (1929) and Naval War College (1930); with service in the Office of the Chief of the Air Corps from 1920 to 1923 and again from 1924 to 1928. During his second Washington tour, Dargue was one of the young officers, along with Hap Arnold, who testified for the defense at Billy Mitchell's trial, but unlike Arnold managed to avoid being exiled to Kansas. In 1926 commanded the record-breaking Pan-American Good Will Flight (wherein he circumnavigated South America). In sum, Herbert Dargue was a passionate, well-connected advocate for an independent air force who had the requisite tact, vision and credibility to lead the nation's premier bombardment group in 1930, shortly after Kuter arrived on station.

Eubank had initially earned his commission in 1918, in the midst of the Great War. He never went overseas, but was instead retained at Kelly Field after graduation to teaching flying to cadets who were barely more junior than he. Eubank attended the Air Service Mechanical School after the war, graduating in 1920, and later served as a test pilot (and eventually Flight Test Unit chief) at Wright-Patterson Field in Dayton, Ohio,

from 1927 to 1929. He then spent two more years in school, graduating from the year-long Air Corps Engineering School (ACES) at Wright-Patterson in 1930 and the Air Corps Tactical School at Langley Field in 1931. Commanding the 49th was his first assignment after ACTS. Eubank was a tough competitor in all he did; even as a retiree in eighties, it would be rare for him to shoot above his age in golf. Eubank thus arrived to command his squadron as an ambitious leader, a school-trained bomber advocate and a test pilot. Kuter and the 49th flourished under Eubank's leadership. As Kuter recalled, "Very shortly the 49th had the best bombing and gunnery scores, the highest percentage of aircraft in commission, the most hours flown and more night and navigation training than any other squadron."

In the early-to-mid 1930s, aircraft technology developed faster than the pilots who flew the planes. In 1931, the Air Corps decided to buy Boeing's B-9 "Death Angel," a twin-engine bomber that was as revolutionary as the single-engine Monomail commercial airmail plane from which it was derived. Modern Mechanix, in its August 1931 edition, dubbed the aircraft a "veritable flying fortress." It was a moniker which strained credulity, since the bomber only had four guns, but it prefigured what the aircraft would ultimately morph into. The magazine did correctly note, however, that it was the fastest bomber of its day, and it could carry over a ton of bombs. Boeing's Monomail and derivative commercial and military designs were unique because they were a monoplanes

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⁷² U.S. Air Force, "Major General Eugene Lowry Eubank," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107125/major-general-eugene-lowry-eubank.aspx.

⁷³ Kuter, "Growth of Air Power," 80.

⁷⁴ Kuter, "Growth of Air Power." 81.

⁷⁵ "New Boeing 'Death Angel' to Be World's Fastest Bomber," August 1931, http://blog.modernmechanix.com/new-boeing-death-angel-to-be-worlds-fastest-bomber/.

(most other transports and bombers were biplanes); had streamlined, all-metal fuselages; used retractable landing gear; and the engines had low-drag cowlings. The B-9's engine placement, cowling design and retractable landing gear owed much to NACA wind tunnel testing at Langley Field. The More importantly, but less apparently, Boeing and its competitors were learning how to control aircraft weight within their designs. The net effect of these design improvements, when applied to a two-engine bomber design, was an aerodynamically-clean aircraft that was fast enough to outrun the pursuit aircraft designed to shoot it down. On the downside, it had an open cockpit (making it both uncomfortable and difficult to communicate), an inadequate liquid oxygen system (which tended to freeze, leading to aircrew hypoxia), fixed-pitch propellers, and a fragile fuselage which rendered it highly susceptible to inflight structural failures. Nonetheless, every bomb squadron in the Air Corps wanted to fly it.

The Army only had enough funds to equip one squadron, but split them between two: Gene Eubanks' 49th Bomb Squadron and the 20th, also at Langley, got the entire five-aircraft operational test fleet. The choice of Eubank's squadron should be unsurprising: a squadron led by a test pilot (and hence at the leading edge of aircraft technology), who had recently graduated from ACTS (the Air Corps intellectual center at the leading edge of airpower doctrine), collocated with the United States' primary aeronautical research center, was given the responsibility of operationally testing a

⁷⁶ Peter M. Bowers, *Boeing Aircraft Since 1916*, Third (Annapolis, MD: Naval Institute Press, 1989), 200–206.

⁷⁷ Anderson, Orders of Magnitude, 2–3.

⁷⁸ Richard K. Smith, "The Intercontinental Airliner and the Essence of Airplane Performance, 1929-1939," *Technology and Culture* 24, no. 3 (1983): 428–49, doi:10.2307/3104760.

⁷⁹ Kuter, "Along with Larry," 82.

bomber which appeared to fulfill strategic bombing advocates' most fervent desires. The B-9 had such great range, speed and payload that it made the aircraft appear invulnerable to the air defenses of the day. Kuter, second-in-command of the squadron responsible for putting the B-9 through its paces, was at the forefront of both technological and doctrinal bomber development less than a year of his arrival to Langley Field.

The B-9 earned its "Death Angel" moniker, but not for the intended reason: it was more dangerous to its crews than any likely enemies. The problem was that the monocoque fuselage, while innovative, was too structurally weak. Kuter recalled that, if he pushed too hard on the rudder and looked back at the fuselage, he could see the aircraft actually twist. ⁸⁰ The Air Corps never bought any more B-9s, and instead went with the closed-cockpit Martin B-10 as its primary bomber. The B-10, although built by a rival manufacturer, reflected a number of lessons learned from the B-9 project. Boeing used lessons learned from the B-9 when building its Model 247, a two-engine passenger aircraft which is considered the first modern airliner. It then used insights from the B-9 and Model 247 projects when building the sturdy, four-engine, closed-cockpit Model 299, which flew in 1935. The Model 299 in turn became the iconic B-17 Flying Fortress. ⁸¹ From the initial introduction to the B-9, Kuter would become intimately familiar with multiple Boeing products over the ensuing years.

In the midst of helping Eubank lead the 49th and primarily flying Keystone bombers while flight testing the Boeing B-9, Kuter participated in multiple events which brought him into contact with other prominent Army aviators of the day and future air

⁸⁰ Kuter, "Growth of Air Power," 82.

⁸¹ Bowers, *Boeing Aircraft Since 1916*, 200–207, 284–284.

force leaders. In one of the Air Corps' annual bombing competitions (it must have been 1931, since O'Keefe died in early 1932), he and Brooks Field classmate Second Lieutenant Richard P. O'Keefe came in second to Second Lieutenants Merrill D. Burnside (another future general) and Charles W. O'Connor. 82 Kuter flew his first international mission in early 1932, when he went on a two-and-a-half month long excursion to deliver five aircraft—two Y1C transport aircraft (militarized versions of the Fairchild 100) and three Keystone B-3As from Kelly Field to Panama. Leading the flight was Lieutenant Colonel (later Lieutenant General) Frank M. Andrews in one of the two brand-new Y1Cs. Future Major General Alvan Kincaid commanded the second Y1C, while future generals Thomas Bryan, Larry Kuter and George Usher flew as copilots.⁸³ During a stop in Manaugua, Nicaragua, Kuter ran across two Marine aviators, and future generals, "Red" McKittrick and "Sandy" Sanderson. He would see both again at the Air Corps Tactical School. In 1933, Kuter was part of a Langley contingent for the Air Corps' "Big Parade"—maneuvers in which the entire Air Corps participated, in an effort to publicize the air arm's capabilities. Approximately 330 aircraft flew in the aerial display. Of the seventeen officers in the Langley contingent, nine (Herbert Dargue, Eugene Eubank, John Ives, Kuter, Troup Miller, Richard J. O'Keefe, Robert Olds, Thomas Power, and Del Spivey) would attain general officer rank and ultimately earn twenty-four total stars.84

⁸² Kuter, "Growth of Air Power," 103.

⁸³ "Headquarters Advanced Flying School Kelly Field, Texas: Operations Order Number 64" (San Antonio, Texas, March 19, 1932), Kuter Collection, Volume 1, Page 45, USAF Academy Library Special Collections.

⁸⁴ Kuter and Power would both earn four stars; Ives and Miller would each earn three; and Dargue, Eubank, O'Keefe, Olds and Spivey would earn two stars.

In June through July 1933, West Point's entire first (senior) class flowed through Langley Field, in the same kind of familiarization trip that Kuter had at Mitchel Field some years before. Kuter was operations officer for the visit, with Major (later Major General) William O. Butler serving as officer-in-charge and First Lieutenant (later Lieutenant General) Richard Nugent serving as his assistant. The 49th was tasked with getting all the cadets in the air, and on 7 July, with the whole West Point class of 1934 in attendance. Lieutenant Kuter emceed the final air force demonstration. 85 Kuter and the 49th were likely given this level of responsibility because in the summer of 1931 Kuter had taken the Class of '32's highest-ranking cadet, First Captain of the Corps of Cadets John P. McConnell, flying in his Keystone bomber. Once airborne, Kuter—after some basic hands-on flying instruction—gave McConnell the controls then told the cadet to get them back to base. Kuter then pretended to read a book (McConnell later recalled that it was a comic book) as the cadet found his way back to Langley. 86 Kuter's confidencebuilding approach (vice the scare tactics employed by airmen in his cadet days) seemed to work. McConnell selected the Air Corps as his branch. It was a major coup for the air arm, and worked out well for McConnell, too. He became a pursuit pilot and went on to serve as the Air Force's sixth Chief of Staff.⁸⁷

While at Langley, the Kuters expanded their social circles outside of the military, too. Another tool in the Air Corps' public relations arsenal was naming aircraft after

⁸⁵ "Headquarters Langley Field, Virginia: General Orders Number 27," June 5, 1933, Kuter Collection, Volume 1, Page 61, USAF Academy Library Special Collections.

⁸⁶ Kuter, "Growth of Air Power," 88.

⁸⁷ U.S. Air Force, "General John Paul McConnell," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106325/general-john-paul-mcconnell.aspx.

cities, and making a big show of christening those aircraft whenever they did. In July 1933, shortly after the demonstration for the West Point cadets, Kuter was part of a Langley bomber contingent which flew to Binghamton, New York, to christen one of the new bombers as the "City of Binghamton." The Binghamton Press published a picture of Lillian "Lily" Sweet, wife of multimillionaire Lloyd Sweet, christening the aircraft with waters from the confluence of the Chenango and Susquehanna rivers, while the photogenic Lieutenant Larry Kuter looked on. Res Lily hosted a party following the christening which included the flight crew, and Larry must have made quite an impression. It was the start of a long-lasting friendship with the high-society couple, but it would come at some personal cost. As the Roxanne Kuter would later recall, "I spent two summers and two Christmases with them and their son and daughter. My mother kept her jealousy controlled but it was there. She seriously began to work on her appearance and figure after they met."

In between leading the squadron, flight testing a new aircraft, building his own flying proficiency, supporting the Air Corps' training, and widening his social circles, Kuter—ever one to study—took and completed every professional military education correspondence course he could get his hands on. Between his arrival at Langley Field in 1930 and his departure in 1934, Kuter took courses not only directly related to flying—bombardment, pursuit and attack aviation courses—but also ones on mobilization, staff duties and the Air Corps supply system. Course completion certificates adorn multiple,

⁸⁸ Kuter, "Along with Larry." 124. Lillian "Lilly" Sweet was the daughter of George F. Johnson (often referred to as simply "George F."), the co-owner of the highly-successful Endicott-Johnson Shoe Company. Johnson City, New York (formerly known as Lestershire) was named after Lillian Sweet's father, who was a pioneer of welfare capitalism: the progressive notion that employers should provide for workers' welfare. ⁸⁹ Letter from Roxanne Kuter Williamson.

large scrapbook pages within the Kuter Collection at the Air Force Academy. In the middle of all this activity, on 25 January 1933, Kuter was promoted to first lieutenant, but that was not much of a feat. He earned his rank in lockstep with his West Point classmates, in accordance with the Army's seniority-driven promotion system. Owing to Depression-driven fiscal restraints, Kuter and his classmates had been second lieutenants for five and a half years. His work had clearly gotten the attention of his senior officers, however. In his second efficiency report at Langley, and the first one that lists Major Dargue as a rater, Dargue wrote, "I consider Lt. Kuter one of the outstanding officers of the group, modest yet forceful, thoroughly loyal, and excellent example of what an officer should be." By July 1932, Eubank termed him "qualified and thoroughly trained to perform all squadron duties including that of squadron commander." In 1933, Eubank recommended that he be sent to the Air Corps Tactical school at an early date and rated him a "Superior" squadron operations officer. Under the demanding Eubank, Kuter never earned less than an "Excellent" overall rating.

During his first year at Langley, Kuter had gotten to know another lifelong friend. Second Lieutenant Haywood "Possum" Hansell was an outstanding young pursuit pilot who was assigned to the Air Corps Tactical School as its armaments officer starting in September 1930.⁹⁴ It was perhaps during this year, although the timing is unclear, that Kuter also got checked as a pursuit pilot. The skills and credibility he built as a dual-

⁹⁰ "Presidential Appointment of Laurence Kuter as First Lieutenant in the Air Corps," January 25, 1933, Kuter Collection, Volume 1, Page 57, USAF Academy Library Special Collections.

⁹¹ "Laurence S. Kuter Official Military Personnel File," n.d., Folder 2, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

⁹² Ibid.

⁹³ Ibid

⁹⁴ U.S. Air Force, "Major General Haywood S. Hansell, Jr."

qualified pursuit and bomber pilot would yield great dividends sooner than he expected.

Hansell left Langley for Maxwell Field, Alabama (along with the Air Corps Tactical

School) in 1931, but not before Kuter watched him almost die.

Hansell had a radio mounted behind the cockpit of a Boeing P-12, a biplane pursuit aircraft that passed for the Army's state of the art at the time, in order to facilitate fighter-bomber communication. He was forced to bail out when his aircraft entered a flat spin, due to the large radio's negative effect on the P-12's center of gravity. Hansell landed under parachute in a shallow, swampy area near the officers' club:

He was splashing around making a hell of a commotion. We decided he was trying to keep warm and thought it was funny. He quit splashing. There was an oyster boat which finally pulled him out of the water. The reason he had been splashing was because he was wearing winter flying boots, and they were tight at the top, fleece lined, and buoyant. He couldn't keep his feet down. The poor fellow was about to drown while we all thought it was the funniest thing we ever saw. 95

When the oystermen brought Hansell to the boathouse, a doctor used a bottle of "prescription" whiskey to revive him (Prohibition was still the law of the land). The Kuters and Hansells maintained a warm friendship, despite Larry having laughed at Possum's imminent demise.

Although Hansell might have been a more talented aviator, Kuter had a superior safety record. The only known accident in Kuter's flying career happened at Langley Field in November 1932. He was Eubanks' operations officer and had accumulated over 770 total flying hours in three and a half years. In the preceding three months, he had averaged twenty seven hours per month while flying five different aircraft: his unit's

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⁹⁵ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 86.

primary assigned bomber (Keystone B-6A), an experimental high-speed bomber (Boeing B-9 Death Angel), a two-seat biplane trainer (Consolidated PT-3A), a single-seat biplane fighter (Curtis P-6E Hawk), and a twin-engine biplane amphibian aircraft (Sikorsky C-6A). Despite having just five hours in the C-6A himself, young Second Lieutenant Kuter was already training another pilot, reserve Second Lieutenant R.B. Collins, to fly it. ⁹⁶ The plane belonged to the 59th Service Squadron, but apparently few pilots knew how (or were willing) to touch it. It was no surprise why, since pilots trained to land in a "three point stance" on land often failed to push the amphibian's nose down when landing on water, causing it to skip across the water:

I came in one day and the skipping had weakened the strut so that the wings with the engines slid back and down. The props chopped into the hull of the flying boat part. I was on the left-hand side at that time; right in front of me, it began chopping closer and closer and closer. I wound up with a face full of parts from the instrument panel. A small wheel from an instrument flew in my mouth. The still revolving propeller went right through the panel and showered me with stuff. I didn't know it couldn't come any further, and I couldn't get out. This was a sort of a "pit and pendulum" business, watching that thing get closer and closer. It never did hit me. ⁹⁷

The final accident report indicated that at least 75 percent of the strut failure was due to it having failed at some indeterminate point previously with the other 25 percent undetermined, since it could not definitively be attributed to a hard landing. Even though Kuter was never directly blamed, even partially, for the accident, he remained a

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⁹⁶ "Technical Report of Aircraft Accident Classification Committee," December 12, 1932, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

⁹⁷ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL. 89.

⁹⁸ "Technical Report of Aircraft Accident Classification Committee."; A photo of the actual aircraft—tail # 30-400—can be found at http://1000aircraftphotos.com/Contributions/Selff/1456.htm

bit miffed over four decades later that he was not completely exonerated in the accident report.⁹⁹

The most potentially deadly event (at least professionally) for Kuter, however, occurred over the Aberdeen Proving Grounds. The 49th Bomb Squadron was slated to command a bombing demonstration which included dropping live, two thousand pound bombs in front of a VIP audience of senior Army generals and congressmen. If poorly executed, it could not only embarrass the Air Corps, but cause significant loss of life. None of Captain Eubank's pilots had ever before seen, much less dropped, such a large bomb. He led his squadron's preparation for the mission, but shortly before the day arrived he was called to sit on a senior evaluation board at Wright Field. Fortunately, Gene Eubank had trained his subordinates well and trusted in their competence. He pressed on to Ohio, leaving Kuter to lead the demonstration. The deployment to Aberdeen went without a hitch, and after some local practice runs, the day came for actual event. Approaching the target area (and the audience) Kuter and his crews encountered winds aloft which blew over the grandstands and toward the target. The 49th, with its slow-flying Keystone bombers, flew a ground track that paralleled the line of the grandstands, in order to preclude bombs dropping on the spectators and allow those on the ground to clearly see the bombs falling to earth. The combination of high winds and slow aircraft speeds required Kuter to crab into the wind and point the noses of his squadron aircraft toward the stands in order to maintain the desired ground track. They

⁹⁹ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 90.

dropped their bombs, were surprised to hear the bombs' blast over their engines' noise, and happily noted that the bombs hit in the target area. 100

Upon landing, Kuter and his elated squadron mates were confused by the chilly reception they received. Apparently neither the ordnance officer who emceed the event (nor apparently any airmen who were in the stands) understood that the direction an aircraft pointed only correlated with its progress over the ground on windless days. No announcement was made as to why the bombers approached the field the way they did, and panic ensued when the clueless audience thought they were about to be bombed by their own Air Corps. Eubank returned from Ohio about the same time the 49th got back to Langley, having already heard that his squadron had threatened many people's lives. Kuter explained what had really happened, and Eubank staunchly defended his airmen. 101 Apparently the more-senior Air Corps officers who had been in the grandstands either lacked the knowledge and experience to recognize the bomb run as normal and acceptable for the conditions, or they were unwilling to support their junior officers. Either way, Kuter was fortunate to have Captain Eubank in his corner.

In Kuter's last efficiency report as a Eubank's operations officer, he was rated "Superior" (the highest possible rating) as an operations officer and "Excellent" (the next highest) as a flight leader. Eubank rated him superior in his performance of field duties and attention to duty. In peace, Eubank termed Kuter as already qualified to command a squadron or serve as S-3 (operations officer) of a group. Most tellingly, in the narrative section, Eubank called him "A thorough, tireless worker. A loyal dignified and honorable

¹⁰⁰ Kuter, "Growth of Air Power," 86.
101 Ibid.

officer. Can meet unusual situations as they arise and can be depended upon to act with excellent judgment and resourcefulness."¹⁰² None could argue with assessment. Most significantly to Kuter's later career, Eubank concluded his narrative with the statement that, "This officer should be given the advantages of the Air Corps Tactical School at an early date."¹⁰³ Kuter did not get selected to attend ACTS in 1933, when that report was written, but on 1 July 1933, just five months after pinning on first lieutenant rank, three years into his first flying assignment at Langley Field and six years into his military career, Major Dargue moved Kuter up to be the 2nd Bombardment Group's S-3.¹⁰⁴

By this point in time Kuter was an accomplished bomber pilot, experienced flight test aviator, qualified pursuit and amphibious transport pilot, and a proven, able administrator. In moving into the group S-3 job, he replaced Captain Robert Olds, a World War I-era aviator, former Billy Mitchell acolyte, ACTS graduate and former ACTS instructor. Olds had departed Langley to attend the two year-long Army Command and General Staff School at Fort Leavenworth. Kuter was nine years younger, and in aviation experience light-years behind, his immediate predecessor. Dargue rated Kuter as "Superior" for the time he served in the group job. Kuter only held the position for five weeks, however, for when Dargue pinned on lieutenant colonel and took command of the Second Bombardment Wing, he brought Kuter along with him, making Kuter both the Assistant Wing Operations Officer and Assistant Post Operations Officer. At an

^{102 &}quot;Laurence S. Kuter Official Military Personnel File," n.d., Folder 2.

¹⁰³ Ibid

¹⁰⁴ Ibid

extremely young age, Kuter had moved from unit-level leadership to wing-level organizational leadership.

This was only the beginning of the challenges Kuter faced during that year. An added challenge was that, when the Air Corps Tactical School had moved out of Langley to its new facilities at Maxwell Field in 1931, the Eighth Pursuit Group had started to move in. Nobody could miss the group commander, Major Byron Quinby "B.Q." Jones, who organized the Eighth Pursuit Group's standup at Langley Field then became its first commander in 1932. 105 He was a fighter pilot's fighter pilot, and in a manner typical of the breed, Jones asserted that "pursuit pilots were the only true pilots in the Air Corps and the 8th Pursuit Group had only the greatest of them." Jones was very much favored by senior Air Corps leaders, judging by the succession of schools he had attended and staff jobs he held. In 1926, he attended the Army Industrial College, then immediately upon graduation went to the Army Command and General Staff School. Upon graduation from CGSS in 1927, he served as a Seventh Corps air officer for a year before attending the Army War College from 1928 to 29. Between graduating from the war college and taking command of the 8th Group, he had also served in the G-2 (Intelligence) Division of the War Department General Staff. This succession of assignments immediately followed his service as a technical advisor to the prosecution during the court martial of Brigadier General Billy Mitchell from late 1925 though early 1926. 107 It could not have helped Dargue and Jones' relationship that Dargue—along with fellow airpower luminaries Hap

¹⁰⁵ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VIII, 1930-1940, 249. ¹⁰⁶ Kuter, "Growth of Air Power." 87.

¹⁰⁷ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 940-941.

Arnold, Tooey Spaatz, Ira Eaker and Miff Harmon—had defended Mitchell during the trial. 108

The bombardment and pursuit groups' coexistence was especially rocky until 1933, when Dargue's promotion to lieutenant colonel (he had graduated from West Point a year ahead of Jones) enabled him to take command of the newly-formed 2nd

Bombardment Wing, with both flying groups on base falling under him. It took Dargue's promotion and organizational restructuring to get Jones in line. Jones directed his pugnacity away from Dargue and toward the new bomb group commander when the wing stood up. If the Air Corps was dominated by bomber zealots, Jones was not indicative of this trend.

Despite the ongoing bomber-pursuit tension and the responsibilities inherent in his new job, the six months that Larry Kuter served on Second Bomb Wing staff should have been pleasant ones. Lieutenant Colonel Dargue's multi-year efforts to build a club-like atmosphere for Langley's officers and their families had borne fruit. Junior officers, especially second lieutenants, could little afford off-post recreation due to the low Depression-era salaries. Dargue thus encouraged on-post events such as beach parties, dances at the officers' club, costume parties and scavenger hunts in order to provide not only reasonably-priced entertainment but to build camaraderie among the officers. ¹⁰⁹ Kuter's promotion to first lieutenant, with its associated fifty percent pay raise, made for

¹⁰⁸ Coffey, *Hap*, 122–123. Coffey asserts that Dargue and Arnold were the two primary individuals leaking anti-Navy and anti-War Department General Staff information to the press and congressmen. Mason Patrick, the Chief of the Air Service, exiled Arnold to Fort Riley, Kansas, but spared Dargue: "a very able officer whom he liked personally."

¹⁰⁹ Kuter, "Growth of Air Power," 105.

a much-improved standard of living. Unfortunately, improved pay and working directly for another great boss could not fix the ravages of Mother Nature.

In August 1933, not long after Dargue moved Kuter up to the wing staff, a hurricane struck Langley Field, and major flooding came with it. This of course meant that Kuter, working as the assistant operations officer for both the flying wing and the post, was again terrifically busy. Aircraft and crews had to be dispersed away from the field in order to prevent them from being destroyed by the high winds, flying debris and flooding that naturally occurred. Once the equipment and people were moved out of harm's way, the real work began, as the air field and surrounding base were flooded. The bridge to the base was damaged and had to be closed, railroad ties were washed out, and multiple boats were left high and dry on the airfield—126 of them, according to Ethel's account. Basements flooded, the base was isolated due to the bridge being closed, and it took days for the waters to recede. It was a leadership and administrative nightmare for Dargue, Kuter and the rest of the small wing staff.

Pollution from the flooding soon became a deeply personal, as well as organizational concern. While children like Roxanne Kuter saw the receding waters as a playground, the parents saw only danger. Physical dangers, such as uncovered manhole covers, and invisible but just as potentially deadly bacteria and chemicals were everpresent concerns. Larry and Ethel only let Roxanne play in the water once, but it seems once was enough. Early in the fall, Roxanne fell ill with a very high fever (104 degrees) and swollen glands. The doctors could not identify a cause, other than to presume she had

¹¹⁰ Kuter, "Along with Larry," 124.

gotten some kind of infection from the contaminated ground, which subsequently developed into mononucleosis. Roxanne went into the hospital in early November. Except from being allowed to spend some time in and around Christmas at home, she would be hospitalized for some months afterward. On 7 January 1934, Roxanne went downstairs, still in her pajamas, for the first time in almost two months. The next day, Larry Kuter was literally off to the races, departing for Florida with multiple other crews and aircraft to participate in the Miami Air Races.

While serving on the Second Bomb Wing staff, Kuter had helped Dargue lead the base's recovery from a major disaster, maintain smooth relations between competing bomber and pursuit communities and build a mutually-supporting Air Corps community on base. He did so while dealing with a major health scare for his and Ethel's only child and maintaining flying currency. He was likely all the more busy as a pilot, since many of the wing's bomber pilots—including Eubank and his former assistant operations officer Troup Miller, were in West Point, Virginia, commanding a Civilian Conservation Corps camp. It is no surprise that the number of "Superior" (versus merely "Excellent") ratings continued to climb. In his last efficiency report under Dargue at Langley, Kuter was rated "superior" as a bomber pilot. Of the ten different areas of personal qualities on which officers were rated, Dargue marked Kuter "superior" for all but physical activity, physical endurance and force—in which he marked him "excellent."

By the end of his time in the 2nd Bomb Wing at Langley Field in February 1934, Larry Kuter was part of a very small, select clique: 1927 West Point graduate bomber

¹¹¹ "Laurence S. Kuter Official Military Personnel File," n.d., Folder 2.

pilots. He won the biological lottery by being physically qualified to attend flying training. He made a wise career move by applying for flying training, over the objections of his field artillery leadership. Most significantly, he earned his wings—a feat which many of his classmates who were smarter and/or more physically talented had failed to do. Next, he chose bombers, further setting him apart from the three quarters of his pilot classmates who flew fighter-type aircraft. Finally, he stayed alive and remained on active duty; by early 1934, four of Kuter's West Point classmates in the Air Corps were gone from active duty. One (a bomber pilot) had died in an aircraft accident, and three (one of them also a bomber pilot) had separated from active duty and gone into the reserves. Approximately two-thirds of Kuter's lieutenant bomber pilot peers were reserve officers who served so briefly on active duty that they posed no professional competition, so Kuter stood out even more by default. He was one of just four (less than two percent) from his West Point class flying bombers, out of sixteen with aviation training still in the Army. Larry Kuter was peerless simply by virtue of having physically and professionally survived up to that point.

Kuter did not succeed simply by process of elimination, however. He not only served alongside but stood out among multiple future general officers—future four-star Thomas Power, future three-stars John Ives, Troup Miller and Richard Nugent; and future two-stars Richard J. O'Keefe and Del Spivey. He made his name as an outstanding aviator, as indicated by his selection for the Panama Canal Zone trip, live bomb demonstration and other high-visibility missions; performance in the annual bomb competition; service as a B-9 bomber operational test pilot; and (perhaps just as

significantly) the absence of plane crashes in his record, where he was at fault. Critically, Kuter had proven himself as a leader (Eubank thought he was already capable of commanding a squadron) and as an administrator. The senior Air Corps leaders Kuter impressed along the way—Frank Andrews, Herbert Dargue, Robert Olds and Eugene Eubank—reads like a "Who's Who" of early advocates of an independent air force and strategic bomber doctrine. Finally, Kuter had sufficient tact to earn the admiration of the pursuit pilots on base, as well. His proven diplomacy—particularly his capacity to work with the irascible pursuit pilot B.Q. Jones—would yield great dividends during the next major challenge for Kuter and the wider Air Corps—the 1934 Airmail crisis. His experience would be all the more valuable because it was Kuter's last tactical-level (wing level or below) assignment until 1942, by which time he was a brigadier general.

Chapter 4: Practice Precedes Theory—The 1934 Airmail Crisis and the ACTS Student Experience (1934-1935)

The period from February 1934 through mid-1935 was significant for Larry Kuter and the Air Corps in which he served. For Kuter, he took part in his first major military operation above the tactical level and attended a Professional Military Education (PME) school as a student for the first and last time in his military career. For the Air Corps, this period was a significant inflection point in airmen's efforts to modernize, professionalize and grow the air arm, while working toward service independence. Kuter, who played a significant role in the airmail operation and then attended the Air Corps Tactical School (ACTS) immediately afterward, had a front-row seat to the major crises and reforms of the day. This phase in Kuter's career showcases the challenges the Air Corps faced in professionally educating the Air Corps' officers, particularly those who entered the service after the Great War—and who would lead the fledgling U.S. Air Force long after the Second World War.

In early 1934, Kuter and his Air Corps peers were woefully prepared for large-scale military operations. As evidenced by his life and career prior to flying training at Brooks Field, the Army did little throughout the late-Twenties and early Thirties to attract high-quality regular officers to flying duty. His experiences during flying training and as a bomber pilot at Langley underscored difficulties the Air Corps had in equipping, training and retaining those who did become aviators. This period showcases how poorly

educated Kuter and his Air Corps peers were for the jobs they were given. From early 1934 through mid-1935, Kuter would have an important role in running a major air transport operation, despite having received no prior instruction as to how such an organization was to be run. He would then became a military historian, writing an organizational history for which, again, he had no academic training. Only his personal qualities (and those of his peers) enabled his successes, since his professional education since West Point was essentially nil. Despite his superior performance, it would take his close relationships with Bert Dargue and Gene Eubank to him secure a slot at the Air Corps Tactical School. The lessons Kuter would learn, the friendships he would establish, and the superior qualities he would demonstrate as an ACTS student would reorient his life in a major way. Kuter's experiences also show how his career success was significantly affected by structural changes in the Air Corps and the generational divide among interwar Air Corps officers. Understanding Kuter's experience during this period starts with understanding different levels of warfare and how few of the interwar Air Corps' officers received value-added education and training before taking on higher levels of responsibility.

Levels of Warfare

Military operations are typically understood as occurring at three primary levels: strategic, operational and tactical. Unfortunately, even today, they are defined as levels of warfare, even though many military operations are conducted outside the context of

armed conflict. While the distinctions between these levels are often more theoretical than actual (tactical decisions can have strategic consequences, and vice versa), it is helpful to understand the terms, and which organizations were meant to focus on each level. The Defense Department's dictionary defines the strategic level as, "The level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, then develops and uses national resources to achieve those objectives." For the interwar Army, the War Department General Staff (WDGS), and specifically for airmen the Office of the Chief of the Air Corps (OCAC), focused on strategic concerns. The lowest, or tactical, level is "The level of war at which battles and engagements are planned and executed to achieve military objectives assigned to tactical units or task forces."² Flying wings and below, such as the Second Bombardment Wing, were tactical-level units. Operational-level organizations provided the critical linkage between strategic guidance and tactical execution. They are meant to focus their efforts on "The level of war at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas." No standing operationallevel air commands existed in early 1934. Even if they did, Kuter had never been taught how he would function in such a command.

The 1934 Airmail Crisis would, among other things, illustrate the need for operational-level air organizations. It would furthermore illustrate for Larry Kuter and

¹ Joint Chiefs of Staff, "Joint Publication 1-02: Department of Defense Dictionary of Military and Associated Terms," March 15, 2015, 231, http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.

² Ibid., 238.

³ Ibid., 180.

others how little education and guidance they had received prior to stepping into this higher level of responsibility. The Army had the United States divided into multiple corps areas, with each corps responsible for particular states. Some air officers were parceled out to those geographically-delimited Army corps areas, but those regional commands bore little relation to the airfields that fell within their two-dimensional boundaries. Aircraft stationed within a given corps region could fly much farther than the corps commander's area of responsibility. The 1934 Army Air Corps Mail Operation would necessitate the creation of multiple, ad hoc operational-level air headquarters, even as regional Army corps headquarters diluted the airmail commands' operational air expertise. Kuter's airmail experience would be a painful introduction to air command structures and peacetime air transport operations. He would also witness how air transport helped make the case for service independence well before strategic bombing did.

Professional Military Education: Kuter, the Educational Anomaly

One must understand how officer professional development was meant to work in order to understand how much a departure Kuter's career (and even more so those of his

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⁴ Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930*, 941; Daso, *Hap Arnold and the Evolution of American Airpower*, 130. B.Q. Jones served as a Seventh Corps Area air officer from 1927 to 1928. Hap Arnold's experience as the First Wing commander at March Field, California highlighted the challenges posed by the command relationships at the time. The Air Corps chief had no operational control over his airmen, so operational taskings had to flow through the corps commander, Major General Malin Craig, who had no aviation background, and who was headquarted in San Francisco. Arnold's relationship with Craig, who would later serve as Army Chief of Staff, was the only thing that made the situation work effectively.

Air Corps peers) represented from the ideal. During peacetime, army officers' careers, much like professionals from other fields, normally flowed such that education preceded application. Just as would-be doctors are first educated in a medical school before applying their skills during residency, military officers typically received professional education and training prior to taking on higher-level responsibilities. Between wars, military professionals' careers are typically consumed with education and training, since practical experience is so hard to come by.⁵

Prior to his arrival in Virginia for his first flying assignment, Larry Kuter's career had reflected a normal professional pattern. At West Point he got some introduction in field artillery tactics before serving as a field artillery officer (although he never attended a formal field artillery school), and he received skill-based flying training before becoming a bomber pilot at Langley Field. By 1933, however, Kuter's career had already deviated from the ideal: as the assistant wing and post operations officer (but often filling his boss's role as the acting wing operations chief) he performed duties that, in ground branches, would have been filled by officers with greater experience and rank.

A snapshot of Kuter's peers helps illustrate how much he deviated from the Army norm. While Kuter was at Langley, his field artillery friend Mid Condon got more education without bearing any greater responsibility. Condon graduated from the yearlong Field Artillery Battery Officers' Course in 1933, but in early 1934 he was his battery's executive and mess officer—the same jobs he and Kuter had held six years prior

⁵ Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Harvard University Press, 1957); Morris Janowitz, *The Professional Soldier: A Social and Political Portrait* (London: Free Press, 1964). Both Huntington and Janowitz, make strong cases for designating military officership as a profession and underscore how and why officers' careers are typically consumed with education and training during peacetime.

at the Presidio. West Point classmate (eventually lieutenant general) Thomas J. H. "Trap" Trapnell—a cavalry officer—had, by 1933, already spent two straight years as a student in professional schools—the Cavalry School's Troop Officers' Course from 1931 to 1932, and the Special Advanced Equitation Course from 1932 to 1933—but he had yet to command a cavalry troop. Trapnell would spend a third year in school (this time in a Signal Corps program) before he eventually took command of his first troop in 1936. Kuter, on the other hand, was assigned increasing responsibility without the benefit of preparatory education. The only formal postgraduate training he had received since West Point in 1927 was a year of flying training in San Antonio. He had nonetheless been thrust into the acting squadron commander role immediately upon his arrival at Langley (a duty normally given to officers with at least a decade more experience), and group operations officer duties (where he replaced Captain Robert Olds, who also a decade more military experience than Kuter and had graduated from the yearlong Air Corps Tactical School), before being handed even greater responsibility on the wing and post operations staff.⁸

Kuter's dearth of professional education was distinctly different from more-senior airmen at Langley Field, too. Many high-potential majors, and even captains, had already graduated from multiple professional military education schools, with most having attended at least two (if not three or more) yearlong courses. These schools included two Air Corps schools—the Air Corps Engineering School (ACES) and Air Corps Tactical

⁶ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VIII, 1930-1940, 705.

⁸ Official Army Register, January 1, 1936 (Washington, D.C.: Government Printing Office, 1936), 529.

School (ACTS); three broader Army schools—Army Command and General Staff School (CGSS), Army War College (AWC), Army Industrial College (AIC); and the Navy's equivalent to AWC, the Naval War College. Before taking command of the Second Bombardment Group, then-Major Dargue had graduated from three such schools—CGSS, AWC and Naval War College—as well as the six-month long Air Service Engineering School (predecessor to ACES). Prior to commanding the 8th Pursuit Group, Major B.Q. Jones had likewise graduated from CGSS, AWC and AIC. Deven Captain Gene Eubank, when he took command of the 49th Bomb Squadron, had already attended ACES, ACTS and (shorter and less-prestigious) Air Service Mechanical School.

Much of airmen's apparent over-education relative to their rank was due to the disparity between rank and responsibility in the Air Corps, which naturally grew from the seniority-driven promotion system. While airmen were given great levels of responsibility—the air arm needed experienced aviators to command its units and fill its staffs—their promotions came in lockstep with their peers in other branches. Lieutenant Colonel Dargue, who took over as the dual-hatted Langley Field post commander and Second Bomb Wing commander (with its two combat flying groups), had at least as the same scope of responsibility as that of full-Colonel ground army officers. Colonel Leon Kromer, the post commander and 11th Cavalry commander when Kuter was a field artilleryman, had arguably less responsibility at the Presidio than lower-ranking Lieutenant Colonel Dargue did at Langley. Captain Eubank, when he took command of

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⁹ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VII, 1920-1930, 909.

¹¹ War Department, The Adjutant General's Office: Official Army and Air Force Register, January 1, 1934.

the Second Bomb Group in late 1933, also wielded great responsibility for one with such a junior army rank.¹² It was therefore appropriate that airmen be the beneficiaries of multiple educational opportunities, since those experiences helped prepare them for their wide-ranging military duties. Kuter's career likewise reflected how quickly airmen's scope of responsibility grew, even as his educational opportunities failed to keep pace. While both Kuter and Condon were first lieutenants, Kuter was arguably doing the work of a major, while better-educated Condon's duties remained those of a second lieutenant.

More remarkably, the scope of Kuter's responsibilities at Langley Field would be dwarfed by what came next. The entire Army Air Corps, much less young Larry Kuter, was totally unprepared for the 1934 Airmail Crisis, wherein the Army took over the nation's airmail system. No education or training Kuter had received up to that point prepared him for the role he would play in helping run the Eastern Zone Army Air Corps Mail Operations (EZAACMO). The eastern zone operation was all the more challenging, because more mail flowed through the eastern zone than both the western and central zones combined. The Air Mail Crisis would dramatically display the Air Corps' inadequacies, which stemmed from chronic shortages of flying hours, obsolescent equipment, constant personnel turnover, and inadequate professional education for the air arm's junior officers.

¹² U.S. Air Force, "Major General Eugene Lowry Eubank."

The Airmail Crisis (others would call it a "fiasco") began, at least for the Air Corps, on 9 February 1934. Major General Benjamin D. Foulois, the Air Corps chief at the time, should have had some notion what was coming when Second Assistant Postmaster General Harllee Branch asked him to visit the Post Office Building on that cold Friday in Washington. Foulois and his Air Corps, however, were totally unprepared for what they would be asked to do. On that morning, President Roosevelt had concluded that federal contracts with commercial airlines to carry domestic airmail had to be cancelled, since those contracts had been made illegally at a series of "spoils conferences" wherein large commercial air operators divvied up the airmail routes. The issue had been simmering for some time, since those conferences had been conducted under the Hoover administration, and Roosevelt had won the presidential election over a year earlier. Even though there had been talk of the Air Corps taking over the airmail, little planning had been done toward such an eventuality.

Foulois did not appreciate how ready the president was to act. When Branch asked how long the Air Corps might need to prepare to take over the airmail, Foulois responded with a rough estimate of seven to ten days. Before the day was out—Foulois had not had time to forewarn the Army Chief of Staff or Secretary of War—President Roosevelt had signed an executive order that canceled the mail contracts with commercial carriers and directed the Air Corps to start flying the mail exactly ten days later, on 19 February. After some hasty overnight planning, Foulois and his staff

designated Brigadier General Oscar Westover to command the Army Air Corps Mail Operations (AACMO); Lieutenant Colonel Henry H. "Hap" Arnold, Lieutenant Colonel Horace M. Hickam and Major B.Q. Jones would run the Western, Central and Eastern zones, respectively. The 1934 Airmail Crisis had begun.¹³

B.Q. Jones was an interesting choice to head up the airmail operation. The bulk of the nation's mail flowed through the eastern zone, so the situation called for a leader of significant rank and stature to spearhead the operation. By virtue of rank, Lieutenant Colonel Dargue, not Major Jones, should have been tapped to lead the eastern operation. Likewise, Dargue was the logical choice by virtue of his being Jones' boss. The most senior airmen at March Field (Arnold) and Fort Crockett (Hickam) spearheaded the efforts in their respective sectors, so picking Dargue's subordinate group commander was odd at best. ¹⁴ Dargue, based on his better educational pedigrees, should also have been considered the better-qualified candidate. The oft-cited rationale is that pursuit aircraft were the primary aircraft types used during the operation (the bombers were too slow to be useful) so it was sensible to task a pursuit unit to lead the operation. ¹⁵ This explanation fails upon closer examination, since pursuit aircraft ceased to be used in the eastern zone well before bombers were. Furthermore, the perceived necessity for using pursuit aircraft for most mail operations should have provided more impetus to put bomber pilots in

¹³ Maurer, *Aviation in the U.S. Army*, 299–301; Shiner, *Foulois and the U.S. Army Air Corps*, 1931-1935, 125–149. Maurer and Shiner's accounts both do excellent jobs of describing how the Airmail Crisis came into being, how it was executed and the impact the operation had on the Air Corps.

¹⁴ U.S. Air Force, "General Henry H. Arnold," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107811/general-henry-h-arnold.aspx; Michael Robert Patterson, "Horace Meek Hickam," text, *Biographies*, accessed May 15, 2015, http://www.arlingtoncemetery.net/hmhickam.htm.

¹⁵ Maurer, Aviation in the U.S. Army.

charge of the operation, since it would have freed experienced pursuit pilots to fly the mail.

B.Q. Jones, in the final report of the Eastern Zone Army Air Corps Mail Operations (EZAACMO), provided an insightful rationale when he noted:

One Bombardment Group, with the necessary single engine planes attached, was the logical organization to have taken over the Air Mail Operations of the Eastern Zone. The Second Bombardment Group at Langley Field was equipped with the B-6 bombardment type airplane that was *entirely inadequate*, *not properly equipped*, *and later deemed unsafe for Air Mail Operations*. The personnel of the Second Bombardment Group, composed largely of reserve officers and of officers recently returned from [Civilian Conservation Corps] duty, *did not possess adequate trained personnel* for the operation of the air mail. [emphasis added]

In other words, B.Q. Jones' pursuit group got the job not because pursuit crews and aircraft were well-suited to the task, but because the bomber units were in such poor shape as to make the pursuit units the better choice at the time. The bomber aircraft were so slow and ill-equipped that they could not routinely be used to fly in adverse weather, even along well-established air routes in peacetime conditions. Pursuit aircraft were inadequate for the task, too, though. Worse still, bomber units were primarily filled with pilots fresh out of training (all but a few had less than a year of operational experience), and those units were led by regular officers who were frequently given taskings that took them away from flying. Eubank had just recently taken over the 2nd Bomb Group in December 1933, after having been away (along with many other bomber officers) for six months running a Civilian Conservation Corps camp in West Point, Virginia. ¹⁷ What Jones fails to acknowledge in his report, however, is that P-12 pursuit aircraft were

¹⁶ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," 17.

deemed unsafe for mail operations and removed from mail service before the B-6 bombers were. While aircraft suitability was cited as a rationale for Jones' selection, it was not a valid one.

Jones' selection to head the operation tends to indicate that pursuit pilots still had pride of place in the mid-1930s Air Corps. Who was chosen to command the operation tended to indicate where the air arm's priorities were, since—if successful—commanding the operation would be major feathers in the career caps of those who commanded the three zones. Jones was a fighter pilot's fighter pilot and no friend of bomber aviation, while Dargue was a highly-regarded bomber advocate. If Air Corps leaders of the time were as bomber-obsessed as airpower histories suggest, Dargue should have been the clear choice. Another indicator of the Air Corps' priorities is where the best pilots were sent. It seems indisputable that the majority of the best Air Corps officers went into fighters, not bombers. Of the forty-three Air Corps pilots commissioned in the 1920s who would go on to earn at least three air force stars, only seven started their flying careers in bombers. 19 Dargue, picking from the best officers in his wing, would likely have picked bomber pilots for some of the key positions. Putting Jones in charge had the net effect (intentionally or unintentionally) of ensuring fighter pilots ran the operation, and hence got the professional benefits which flowed from the opportunity. It is unknown whether or not Dargue protested the decision to Westover or Foulois, but he dutifully went about supporting the effort in any way he could.

¹⁸ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934."

¹⁹ Author spreadsheet. Compiled from the official Air Force website at http://www.af.mil/AboutUs/Biographies.aspx and multiple editions of the *Official Army Register*, from 1934 to 1948.

Giving up Kuter was Dargue's first contribution to the eastern zone's success. B.Q. Jones had carte blanche authority to request anyone he wanted from within the zone, and Kuter was one of the first men who came to mind. Jones' third special order, published on 13 February, tasked Larry Kuter to report without delay to Newark, New Jersey. 20 The next order made Kuter the Assistant Zone Operations Officer, "in addition to his other duties."²¹ Before departing, Larry told Ethel, "I can't imagine why B.Q. has sent for me. He hates bombers. He probably wants me to sweep out the hangars."²² His comment was prophetic, since he would not see home again until 12 June, long after the operation was over.²³ While Jones might not have thought much of bomber pilots, he knew Kuter well due to Jones' position as group commander and Kuter's works as wing and post operations officer. Kuter's administrative and interpersonal skills, and perhaps more importantly the fact he was also dual-qualified as a pursuit pilot, mitigated Jones' distaste for bombers. Jones further knew he could count on Kuter to be lucid; according to Kuter, "B.Q.'s operations officer was an older WW I pursuit pilot who was rarely sober when he was away from home," so the young lieutenant was once again acting operations officer on day one—but this time for a much bigger operation.²⁴ It was not the last time Kuter would replace a more-senior officer with drinking problems. Before departing Langley, Kuter met with Dargue. Dargue was willing to turn over any and all

²⁰ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," Appendix A, Page 4, Zone Adjutant; "Special Order Number 3," February 14, 1934, Kuter Collection, Volume 2, Part 1, Page 2, USAF Academy Library Special Collections.

²¹ "Special Order Number 4," February 14, 1934, Kuter Collection, Volume 2, Part 1, Page 3, USAF Academy Library Special Collections.

²² Kuter, "Along with Larry." 126.

²³ Kuter, "Growth of Air Power," 98.

²⁴ Kuter, "Growth of Air Power." 90.

resources Jones might need, and he urged Kuter to tactfully bring up the subject of using high-capacity (yet slow) bombers for trunk routes.²⁵ Kuter replied that he would do what he could.

Kuter checked out a sidearm and a Curtis P-6 Hawk and departed for Washington, D.C. on 14 February. The operation was moving to Newark, but without Kuter (at least for the time being). Kuter arrived at Jones' original headquarters location in the Munitions Building in Washington, DC, to find that Jones and his team were moving to New Jersey to get away from prying senior Air Corps eyes. Jones, trusting in Kuter's capacity for independent action, left the young lieutenant to keep the budding operation going. Once Jones was up and running in Newark, Kuter was to shut down the Washington operation and fly the Air Corps chief's Curtis Condor passenger aircraft —a plane Kuter had never flown before, and of which only two existed in the Air Corps inventory—to Newark for use in the airmail operation. It was a great opportunity for Kuter to show his leadership and administrative skill. Fortunately, Kuter's flying skill kept the Condor from killing him.

At three o'clock in the afternoon on 15 February, Kuter got word that Jones was up and running in Newark, so he closed up shop and made his way to Bolling Field.

Upon arrival, he found General Foulois' aircraft loaded up and its engines running. With daylight waning and a cold front moving in, he hurriedly strapped into the unfamiliar Condor and starting taxiing for takeoff, even as he tried to acquaint himself with this new plane. He was comforted to see an enlisted man in the copilot's seat, who he presumed

²⁵ Ibid., 91

²⁶ Ibid.; Peter M. Bowers, Curtiss Aircraft, 1907-1947 (Annapolis, Md: Naval Institute Press, 1987), 396.

was the aircraft's crew chief. On takeoff, the plane was so slow to accelerate and gain altitude that he barely missed hitting smoke stacks near the field. When he directed the enlisted crew chief to raise the landing gear, he learned his flying partner was a clerktypist who did not know what landing gear was, much less where to find the handle which raised it. Kuter found the handle on his own, and once safely airborne assessed the situation: he was the only aviator in an entirely foreign airplane, which had been overloaded with office stationery, flying through marginal weather, to an unfamiliar destination which was surrounded by smoke-producing oil refineries, and would get no help from his right-seater. Kuter managed to get himself, his passenger and the stationery to Newark safely.²⁷ The very next day, orders were cut for First Lieutenant (later Lieutenant General) Elwood "Pete" Quesada, General Foulois' aide and pilot, to join the airmail operation. Although Kuter claimed no part in getting Quesada assigned to the operation, he was happy to have the Air Corps chief's pilot, who had logged over 3,200 flying hours and had prior experience with the Condor, fly the airplane and train others to do so.²⁸

The day after Kuter arrived in Newark, Jones elected to move again, this time to Floyd Bennett Field in New York City. Kuter led the headquarters flight to the new field in a P-26, a single-seat fighter which (again) he had never previously flown.²⁹ By noon on the 16th, Jones' operation was up and running at its third location in as many days,

²⁷ Kuter, "Growth of Air Power," 92. ²⁸ Ibid., 93; Hughes, *Over Lord*, 41.

²⁹ Kuter, "Growth of Air Power," 94.

with just three days left until the start of flying operations.³⁰ Also on that day, three pilots (albeit in other zones) died in airmail training flights.³¹ The next day—the first one since the start of the operation that Kuter did not relocate from one airfield to another—requests went out for B-6 bombers from Langley to join the operation.³² A day later still, on the 18th (the last day before the Air Corps was to start flying the mail), Captain Newton Longfellow, a First World War-era observation pilot who would later serve as a wartime bomber general, took over as operations officer.³³ Longfellow replaced the original, often drunk officer whose shoes Kuter had been filling for the previous four days. His arrival freed Kuter to get out and fly some of the routes, while also familiarizing him with more aircraft which he had not previously flown; it was helpful, since another of Kuter's duties was to be the plans officer.³⁴ It gave him some appreciation for the challenges the crews faced: inadequate training, ill-equipped aircraft, and unseasonably poor weather.

The horrendous weather during the EZAACMO operation played a part in professionally developing officers with regard to checking weather forecasts before flight. In his unpublished memoir, Kuter takes credit for persuading Jones to have First Lieutenants Orvil A. "O.A." Anderson (Anderson would later earn two stars) and Randolph P. Williams, whom Kuter considered the two best meteorologists in the Air

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³⁰ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," Appendix A, Sheet 9, Operations.

Maurer, Aviation in the U.S. Army, 303.

³² Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," Appendix A, Sheet 10, Operations.

³³ Ibid., Appedix A, Sheet 12, Operations.

³⁴ Kuter, "Growth of Air Power," 94.

Corps, ordered to duty with EZAACMO.³⁵ He called it, "Without a doubt my greatest contribution to the airmail effort."³⁶ Kuter had known "Pinky" Williams for some time; they lived close to each other at Langley, and they worked together closely when Kuter was wing operations officer and Williams was the post meteorologist. The simple innovation was to require pilots to at least look at a weather forecast before they flew:

We set up for the first time a system wherein pilots could not get a clearance without going through the weather office. This was the first time in the Army Air Corps that that happened, and Pinky's forecast was the best there was. We at least made the pilots look at a forecast . . . which was a new departure. A lot of these tough aviators didn't like it a damned bit because they could go any place. ³⁷

With a pilot corps that shunned weather briefings, yet had little experience flying in clouds, it is no wonder there were accidents.

On the 22nd, just three days into the operation, two more mail aircraft crashed, even as the operations staff belatedly recognized that P-12 pursuit aircraft (the same type that almost killed Possum Hansell when he attempted to add a radio to it) were unsuitable for hauling mail. O-38 observation aircraft (which were reasonably ideal) were in short supply, and fast-flying Martin YB-10 bombers were not yet available. Keystone bombers would be used to fly the mail, and P-12 use (the original reason B.Q. Jones was given the operation) would be discontinued.³⁸ Meanwhile, the public outcry continued to mount; American fighter ace and Medal of Honor recipient Eddie Rickenbacker decried the

³⁵ Ibid.

³⁶ Ibid.

³⁷ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 155.

³⁸ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," Appendix A, Sheet 21, Operations.

airmail operation as "legalized murder."³⁹ He was far from alone in his assessment. Rickenbacker, as vice president of Easter Air Transport, had some mixed motives, however; his company was one of those flying the mail before the Army took it over. Bad news for the airmail operation was good news for airline executives and Roosevelt's political opponents.

By 23 February, manning within the EZAACMO operations office had stabilized somewhat. Instead of Kuter essentially running a one-man show, Captain Longfellow headed a four-man operations team. ⁴⁰ Lieutenant Francis B. Valentine, a 1918 West Point graduate and also an observation pilot, replaced Kuter as Assistant Operations Officer. ⁴¹ Kuter, nine years junior to Valentine and fifteen years younger than Longfellow, was relegated to the reports section. ⁴² He was fortunate to finally have another non-fighter pilot on staff by that time, however; bomber pilot First Lieutenant (later Major General) Willard R. Wolfinbarger worked alongside him and headed up the records section. ⁴³ With more bombers entering the mix, it was helpful to have more bomber expertise on staff. The reports Kuter collected tended to tell a different one from the alarmism in the popular press. The mail was, in fact, getting through. The situation was ugly, however, for the

³⁹ Edward V. Rickenbacker, *Rickenbacker: An Autobiography* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1967), 186.

⁴⁰ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," Appendix A, Sheet 23; *Official Army Register, January 1, 1936*, 424; Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*.

⁴¹ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," Appendix A, Sheet 23; Krisman, *Register of Graduates and Former Cadets of the United States Military Academy*, 1802-1974, 346. Valentine would eventually retire as an air force colonel.

⁴² Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," Appendix A, Sheet 23.

⁴³ U.S. Air Force, "Major General Willard R. Wolfinbarger," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105224/major-general-willard-rwolfinbarger.aspx.

majority of the airmail pilots were reservists who had earned their wings two or less years before. Worse still, few were trained to fly in adverse weather. When the original tasking had come down from Air Corps headquarters on 10 February, only 20 of the 597 pilots (less than four percent) were both available for airmail duty and trained in "blind flying." The training situation improved, but progress was slow. On 11 March, due to poor weather and mounting political pressure, the airmail operations temporarily ceased, and "on this date the mission was changed from providing air mail service to preventing the recurrence of fatal accidents."

With improving manning, better aircraft entering into the operation, and a pause in operations, Kuter and his officemates might have started to enjoy a degree of stability. Jones was not yet done disrupting his own operations, however. Kuter—the only long-term continuity within the operations section—would once more be left holding the reins, but this time he would have to deal with the "Little Flower," New York mayor Fiorello LaGuardia. Jones and LaGuardia had apparently been competitors during the First World War, and their personal history together interfered with operational practice. LaGuardia refused to "provide the written authority to remain at Floyd Bennett Field that the prudent safeguarding of government property and responsibility required," which Jones had

⁴⁴ The EZAACMO report is illuminating: On 10 February, there were 483 regular officers and 114 reserve officers, for a total pool of 597 pilots. After discounting (1) officers at bases which were exempt from participating in airmail operations, (2) exempt officers at bases which participated in the mail operation (they could not be released to participate in the operation because of their other duties), and (3) officers required for administrative overhead (serving as commanders, unit mechanical officers and the like); only 80 pilots actually flew the mail. Of those, only 35 were at least notionally qualified for "blind flying," and just 20 of them were deemed truly proficient.

⁴⁵ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," Appendix A, Page 48 Operations.

requested. 46 Even though it was minor issue. Jones set an ultimatum on 12 March that, "it would be done by 3:00 PM that day or he would take the entire EZAACMO and all of its publicity and economic benefits 'far enough away so that the Mayor couldn't get his God-damned hands on it." As advertised, Jones departed for parts unknown at three o'clock, leaving Kuter to head up the rear echelon. LaGuardia arrived half an hour later, demanding to see Jones. Kuter, as diplomatically as he could, informed the mayor that he did not know where Jones was, had no way to reach him, and only knew he was to close the headquarters when Jones called. When Jones did eventually call, he was pleased to hear how the mayor and his staff had stormed out of the office. EZAACMO headquarters relocated to Mitchel Field, which was on federal land on Long Island and hence out of LaGuardia's reach. 48 The move was conducted in the dead of night, between midnight and four AM. 49 Kuter had proven once again his capacity for diplomacy and independent action.

The Air Corps started flying the mail again on 19 March, but the operation was already on the decline. Plans were already being made for the release of surplus personnel due to the elimination of certain routes. Airmail flights were only conducted in "good" weather, and consequently the frequency of crashes went down significantly. 50 Kuter was not yet done with the mail, however. As Jones and his team started winding down the airmail operations and released pilots back to their units, Kuter was one of two

⁴⁶ Ibid., Annex A, p. 50.

Kuter, "Growth of Air Power," 95.

⁴⁸ Ibid., 96.

⁴⁹ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," Appendix A, p. 50.

Solution 10 in 1

men tasked to remain at Mitchel Field to write the final Report of the EZAACMO, a document which served as the official history of the airmail operation. This was significant, for in writing the conclusions and recommendations, the junior lieutenant found himself helping to establish the basis for major structural reforms within the air arm.

Given Kuter's lack of training as a historian, the EZAACMO final report is impressive as an organizational history. Single-spaced and two inches thick, it forms the core of much of what is known of the airmail operation. Historian Maurer Maurer, in his in-depth study *Aviation in the U.S. Army, 1919-1939*, extensively cites the report Kuter ghostwrote for Jones. Two of the EZAACMO's accomplishments were little noted in the popular press at the time, and were likewise not trumpeted by airmen. First, at least unofficially, "The Air Corps carried more mail per mile flown and delivered the mail more promptly than did the commercial companies," and second, "There was not an ounce of mail lost in the entire operations of the Eastern Zone." Air Corps pilots' lives and aircraft had been lost, but the mail had always gotten through. It was a tremendous testament to the pilots, most of whom were reserve officers two years or less out of flying training, who flew the mail. The conclusions, recommendations and other sections, however, gave a less rosy view of the air arm.

Even the briefest review of the EZAACMO Final Report highlights major problems in the Air Corps. Jones listed fifteen major deficiencies in his report (which can be found in Appendix A), but the list of shortfalls did not end there. Combat personnel

⁵¹ Maurer, Aviation in the U.S. Army, 562–563.

⁵² Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," 2.

were "neither trained nor interested in administrative, supply or procurement technique." In the event of a war, wherein standing Air Corps units would form the nuclei for larger air organizations, this dearth of organizational competence would be disastrous.⁵³ The policy of reserve officers serving short active-duty stints was found to be "fundamentally unsound," leading to most of the airmail flying being done by grossly inexperienced aviators. 54 More substantially, the Air Corps needed to be reorganized. Jones opined that all tactical units, stations and depots should report directly to a yet-to-be-created General Headquarters (GHO) Air Force.⁵⁵ Army corps area commanders would essentially be cut out of airmen's operational chain of command, as tactical units needed to report to (again, hitherto nonexistent) area air force headquarters, which should report directly to the GHQ Air Force, which would in turn report directly to the Army Chief of Staff. The EZAACMO operation was thus an early introduction to arguments over command and control of Army airpower. Writing the report also likely served to introduce Kuter to many key Air Corps leaders of the day, since such documents were rarely written in isolation.

Other recommendations in the report acknowledged well-known but pressing Air Corps concerns. Mobilization plans had to be written with an eye toward maintaining unit integrity; in time of war, existing units should form the nuclei of larger units—peacetime flights should form the core leadership of wartime squadrons, peacetime squadrons should retain their people as they grow into wartime groups, etc. Sufficient flying time

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⁵³ Ibid., 3.

⁵⁴ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934."

had to be allotted, for both individual pilot proficiency and combat-oriented unit training. Individual pilots had to arrive to units fully trained, rather than foisting individual training on flying units, and pilots needed to be given a minimum of three (not just one or two) years' active service before reverting to inactive reserve status.⁵⁶ The importance of the changes had been demonstrated from the outset of the operation.

On 12 June, after the EZAACMO report was complete, Kuter headed home. He had managed to inject some levity into the official document. On the front cover was a picture of a gravestone, with "EZAACMO" engraved at the top. In the space below was, written: "Conceived (in sin), Feb 10. Born (prematurely) Feb 19. Paralyzed (officially) Mar 10. Quartered (by order) May 8. Died (unmourned) May 16. REQVIESCAT IN PACE (Rest in Peace)."57 It both demonstrated Kuter's sense of humor (which would later get him in trouble) and his ability to succinctly capture how the operation was viewed. For the period covering the airmail operation, Jones wrote the most glowing efficiency report Kuter had received to date. The veteran fighter pilot rated Kuter superior in every duty he performed (EZAACMO Assistant Operations Officer, Planning Officer and Reports Section Chief), termed him superior as an airplane pilot, and marked him superior in all but one of the personal qualities listed on the form. Kuter's "physical activity (agility; ability to work rapidly)" was merely excellent. Jones called him "A well balanced, stable, and very intelligent officer with superior judgment and common sense, thoroughly reliable and especially capable and dependable for independent

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⁵⁶ Ibid.

⁵⁷ Ibid., Cover.

assignments."⁵⁸ The report's secondary rater, Air Corps Chief Major General Benjamin Foulois, concurred with Jones' assessment.⁵⁹

The Kuters go to Maxwell

On February 23, the same day Lieutenant Valentine replaced Kuter as the EZAACMO assistant operations officer, the War Department had published orders notifying Kuter of his selection to attend the Air Corps Tactical School. Although he was elbows-deep in the early 1934 Airmail Crisis at the time and had little opportunity to dwell on this news, it was cause for great celebration. ACTS was a school that all ambitious Air Corps officers wanted on their résumés, and even though Kuter's career was shaping up to be an exceptional one, the opportunity came earlier than expected. Since ACTS' first class had entered in 1920, its student population had consisted largely of World War I-era officers and the entering class of '34 could still have been filled with wartime vets. Fortunately, ACTS was growing in its student capacity (and the Air Corps was likely running out of high-quality Great War veterans), so there was room for promising junior airmen. The preceding class had twelve first lieutenants (no second lieutenants), so there was hope. Even this optimistic statistic was deceptive, however.

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⁵⁸ "Laurence S. Kuter Official Military Personnel File," n.d., Folder 2, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

⁵⁹ "Laurence S. Kuter Official Military Personnel File," n.d.

⁶⁰ Kuter, "Growth of Air Power."

⁶¹ Olsmith, Recollections of an Old Soldier. 153.

and all were at least four years senior to Kuter.⁶² He was still a very junior first lieutenant when he was selected, so he had reasonably expected to wait much longer for his number to come up.

How Kuter got his ACTS slot is worth noting, since it took more than merely looking good on paper to get in. Captain Theodore J. Koenig, one of his earliest bomb squadron commanders, had approved and forwarded an earlier request to attend the school.⁶³ It took his previous 49th Bombardment Squadron commander and friend, Captain Gene Eubank, however, to secure him a slot. As Eubank recalled in a 1970 oral history interview: "I urged [then-Major Carl A. "Tooey"] Spaatz who was then in Washington. We usually picked two or three younger officers to go to Tactical School as we would get the older ones through. Spaatz had one picked and I said, 'Tooey, that boy that was in our group at Langley, he isn't in the league with Kuter.' I said: 'If you want the best one, if you want the best young officer down there to go to Tactical School, Larry Kuter is the boy to send."64 Spaatz's protégé must have been Second Lieutenant Reuben C. Hood, a 1928 Georgia Tech graduate who had been trained as an attack pilot, but whose first assignment was in the 96th Bomb Squadron at Langley. 65 By mid-1934, Hood had already graduated from the Chemical Warfare Line and Staff Officers' School, and was commanding the Air Corps Detachment at Edgewood Arsenal, Maryland. The only other junior lieutenant was "Possum" Hansell (a 1924 Georgia Tech grad). Hansell had been associated with ACTS since 1930, and was a member of Captain Chennault's

⁶² History of the Air Corps Tactical School; Official Army Register, 1934

⁶³ Kuter, "Growth of Air Power." 108.

⁶⁴ Eugene Eubank and Murray Green, Interview with Eugene Eubank, May 8, 1970, Murray Green Collection, USAF Academy Library Special Collections. 15.

⁶⁵ Finney, History of the Air Corps Tactical School, 1920-1940.

"Three Men on a Flying Trapeze" demonstration team, so he needed no introduction to the school's instructors. In either case, it appears that Eubank was the better judge of potential; Kuter ultimately earned as many stars as the other two combined.

Lieutenant Colonel Dargue's endorsement certainly carried great weight, too.

Dargue know Kuter very well ("intimately" according to Kuter's February 1934

efficiency report) and had a high opinion of the young aviator. 66 More importantly,

Dargue had been selected to be the ACTS Assistant Commandant starting in summer

1934, and would thus serve as the school's dean. Even better, Eubank would also join the

ACTS faculty—heading up the bombardment section—when Kuter arrived. While

Kuter's mentors would cut him no slack as a student, three-plus years working with and

for them had prepared the young officer well for the airpower education he would

receive. After the rapid growth in responsibility Kuter experienced in the Second Bomb

Wing and the intensive EZAACMO operation, life as an Air Corps Tactical School

(ACTS) student would be a breeze.

Student at the Air Corps Tactical School

ACTS was the first and only resident Professional Military Education (PME) school Kuter attended during his thirty-five year career, and his stint as an ACTS instructor immediately after graduation was his last and only developmental assignment before he departed for Washington, DC, to serve on the strategic-level War Department

^{66 &}quot;Laurence S. Kuter Official Military Personnel File," n.d., Folder 2.

General Staff (WDGS). By definition, this school—where he was a student from 1934-35, then taught bombardment from 1935-39 (eventually taking over as bombardment section chief)—was the only one which prepared him for the global scope of his wartime responsibilities before, during and after the war. It was the period when the "Bomber Mafia" held its greatest sway at ACTS, and Kuter—one of the few ACTS instructors who started his career in bombers—was one of the more strident bomber mafiosos. ⁶⁷ One cannot understand Kuter without understanding his role at ACTS. Kuter's story also sheds light on generational dynamics, the impact of seniority-driven promotion policies, the negative consequences of slowly growing needed capabilities, and military professionalization. Kuter's time at ACTS is more understandable once these larger issues are understood.

Generational Dynamics

Kuter's ACTS experience should not be conflated with that of his peers, who in this case are defined as those who also reached four-star general officer rank. Kuter was one of twenty-two airmen commissioned between 1926 and 1932 who earned four stars, and were thus best positioned to lead and shape the Air Force through its critical early

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⁶⁷ Many staunch bomber advocates started their flying careers in fighter type—pursuit, attack and observation—aircraft. Of the Army Air Forces'/U.S. Air Force's first twenty-five four-star Generals, only three—Fairchild, Kuter and Power—started their operational flying careers in bombers. Even Curtis LeMay, the man most closely associated with strategic bombing in Air Force lore, started his career as a pursuit pilot. The first "dyed in the wool" Air Force Chief of Staff whose first operational flying assignment was in bombers was John D. Ryan—who became CSAF in 1969—twenty-two years after the Air Force became an independent service.

years as an independent service.⁶⁸ They were senior enough to lead the Army Air Forces as general officers during the war, yet young enough that they could continue leading the fledgling independent Air Force through the first decade and a half or more of its existence. It was this group that Michael Worden, in his oft-cited work *Rise of the Fighter Generals: The Problem of Air Force Leadership, 1945-1982*, termed the "senior World War II generation." A list of senior World War II generation Air Force generals can be found in Appendix D. ACTS, and PME schools in general, did not figure prominently in most of these men's careers.⁷⁰

Kuter was one of only two "senior World War II generation" full generals who attended the year-long ACTS program, and was the only one who served there as an instructor.⁷¹ Nine of the others attended during the 1939-40 academic year, when the course length (and hence quantity and quality of instruction) was slashed to three months and class sizes grew to one hundred students at a time in order to quintuple throughput.⁷² The other eleven never attended the school, but since they likely would only have attended the short course, they missed little. Curtis LeMay, the prototypical bomber zealot, attended the first of the four short courses, but never mentioned ACTS in his autobiography, *Mission with LeMay*, nor does the school feature in LeMay biographies—

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⁶⁸ Author spreadsheet. Compiled from the official Air Force website at http://www.af.mil/AboutUs/Biographies.aspx and multiple editions of the *Official Army Register*, from 1934 to 1948.

⁶⁹ Worden, Rise of the Fighter Generals. 1.

⁷⁰ Ibid. 2. Worden states that 59 percent of the senior World War II generation four-star generals graduated from ACTS. Given 22 generals, that would equate to 13 ACTS graduates, whereas only 11 actually attended the school. Worden makes no mention of the fact that only two (Kuter and his 1936-37 academic year student Frank F. Everest) graduated from the full nine-month program.

Author spreadsheet. The other graduate of the full 9-month program was Frank F. Everest, who attended ACTS from 1936-37 and thus had Kuter as his bombardment instructor.

⁷² Finney, *History of the Air Corps Tactical School*, 1920-1940. 130-141.

Thomas Coffey's *Iron Eagle* or Warren Kozak's *LeMay*. None of the twenty-two senior World War II generation full generals attended the Army's Command and General Staff School (CGSS), Army War College (AWC) or Army Industrial College (AIC). Despite the Army's limited educational investments in these men, they served an average of twenty years of their careers as general officers, holding four-star rank for an average of five years. Considering how little direct impact ACTS had on the Air Force's longest-serving and arguably most influential leaders, it is surprising how much ink has been spilled in writing about the school.

ACTS nonetheless dominates historical narratives of the interwar Army Air Corps. Books that address the policies and doctrines that ACTS instructors (Kuter among them) espoused, the airman culture their concepts suggested, and the impact their ideas had on subsequent airpower application could fill a small library. Also prominent in historiography are technological developments that enabled (or restrained) airmen's ability to put their doctrine into practice—most notably the Boeing B-17, which was

⁷³ Ibid.; General Curtis Le May, Curtis E. LeMay, and General LeMay, *My Story Mission with General Curtis LeMay*, ed. MacKinlay Kantor (Doubleday & Co, 1965); Coffey, *Iron Eagle*; Warren Kozak, *LeMay: The Life and Wars of General Curtis LeMay*, Reprint edition (Washington, D.C.: Regnery History, 2011).

⁷⁴ United States Army, *The Adjutant General's Office: Official Army and Air Force Register, January 1, 1948.* (Washington D.C.: Government Printing Office, 1948). Some would attend the Air War College or National War College after the Second World War, but it seems unlikely those schools would have done much to change the opinions of those whose thinking had been deeply impacted by a half-decade of war. ⁷⁵ Author spreadsheet. Kuter spent over twenty years of his career as a general officer, with seven of those as a four-star general. Only five other men commissioned between 1927 and 1932 served longer as generals: Lauris Norstad, Curtis LeMay, Robert M. Lee, Dean Strother and John P. McConnell. Only three—Thomas Power, Norstad and LeMay—served longer as four-star generals. Of all these men, Kuter was the only one who graduated from the full nine-month ACTS course of instruction.

⁷⁶ A partial list of scholarly works which specifically address the Air Corps Tactical School's influence and the strategic bombardment principles they espoused includes, but is not limited to, Biddle's *Rhetoric and Reality in Air Warfare*, Clodfelter's *Beneficial Bombing*, Crane's *Bombs, Cities and Civilians*, Ehlers' *Targeting the Third Reich*, Pape's *Bombing to Win*, Overy's *The Air War, 1939-1945*, and Sherry's *The Rise of American Air Power*.

designed with ACTS cadre's concepts in mind.⁷⁷ It is difficult to overstate the influence technological developments had on airmen's thinking. Unfortunately, in many narratives, airpower doctrines and technologies sometimes take on agencies of their own and other parts of the historiographical forest, particularly personnel policies, are lost for the doctrinal and technological trees. Regardless, ACTS seems to have had a mythical impact on the development of interwar airpower.

A way to reconcile the two views of the Air Corps Tactical School—ACTS as inconsequential in the careers of the Air Force's most influential leaders and ACTS as the fount of Army Air Corps doctrine and culture—is to examine the fourteen men who preceded Worden's "senior World War II generation." They were commissioned in 1925 or before and reached four-star rank in the Army Air Forces and/or the U.S. Air Force. Half of them earned their commissions during or before the First World War, and the other half entered the officer ranks between 1920 and 1925. A list of these generals can also be found in Appendix D. All but General of the Air Force Henry "Hap" Arnold—the only five-star general in the service's history—graduated from ACTS, and all who attended the school had the full yearlong experience. What is interesting is the way that this earlier group challenges the historians' notions that airmen assiduously avoided PME

⁷⁷ A number of airpower histories highlight how interconnected technological developments were with airmen's push for service independence. Tami Davis Biddle's *Rhetoric and Reality in Air* Warfare and Donald Miller's *Masters of the Air* and Thomas Greer's *The Development of Air Doctrine in the Army Air Arm, 1917-1941* all provide excellent accounts of how bomber advocates drove the requirements that fed into the B-17 design.

⁷⁸ Author spreadsheet. While perhaps inelegant, the "pioneer generation" simply connotes those four-star generals who preceded Warden's "senior World War II generation," which in turn meant those commissioned in 1925 and earlier. Despite half having entered before or during the First World War and half entering afterward, their educational experiences were often remarkably consistent with each other.

⁷⁹ Finney, *History of the Air Corps Tactical School, 1920-1940*.

schools. ⁸⁰ The overwhelming majority of the Air Force's older four-star generals (what could be termed the "true senior World War II generation," but for the purposes of this work the term "pioneer generation" is adequate) graduated from both ACTS and CGSS—with many of them also graduating from the Air Corps Engineering School (ACES), Army War College and/or the Army Industrial College. ⁸¹

ACTS occupies a great deal of space in narratives of early airmen, when other Army schools which were just as long (if not longer) do not. CGSS, which served the same officer demographic, was also a year in duration, and during the 1928-35 academic years was actually a two-year program. CGSS was also the more prestigious of the two schools; ACTS commandants' pleas for CGSS-graduate airmen to serve on faculty were rarely satisfied, whereas all but a very few ACTS instructors were ACTS graduates themselves. When Kuter was an ACTS student, all the ground Army officers teaching at the school were CGSS (if not War College) graduates, whereas few of the faculty's airmen were. It is perhaps noteworthy that none of the air arm's four-star leaders attended CGSS when the course was two years long.

Based on commissioning dates, then, those who led the U.S. Air Force during its infancy—the "pioneer generation"—were professionally well educated, but their thinking was likely unaltered during their time at Fort Leavenworth. Worden's "senior World War

⁸⁰ Perret, *Winged Victory*. 464. Perret, for instance, asserts that "airmen's aversion to schools and staff work proved a serious handicap," while offering little evidence to support his claim. The reverse actually tends to be true; many airmen in oral histories recall asking for, but being denied, school opportunities.

⁸¹ Author spreadsheet. It is remarkable how much time early senior air leaders spent in schools. Joseph McNarney, George Kenney, Hoyt Vandenberg, Muir Fairchild, Benjamin Chidlaw and Orval Cook all attended three or more year-long PME schools. Fairchild spent over nine years of his career in PME schools, as a student or instructor. He graduated from the Maintenance Engineer Course (1923), ACES (1929), ACTS (1935), Army Industrial College (1936), and Army War College (1937). He also served on ACTS faculty from 1937-41 and commanded Air University from 1946-48. Army Air Forces/U.S. Air Force leaders must have viewed school attendance very favorably.

II generation" (of which Kuter was one of the older members) that followed after them and led the Air Force through its "adolescence"—the first fifteen to twenty years of its existence—were undereducated for the responsibilities they bore, with the lone exception of Kuter. While ACTS was the only school he attended as a student, the four years he spent as an instructor provided for a richer military education than attendance at any other school likely could.

Laurence Kuter's life provides an ideal lens for examining ACTS in particular and interwar airmen's professional development more broadly, because his career timing put him at the intersection between the "pioneer" and "senior World War II" generations of key Air Force leaders. Kuter was also, among those typically identified as key ACTS bomber advocates, one of the few bomber mafiosos who served a full four-year stint at the school. As the only airman commissioned in 1927 who reached four-star general rank, he was very much like those commissioned in the five years after him in the limited formal education he received, but significant wartime experience he garnered, during his career. From his time at ACTS and through the first two decades of his career, however, Kuter's peers hailed from the pioneer crowd.

Of the fourteen "pioneer generation" leaders who reached four-star Air Force rank, all but four were either Kuter's classmates or his students at ACTS.⁸³ The only four-star generals who were commissioned before Kuter, but were neither his ACTS classmates nor students, were Generals "Hap" Arnold, Carl "Tooey" Spaatz, Joseph

⁸² Kuter served on ACTS faculty for four years—the same as Muir "Santy" Fairchild, "Hal" George, George Kenney, Carl Spaatz, and Kenneth Walker; and longer than Haywood Hansell, Odas Moon, or Robert Olds.

⁸³ Finney, *History of the Air Corps Tactical School*, 1920-1940. 124-125.

McNarney and George C. Kenney—all of whom were commissioned one to two decades before Kuter. Kuter worked closely with all of these early airpower leaders before, during and/or after the Second World War. Kuter's formative years as an officer were thus spent alongside men who were primarily shaped by the First World War and the interwar struggle for service independence—to a degree that no other "senior World War II generation" general could match. Nobody from Kuter's generation was better acquainted with Hap Arnold's vision for the independent air arm than Kuter.

ACTS within the Professional Military Education System

Although airmen had little control over promotions or the air arm's rate of expansion during the interwar period, they could at least develop their people. ACTS was the centerpiece of airmen's interwar education. Fully describing ACTS—its history, impact and meaning—is an important story, and as a result it has already been told multiple times. The most complete work on the topic is Robert T. Finney's *History of the* Air Corps Tactical School, 1920-1940, but it was first published in the 1950s and has thus been superseded by other works. 84 For a shorter, more up-to-date and readable account, Peter Faber's chapter "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower" in *The Paths of Heaven: The Evolution of* Airpower Theory is excellent. 85 Other narratives exist that focus on ACTS in particular,

⁸⁵ Faber, "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower.", pp. x to x.

and many airpower histories address ACTS' role in airpower theory and development. Most focus on how and why Army Air Forces leaders came to embrace the High-Altitude Precision Daylight Bombardment (HAPDB) doctrine—with its associated rejection of long-range fighter escorts—prior to the Second World War. Closely associated with these discussions are observations that airmen underemphasized and hence under-resourced close air support and other critical capabilities. While a full review of the existing literature would detract too much from the story of Kuter's life and career, his professional development from 1934 onward cannot be accurately understood without spending some time on this discussion.

ACTS holds almost a mythical status in airpower history. To airpower proponents, the ACTS faculty was somewhat misguided, but on the whole they were remarkably successful in building and expanding upon air power theories and doctrines that would prove quite successful during the Second World War—despite senior Army leaders' conservatism, the Navy's animosity, Congressional parsimony and Americans' stubborn isolationism. Airpower detractors—whose legions have grown since the end of World War II, and whose ranks grew even more rapidly as a result of the Vietnam War and more recent conflicts in the Middle East and Libya, see ACTS airmen as hubristic fools, who thought that they could eliminate the Clausewitzian realities of war that had

⁸⁶ In addition to official histories, which one might expect to be biased, such as the U.S. Strategic Bombing Surveys and Craven and Cate's multivolume *The Army Air Forces in World War II*, many scholarly works argue that Allied strategic bombing campaigns were very effective during the Second World War. Adam Tooze's *The Wages of Destruction* (2006), Robert Ehlers' *Targeting the Third Reich* (2009), Richard Overy's *The Bombers and the Bombed* (2013) all make strong cases for the strategic bombing's value in the European theater. Richard Frank's *Downfall* (1999) strongly argues that strategic bombing against Japan—including the atomic bombs dropped on Hiroshima and Nagasaki—saved Allied and Japanese lives by significantly shortening the war and rendering alternative strategies irrelevant.

existed since time immemorial. ⁸⁷ While these gross caricatures barely begin to describe the range of opinions (and often vitriol) expressed in discussions of ACTS thinking, they hint at the ongoing historiographical debate over strategic bombing's value in particular and air power's proper role in joint operations more generally. Kuter's name regularly appears in these debates, for reasons that will become all too obvious—he was right in the center of the strategic airpower debate at ACTS from 1934 to 1939, as the HAPDB doctrine was being refined. Before he could become a significant player, however, he had to attend ACTS as a student.

The Air Corps Tactical School, in its basic conception, was unremarkable. As previously noted, military professionalization—the process of military organizations embracing key professional traits—had been ongoing in militaries around the world for some time. A major element in the military professional socialization, education and training process was attending military schools. The U.S. Military Academy at West Point, New York (Kuter's alma mater), initiated most of the Army's core members into the profession of arms. The problem for Kuter and airmen like him was that there was no U.S. Air Force Academy to educate and train airmen *as airmen* from the outset (nor would there be for some time—the first class did not graduate until 1959, twelve years

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⁸⁷ Robert Farley's 2014 book *Grounded: The Case for Abolishing the United States Air Force* is the most recent, but is far from alone among polemicists who claim that airmen think they can eliminate Clausewitzian fog and friction. Others include Ronald Schaffer's *Wings of Judgment* (1988) and Michael Sherry's *The Rise of American Airpower* (1989). The debate was very much alive throughout the Cold War, with John Keegan remarking in his landmark 1976 book *The Face of Battle* that, "The strategic-bombing campaign against Germany, its costs and benefits, its rights and wrongs, engages the energies of some of the most powerful minds at work in the field of military history today and has fomented one of the subject's few real intellectual antagonisms."

⁸⁸ A number of works deal with military professionalization. In addition to Chisholm's *Waiting for Dead Men's Shoes*, Christopher McKee's *A Gentlemanly and Honorable Profession: The Creation of the U.S. Naval Officer Corps, 1794-1815* and William Skelton's *An American Profession of Arms: The Army Officer Corps, 1784-1861* highlight how military professionalization long antedated the Progressive Era.

after the Air Force became an independent service). This is unsurprising, however, since the airplane was still in its adolescence as a weapon of war. When Kuter graduated from West Point in 1927, the Army Air Corps still only comprised seven and a half percent of overall Army strength.⁸⁹

Professional development of Army airmen—as airmen—had to wait for training they received as officers. The Air Corps was not the only branch that needed to reprogram its young officers after commissioning. The Army's conservative branch system stunted efforts at mechanization, too, much to the chagrin of tank advocates. Airmen needed more specialized training and mental adjustment, however, than those in other branches. "Three-dimensional" airplanes were less constrained by geography than "twodimensional" horses, tanks and trucks, whose operations were constrained by the terrain over which they could travel. Perversely, air leaders were given the least opportunity to do necessary education (or re-education). This becomes obvious when one tracks airmen's progression in professional military education programs.

In keeping with well-established practice, Army ground officers received branchspecific educations after commissioning. The company-grade training West Point classmates Mid Condon and Trap Trapnell had received in their respective field artillery and cavalry branches were indicative of this. Just as the infantrymen, artillerymen and cavalrymen had established their own branch-specific schools long before, the Air Service quickly established its own school shortly after the First World War, when it became a branch apart from the Signal Corps. The Air Service faced significant

⁸⁹ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II."

challenges, however. The Air Service was too small overall, and within it there was a dearth of senior leaders and a mass of war-experienced lieutenants who had been commissioned in a one and a half year period, between April 1917 and November 1918. Especially given personnel constraints, there was thus little need for a company-grade level course; the lieutenants and captains were already well-acquainted with war, and because few airmen were leaving the service, few junior officers would join the Air Service any time in the near future. What senior airmen did need was officers who could command squadrons and groups, and serve on higher-level staffs. The War Department authorized the establishment of the Air Service Field Officers' School (ASFOS) at Langley Field, Virginia on February 25, 1920. The first class started on November 1—just over eight months after the school was established. It was a compressed timeline for such an ambitious project.

Designing and implementing an appropriate curriculum posed numerous challenges. In keeping with a normalized career progression, an Air Corps officer's professional military education would flow from a company-grade school (ASFOS was for field grade officers—majors and lieutenant colonels), to (more selectively, and for all branches) Army Command and General Staff School, then (more selectively still) to the Army War College—with operational and/or staff assignments between these programs. Some, in the midst of these schools, might attend other branch-specific schools, such as

⁹⁰ Finney, *History of the Air Corps Tactical School*, 1920-1940. 9.

⁹¹ Ibid. 10.

⁹² Of the Army Air Forces/United States Air Force's first thirty-five full generals, only four graduated from Army War College: Joseph McNarney, George Kenney, Muir Fairchild and Hoyt Vandenberg. Five others—Charles Cabell, Jacob Smart, Truman Landon, Walter Sweeney and Joe Kelly—graduated from Army-Navy Staff College, or the National War College which succeeded it.

the Air Corps Engineering School (ACES—predecessor to the Air Force Institute of Technology) at Wright Field in Dayton, Ohio. A very select few attended the Army Industrial College, the Naval War College or got advanced degrees from civilian institutions. Students' military rank would ideally increase at each sequentially higher-level school, with each successive school ideally having a broader focus than the one before.

The instructors at Langley faced a special challenge, for they knew (and Kuter's experience later validated) that instruction at West Point was antithetical to current airpower best practices or innovative applications of the air weapon, and flying units had their hands full building and maintaining their crews' tactical-level proficiency. ASFOS also usually provided airmen with their first exposure to operational- and strategic-level concepts, even as it allowed for demonstrating advanced tactical flying techniques. The Langley instructors further comprehended that the "waiting for dead men's shoes" dynamic was at work in the professional military education system, too. The same backlog that slowed airmen's promotion opportunities delayed their PME attendance, even as lack of capacity at the ASFOS limited education opportunities further still. The wait list was so long that ASFOS and its successors (ASTS an ACTS) were the last PME schools many airmen attended. Others were destined for further schooling at CGSS, the Army War College and/or the Army Industrial College—none of which had much to offer by way of air concepts. ASFOS was a prep school for them. In sum, the ASFOS curriculum, at its most ideal, had to somehow improve the tactical competence of battlehardened airmen (though extensive hands-on flying), get tactical pilots to think in terms

of operational- and strategic-levels air warfare, and simultaneously teach ground Army doctrine and generic command and staff procedures. The instructors would have to teach this curriculum to lieutenants, captains, and majors, in the brief span of nine months, so that graduates could go forth and argue the advantages of airpower (others might say preach the airpower gospel) to skeptical ground Army officers who significantly outnumbered and outranked them. No academic curricula (much less formalized doctrine) existed when the school started, no other nation offered a useful model to emulate, and the instructors' academic training and practical experience was far from ideal.

The first ASFOS class instructor and student mix indicated the rushed way in which the school was created and its somewhat schizophrenic purpose. Nine officers (just over half of them majors) taught a group of seven officers (a slight majority of whom were captains). 93 They represented some of the most experienced military aviators of the day, given that the First World War had ended less than two years earlier. Heavier-thanair flight was less than seventeen years old, though, and the Army had only had airplanes in its inventory for eleven years. The war had driven massive advances in aviation technology and concepts, and those developments often left engineers and aviators with more questions than answers. Although the instructors (on average), outranked their students, they taught their peers. Most of the sixteen students and instructors in the 1920-21 class were born between 1890 and 1893, and all but one were in their twenties when

⁹³ Finney, History of the Air Corps Tactical School, 1920-1940.

the United States formally entered the war on April 6, 1917.⁹⁴ The blind led their blind friends. One wonders who was teaching whom in this class; perhaps this is why four of the instructors were also listed as students—perhaps even they themselves did not really know.⁹⁵

The school changed its name two years after it came into existence, but the name change did little to clarify its purpose. Although ASFOS—as indicated by its title—was notionally meant to prepared field-grade Air Service officers for higher-level command and staff duties, the Chief of the Air Service belatedly noted that not enough of such Air Service officers existed. Furthermore, since ASFOS was the only Air Service school that was not narrowly devoted to technical training, a board responsible for overhauling the Army's school system decided that all ranks of airmen should be eligible to attend it. Left unstated was that company-grade officers were essentially equal in age and experience to their field-grade counterparts, and many company grade officers were already doing field grade work.

In 1922, two years after the school opened its doors, ASFOS was given an equally incongruous name: the Air Service Tactical School (ASTS).⁹⁷ The school changed names again to the Air *Corps* Tactical School in 1926, in recognition that the expanding air arm had been renamed and had gained a greater degree of autonomy. In 1931, the school kept its name but moved to Maxwell Field, Alabama, to allow for expansion.⁹⁸ The Tactical School, from 1922 onward was, at least in name, intended to train pilots in tactics. This

⁹⁴ One of the instructors, Captain Harry Drayton, turned 30 the day before the U.S. entered the war.

⁹⁵ Finney, History of the Air Corps Tactical School, 1920-1940. 9.

⁹⁶ Ibid. 11.

⁹⁷ Ibid.

⁹⁸ Ibid. 25.

should have been buttressed by the fact that the majority of instructors and students, throughout most of the school's existence, were World War I-era pilots. They were thus well-steeped in that level of warfare. ASFOS and its successors should have been especially strong in developing fighter—pursuit, attack and observation—tactics, because the majority of instructors and students throughout the school's existence were fighter pilots. One of the students who entered with the 1922 class, First Lieutenant Frank O. "Monk" Hunter, was already an ace fighter pilot with eight aerial victories to his credit and five Distinguished Flying Crosses. ⁹⁹ Instead of becoming a hotbed of fighter development—developing new airborne tactics, determining how best to fit fighters into Army operational schemes of maneuver and considering how fighter aircraft fit into American military strategy—ACTS instead came to be synonymous with interwar strategic bombardment doctrine.

HAPDB and ACTS

ACTS cadre and their students were more than mere products of impersonal manpower policies or the progressive mood of their times. Peter Faber aptly describes ACTS development throughout the school's two-decade existence. Interwar air leaders devised a four-part strategy carving out a niche for Army airpower. Airmen would, "(1) redefine America as an airpower rather than a maritime nation; (2) demonstrate and publicize the versatility of airpower in peacetime roles; (3) create both a corporate Air

⁹⁹ U.S. Air Force, "Major General Frank O. Hunter," April 30, 2015, http://www.afhso.af.mil/shared/media/document/AFD-100927-026.pdf.

Corps identity through political maneuvering and an independent Air Force through legislation; and (4) perhaps most importantly, develop a unique theory of air warfare—unescorted high-altitude precision daylight bombardment (HAPDB) against the key nodes of an enemy's industrial infrastructure."¹⁰⁰ ACTS and its predecessors, AFSOS and ASTS, played the lead role in developing HAPDB doctrine. In large part due to the ACTS's "Bomber Mafia" and their sympathizers, the semiautonomous Air Corps entered the Second World War organized, physically equipped (at least with regard to bomber aircraft—the B-17 and B-24), and theoretically prepared to conduct the most devastating air campaigns ever conducted up to that time—simultaneously, in both Europe and the Pacific.¹⁰¹

In Faber's formulation, ACTS had gone through two major phases prior to Kuter's arrival. In Phase One (from the school's inception in 1920 through 1926, when the Air Service became the Air Corps), ACTS cadre placed the bomber at the center of airpower thinking and developed core employment principles. During Phase Two (roughly 1927, when Kuter graduated from West Point, to 1934, when Kuter arrived at Maxwell Field as an ACTS student), the Bomber Mafia developed the initial HAPDB concept.¹⁰²

¹⁰⁰ Faber, "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower." 186.

¹⁰¹ Ibid. 187.

Faber's narrative suffers from some inaccuracies. He states that, "... of the 1,091 total graduates, 261 of them became general officers in World War II. They comprised 80 percent of the senior leadership in AAF and included 11 out of 13 three-star generals and all three of the four-star generals then in service." While his statistic of four-star generals is technically accurate, he omits the air arm's highest-ranking officer, five-star General of the Army "Hap" Arnold, who never attended ACTS. Regarding three-stars, the AAF actually had fourteen three-star generals on V-J Day, of which three had not graduated from ACTS. Two of the ACTS nongraduates, Millard F. Harmon and Lewis Brereton, had nonetheless taught at the

Haywood Hansell, Kuter's ACTS classmate, summarized HAPDB as resting on five tenets:

- 1. Modern great powers rely on major industrial and economic systems for production of weapons and supplies for their armed forces, and for manufacture of products and provision of services to sustain life in a highly industrialized society. Disruption or paralysis of these systems undermines both the enemy's *capability* and *will* to fight.
- 2. Such major systems contain critical points whose destruction will break down these systems, and bombs can be delivered with adequate accuracy to do this.
- 3. Massed air strike forces can penetrate air defenses without unacceptable losses and destroy selected targets.
- 4. Proper selection of vital targets in the industrial/economic/social structure of a modern industrialized nation, and their subsequent destruction by air attack, can lead to fatal weakening of an industrialized enemy nation and to victory through air power.
- 5. If enemy resistance still persists after successful paralysis of selected target systems, it may be necessary as a last resort to apply direct force upon the sources of enemy national will by attacking cities. In this event, it is preferable to render the cities untenable rather than indiscriminately to destroy structures and people. (Emphasis in original)¹⁰³

While Hansell summarized the doctrine well, he (and Faber who quoted him) did not distinguish between HAPDB concepts as they stood in 1934—when Kuter, Hansell and Fairchild all arrived as students—and 1940, when ACTS closed its doors.

Nonetheless, it does provide a useful summary of bomber advocates' thinking. What is missing in the current historiography is Kuter's particular role in this doctrine's development, during Phase 3, when according to Faber, Robert Webster and Muir Fairchild identified which target sets should be struck in a future war. ¹⁰⁴ It seems strange that Kuter, who served in the Bombardment Section first as an instructor and later as its

¹⁰⁴ Ibid. 219.

school. Of the war's three-star generals, only James H. "Jimmy" Doolittle had never taught at nor attended ACTS.

¹⁰³ Faber, "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower." 217-218.

chief between 1935 and 1939, had little to do with target selection, yet Fairchild, who did not arrive on faculty until 1937, would have been a leading targeteer. Before exploring Kuter's experience as an ACTS student and instructor, one must understand the people had input into HAPDB development prior to his arrival.

The HAPDB concept developed prior to Kuter's arrival in 1934 flowed primarily from four faculty members whose only PME experience was ACTS: Robert Olds, Kenneth Walker, Donald Wilson and Harold Lee "Hal" George. 105 Olds (ACTS student then instructor 1927-31—the same individual Kuter replaced as 2nd Group Operations Officer) was a Billy Mitchell acolyte. Olds had served as Mitchell's aide and carried the renegade general's thinking into the school, but he had been gone for three years by the time Kuter arrived. Walker (ACTS student then instructor 1928-33) was a fierce bombardment advocate too, having served as a bomber pilot in both the Philippines and at Langley Field, but he left a year before Kuter got to Maxwell. Donald Wilson (instructor 1929-30, student then instructor again 1930-34 and 1936-40), served the most years of any bomber maven, but again he moved away from the school just before Kuter moved in. Hal" George was thus among the few established bomber advocates on ACTS faculty when Kuter arrived.

¹⁰⁵ Finney, History of the Air Corps Tactical School, 1920-1940.

¹⁰⁶ Ibid. 103.

¹⁰⁷ Ibid. 104.

¹⁰⁸ Ibid. 102-111.

¹⁰⁹ Robert Webster would become a great bomber advocate at ACTS, but he only graduated from the school in 1934, and Kuter's class was the first one he taught. The legendary aviator Odas Moon, who was an ACTS student from 1930-31 and notionally taught at the school from 1933-36, officially took up the bomber advocacy role after Walker's departure and is often listed as a bomber Mafioso, but he could have had little impact on airmen's thinking. Moon at best taught at the school for one year before medical concerns led to Kuter's friend and mentor Gene Eubank backfilling him in the bombardment section for the 1934-35 academic year.

doctrine, later wartime strategy and his influence on Kuter's eventual move into air transport, his background is worth further study.

Hal George was in law school when the Great War interrupted his studies, and he flew as a bomber pilot in France. After the Armistice, he returned home and completed his degree at George Washington University, and did so well that he earned a highlycompetitive clerkship for a United States Supreme Court justice. He was unable to shake the flying bug, however, and reentered service in time to participate in General Billy Mitchell's famed bombing tests against battleships off the Virginia coast—both as a pilot and Mitchell's aide. George was clearly a bombardment advocate, and he was naturally selected to attend ACTS as a student from 1931-32. 110

Kenneth Walker tried to convince George to stay as an instructor, but George wanted nothing of it. He "went all the way to Washington to get his orders changed only on arrival to be told 'we know what you're here for so go on back." Despite his reluctance, he and Walker together hammered out many of early 1930s bomber tactics, and when ACTS was reorganized in 1934, he became dual-hatted as the Department of Air Tactics Director and Air Force Section Chief. As such, he was ill-positioned to argue vociferously for bombers, since the attack, observation and pursuit sections also fell under his purview. Hal George, still the lawyer, encouraged an adversarial system wherein bomber, pursuit, attack and observation advocates made their cases in the court of student opinion. He trusted that the best argument would win in the end, but it could

¹¹⁰ Haywood S. Hansell Jr. and Harold Lee George, Interview with Haywood Hansell and Harold L. George, interview by Air Force Academy, n.d., USAF Academy Library Special Collections. 1-2. ¹¹¹ Ibid., 3.

not have hurt the bombers' cause that George ran the Air Force section, which brought all the different capabilities together into a unified whole. For Hal George's system to work, however, he still needed a strong bomber advocate in his bombardment section to drive his points home.

For the 1934-35 academic year, Captain Eubank led the bombardment section.

The nominal bombardment section chief, Captain Odas Moon, was physically incapable of doing the job, even though he kept the title. It is unclear what Moon's ailment was. According to Eubank (Moon's longtime friend), Moon "drank himself to death," which indicates that alcoholism at a minimum significantly hindered his work at the school, and per Kuter's recollection, Moon was "hospitalized with what was feared to be a totally disabling illness" at some point before the end of his student year. Whatever the nature and timing of Moon's ill-health, he never logged a single hour of flying time from at least August 1934 onward and thus was irrelevant to a third of the school's syllabus. In February 1935, Eubank was ordered back to Langley Field to work in General Headquarters Air Force, so a long-term replacement for Moon was still needed.

It perhaps did not help that ACTS leaders consistently wanted their section chiefs to be CGSS graduates, when none were forthcoming. Aside from the Commandant and Assistant Commandant, only four of Kuter's aviator instructors had attended CGSS. None of them registers as having been a prominent bomber advocate, and two of the four

¹¹² Finney, History of the Air Corps Tactical School, 1920-1940.

Eubank and Green, Interview with Eugene Eubank; Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL.

Air Corps Tactical School, "Memoranda to the Secretary, Air Corps Tactical School. Subject: Flying Time," August 1934, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

¹¹⁵ U.S. Air Force, "Major General Eugene Lowry Eubank."

¹¹⁶ Author's spreadsheet.

were gone before the end of the academic year.¹¹⁷ The nonflying Army had no trouble filling its quota, however, since all five ground Army officers on staff were CGSS, if not also War College, graduates. If bomber zealots were to win over Kuter and his classmates, it would not be through their superior experience or extensive professional military education. Kuter's primary bombardment instructor was non-CGSS graduate Gene Eubank, who stood in for non-CGSS graduate Odas Moon. Eubank taught bombardment doctrine that sprung from the minds of those who, for the most part, had been stymied in their requests for professional schooling, but had built a comprehensive strategic bombardment doctrine, which—if they were successful—men like Kuter and his contemporaries would carry forward.

In sum, the ACTS faculty makeup prior to Kuter's arrival in 1934 further contradicts the notion that the Air Corps was bomber-obsessed in the early 1930s. The Chief of the Bombardment section (Moon) was too ill or drunk to function and the air arm was so short on bomber talent that it had to throw a militarily undereducated stand-in (Eubank) into the breach to replace him—but only for part of the 1934-35 academic year. The chief bomber advocate (George) was retained at the ACTS under duress and intentionally forewent establishing a consistent pro-bomber narrative among his subordinate faculty. One of the bomber mafia's up-and-coming stars (Webster) was an observation pilot who had just graduated from ACTS himself in 1934, and was put in the

¹¹⁷ All five of the ground Army officers were at least CGSS, if not War College, graduates. The four airmen who CGSS graduates were: Frederick Eglin, who directed the Department of Basic and Special Instruction, died in a aircraft accident in 1937 and still has an Air Force base named after him; Edmund Hill, who left the school in October 1934 to go to flight training and later worked for Kuter when Kuter led the Army Air Forces delegation at the Yalta Conference; John Moore, who ran the ACTS extension course; and Arthur K. Ladd, who taught air logistics, also died in an aircraft accident in 1935, and has an Army airfield named after him.

Air Force, not Bombardment, section. Despite ACTS leaders' pleas that all section chiefs be at least CGSS graduates, none of these bomber mafiosos had attended CGSS. The ground Army officers were actually the longest-serving and most educationally-qualified faculty members, having attended at least CGSS. If the Air Corps was as awash in bomber zealots in the mid-1930s as historiography suggests, Kuter's primary ACTS bomber instructors should have been something other than a sickly, nonflying drunkard and a rising star who could only be spared for a fraction of the academic year. Given the limited options within the pioneer generation which made up the bulk of the pilot force, ACTS leaders had to look for high-quality young officers, whose other personal qualities might compensate for their inexperience and lack of education. Few young officers were getting selected for the school, however.

The Kuters Go To Maxwell

On 10 July 1934, the Kuters departed Langley Field exactly four (very busy) years after they had arrived. They spent an extended leave period visiting family and friends in their home town of Rockford, Illinois. In the midst of their leave, Larry and Ethel left Roxanne in Rockford to get acquainted with her cousins. They also escaped to the Chicago World's Fair, spending four days there with their friends Troup and Julia

¹¹⁸ The reason so few airmen had attended CGSS is how relatively junior they were, due to the "dead men's shoes" dynamic. All the bomber mafiosos on faculty when Kuter was a student had sixteen or fewer years of commissioned service. George initially earned his commission in 1917, but the break he took to complete his law degree reduced his total time in service. He still only held the permanent rank of captain in 1934. Eubank, Moon and Webster were commissioned between February and October 1918.

Miller. Troup Miller (later to become a lieutenant general) had been Kuter's assistant operations officer in the 49th Bombardment Squadron at Langley Field, and they would remain lifelong friends. The family finally arrived at Maxwell Field on August 25th—the earliest date they could report—and initially stayed with their friends and soon-to-be ACTS classmates the Hansells while they waited for their own quarters. It was a busy week, since in addition to moving in, Larry Kuter managed to fly nine sorties, for a total of over seven hours of flying time before the month was out. The Kuters soon moved into newly-built quarters (one of the Depression Era's many public works projects) immediately behind the ACTS School building. In that semicircular arrangement of homes, relationships would be formed that would last decades, through a world war and the early struggles of the Cold War.

Opening exercises for the ACTS class of 1934-35 began on 5 September. Schools are heavily shaped (if not defined) by their leaders, and ACTS was no exception. The ACTS commandant for Kuter's class was Colonel John F. Curry (West Point class of 1908), who been on faculty since 1930 and had been the commandant since 1931. He had an impressive operational pedigree (including having flown in Pershing's punitive expedition into Mexico), as well as significant academic training. He had taught at West Point for four years and was a graduate of ACES, ACTS and CGSS. He was also an avid equestrian, which had a direct impact on the school's curriculum. As Kuter recalled, "He

¹¹⁹ Kuter, "Growth of Air Power," 109; Kuter, "Along with Larry," 128.

¹²⁰ Troup Miller Jr., Interview with Lt Gen Troup Miller, Jr., interview by J. C. Hasdorff, July 12, 1978, 21, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

¹²¹ Air Corps Tactical School, "Memoranda to the Secretary, Air Corps Tactical School. Subject: Flying Time."

¹²² Kuter, "Along with Larry."

made equitation twice a week a mandatory element in the curriculum at the Air Corps

Tactical School. For that reason Maxwell Field was the only Air Corps station to boast a
large stable of riding horses." Officers, their wives and children periodically competed
in horse shows, and hunt breakfasts were organized on Sunday mornings. The
emphasis on horsemanship was most obvious of the often-schizophrenic nature of ACTS
instruction. Kuter's classmate Captain Muir "Santy" Fairchild preferred metal and wood
steeds, and vowed that—if he ever got assigned to Washington—he would rid the school
of government-owned horses. He eventually made good on his promise. 125

While Curry's role as commandant allowed him to indulge in his favorite pastime, he was also the base commander. Combining work with pleasure, he "conducted a daily inspection by riding around and through his 'plantation." He left academic affairs primarily to Major Dargue—Kuter's former group and wing commander, who had endorsed his ACTS application. Dargue was a graduate of West Point, ACES, CGSS, and both the Army and Navy War Colleges. Indicative of how stretched the faculty was, Dargue balanced his duties as the effective dean of the school with classroom instruction. Since there were no Navy officers on faculty, he leveraged his Naval War College education to inaugurate a course on naval operations, starting with Kuter's class. There would be no naval officers on faculty until 1936.

Dargue did most of the talking on the opening day. He noted that it was a year to concentrate on studying tactics, and all else was to be subordinate to that. Wednesday

¹²³ Growth of Air Power, 110.

¹²⁴ Ibid

¹²⁵ Kuter, "Growth of Air Power."

¹²⁶ Ibid., 111.

Finney, History of the Air Corps Tactical School, 1920-1940, 37.

afternoons and weekends were free, and students were encouraged to get away from the school, rest and forget about the school during those times—even as they were admonished not to "plan on any entertainments during the week." Dargue appointed Major Kilner as the class's president pro tem, and when Kuter and his classmates were dismissed to their desks, the year's schedule was on the front of the Academic Department regulations book. ACTS was a marked departure from his experiences to date.

The ACTS schedule, found in Appendix B, merits special discussion. ¹²⁸
Unsurprisingly, the bulk (602 hours—almost two thirds) of the school's 943½ hours of instruction was devoted to air warfare: 273 for practical flying and the rest classroom instruction. The Air Force course, which focused on bringing all the individual elements of air power together, occupied the most time on the academic calendar, at 85 hours. Air Logistics was the second-lengthiest airpower course, at 50½ hours, and Bombardment Aviation was third, at just over 49 hours. The other aircraft types—attack, pursuit, observation and even balloons and airships—rounded out the air-oriented academics. Airpower integration was thus the area of greatest emphasis and the bomber was considered the most important aircraft type (unless the logisticians never got the bombs and bullets to them). The other 300+ hours were devoted to land warfare, leadership and staff topics, and Dargue's 4½ hours on naval operations.

¹²⁸ Air Corps Tactical School, "Course Completion Certificate," June 4, 1934, Kuter Collection, Volume 2, Part 1, USAF Academy Library Special Collections. Attachment 1, and the instructional hours discussed in these two paragraphs, comes directly from this document.

The actual breakdown of the coursework yields some interesting comparisons. Students spent more time on horseback (Equitation: 86 hours) than they did in the classroom learning about comprehensive airpower employment (Air Force block: 85% hours). Horses overall (Equitation and Cavalry together: 102-1/3 hours) occupied twice as much calendar space as bombers (49-1/3 hours). Both fighter-type aircraft (Pursuit and Attack Aviation—61½ total hours) and Air Logistics (50½ hours) filled more calendar space than Bombardment Aviation. If the ACTS leaders loved bombers, they had a strange way of showing it. The school's purported emphasis on air tactics was suspect, too; more time was devoted to infantry and field artillery than was given to instruction in antiaircraft or air navigation. Airmen would come to care a great deal about antiaircraft artillery and long-range navigation when war came. Airmen on the ACTS faculty were not especially well-qualified in the sense of their professional military education, and the courses they taught were diluted by intentional competition between sections and a significant amount of time spent on land warfare. If what made the school special were not its instructors or syllabus, then perhaps it was the students.

Kuter's Classmates

Kuter could have had no better group of classmates to prepare him for seniorlevel service, even though they were not universally a hand-picked group. Because of the "waiting for dead men's shoes" dynamic, three quarters of Kuter's Air Corps classmates were Great War-era veterans.¹²⁹ The class's longest-serving airman was Major Vernon Burge, who in April 1912 had become the Army's first enlisted aviator, under the instruction of Lieutenant Frank P. Lahm in the Philippines. Burge built and maintained the aircraft that he and Lahm flew.¹³⁰ Major Walter G. Kilner, West Point class of 1912, was the most militarily senior, though. He had reached the temporary rank of full colonel during the Great War, but had been serving in his permanent rank of major for the past fourteen years. Kilner had just graduated from the Army Industrial College, and would attend the Army War College immediately after ACTS. Kilner was one of three Kuter classmates who accomplished the trifecta of attending ACTS, Army War College and Army Industrial College in three consecutive years.¹³¹ The oldest Air Corps student, however, was Captain John McCulloch, born in 1887, who was twenty years older than the class's youngest and most junior member, Second Lieutenant Reuben C. Hood, Jr.¹³² Kuter was the second-youngest in the class.

While Kuter's classmates varied widely in age and experience, the ranks they held were much more tightly grouped. Forty-six of the class's fifty airmen were company grade officers, so one would expect them to be relatively similar in age and experience, and hence benefit from similar types of instruction. The "dead men's shoes" personnel dynamic was very much at work, however. The captains (28 of them) had all been commissioned within 15 *months* of each other—between May 1917 and August 1918,

¹²⁹ Finney, *History of the Air Corps Tactical School, 1920-1940*; War Department, *The Adjutant General's Office: Official Army and Air Force Register, January 1, 1934.*

¹³⁰ Arbon, *They Also Flew*. 2.

¹³¹ Official Army Register, January 1, 1938. (Government Printing Office, 1938). The other two were "Santy" Fairchild and Arthur Vanaman.

¹³² War Department, The Adjutant General's Office: Official Army and Air Force Register, January 1, 1934.

while the lieutenants' commissioning dates spanned 11 *years*, from September 1918 to September 1929. Three-fifths of the airmen in Kuter's class were born in 1895 or earlier, meaning most of the class hailed from the same cohort as the original ASFOS class almost a decade and a half earlier. This could only have been made possible by the seniority-based system that retarded the older airmen's rank progression and limited professional military education opportunities for airmen. The system left ACTS classes filled largely with World War I airmen, sixteen years after the guns had fallen silent in Europe. Given that this was the fifteenth iteration of the course, many of Kuter's Great War-era student peers were something other than the cream of the Air Corps crop. What was the older airmen's loss was the young lieutenants' gain, however.

Kuter got to learn not only from his class's combined Army aviation wisdom, but also from a wide variety of officers from other branches, services and countries. The ACTS class of 1934-35 included Army officers from other branches (Coastal Artillery, Field Artillery and Signal Corps), three Marines (all aviators) and three foreign officers (two from Turkey and one from Mexico). All three Marines in the class became generals: William Wallace, Lawson Sanderson and Vernon Guymon earned three, two and one stars, respectively. Based on Kuter's and his classmates' ultimate career accomplishments, it is fair to assume that they taught each other much, both inside and outside of class. 134

¹³³ Finney, History of the Air Corps Tactical School, 1920-1940.

Kuter's was an ACTS class that the "stars fell on;" the fifty Air Corps officers in his class alone eventually earned over 50 stars, with three of them reaching four star general rank (Fairchild, Vandenberg and Kuter), one (Barney Giles) earning three stars, and a constellation of them achieved major general and brigadier general rank. What is especially noteworthy is how successful the youngest members of the class were. Whether the selection committee chose their students wisely, the senior students did an extraordinary

It was going to be difficult for Kuter to distinguish himself within such a crowd. He had proven himself as an aviator at Langley Field, but given that his classmates included some of the earliest Army aviators, he would have to be extraordinarily skilled to overcome their flying experience. The more-junior members of his class were impressive: Captain Clarence Crumrine had earned the Distinguished Flying Cross in 1920 as a pilot in the Alaskan flying expedition, First Lieutenant Hoyt "Van" Vandenberg was an accomplished pursuit pilot, and Second Lieutenant Possum Hansell's membership in Chennault's "Three Men on a Flying Trapeze" flying demonstration team marked him as a superior aviator, as well. 135 If he was to distinguish himself in this course, it was unlikely that he would do so on the basis of superior leadership skills or flying prowess.

Kuter had been noted for his intellectual capacity and hence might set himself apart in the classroom, but he faced stiff competition there, too. In addition to Kilner with his long service and recent Industrial College experience, five of the captains were graduates of the year-long Air Corps Engineering School. This included Muir "Santy" Fairchild who, according to Kuter's classmate Matthew Deichelmann, was "another one

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job of mentoring the younger ones, or other factors—not the least of which was rapid wartime growth—the Air Corps lieutenants in the ACTS class of '34-'35 proved outlandishly successful. Those thirteen individuals ultimately earned twenty-one stars: two 4-stars (Kuter was one of them), five 2-stars and three 1-stars.

¹³⁵ Maurer, *Aviation in the U.S. Army*, 174–175; U.S. Air Force, "General Hoyt S. Vandenberg," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105311/general-hoyt-s-vandenberg.aspx; U.S. Air Force, "Major General Haywood S. Hansell, Jr." The Air Service billed the Alaskan Air Expedition as "The Year's Greatest Aerial Event." Crumrine commanded the third of four aircraft on the trip, which took 40 days, 4,502 miles and 50 flying hours to make the trip from Mitchel Field, New York to Fort Davis on the Nome River. Captain Streett, who commanded the expedition, called it "one of the most hazardous and stupendous aerial events attempted in any country."

of the people of the Kuter caliber."¹³⁶ Kuter himself had taken every correspondence course he could get his hands on, but class by mail could not match the value of face-to-face instruction by handpicked educators. While some historians have indicated that interwar airmen assiduously avoided schooling, Kuter and his classmates defied this description. ¹³⁷

Kuter's ACTS class was a combination of grizzled old (at least in aviator terms) wartime aviators, young Air Corps upstarts, and "spies" from within and outside of the Army and/or the United States. Many, but certainly not all, were high-performing individuals. The vast majority of them were airmen who had entered service before or during the First World War. There were thus wide cultural and temporal divides between the class's three main camps: its primary audience of older airmen, Kuter and his younger Air Corps contemporaries, and the outsiders (Army non-airmen, Marines and foreign officers).

From a student perspective, Kuter and his more-junior peers could not have had a better venue for professional mentorship and growth. Within and outside of the classroom, he associated with Air Corps living legends, as well as experienced and dynamic advocates from other services, Army branches and countries. It is little surprise that Kuter and his classmates found ACTS to be a center of intellectual ferment.

¹³⁶ Matthew K. Deichelmann, Interview with Maj Gen Matthew K. Deichelmann, interview by J. N. Dick, March 31, 1976, 241, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL. ¹³⁷ Perret, *Winged Victory*.

¹³⁸ The term spies, in this case, is used both literally and figuratively. Foreign military students reported back to their countries on what was being taught at ACTS. This was an important part of the school's mission, but at the same time it posed a restraint on what instructors could teach. Case studies and problems either had to be completely notional or based on unclassified, real-world data. This was less an issue than individuals from the Navy or other Army branches, whose role (in part) was to report on ACTS instruction that did not accord with official Army doctrine or threatened other branches' interests.

ACTS Instruction

The Department of Air Tactics comprised the bulk of academic instruction and is the most historically noteworthy part of ACTS. Major George opened Air Tactics instruction by relating the nine principles of war to airpower. In doing so, he took the Army's somewhat mechanistic distillation of military history and applied it to the mechanically-defined air weapon. George, building upon the work of those who had preceded him, presented his concept as the logical conclusion to a series of facts and assertions: (1) Nations, like men, compete. (2) To emerge victorious, a nation had to defeat its enemy's will to resist. (3) The means for defeating the enemy's will were traditionally ground and naval forces, which were resisted by enemy ground and naval forces. (4) Air power (acting independently of armies and navies) offered the ability to directly attack the enemy's will by hurdling over land- and sea-bound forces. His basic concept—independent air action—found fertile ground in an Air Corps student body that felt itself maltreated by conservative Army leadership and misguided personnel policies. The bomber's primacy in his thinking, however, would be fiercely resisted.

The class makeup was stacked against Hal George's case. Four fifths of the students were Great War veterans, who had seen little in the way of bomber effectiveness during the war or in the sixteen years since the Armistice. Of the dozen student airmen commissioned after the war, four started their careers as attack pilots, four were

observation pilots, three were pursuit, and only one—Kuter—began in bombers. After factoring in ground Army officers and Marines, and countervailing instruction from Lieutenant Colonel Oldsmith and his Department of Ground Tactics, the odds were even less favorable for bomber advocates. While Hal George might have been preaching to the converted about independent air action, the notion that bombers should take center stage was met with great skepticism.

Fortunately for Hal George, he faced little intellectual competition from the Attack or Observation sections. Major Lotha Smith, a Great War veteran who graduated from the prior year's ACTS class, headed the Attack Section. He was assisted by Major Emil Kiel, an ACTS classmate of George's and a fellow war veteran who led the Communications Section. Neither seems to have made much of an impression on the students. When Kuter recalled their instruction, he said, "Their specialty was avoiding detection and achieving surprise by flying very low. They repeated the attack slogan that attack aviators 'did not fly over cows, they flew around them." While certainly aggressive, this kind of thinking hardly represented sound doctrine. The Attack Section represents a major missed opportunity in airpower historiography. With two experienced attack aviators on the faculty, highly-motivated and educated ground Army faculty alongside them and primarily fighter pilots in the student body, the Tactical School might have formed the nucleus of interwar air-to-ground integration. Why this did not happen is a mystery, but it appears that Kiel and Smith were not the best the attack community had

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140 Growth of Air Power, 116

¹³⁹ Official Army Register, January 1, 1938. The individual entries for each officer in the register list not only when they graduated from flying training and earned their wings, but also list which advanced course they graduated from: attack, bombardment, observation or pursuit.

to offer. Although both reached general officer rank during the war, they only pinned on their first stars in 1943 and 1945, respectively—one to three years later than Kuter, who was more than a decade younger than they.¹⁴¹

The Observation Section, headed by Major Frederick W. Evans, likewise seemed bereft of forward thinking. Observation was the mission which initially attracted Kuter to flying. As a field artilleryman, he had grown frustrated with the aerial spotting support he was getting and, concluding he could do better, went to pilot training with the intent of becoming a better field artilleryman. Evans, in accordance with current Army doctrine, covered standard tactics for supporting division commanders with airborne artillery spotting, photography, sketching, reconnaissance and other support functions. While vitally important, and observation aviation would prove immensely valuable in wartime, there was again little in the way of innovative thinking. Artillery spotting aircraft served essentially the same purpose that observation balloons first did a century and a half before the Second World War. Evans would ultimately earn two stars, but would make his name in air transport—a unique strategic airpower function—during the war.

While the few bomber advocates on the faculty faced little intellectual competition from attack and observation advocates, they met stiff resistance in the Pursuit Section, headed by the irascible Claire Chennault. Chennault, the man who had saved Kuter's flying career by passing him when he went to an elimination checkride during pilot training, was a "fighter pilot's fighter pilot." Chennault was in his fifth year

¹⁴¹ Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*.

at Maxwell Field, having attended ACTS as a student (alongside his doctrinal arch nemeses Odas Moon and Gene Eubank) and then staying as an instructor. 142 The head of the "Three Men on a Flying Trapeze" aerial demonstration team, who would later gain fame leading the American Volunteer Group (the "Flying Tigers") in China during the war, was unwilling to yield ground to bomber advocates. While Chennault would prove prescient in some of his thinking, he also clung to outmoded open cockpit fighter designs and resisted the notion of long-range bomber escort. Bomber advocates would learn a long, painful wartime lesson in the importance of long-range fighter coverage, but they got little help from pursuit advocates. Chennault and his successors in the Pursuit Section (Major Byron "Hungry" Gates, and Captains James Parker, Hoyt "Van" Vandenberg and Earle "Pat" Partridge) failed to imagine how a long-range escort fighter might be built, did not advocate effectively for development of such an aircraft, and missed developments (particularly external "drop" tanks) that eventually made such aircraft viable. 143 Considering how many ACTS faculty and students came from pursuit backgrounds, it is extraordinary how unsuccessful Chennault and his fellow pursuit aviators were in advocating for pursuit aircraft development.

For the ACTS class of 1934-35, the bomber advocates—the terminally ill Odas Moon and the short-term stand-in Gene Eubank, with the help of Hal George—apparently won over a surprising number of converts. They did so despite an Army institution that was little interested in independent bombing campaigns, higher-ranking

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¹⁴² Finney, History of the Air Corps Tactical School, 1920-1940.

¹⁴³ Ibid. Considering that both Partridge and Vandenberg eventually earned four stars, and both Chennault and Gates retired as two-star generals, the Air Corps certainly provide the Pursuit Section with smart, energetic advocates.

ground Army faculty members with more extensive professional military education, a student body that boasted few bomber pilots, and an adversarial system that encouraged debate rather than slavish adherence to school-approved solutions. They were so effective that Possum Hansell—the pursuit pilot who had flown with Chennault's demonstration team—went from being a staunch pursuit advocate at the start of the course to reversing direction and becoming a bomber advocate by the end of the year. Either the bomber advocates—in particular Hal George—had extraordinary powers of persuasion, the pursuit and observation advocates were especially poor communicators, or some other factor was at work. The dearth of pioneer generation bomber pilots made Kuter's bomber expertise all the more unique and valued. The Army's seniority-driven promotion system and its conservatism regarding growing the air arm made airmen desperate for independence; airpower's promises would never be fulfilled if ground generals called the shots within the Army. Unescorted High-Altitude Precision Daylight Bombardment doctrine helped justify service independence, which promised to better grow and use military airpower to its fullest. Larry Kuter, the intellectual, purebred bomber pilot who could argue persuasively for bomber doctrine, was ideally positioned to benefit from all these forces at work. He did not achieve his success as an ACTS student on his own, however.

One thing that became quickly apparent was that the ACTS experience, while rigorous, was as much if not more about off-duty activities outside the classroom as those in the classroom or cockpit. The Maxwell officers' club, golf course and skeet range received extensive use by students and faculty, but the relationships built were more important than the activities. Classmates (and future fellow faculty and four-star generals) Captain Muir "Santy" Fairchild and Lieutenant Hoyt "Van" Vandenberg lived nearby on post, and future four-star Captain Benjamin "Ben" Chidlaw would move into the Kuter's quarters after graduation. Little discussed in many treatments of ACTS is how comfortable life was at Maxwell Field. The Depression's effect on the Deep South's agricultural economy more generally combined with local racial policies and prejudices to make for surprisingly high-class living. Although Army pay was on the whole far from generous, a dollar went a long way in the Montgomery area. One vignette helps to describe how the conditions at Maxwell Field in particular helped the Air Corps retain its intellectual capital.

Lieutenant Colonel Vernon G. Olsmith, an infantryman who led the Department of Ground Tactics during Kuter's student year, recalled finding a home to rent off post. He and his wife found a large, three-bedroom home with a detached garage and maid's quarters for \$100 per month. Better still, they "inherited their excellent maid, a colored woman of uncertain age named Beulah who, for seven dollars a week, was housekeeper, cook and laundress," and within a week they "found another colored prize, Sam White,

who for five dollars a week, became yard man, butler and chauffer. Arriving on the job before six each morning, he washed my new Buick until it shone, served breakfast, drove me to work, took care of the lawn and ended his day by serving dinner at seven P.M. All this he did with great enthusiasm."¹⁴⁴

The Kuters did not find life on Colonel Curry's plantation quite so genteel, since they were living on a lieutenant's salary. Nonetheless, they hired their own live-in maid, Beatrice, who also charged five dollars a week for her services. The Kuters thus lived in a manner that would be unrecognizable to lieutenants and their wives of later decades. Larry had his hands full as an ACTS student, which included not only academics and flying, but extensive social obligations in which Ethel was heavily involved. On the homefront, Colonel Curry's wife sponsored a base Women's Club, which Ethel quickly joined. Ethel's interests were many and varied, but she became particularly interested in the Book Club, which she would chair for their five years at Maxwell Field. 145

Ethel did not limit herself to on post activities, however. Although ACTS was, for many who attended the school, a time to rest and recharge, such was not the case for the Kuters. Ethel started acting at the Montgomery Little Theater and before the year was out, she had played leading roles in both "Jig Saw" (where she won the leading role despite her advanced age of 29) and "Double Door." In the midst of school, cocktail parties, flying, riding, play rehearsals and late night studying, the Kuters decided to try for a second child. Ethel felt obligated to give Larry a son, since Roxanne was their only child. Larry was apparently home consistently enough to do the trick, and shortly after

¹⁴⁴ Olsmith, Recollections of an Old Soldier, 153.

¹⁴⁵ Kuter, "Along with Larry," 132–135.

Christmas Ethel found out she was pregnant. ¹⁴⁶ In reviewing the Kuters' personal files, it is difficult to know which of the two was the more success-oriented.

The Kuters' lives slowed down little after the New Year, as a six-week snapshot underscores. Over the last weekend in January, Larry—needing to log flying time—flew to visit their millionaire friends the Sweets at their Daytona Beach winter home, while Ethel rehearsed for "Bill of Divorcement." The following weekend, on February 2nd, their friends Troup and Julia Miller arrived and stayed as houseguests while Troup and other Langley crews were there for maneuvers. They stayed at least long enough to see Ethel act in the play, which ran on the 7th and 8th. The day after the play closed, Ethel started suffering nausea and cramps and went on bed rest. On the 13th, she was taken to hospital on a litter and miscarried—the day before Valentine's Day.¹⁴⁷

Even hospitalization did little to slow down a busy social calendar. Two days after Ethel returned home from the hospital, her college roommate and bridesmaid, along with her husband, visited the Kuters for two nights. From March 2nd through the 5th, their friends the Burnsides visited. Perhaps despondent about losing her child, Ethel attended none of the parties while the Burnsides visited, leaving Larry and Beatrice to entertain their guests. Over the school's March break, the Kuters visited the Sweets in Daytona, returning in time to host Possum and Dotta Hansell, Colonel and Mrs. Hansell (Possum's parents) and Reginald and Sue Vance for dinner on the 18th. In April, the Sweets would

¹⁴⁶ Ibid., 132–133.

¹⁴⁷ Ibid., 133. Although this would seem to be a major event in the Kuters' life, neither Larry nor Ethel commented on it very extensively. In her memoirs, Ethel merely notes that she was taken to the hospital on the 13th, miscarried on the 14th, remained at the hospital until the 22nd, and remained on bed rest for an indeterminate time after she returned home. The miscarriage is not even mentioned in Larry Kuter's memoirs. Ethel's daily calendar simply notes "hemorrhages & miscarriage."

pay a reciprocal visit to Maxwell Field, which involved another string of parties.¹⁴⁸ On a lieutenant's salary, the Kuters had a social calendar during his student year that would be recognizable to only a general officer today. It was valuable training for a family who would see Larry attain general officer status much sooner than anyone could have expected.

Eubank leaves an opening; Kuter is pushed through

In the midst of the studying, flying, social gatherings, wives' club meetings and theater performances, officers' careers were being decided. On 18 December, Larry Kuter had submitted his assignment preferences, along with those of his other classmates who did not already have a tentative assignment. If assigned overseas, he wanted the Philippines. If kept stateside, he wanted to return to California. In order, he requested: training as an advanced navigation student at Rockwell Field (San Diego), a bombardment group at Hamilton Field (Novato), a bombardment group at Rockwell Field, or a pursuit group at March Field (Riverside). Their tour in field artillery in Monterrey had clearly left them with a very favorable impression of the Golden State. The Army's response to Kuter's request, in typical fashion, was none of the above. Captain Moon, in a letter to Major Dargue, submitted Captain Ned Schramm and First Lieutenant Kuter (who was nine years junior to Schramm in age and military service) as

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¹⁴⁸ Ibid., 133–134. The Sweets were clearly people of great privilege, but they had an affinity for airmen. As Ethel recalled, that trip "was the beginning of Lily's practically 'joining the Air Corps.' Many of our friends became close friends with the Sweets. Some years later, Dotta Hansell commented that Lily was the first millionaire we knew. I told Lily this and she corrected me, 'Three millionaire.'"

being suitable for assignment in the Bombardment Section. Captain Gene Eubank was ordered back to Langley Field, to report to Major General Frank Andrews, who was to take command of the newly-established General Headquarters Air Force effective 1 March. With Moon seriously ill, whoever moved into the Bombardment Section would be the only man in a two-man operation. Eubank, once again advocating for his protégé, recommended young Larry Kuter.¹⁴⁹

Ned Schramm was selected to take command of the 37th Attack Squadron at Langley Field (perhaps indicating he was less than vociferous in his bomber advocacy), leaving Kuter as the only other student whom Moon had recommended for Bombardment Section instructor duty. ¹⁵⁰ No viable replacements for Moon or Eubank were forthcoming from the wider Air Corps. Within Kuter's class, Captain "Santy" Fairchild might have moved into the Bombardment Section vacancy, but he was slated to attend Industrial College next (to be followed by War College); he would not return to Maxwell until 1937. ¹⁵¹ Fellow Lieutenant Possum Hansell was highly regarded by the faculty, having been associated with the school to varying degrees for the prior five years, but he was only a recent convert to the bomber fold. He had spent his flying career to that point in pursuit aircraft, and furthermore he was even more junior than Kuter. Hansell would stay on as an instructor, but in the Air Force section. ¹⁵²

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¹⁴⁹ Air Corps Tactical School, "Correspondence: Air Corps Tactical School Instructors and Staff," 1934, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

¹⁵⁰ U.S. Air Force, "Brigadier General Ned Schramm," *Biographies*, accessed May 15, 1015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105681/brigadier-general-ned-schramm.aspx.

¹⁵¹ U.S. Air Force, "General Muir S. Fairchild," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107112/general-muir-s-fairchild.aspx. ¹⁵² U.S. Air Force, "Major General Haywood S. Hansell, Jr."

Kuter was a surprising, but by process of elimination, obvious choice to head the Bombardment Section. He possessed a better combination of bomber experience, native wit, flying talent, social discretion and assignment availability than any of his fellow classmates. This was so despite Kuter being the second-youngest officer in an ACTS class largely comprised of men a decade or more older than he. He would teach the course essentially solo. Since bomber advocates in the wider force were so few and/or ineffective, a lonely lieutenant in the school's premier course, when ACTS leaders continually stated they needed two in the section (with the chief preferably a CGSS graduate), was the best the service could do. Either Larry Kuter was almost superhumanly good to merit such confidence or the Army had so few effective bomber advocates that Kuter—who was good, but no Superman—was the best available option, or both. Both options suggest gaps in historiography, but it appears the Bomber Mafia resembled less an organized doctrinal crime syndicate than a hyper confident but local street gang, centered on the Maxwell Field area.

Graduation

The Kuters remained busy, academically and socially, right through graduation day. On May 22nd, Ethel acted in another play at the Little Theater, and six days later (Larry's birthday) she was elected to the theater's Board of Directors. Four days after that, on June 2nd, the Kuter's hosted a graduation party in the "Rose Abbey" garden—the home of one of Ethel's friends from the theater group. General Westover, the Assistant

Chief of the Air Corps, attended the party then spoke at the ACTS graduation two days later. At the graduation, it was announced that Larry had graduated at the top of his class, but contrary to some accounts he was not the top student academically. He was actually second in his class. 153 It is perhaps the case that Kuter was announced as having graduated at the "top" of his class, since he would need every ounce of credibility he could get. He would be teaching bombardment to a bunch of Great War vets with significantly greater age, rank and flying time. The Kuters' friends congratulated him on their assignment and noted that they got the best assignment of all. Considering their standard of living and the way they had integrated so well into the local social scene, it was hard to argue otherwise. Regardless, Larry was privately disappointed that he was not selected for CGSS, like his friend and classmate Hoyt Vandenberg, who had not performed quite so well as Larry. Kuter's performance was nonetheless well known to senior Air Corps leaders, since when General Westover wrote a letter to Ethel thanking her for hosting the party at the Rose Abbey, he congratulated her and Larry "on his fine record at the Tactical School this year. It will mean much toward his future advancement and success."154

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¹⁵³ "Laurence S. Kuter Official Military Personnel File," n.d.; Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 122. Although Kuter is typically credited with graduating first in his ACTS class, his efficiency report indicates that he was second academically. Ethel Kuter's unpublished memoir "Along with Larry" notes that Kuter was announced at graduation as having graduated first, so either her memory was inaccurate or Kuter was selected based on criteria that included more than just academic scores. When asked in an oral history interview how he came to be first in the class, Kuter did not confirm nor deny that he graduated first, but rather tacitly admitted that he had come in second stating, "Incidentally, when Reuben [Hood] and I graduated, we were the first two in the class, and we were the two juniors."

¹⁵⁴ Kuter Collection.

Conclusion

Larry Kuter turned thirty in May 1935. He had established himself as an accomplished bomber pilot, highly regarded by Bert Dargue and Gene Eubank, both of whom were themselves accomplished bombardment aviators. He had proven himself as military thinker, graduating at the top of a class that included a future Air Force Chief of Staff (Vandenberg), Vice Chief of Staff (Fairchild), Hap Arnold's wartime deputy (Barney Giles) and the Marine Corps' Director of Aviation (Wallace). Larry was also half of an impressive husband-wife social team; in just nine months on post, Ethel had established herself not only in the on-post social scene, but had furthermore established herself as a leading actress and leader in the local theater. In an era when servicemen's wives were integral parts of their careers, Ethel was a key enabler to Larry's success. Not only did the Kuters mix comfortably with the Army's higher social strata, but as evidenced by the party they hosted at the Rose Abbey and reciprocal visits with the Sweets, they traveled comfortably in civilian circles as well. Ethel was a force in her own right, but she was not the only one in her family with social grace. Larry was the one who had cultivated the relationship with the Sweets, and it was he, along with their maid Beatrice, who had entertained their house guests when Ethel was recovering from her miscarriage. Larry would need every ounce of credibility, degree of stage presence, tightly focused argumentation, and thick skin that he could muster for his next assignment. As the sole ACTS Bombardment Section instructor, he would be teaching

bombardment to a skeptical group of mostly pursuit pilots, who were often a decade older than he.

When Larry Kuter read the list of the next year's students, he knew that his lectures would have to be good. Majors William Kepner and Ira Eaker; Captains John Cannon, Kenneth Wolfe, Nathan Twining, and Benjamin Chidlaw; and First Lieutenant Elwood Quesada—all of whom would earn at least three stars—would be his students. None of them could be classified as a bomber pilot or advocate, at least at that point in their careers; all had strong pursuit, attack or airship backgrounds. Fortunately, the first bombardment lessons were scheduled for November, so he would have ample time to prepare. He could not simply dust off Eubank's lectures, however, since Dargue demanded that his instructors introduce new material every year. He would have to come up with something creative and different for this crowd. The Kuters would not take their normal summer leave that year.

Larry Kuter's selection as the acting Chief of the ACTS Bombardment Section is part of a wider story. He was an excellent bomber pilot, a creative intellectual leader, and a forceful but diplomatic instructor. He furthermore, with his wife Ethel's help, had great stage presence and was a gracious host at the many parties the Kuters hosted or attended. All these personal traits enabled Kuter to take the reins as the sole Bombardment Section instructor immediately upon his graduation from ACTS, and suggest that Kuter played a greater role in bombardment development than is currently understood. Kuter's personal

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¹⁵⁵ Kepner was a famous balloon pilot, Eaker and Quesada were air refueling pioneers and pursuit pilots, Cannon and Childlaw were also pursuit pilots, and Twining was an attack pilot. Cannon, Childlaw and Twining would all earn four stars, with Twining serving not only as the Air Force Chief of Staff, but also the service's first Chairman of the Joint Chiefs of Staff.

traits still do not fully explain how a lieutenant with just one operational flying assignment under his belt prior to attending ACTS came to teach one of the premier courses of instruction at the school—bombardment—when strategic bombing was ACTS leaders' greatest area of emphasis.

Larry Kuter's career as an ACTS student directly reflects a combination of demographics and personnel policies that might seem comical had they not had such devastating consequences. The dramatic wartime boom and bust of Army airmen combined with the service's seniority-based promotion system and a conservative, seniority-driven professional military education system to create a large cohort of ossified and aging aviation officers who would continue to comprise the majority of airmen throughout the 1930s. The interwar Army Air Corps thus typified the worst of the "waiting for dead men's shoes" personnel dynamic. While some senior airmen, like Hap Arnold, Santy Fairchild and Hal George, used the opportunity to continue growing and moving airpower forward, many others made Kuter and other young, ambitious officers stand out by default. The social relationships the Kuters enjoyed as students both within and outside of the military, rubbing elbows with Depression-era multimillionaires and Montgomery-area elites, indicate that aviators enjoyed a level of social prestige that would not be repeated in later decades. There could be no better training for a future general officer and military diplomat than extended duty in a place where local social and economic conditions enabled a lieutenant to associate with higher levels of civilian society, even as he taught military men who were often a decade older than he—many of

whom were the Air Corps' intellectual leaders. How well Kuter would take advantage of the opportunity ACTS instructor duty offered remained to be seen.

Graduation day at Maxwell marked the culmination of a very educational year and a half. As a member of the operations staff for the Eastern Zone Army Air Corps Mail Operations (EZAACMO), Kuter became intimately acquainted with many of the problems the 1934 Airmail Crisis laid bare. When he authored the EZAACMO's final report, he essentially wrote the official airmail history, since the eastern zone was the largest of the three airmail sectors and neither of the other two zones produced such a detailed account. As such, he took a direct role in identifying problem areas within not only the mail operation, but the Air Corps as a whole, and advocated for structural changes to address organizational shortfalls. When he subsequently attended the Air Corps Tactical School (ACTS), he learned many lessons which he ideally should have been taught before partaking in the eastern airmail operation. On a positive note, he got to know even more future senior Air Force leaders, watched a number of the changes for which he had advocated become reality, benefited personally from the growth and changes the airmail operation necessitated, and grew intellectually.

Chapter 5: Preaching the Bomber Gospel—Developing and Teaching Bombardment Doctrine at ACTS (1935-1939)

While Larry Kuter had learned much during his year as an ACTS student and the seven years as a commissioned officer preceding it, the next four—from 1935 to 1939—significantly defined his career and molded the Air Corps he served. His ACTS instructor experience was primarily shaped by four things: being thrust into teaching bombardment doctrine to a skeptical, senior-ranking audience (while engaging in a running academic debate with equally-senior ACTS faculty members); his work with the Air Corps Board, through which he helped shape Air Corps policy; the recognition he gained through other high-visibility projects, such as writing the ACTS bombardment textbook and participating in prewar mobilization planning; and direct doctrinal conflict with the Navy—which could have ended his career, but instead boosted the professional standings of both Kuter and the school. As with other achievements during his long career, all that he experienced would not have been possible without his wife Ethel's constant support.

Learning by firing squad

While Kuter had learned a great deal as an ACTS student, his time as an instructor provided a whole new level of education. This was largely due to the makeup of his

students and instructor peers. Upon graduation, he joined a very senior and highly opinionated faculty, even as he prepared to teach bombardment doctrine to students who were primarily senior-ranking, Great War-era fighter pilots. On the faculty, First Lieutenant Kuter (who had just turned thirty) helped bring the average ACTS instructor age down to forty-three; his friend First Lieutenant "Possum" Hansell and Major Frederick Evans, who led the Observation Section, were the only other assigned instructors in their thirties. The ground Army officers were even older still; their average age was forty-five and the youngest of them, Major Harold Ristine, was forty-one.² The one- to two-decade age difference between Kuter and the majority of his faculty peers would make it difficult to make his voice heard. The other discriminator, and one of greater concern in the rank-conscious military, was Kuter's dearth of experience; of the twenty-two full-time ACTS faculty, only Kuter and Hansell were commissioned after the Armistice.³ Hansell (who was junior in rank, but not age, and had been associated with ACTS for four years before becoming a student) was the only other lieutenant, and Julian Haddon (the ACTS secretary and librarian) was the only captain.⁴ All the rest thus outranked Kuter by at least two pay grades and had more than twice his time in military service. If Kuter was going to have any impact on his fellow instructors' thinking (much

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¹ Finney, *History of the Air Corps Tactical School, 1920-1940*, 105–106; *Official Army Register, January 1, 1934* (Washington, D.C.: Government Printing Office, 1934). Finney's work lists ACTS faculty and students by academic year, and the Official Army Register includes, among other things, officers' birth dates, dates of rank, and which course (attack, bombardment, pursuit or observation) they each went through at Kelly Field. Correlating the names from Finney's roster and the data from the Official Army Register provides a reasonable picture of the instructors' and students' backgrounds.

² Finney, History of the Air Corps Tactical School, 1920-1940, 106; Official Army Register, January 1, 1934, 581.

³ Finney, History of the Air Corps Tactical School, 1920-1940, 106; Official Army Register, January 1, 1934.

⁴ Finney, *History of the Air Corps Tactical School*, 1920-1940, 105.

less that of his students), it could only come through the strength of his argument, the force of his personality, and top-level support. Fortunately, he was highly articulate, his wife Ethel was an outstanding speech and acting coach, and Lieutenant Colonel Dargue was still running the school.

Kuter's faculty mentors provided him with professional shielding while he blazed doctrinal trails (or in some cases dug deeper ruts in well-worn bomber modes of thinking). Although Eubank was gone (he was serving in the newly-formed General Headquarters Air Force), Dargue remained as assistant commandant, providing intellectual leadership and continuity as Colonel Arthur G. Fisher took over as the school's new commandant in the summer of 1935. Just as importantly, Lieutenant Colonel Hal "Bomber" George, another long-term mentor and friend, continued to direct the Department of Air Tactics and Strategy, giving Kuter wide latitude in teaching his bombardment courses. Hansell and Captain Robert M. Webster, both instructors in the Air Force section, were friends and professional colleagues as the Air Force and Bombardment sections coordinated extensively with each other. Kuter also had well-established relationships with his intellectual competition; Majors Lawrence Glasgow (Infantry section), Benjamin Harmon (Antiaircraft section), and Byron "Hungry" Gates (Pursuit section) had all been Kuter's ACTS classmates. Kuter had known Major

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⁵ U.S. Air Force, "Major General Eugene Lowry Eubank"; Finney, *History of the Air Corps Tactical School*, 1920-1940, 105.

⁶ This work uses either "Hal" or "Bomber" for Harold L. George, who was a staunch bomber advocate. This is significant, because at the same time there was also a Harold H. "Pursuit" George in the Air Corps, too. Major "Pursuit" George was a World War I fighter ace and an ACTS student from 1936 to 1937, when Kuter and "Bomber" George were on faculty.

⁷ Kuter, "Growth of Air Power," 133.

⁸ Finney, History of the Air Corps Tactical School, 1920-1940, 106, 124–127.

Chennault—his primary intellectual competition at ACTS, who was not assigned to the school, but remained at Maxwell Field and occasionally taught pursuit courses—since pilot training six years before. Kuter's mentors, and his ability to cultivate friendships, even with those he strenuously disagreed with, would prove invaluable at ACTS and long afterward.

When the time came to teach, Kuter would be alone on the platform, however. In his first year, he would stand before sixty-nine students, all but one of whom outranked him. The only junior-ranking student (and only by date of rank) was First Lieutenant Ford Fair, who was six years older than Kuter. Fair had served as an enlisted man in the Army during the First World War and earned his commission the same month Kuter did. Much like his faculty peers, Kuter's students were, on average, a decade older than he, and two—Lieutenant Colonel Edward Hoffman and Major Joseph Davidson—were more than twenty years his senior. More significant than simple age or rank, however, was student quality. Although none of them knew it at the time, Kuter's first ACTS student class contained thirty-five future generals: four 4-stars (including one from the ground Army), five 3-stars (one them a Marine), seventeen 2-stars (including another Marine) and a multitude of 1-stars. Together, this class alone would wear over sixty

⁹ Ibid., 106.

¹⁰ Ibid., 125–126.

¹¹ War Department, The Adjutant General's Office: Official Army and Air Force Register, January 1, 1934... 216.

¹² Ibid., 168, 236.

Author spreadsheet. By comparing the class roster to multiple other sources as necessary--R. Manning Ancell and Christine M. Miller's *The Biographic Dictionary of World War II Generals and Flag Officers*, the official Air Force website (which has official biographies of many early Air Force generals), the *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point* (also known as Cullum's Register), one can form a solid picture of those who taught at or attended the Air Corps Tactical School.

stars.¹⁴ This is likely due to the fact that he was likely teaching the highest-quality student class ACTS had yet seen. Starting in 1935, officers attending the school had to have average ratings of excellent or superior, whereas before they had needed only to be of average age, rank and experience.¹⁵ Notably, none of the ACTS class of 1936's seven future Air Force three- and four-star generals were bomber pilots.¹⁶ The student class was not totally devoid of bomber talent, however; Captain (and future Brigadier General)

Ralph Snavely—Kuter's former bombardment instructor at Kelly Field —was among his first students.¹⁷ Among this crowd, as with his faculty peers, Kuter had little in the way of professional credibility, despite his impressive résumé to that point. To make his case for bombardment, he would have to present a logically airtight case, and deliver it with great confidence and poise. At the same time, however, he would need a surfeit of tact and humility as senior officers attacked his ideas.

A few other aspects of the ACTS class of 1935-36 are noteworthy. Although only a quarter of the class's airmen had been commissioned after the Great War, like Kuter's class before it, the growth in class size meant that more (albeit not many) young aviators were starting to attend the school. Ten of the students had been commissioned after the Armistice, but eight of the ten had been commissioned at least two years longer than

¹⁴ Author spreadsheet. Hodge commanded the XXVI Corps as a lieutenant general during the Second World War and was the four-star Chief of Army Field Services when he retired in 1953. Twining went on become the Air Force's third Chief of Staff and the service's first Chairman of the Joint Chiefs of Staff. Cannon eventually commanded Tactical Air Command and has an Air Force Base named after him in New Mexico. Chidlaw ultimately led Continental Air Defense Command, predecessor to North American Air Defense Command (NORAD). ACTS instructor Earle E. "Pat" Partridge took command from Chidlaw and became the first NORAD commander. Kuter succeeded Partridge in the NORAD billet.

¹⁵ Finney, *History of the Air Corps Tactical School*, 1920-1940, 41. Given the glut of World War I-era Air Corps officers, those averages—if rigorously applied—would have excluded many high-potential officers like Hansell and Kuter.

¹⁶ Ibid., 126–127; Official Army Register, January 1, 1934.

¹⁷ Finney, History of the Air Corps Tactical School, 1920-1940, 126.

Kuter.¹⁸ The student body also included a naval aviator for the first time: Lieutenant Bennett W. Wright, who would join ACTS faculty the following year as chief of the Naval Operations section.¹⁹ ACTS would have a naval officer for the remainder of its existence, but the school would never have more than one at a time, and the Navy instructors never spent more than one year on faculty.²⁰ It appears the Navy's subordinate Marine Corps had a much greater appreciation for ACTS; while no marine ever served on faculty, thirty-six marines graduated from the school, while just five naval officers did.²¹

There were no foreign students in Kuter's first student class, nor would he ever have a foreign student. After 1935, no more foreign students graduated from the school until the 1939-40 academic year (after Kuter was gone), when Chile and China each sent one student for the three-month short courses. The absence of foreign students should have freed the ACTS faculty airmen to pursue and use classified, "real world" examples for their instructional problems. Instead, they continued to use unclassified, theoretical "red versus blue" scenarios, overlaid over American topography in their lessons. It is difficult to understand why the faculty limited themselves to unclassified scenarios, given the lack of a foreign espionage threat in the classroom, until one considers how undermanned the ACTS faculty—and the Air Corps as a whole—was at the time. Kuter and his bomber peers might very well have been "mirror-imaging," or assuming that likely enemies were similar to the United States. It seems at least, if not more, likely that

¹⁸ Ibid., 125–127; Official Army Register, January 1, 1934.

¹⁹ Finney, *History of the Air Corps Tactical School, 1920-1940*, 127.

²⁰ Ibid., 108–111.

²¹ Ibid., 117–141.

²² Ibid., 125–141.

²³ Kuter, "Growth of Air Power."

ACTS faculty simply lacked the time and information to create more realistic scenarios. Kuter's bombardment instructor predecessors had been so undermanned and frequently rotated that they lacked the time to write a formal course text; it is unsurprising they failed to engage in the far more time-intensive act of creating timely, real-world problems for their students. America's isolationist sentiments further limited airmen's range of motion. Had word gotten out to the American public that airmen were building offensive scenarios, based on current intelligence collection on likely adversaries, the political blowback would have been substantial.

Kuter would soon learn that U.S. Navy faculty and students posed greater threats to his career than foreign officers try to spy on his work. Not only had Dargue put Kuter in charge of bombardment aviation, but he also gave him responsibility for some of the naval instruction. ²⁵ It was a natural yet uncomfortable fit, since bombers were a major source of contention between the Army and Navy. While the water's edge seemed naturally define the two services' respective spheres—the Army should be responsible for land warfare and the Navy the sea—the Army's ownership of the coastal defense mission and airplanes' increasing ability to operate far out to sea confounded this longstanding, two-dimensional paradigm. Allowing Army bombers to operate to the edge of their operational capabilities threatened the Navy's prerogatives as the nation's senior

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²⁵ Donald Wilson interview, 116.

²⁴ Creating realistic classroom training scenarios based on classified intelligence was, and still is, a massive, manpower-intensive challenge. Building realistic air scenarios in the mid-Thirties would have required the presence of air officers around the globe to collect information on military air developments, an air intelligence organization(s) to analyze and disseminate that information, and the capacity to store and protect that intelligence. This would all have needed to be done before the instructor even began to sort through all that data in order to determine what was relevant and valid. In an Air Corps with roughly 1,200 total officers, which in 1934 struggled to find enough pilots to man the airmail operation, the air intelligence operation was not, and could not, be adequately funded and manned. Even if so, instructors like Kuter would have lacked the time to make use of relevant intelligence on other countries.

maritime service, but also served as a more existential threat. If land-based aircraft, together with land-based coastal defenses and simple geography (the Pacific and Atlantic were very wide moats), could make the isolationist United States appear largely immune to enemy attack, then the Navy's Depression-era fleet plans were highly questionable. There was less value in building American battleships to defend against foreign warships, if those foreign combatants would be destroyed before they get close enough to attack America's shores. Kuter's bombardment advocacy would thus be automatically taken as an affront to the nation's maritime service, no matter how tactfully he delivered his message.

Kuter should have been on firm ground as an Army officer advocating for a bombardment capability that resided within his own service, but bombers had fierce detractors in the ground Army branches, too. Bombers and attack aircraft directly threatened coastal and field artillerymen; although airmen had no intention of fully supplanting either of these branches, airplanes at minimum might render these branches less relevant. Fixed coastal defenses, for instance, were less necessary if one assumed enemy navies were unable to survive within range of land-based aircraft (and well outside the range of coastal guns). The ground Army as a whole was directly threatened by the notion of strategic bombardment, for baked into strategic bombardment technology and doctrine was the notion that airpower could render ground forces unnecessary, at least in certain contexts. If a nation could be forced to capitulate under the weight of a strategic bombing campaign without the necessity for a large-scale ground invasion, then virtually every branch within the ground Army was threatened,

from infantry to field artillery to cavalry and all the rest.²⁶ Strategic bombardment posed a career threat to professional army soldiers, but more importantly it fundamentally challenged soldiers' conceptions of warfare. The soldiers had good reason to be skeptical, given the history of armed conflict and the failure of strategic bombing in World War I to alter the outcome of the conflict.

Kuter faced plenty of opposition within the Air Corps fold, as well. The Great War veterans who comprised the bulk of the class had seen little to convince them, during the war or in the decade and a half since, of bombing's efficacy or bombers' survivability. Strategic bombing furthermore threated the fighter pilots' conceptions of warfare and aspirations for their attack, observation and pursuit tribes. If bombers were as difficult to detect and invulnerable to attack as bomber advocates purported them to be, then there was little need for pursuit aviation. If enemy forces could be destroyed far inside enemy territory, then attack aviation—in direct support of ground troops—was likewise of limited value. Observation aircraft, used for artillery spotting, would serve little purpose if the enemy were destroyed before getting within range of friendly artillerymen's guns. Teaching bomber doctrine when unabashed fighter advocates like John K. Cannon, Ira Eaker and Elwood "Pete" Quesada were all in the same class was a fearsome prospect. Doing so while verbally sparring against fighter instructors Claire Chennault and Gordon Saville in and out of class made the prospect of teaching all the less alluring. Instructing high-ranking students whose opinions were firmly fixed by their long tenure in service—and doing so for four years straight—would significantly impact

²⁶ Army aviation was capability that suffered during this time. The Armored Force did not come into being until 1940, and would not be designated as a permanent branch until 1950.

Kuter's thinking and approach to winning people to his point of view. It is little wonder that Kuter and Hansell would be prolific airpower writers and speakers, even well past their respective military retirements; after teaching at Maxwell Field, all other writing and speaking engagements would be cakewalks by comparison.

Faculty Composition and the Air Corps Board

The Air Corps Board at Maxwell Field presented another educational and professional growth opportunity for young Kuter, for through it he became directly involved in shaping Air Corps policy. When Kuter joined the ACTS faculty in the summer of 1935, he was one of just seventeen airmen assigned to the school. The other five full-time instructors were from ground army branches, and three other Air Corps instructors—most notably Major Chennault who served on the Board—only taught at the school part-time, since they were assigned to other units on the post.²⁷ Of the seventeen assigned airmen, four did little classroom instruction. The new Commandant, Colonel Fisher, was too busy to teach, due to his post commander duties.²⁸ Lieutenant Colonel Dargue, the assistant commandant, functioned as the school's dean, while also heading the naval operations section, so he could not help with bombardment. Major Otis Moon, while he was listed on the faculty and notionally led the bombardment section, was waiting to be medically discharged from service.²⁹ Captain Haddon was the sole

²⁷ Finney, *History of the Air Corps Tactical School*, 1920-1940, 105–106.

²⁸ Ibid., 12–13

²⁹ Kuter, "Growth of Air Power," 121.

dedicated administrative staff officer, which left thirteen airmen to share the bulk of the air instruction, in a school that had just grown its student body by seventeen percent over the summer.³⁰ Of the thirteen full-time instructors, a third of them—Major Earl DeFord (fresh from two years at CGSS), Kuter, and his ACTS classmates Byron Gates and Possum Hansell, and—were all new to the faculty.³¹ Although Hansell was by then a convert to the strategic bombardment gospel, Kuter was the only bomber pilot addition to the faculty that year. Of those who joined the faculty in 1935, fighter pilot Gates had the greatest opportunity to shape the ACTS syllabus, since he would remain on faculty until the last class graduated in 1940.³²

The shortfalls in numbers and experience were further exacerbated by the collocation of the Air Corps Board, which only became a formally-recognized Air Corps entity (with people actually assigned to it), in the summer of 1935. Since the school was first established as the ASFOS at Langley Field, it had served not only as an instructional center, but also as the Air Service's (later the Air Corps') brain trust. An Air Service Board had been formed in 1922 at Langley Field to address subjects referred to them by the Chief of the Air Service, as well as to make recommendations for improvements to the Air Service. Although the Board was notionally created in 1922, no additional manpower to address the added workload had ever been assigned.³³ The Air Service Board became the Air Corps Board in 1926, due to the air arm's name change, and the

³⁰ Finney, *History of the Air Corps Tactical School*, *1920-1940*, 105–106, 124–127.

³¹ Ibid., 104–106.

³² Ibid., 106–112.

³³ Ibid., 15.

board temporarily ceased to exist when ACTS moved to Maxwell Field, taking its faculty with it, in 1931.³⁴

In August 1933, a revised Army Regulation (AR) 95-20 directed that the Air Corps Board be permanently based at Maxwell Field, again with the purpose of both working issues referred to it by the Air Corps chief and recommending Air Corps improvements to the chief. No additional manpower was authorized in conjunction with the new task. Four months later, in January 1934, Colonel Curry held the Air Corps Board's inaugural meeting. He took his resources out of hide, meeting with his assistant commandant and six faculty members. By September 1934, as Kuter started his ACTS student year, AR 95-20 had been revised again, directing that the Air Corps Board be formally established, with the commandant and assistant commandant serving as exofficio board members, with 5-8 permanent members to be designated by the Chief of the Air Corps. By June of 1935, as Kuter graduated, the board had four of its five permanent members.

The net effect for Kuter was that he had greater influence on bomber doctrine. Since the board lacked the personnel to conduct every study on its own, leveraging ACTS instructors for Air Corps Board projects was a longstanding practice. Kuter was one of the few bomber pilots on faculty, so his work naturally extended well beyond the classroom. Before the 1935-36 academic year started, the Air Corps Board had already undertaken 8 projects. By the end of the year, a total of 27 projects had been started, with 12 completed. The board would not reach its full eight-man complement until 1941,

³⁴ Ibid., 28.

³⁵ Ibid., 28–29.

when ACTS closed, freeing instructors for board duty.³⁶ While it is unclear how many Air Corps Board projects Kuter was directly involved in, a significant one was planning for the defense of South America, which will be covered later in this chapter.³⁷ Kuter's airpower education was intense indeed. First and foremost, however, Kuter had to create the school's bombardment textbook. Like the EZAACMO final report, it would gain him recognition well beyond Maxwell Field's fence line.

Professional exposure

Writing the bombardment text through the summer and early fall of 1935 gained Kuter exposure to yet more key individuals in his professional life and significantly shaped his thinking with regard to precision bombardment. Knowing that his bombardment instruction would have to be very good, comforted by the fact that he would not have to teach his first lesson until October, and all too aware that he would need a good text from which to teach, Kuter set out to write the ACTS bombardment textbook.³⁸ Despite being due for a break after his hard-won success as an ACTS student, he took no leave that summer.³⁹ He needed all the time he could get, for not only was he writing a new text, but he was also a flight commander for the 54th Bombardment Squadron, which was collocated with ACTS at Maxwell Field. Kuter was not alone in having his attention divided between teaching and flying squadron responsibilities;

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³⁶ Ibid., 31.

Kuter, "Growth of Air Power," 137.

³⁸ "The Air Corps Tactical School Program of Instruction: Course 1935-1936," 1935, Kuter Collection, Volume 2 Part 1, Page 29, USAF Academy Library Special Collections.

³⁹ Kuter, "Growth of Air Power," 122.

Possum Hansell was recommended for temporary promotion the same time Kuter was. Ironically, though, Hansell the bomber convert was a flight commander for the 87th Pursuit Squadron. For his classes, Kuter would eventually produce a three-hundred page text, while having worked with a "Who's Who" of bombing advocates, such as Kenneth Walker, Great War strategic bombing planner (and president of the Air Transport Association) Edgar Gorrell, and the irascible "Hap" Arnold.

Following graduation, the Kuters moved out of the duplex student quarters and moved into a two-story attached home close to officers' club and pool. 41 Kuter set about revising the bombardment textbook, and in doing so focused on an aspect of bombing that would continue to occupy the minds of military planners and weapons designers for decades to come: bombing accuracy. Precision was the key to making airmen's visions a reality. During Kuter's student year, Major Grandison Gardner (who led the air navigation section and had a "mathematical bent") gave a lecture which energized Kuter's thinking. 42 Gardner focused on bombing probabilities, or the number of bombs that had to be dropped in order to ensure a given percentage likelihood of striking a target. Bombing accuracy varied with the size and shape of the targets, as well as the bomber's probable error: a low, slow-flying bomber, flown by a proficient pilot, dropping

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⁴⁰ Arthur G. Fisher, "Memo to the Adjutant General, Washington, D.C.," October 21, 1935, Kuter Collection, Volume 2, Part 2, Page 30, USAF Academy Library Special Collections. In this memo, Colonel Fisher recommended that Kuter be given a temporary promotion to captain, since there were "no officers of suitable permanent rank locally available."

⁴¹ Kuter, "Growth of Air Power." 122. Those quarters are still in use at Maxwell Air Force Base, although they are now for full colonels, rather than lieutenants.

⁴² Ibid., 122; War Department, *The Adjutant General's Office: Official Army and Air Force Register, January 1, 1934.*, 246. Gardner came by his mathematical focus through natural abilities and intensive education. He was a graduate of the Air Service Communications School (1921), Air Corps Engineering School, Aero Engineering Course (1927), Massachusetts Institute of Technology (M.S., 1928) and the Air Corps Tactical School (1933).

an particular type of bomb, was much more likely to strike a large ground target than a poorly-trained pilot flying at high altitude in a high-speed aircraft trying to drop the same bomb on a small target. Gardner's probability calculations focused on likelihood of hitting targets, but did not fully address the likelihood of destruction: an above-ground tent and a hardened bunker might take up the same geographical space, but the probability of destruction varied dramatically. Gardner's example also did not address various types of combat-induced error: from anti-aircraft artillery, enemy fighters, and maneuvering targets (in the case of naval ships). Bombing inaccuracy due to weather, camouflage, decoys, smoke, inaccurate intelligence and all manner of other real-world factors were likewise left unaddressed. Perhaps the truth, even without combat realities, was already too much to bear.

Given the crude status of bomber aircraft in the mid-1930s, their inadequate aiming systems and the suboptimal bombs in the inventory, even grossly simplified problems proved intractable. Simply increasing bomber fleet size did not yield an acceptable likelihood of a hit, much less destruction. In one example, Kuter looked at the probability of striking an aircraft carrier-sized target with just one bomb. Using current bomb range data, he was astonished at how many bombers would be required to ensure even an 80% likelihood of striking a non-maneuvering, capital ship-sized target: "With no allowance for increases in bombing error due to maneuver by the target, by the ships anti-aircraft artillery or by carrier-based fighters, a full bombardment group would have

⁴³ Kuter, "Growth of Air Power," 122.

to make several sorties to assure a reasonable chance of success."⁴⁴ This was not good news for a young airman tasked with advocating for bombers, to a skeptical audience primarily composed of very senior pursuit and attack pilots, not to mention marine and naval aviators. ⁴⁵ It was even worse news for an Air Corps, starved for interwar funds, which wanted to prove its relevance to modern combat. While there was little prospect of buying enough bombers to achieve airmen's desired effects, increased precision promised to make airmen's visions a reality by making each aircraft all the more effective.

Precision bombing might achieve what mass never could. When Kuter ran his calculations again, but this time using half, then one-quarter the probable error, he got startling results. With significantly improved accuracy, a flight of bombers promised to achieve what a larger group previously never could: a flight could destroy one ship, and a group could attack a whole nine-ship fleet. This accuracy had to come through improvements in both equipment and training. With better technology and experience, airpower promised to achieve decisive effects independent of ground power and threaten navies far out to sea, at an acceptable cost in men and materiel. In all of this, Kuter

⁴⁴ Ibid., 123.

⁴⁵ Aircraft carrier-based Navy and Marine Corps aircraft had a further problem when it came to plans for sinking enemy shipping. Limitations on aircraft carriers' size directly limited the size of aircraft that could operate from them. Smaller size meant a combination of shorter range, limited ammunition and smaller bomb loads than were possible with aircraft operating from fixed land bases, with long, wide runways. Naval forces addressed this problem in two ways. First, they employed torpedoes, which was clearly not an option for attacking land targets. Second, they utilized dive bombing techniques. While aircraft, and hence bomb, size was limited, they could make each bomb run more effective by attacking at a much steeper angle, which enabled greater accuracy. As the Luftwaffe would painfully discover, (1) aircraft designed for dive bombing were easy pickings for defending fighters, and (2) large aircraft designed for flying long distances could not easily be made to also withstand the aerodynamic stresses involved in dive bombing. In other words, naval bombing techniques were of limited value for ground-based airmen who were contemplating striking large, heavily-defended and fortified targets, far away from friendly airfields.

⁴⁶ Kuter, "Growth of Air Power," 123.

focused on the enemy's ability, rather than will, to resist.⁴⁷ While most of his compatriots saw nations as similar to people, and hence that war was a clash of wills, Kuter focused more on national capacity to fight. Others wanted to attack enemies' heads and hearts, but Kuter sought to cut off their hands and feet. He argued that military foes' will to fight might never abate. If they lacked the electricity, oil or manufacturing facilities necessary to prosecute a war of aggression, however, their desire would be rendered irrelevant. Furthermore, he made the case that capacity was at least to some degree measurable. It was difficult, but possible, to measure warmaking capacity. There was no viable metric for measuring national will, and thus no proof that bombing had or could directly impact that will. Attacking capacity had a basis in historical practice and logic: destroying enemy productive capacity, rail lines, storage depots and the like had a long pedigree and destruction through air power was to a degree testable by experimentation. ⁴⁸ Destroying will through bombing had little more basis than faith that it could be done. Of course, First World War army generals' faith in soldiers' élan overcoming enemy machine gun and artillery fire had been found equally as questionable.

Kuter's bombardment text was not written in a vacuum. Rather, much of what he wrote was very much a distillation or continuation of the work of those who had gone before, and/or were on the ACTS faculty as he wrote it. Donald Wilson, who had taught bombardment at Maxwell for three years but left just before Kuter arrived, had been one of the primary drivers for bombing doctrine. Possum Hansell had been a major

⁴⁷ Ibid., 124.

⁴⁸ Ibid.

contributor to the bombardment probabilities Gardner had lectured on. ⁴⁹ Lieutenant Colonels Dargue and George were very involved and supportive. Since there were so relatively few bomber mavens at Maxwell, Kuter took his draft text on tour. He checked out an A-17 attack aircraft and first flew to Hamilton Field, California, where he consulted with his former West Point tactical officer Major George Stratemeyer, former ACTS instructor Captain Kenneth Walker, and Walker's assistant, First Lieutenant Frederick L. Anderson. He then proceeded to March Field (also in California), where his text was reviewed again, before returning to his old stomping grounds at Langley Field, Virginia. There, Major Bob Olds—who by then commanded Second Bombardment Group—reviewed it, too. During his final stop at the Air Corps Engineering Center in Ohio, the test pilots there extolled the virtues of the bombers then in development. They also noted, however, that little progress was being made on bombsights. ⁵⁰ Without improvements in aiming technology, accuracy would only get worse, due to higher bombing speeds and altitudes.

To validate his thinking, Kuter examined bombing effectiveness during the First World War. According to Kuter, "... some original research revealed that our 1st Day Bombardment Group . . . had no evident effect on the outcome of the war and, significantly, that the 1st Day Bombardment Group had no confirmed history of ever destroying any target." Rather than ignoring this inconvenient truth, Kuter made it a key

⁴⁹ Griffith, The Quest: Haywood Hansell and American Strategic Bombing in World War II, 35.

⁵⁰ Kuter, "Growth of Air Power," 125–126; John F. Curry, "Air Tactical School Orders," May 31, 1935, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL. Kuter obviously wasted little time in writing this document, since the orders for his visit to the west coast were cut before he formally graduated from ACTS.

⁵¹ Kuter, "Growth of Air Power," 124.

element of his argument; strategic bombing was ineffective during the Great War because the wrong targets had been chosen, low-quality aircraft had been employed, and the crews were sent into battle poorly trained. These factors could be overcome through better intelligence, aircraft technology and aircrew training.

Dargue, through his encouragement and connections, gave Kuter's research an even wider audience. When Kuter's lecture on the 1st Day Bombardment Group was complete, Dargue sent a copy to Edgar Gorrell, who as a colonel during the Great War had authored a strategic air campaign plan termed the "202 Squadron Program," which General Pershing had approved but was never implemented. Gorrell, who was then the Air Transport Association of America (ATA) president, was impressed with the accuracy of Kuter's account, as well as the way in which Kuter used the plan's failure to argue for greater, not less, investment in strategic bombing capabilities. Gorrell sent copies of the lecture to every senior officer (other than Pershing) who had worked on the 202 Squadron plan. Each recipient endorsed Kuter's account, and Gorrell subsequently invited Kuter to Chicago, where they discussed the text face-to-face, in even greater detail.⁵²

Kuter's research was ultimately delivered to his students as a lecture, titled, "American Air Power: School Theories vs. World War Facts," which he first gave in May 1936, toward the end of his first year of instruction. He dramatically concluded the lecture with:

The 1st Day Bombardment Group was misnamed. It was \underline{a} group, it was the <u>first</u> group, and it was a <u>day</u>—time group, but without the bombsights or means of accurate bombing, it was never a <u>bombardment</u> group . . .

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⁵² Ibid., 130.

Had this 1st-Day-Group actually been a Bombardment Group, that vital rail line would have been cut long before St. Mihiel. Since Germany surrendered when the 1st Army A.E.F. approached within heavy artillery range of this rail line which fed and supplied her 43 divisions, had this 1st Day Group been a Bombardment Group, would there have been a St. Mihiel and a Meuse-Argonne Offensive? . . . The school theory on the employment of air forces would not be the wild scheme of the air zealot, but the Doctrine of National Defense – the doctrine advanced by eighteen years' study, planning and improvement. ⁵³

Kuter, although far from faultless in his thinking regarding bombardment, showed a remarkable degree of ingenuity, energy and confidence in researching, writing, vetting and presenting this lecture. This lecture is perhaps how George C. Marshall first learned of Larry Kuter, for Gorrell and Marshall were longtime friends. ⁵⁴ Gorrell actually suggested Kuter go visit the then-colonel, but the young lieutenant failed to seize the opportunity (much to his later dismay). Instead, it would be years before Kuter came to know great soldier and statesman.

Kuter's research did put him in contact with another powerful mentor, Brigadier General Henry H. "Hap" Arnold. When Kuter mentioned his concerns over the Air Corps' apparent disinterest in bombsights and ballistics to Lieutenant Colonel Dargue, he got yet another travel opportunity. Dargue sent Kuter to see Arnold. It was a dramatic introduction to a man with whom Kuter would become intimately familiar in future years. The lieutenant had barely gotten past the purpose of his visit when the general picked up the phone and got the Army's ordnance chief, Colonel Charles M. "Bull" Wesson, on the phone. Kuter later recalled that the conversation went something along the lines of: "Bull, I've got a young lieutenant here who says that your department spends all kinds of

⁵³ Laurence S. Kuter, "American Air Power: School Theories vs. World War Facts," May 1936, Microfilm reel 4497, Frames 1283-1319, Air Force Historical Research Agency, Maxwell AFB, AL.

⁵⁴ Kuter, "Along with Larry," 142.

⁵⁵ Kuter, "Growth of Air Power," 127.

effort on the interior ballistics that should get shells near targets, but gives no attention on the exterior ballistics needed to put bombs on their targets and has never produced and acceptable bomb-sight . . . Allright, I'll send him up."56

Kuter dreaded the pending meeting with the colonel. Wesson, whose appearance fit his nickname, put the anxious Kuter at ease when he visited. The ordnance officer, who would later wear two stars, was all too familiar with Arnold's methods, and did not intend to shoot the lieutenant messenger. More importantly, Wesson revealed that the Army was more interested in bombing accuracy than Kuter expected: they were working on a design that promised to make bomber advocates' wishes come true. Errors might be reduced to twenty five percent—perhaps just ten percent—of what was then achievable. New ballistics tables, based on this greater accuracy, were soon to be produced—but they would be released to only a select few individuals.⁵⁷ Kuter, believing that great accuracy was both achievable and coming soon to the Air Corps inventory, would teach bombardment with confidence, even as he continually sought bombing scores from flying units to see if progress was being made.

The knock-on effect for Kuter was that he became a de facto mobilization planner. Bombing probability data allowed him to calculate how many bombers and bombs were required to destroy a given target. If key targets for a given enemy could be identified and numbered, then it was (presumably) possible to estimate the number of bombs and bombers required to defeat that enemy. Once bomber requirements were known, then rest of the requirements to build and sustain that force could be determined.

⁵⁶ Ibid.

⁵⁷ Ibid.

Mid-1930s bombing accuracy made those numbers impossibly large, but every quantifiable improvement in accuracy made strategic bombardment advocates' wishes more attainable. An intense focus on precision bombing—doctrinally at ACTS and programmatically at the higher Air Corps headquarters levels—could be justified by the massive possible savings in men and materiel if and when war came.

By the end of his first year as an instructor, Kuter had challenged multiple constituencies, even as he earned the admiration of many senior airmen. He threatened the conservative, ground-centric Army by asserting that aircraft—by virtue of precision bombardment—might yield decisive battlefield effects in ways they never previously could. Building enough inaccurate legacy bombers to yield adequate probabilities of success was a lost cause, but an adequate quantity of modern, precise bombers might be achievable. By using ship-sized targets, Kuter also attacked naval prerogatives, by seeking to show how land-based airpower might destroy warships at sea. The notion of using bombers to supplant ground and naval forces was not particularly new; Air Service bombers had sunk the battleship *Ostfriesland* in 1921, while Kuter was still in high school, and Billy Mitchell had been court martialed for his inflammatory pro-airpower rhetoric while Kuter was a cadet. What was dangerous was the fact that he was teaching his ideas at the Air Corps Tactical School, when such thinking was directly contrary to Army doctrine.

Subsequent years

Later years would bring Kuter into contact with many other future airpower luminaries, as his ACTS portfolio continued to grow. During his first year, he was one of five staunch bomber advocates on faculty: Lieutenants Hansell and Kuter, Captain Webster, and Lieutenant Colonels George and Dargue (who taught little and mostly stayed above the fray).⁵⁸ In summer 1936 Kuter's responsibilities grew, as he was given the formal title of bombardment section chief for that academic year. Possum Hansell, at least notionally, served under him as a bombardment instructor, but his duties were split between the Air Force and Bombardment sections. Kuter got the Bombardment section chief job in 1936, even though Webster and two other bomber advocates—Donald Wilson, Roland Birnn, who both joined the faculty that year—outranked him. ⁵⁹ Wilson backfilled for Hal George (who had moved up to General Headquarters Air Force staff) as head of the Air Tactics and Strategy department, Birnn—who had just graduated CGSS alongside Wilson—moved into the Staff Duties section, and Webster (somewhat inexplicably) remained just an instructor in the Air Force section. 60 Kuter was the only lieutenant ever to serve as an ACTS section chief.⁶¹

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⁵⁸ Finney, *History of the Air Corps Tactical School*, 1920-1940, 105–106.

⁵⁹ Ibid., 107–108.

⁶⁰ Roland Birnn had not only participated in both the sinking of the *Ostfriesland*, but—perhaps more shockingly to modern sensibilities—a simulated gas attack on New York City.

⁶¹ Finney, *History of the Air Corps Tactical School, 1920-1940*, 104–109. In fairness, the faculty was only formally broken down into sections from 1934 to 1939. Had ACTS been organized by sections and divisions in the preceding and succeeding years, other lieutenants—Clayton Bissell, Warren R. Carter, Kenneth Walker, for instance—might also have held the title. It is nonetheless significant that Kuter held such a responsible position when higher-ranking officers could have been chosen instead of him.

Meanwhile, the faculty's fighter pilot positions were fully manned. Four more fighter pilots—Frederick von H. Kimble, James E. Parker, Ralph Stearley and Hoyt Vandenberg—joined the faculty in 1936, even as both Claire Chennault and Gordon Saville remained at Maxwell. While Kuter was the only full-time Bombardment section instructor, the Attack, Observation and Pursuit sections all had two instructors each. Fighter advocates would complain vociferously (and not altogether baselessly) about the Air Corps' de-emphasis of fighters, but the ACTS faculty makeup gave scant evidence of his complaint. If the bomber pilots overpowered their fighter pilot colleagues, they could have done so only through effective argumentation. The fighter pilots outnumbered them, and even included a future Air Force Chief of Staff (Hoyt Vandenberg).

The 1937 to 1938 academic year was something of a watershed year for both Kuter and ACTS. Muir "Santy" Fairchild, a staunch bomber advocate who, like Kuter, had a reputation as an intellectual, joined the faculty after having spent three straight years as a student. 63 Kuter's former Kelly Field instructor Ralph Snavely, who after graduation from ACTS had spent a year at CGSS, further increased bomber pilots' numbers. 64 Snavely took over the bombardment section, so the lower-ranking Kuter reverted to being a bombardment instructor. While this might have been a demotion in responsibility, it meant bomber advocates had finally assembled something of a dream team. Dargue was in his fourth year as assistant commandant, Donald Wilson headed the air tactics and strategy department (he was in his ninth straight year in PME schools—as

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⁶⁴ Ibid 443

⁶² Ibid., 107–108.

⁶³ Ancell and Miller, The Biographical Dictionary of World War II Generals and Flag Officers, 389.

a student or instructor—with most of those years spent on ACTS faculty), Fairchild headed the Air Force Section, Snavely headed Bombardment, Birnn led the Staff Duties section and Kuter and Hansell—both highly-intelligent and articulate—were in their third year as ACTS instructors in the Bombardment and Air Force sections, respectively. Robert Webster left for CGSS in 1937, and both Hal George and Ken Walker were long gone to other assignments, but strategic bombardment advocates reached a critical mass that year. Still, though, their dominance was more intellectual than numerical; the air tactics department—which took up most of the school's syllabus—still had two fighter pilots each in the Attack, Observation and Pursuit sections, while Frederick Kimble headed the Combat Orders section.

The bomber dream team did not stay intact for long. Hansell and Dargue left in 1938. Dargue took command of the 19th Composite Wing in the Panama Canal Zone, while the Hansells headed to Fort Leavenworth for CGSS.⁶⁷ While the Kuters were happy for the Hansells, they were disappointed Larry did not get to go, too. He had been applying to attend CGSS since 1935.⁶⁸ While it is difficult to know why Hansell went to CGSS ahead of Kuter, it might have been due to the fact that Hansell had been stationed at Maxwell Field for seven straight years.⁶⁹ Possum needed to move on more than Kuter. The Kuters' disappointment only grew when they learned Larry was not on the 1939 school list, either. Given Kuter's substantial success up to that point, CGSS should

⁶⁵ Finney, *History of the Air Corps Tactical School, 1920-1940*, 108–109.

⁶⁶ Ibid., 107–108.

⁶⁷ Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 380, 399. ⁶⁸ "Memo to the Adjutant General," September 18, 1935, Kuter Collection, Volume 2, Part 2, Page 30,

USAF Academy Library Special Collections.

⁶⁹ U.S. Air Force, "Major General Haywood S. Hansell, Jr."

at Maxwell to provide continuity during a period of significant upheaval. ACTS (and Kuter in particular) had enjoyed four years of consistent, steady leadership under Dargue as assistant commandant, but that was about to change.

Personnel turmoil at ACTS from 1938 onward started with the school's senior leadership team. The commandant position changed hands three times that academic year—from Brigadier General Pratt to Colonel Albert Sneed (a temporary fill for just two months), to Colonel "Miff" Harmon (who held the position for four months), to Colonel Walter Weaver. This in turn impacted the assistant commandant position, as it went from Lieutenant Colonel Dargue, to Colonel Harmon, to Lieutenant Colonel Wilson (while Harmon served as acting commandant), then back to Harmon (once Weaver had moved in). The personnel churn was not limited to just senior leadership. The school lost two instructors who (in addition to Dargue) had been at the school for four years (Richard Creed and Lotha Smith), and another two with three years' instructor experience (Earl DeFord and Lawrence Glasgow and Hansell). ⁷⁰ Hoyt Vandenberg also left in 1938, but he had only been at the school two years and not made a very great impression as an instructor. The Meanwhile, all four pilots who joined the faculty in 1938—Earl W. Barnes, Frederick M. Hopkins Earle E. "Pat" Partridge and Leo Walton (all of them future generals)—were fighter pilots.⁷² The other two instructors who joined ACTS departments

⁷⁰ Finney, *History of the Air Corps Tactical School*, 1920-1940, 109–110.

⁷¹ Meilinger, *Hoyt S. Vandenberg, the Life of a General*, 19. According to Meilinger, Vandenberg's "two years at Maxwell proved remarkably unremarkable."

Finney, History of the Air Corps Tactical School, 1920-1940, 109–110; War Department, The Adjutant General's Office: Official Army and Air Force Register, January 1, 1934.

that year were neither Army aviators nor graduates of the school.⁷³ Kuter provided much-needed continuity and expert bomber instruction during this turbulent time.

Student Continuity

Kuter's ACTS student classes were remarkably consistent in their makeup. The 1936 entering class included two future four-stars, Pat Partridge and Frank F. Everest, along with four other future three-stars, and again, all those future three-and four-stars were fighter pilots. As before, this class had few junior officers, with only nine first lieutenants on the roster, out of fifty-eight total airmen. All but one of them were older than Kuter, but for the first time he taught a West Point classmate, fighter pilot First Lieutenant (later Brigadier General) George McCoy, Jr. Half of the students were still majors and above, including three lieutenant colonels. ⁷⁴ In 1937, future four-stars Orval Cook, Otto P. "Opie" Weyland and Thomas D. "T.D." White entered as students, along with a multitude of lesser future generals. Again, all three were fighter pilots, and lieutenants were a minority of the roster. ⁷⁵ The class roster for the 1938-39 academic year included just three lieutenants, even though class size had grown to 76. Two of the three lieutenants were older than Kuter, and all three were fighter pilots who had graduated flying training a year ahead of him. This class included the second and last of the West

⁷³ Finney, *History of the Air Corps Tactical School*, 1920-1940, 109–110.

⁷⁴ Ibid., 127–128; *Official Army Register, January 1, 1938.* The future three star generals in the 1936-37 class included Earl W. Barnes, Robert W. Harper, David M. Schlatter and Joseph Smith. Although it is unknown how Kuter's interactions with Smith went at ACTS, they would have a significant run-in many years later.

⁷⁵ Finney, History of the Air Corps Tactical School, 1920-1940, 128–129; Official Army Register, January 1, 1938.

Point '27 graduates Kuter taught at ACTS, coastal artilleryman (and future Air Force major general) Captain Matthew Deichelmann. Only one future Air Force four-star general graduated from ACTS in 1939, however: fighter pilot Captain Charles P. "Pre" Cabell. There were no other future three-stars in that class. Even in his fourth and final year as an ACTS instructor, Larry Kuter was at best teaching his peers, who were almost invariably fighter pilots who were ill-disposed to accept his message about the importance, and indeed supremacy, of bombers.

Air Corps fighter pilots were not the only ones who were less than eager to embrace Kuter's instruction. Even though he had grown in rank (he pinned on captain on 14 June 1937) and experience as an instructor, he had to teach far more-senior non-airmen, as well. The 1938-39 class, for instance, included sixteen officers from branches and services other than the Air Corps, no fewer than six of whom were future generals. The officers from other branches and services would most significantly threaten Kuter's position at the school.

An April Fool's Joke Gone Awry

April Fool's Day 1938 was an important day in Air Corps Tactical School history, and Larry Kuter in particular. He was directly, if not intentionally, responsible for

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⁷⁶ Finney, *History of the Air Corps Tactical School, 1920-1940*, 130–132; *Official Army Register, January 1, 1939* (Washington, D.C.: Government Printing Office, 1939); U.S. Air Force, "Major General Matthew K. Deichelmann."

⁷⁷ Finney, *History of the Air Corps Tactical School*, 1920-1940, 130–132; War Department, *The Adjutant General's Office: Official Army and Air Force Register*, *January 1*, 1934., 100.

⁷⁸ Finney, *History of the Air Corps Tactical School, 1920-1940*, 130–132; Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 6, 174, 176, 256.

garnering a great deal of attention for the school. By then, Kuter was perhaps a little too comfortable. He was in his third year of teaching bombardment, had been relieved of some responsibility since Ralph Snavely had taken over the bombardment section, and he had a number of allies on the faculty when it came to bombardment advocacy. As a captain, he also at least had a somewhat higher stature among his faculty peers and students. He was perhaps a little too confident, however, and all too willing to employ his sharply-honed wit. On 1 April 1938, Kuter was scheduled to teach a lesson on the history of the Navy. ⁷⁹ In his lecture, he put forth a scenario wherein an aerial armada of bombers destroyed a naval fleet as it was coming out of harbor, in a manner not all that dissimilar to what the Japanese would do to the American fleet at Pearl Harbor. The scenario was quite contrived; as Kuter recalled some years later, "It was a shooting ducks in a barrel proposition, and we sunk all battleships and carriers and everything else."80 Worse still, the lecture was a little too funny. As Hansell would recall in Kuter's obituary many years later, "The Lecture was salted and spiced with humor, but taken quite literally it could be construed as a contention that the Navy was now superfluous and lacked the wit to know it."81 Lieutenant Commander Miles Browning, the brilliant but temperamental navy officer on ACTS faculty at the time, took offense at the suggestion and promptly reported the young captain's heresy to senior naval officers. It was not unusual for officers from other branches and services to report on ACTS instruction, but this time a firestorm ensued. As Kuter later recalled:

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⁷⁹ Ethel Kuter, "Ethel Kuter 1938 Diary," 1938, 1 April, Kuter Collection, USAF Academy Library Special Collections; Haywood S. Hansell, "General Laurence S. Kuter, 1905-1979," *Aerospace Historian*, June 1980.

⁸⁰ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 518.

⁸¹ Hansell, "General Laurence S. Kuter, 1905-1979," 92.

Miles Browning was a very ambitious young sailor, and, being out of the mainstream, I think Miles felt that he just had to make some waves. He would report everything upward that had any trace of reflection or failure to applaud his service. The infantry did that; we all knew they did. It was no secret, no particular surprise, that my 'bombs can sink battleships lecture' went straight up, word for word, and I suspect he had it copied many times to go to everybody who could read.⁸²

The issue, especially for Army and Navy bureaucratic infighters, was that Kuter's instruction reopened an issue between the two services that had (theoretically) been "completely and absolutely settled" more than seven years before. In January 1931, Army Chief of Staff Douglas MacArthur and Chief of Naval Operations Admiral William V. Pratt thought they had solved a major bone of contention between the two services through the unimaginatively named MacArthur-Pratt Agreement. In the agreement, naval air forces would be ship-based and army air forces would be land-based. In the service chief's minds, this meant that the Army aircraft's sole role with regard to seapower would be carrying out defensive missions, both at home and in overseas territories.⁸³ Long-range bombers, capable of carrying large (and theoretically accurate) payloads, upset this paradigm: they could be a first line of defense against foreign navies. A later modification of the McArthur-Pratt Agreement tried to solve the dilemma that long-range aircraft posed by restricting the Army's responsibility and authority to one hundred nautical miles out to sea. In short, the Army and Navy were responding to aircraft technological advancements in remarkably conservative ways. Land-based aircraft could operate far out to sea and ship-based aircraft could fly ever-further inland, but the

⁸² Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 521.

⁸³ Wesley Frank Craven and James Lea Cate, eds., *The Army Air Forces in World War II, Volume One: Plans and Early Operations, January 1939 to August 1942* (Chicago: University of Chicago Press, 1948), 62.

services agreed upon an arbitrary, two-dimensional geographic limit and treated it as sacrosanct.

Kuter's scenario, even if it was theoretical, taught in the context of academic freedom and meant as an April Fool's joke, represented an attack on interservice agreements. In short order, Browning's report reached the Chief of Naval Operations, who contacted the Secretary of the Navy, who in turn called the Secretary of the Army, demanding that whoever had taught the lesson be disciplined. Inquiries rolled bureaucratically downhill to Brigadier General Henry C. "Conger" Pratt, who had been ACTS commandant for less than a year. Pratt refused to say who had given the lecture and demanded that he be the one to discipline his subordinates. 84 On 7 April, less than a week after the lecture had been given (word had traveled fast, up and down the military chain of command), General Pratt publicly reprimanded Kuter before the entire student body. 85 When Kuter returned to his office, he found it full of students, who were full of indignation at the punishment meted out to the young captain. One of his students, Captain T.D. "Tommy" White, who would be the Air Force's fourth chief of staff two decades later, left his calling card in the middle of Kuter's desk. White had inked-in a black border around its edges, and it read, "This is a black day for the Air Corps." Little did they know, however, that brighter skies were ahead.

The scolding was barely over before Kuter was tasked to participate in a board that was tasked to examine the viability of the Boeing XB-15, a massive four-engine

⁸⁴ Hansell, "General Laurence S. Kuter, 1905-1979," 92.

⁸⁵ Kuter, "Ethel Kuter 1938 Diary," 7 April.

⁸⁶ Kuter, "Growth of Air Power," 131.

bomber. Kuter served as the Air Corps Technical School representative for the board General Arnold chaired. It was a critical point in Air Corps history, since not only was the B-15 threatened, but Congress and the Army were threatening to cancel the B-17 program in its tracks, as well. Keeping the XB-15 in the inventory was critical—even though it was too flawed a design to be made into an operational bomber—because it served as a testbed for developing the very long-range bomber airmen needed to fulfill the promises of strategic bombardment. The Boeing XB-15 had a range of over 5,000 miles and had a maximum gross weight (at 70,000 pounds) nearly double that of its cousin, the Boeing XB-17.87 The XB-17 was critical, because it could be used as an operational bomber. The B-17 "Flying Fortress" would be one of the most iconic strategic bomber of the war.

The board (in a manner not unlike other groups Kuter often found himself a part of) went well beyond its initial charter. Not only did Kuter and the others convincingly argue to keep the B-15 as an experimental aircraft, but furthermore made a strong case for producing more B-17s as well. Although the B-24 would be produced in greater numbers, the B-17 would be the workhorse of America's bomber fleet, with B-17 variants remaining in the Air Force inventory well past the end of the Second World War. Technologies developed in the B-15 project would contribute directly to development of not only the B-17, but the B-29 (which was used with devastating effect in the Pacific to include dropping the two atomic bombs on Japan), as well as commercial aircraft, like

⁸⁷ Bowers, *Boeing Aircraft Since 1916*, 228–230.

the Boeing Model 314 Clipper amphibian airliner. ⁸⁸ Much as with the YB-9 years before, military aircraft developments contributed to commercially successful aircraft designs, which in turn helped enable the development of later military designs. Canceling The XB-15 and XB-17 programs at that time would have had a negative, cascading effect on later aircraft development and production.

Not long after the Navy lecture debacle, the ACTS faculty learned that Brigadier General Leslie McNair and Colonel Edmund L. "Fritz" Gruber, both field artillerymen, would lead an inspection team (devoid of Air Corps officers) whose purpose was to investigate allegations that airpower zealots at Maxwell were campaigning for a separate Air Force. After some discussion, the ACTS instructors concluded that they would not hide nor dilute what they were teaching, but present their work as clearly and compellingly as they possibly could. Kuter had his hands full, for he had to compress each of his one-hour lessons into five-to ten-minute short courses and there were many bomber lessons to revise. McNair and Gruber sat through a weeklong crash course, then spent several hours discussing their conclusions amongst themselves. They then met with Lieutenant Colonel Dargue, as the rest of the faculty anxiously awaited their verdict. When Kuter and the rest of the faculty were invited into Dargue's office, McNair first of all stated the obvious. The ACTS curriculum's scope went well beyond the other army branches' schools, and much of it went beyond what was being taught at CGSS and even the Army and Navy War Colleges. McNair regretted that there was no National War College, where notions of strategic airpower might better be discussed. McNair's words

⁸⁸ G.E. Brower, "Memo: Air Corps Technical Sub-Committee on Procurement of B-15 (B-20) Airplanes," April 14, 1938, Kuter Collection, Volume 2, Part 2, Page 5, USAF Academy Library Special Collections.

were more important for what they did not say. While he did not overtly approve of the ACTS coursework and methods, he did not disapprove of them, either. Dargue and company took this as an official sanction of the school's curriculum. 89 More importantly, McNair's visit illustrated that, were it not for ACTS, strategic bombing concepts would have had little place in either service's professional military schools.

What started very poorly for Kuter ended well for him. While Pratt had publicly displayed his displeasure, the efficiency report for the period covering the Navy incident belied his disapproval. Pratt concurred when Dargue rated Kuter "superior" in all but two categories: "cooperation" and "judgment and common sense." The next report, which Colonel "Miff" Harmon wrote, was even more laudatory than Dargue's. Harmon rated Kuter "superior" in all ten possible categories, and in the narrative section he wrote, "For his age and grade he is considered the best instructor I have ever known. He works thoroughly and conscientiously, and exceedingly well without close supervision or the need for supplementary instructions. An exceptional officer who should be given a rating of 'superior plus.""91 [emphasis added] Harmon further recommended Kuter for command of a bombardment group. 92 Kuter was elated; years later, he would remember that "Jesus couldn't have had a better" report. 93 Kuter, unwittingly, had helped the school gain legitimacy through the investigation that his lecture initiated. Colonel Harmon's high appraisal, however, was not due to Kuter's work in defending the ACTS curriculum, but rather his work on Air Corps mobilization plans.

Kuter, "Growth of Air Power," 134–135."Laurence S. Kuter Official Military Personnel File," n.d.

⁹¹ Ibid.

⁹³ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 518.

Ordered to Washington

On November 14, 1938, President Roosevelt issued some startling instructions to his civilian and military leaders. In his view, airplanes—not ground forces—would most influence Hitler's actions; Hap Arnold dubbed it the "Magna Carta of the Air Force." 94 While it is difficult to know how the president came to this insight, his intuition proved prescient. According to economic historian Adam Tooze, Hitler ordered Operation Barbarossa, the invasion of the Soviet Union, because of British and American airpower: "The conquest of the oilfields of the Caucasus, 2,000 kilometers deep in the Soviet Union, was not treated as the awesome military-industrial undertaking that it was. It was inserted as a precondition into another gargantuan industrial plan designed to allow the Luftwaffe to fight an air war, not against the Soviet Union, but against the looming air fleet of Britain and the United States."95 [emphasis added] Not even Arnold would have believed at the time that just the potential of American airpower mobilization had pushed Hitler into making one of the greatest (if not the greatest) strategic blunders of the war by attacking the Soviet Union. What he did know, however, was that the president might include his airpower mobilization proposal in his State of the Union speech—to be given in less than two months—and he lacked the staff to build an effective plan.

Arnold quickly collected planners for the task ahead: Lieutenant Colonels Spaatz, Joseph T. McNarney and Ira C. Eaker were acquired locally; Major Fairchild was tasked to come from Maxwell Field, and Captain Kuter was diverted from a cross-country flight.

⁹⁴ Futrell, *Ideas, Concepts, Doctrine*. 91.

⁹⁵ Tooze, The Wages of Destruction. 452.

He had decided to combine some cross-country training with the 1938 Army-Navy game (Army won 14-7). It had been a wonderful time, since "rich and generous friends from Binghamton, New York [the Sweets, no doubt] reserved a suite in the Waldorf and provided dinners at elegant restaurants and night clubs . . . They paid those bills." ⁹⁶ Kuter was just getting ready to depart for home on Monday, 28 November, when he got a telegram. He was to fly to Bolling Field, report to the basement of the Munitions Building, and plan to remain for a few days. 97 It would not be the last time he got a rude surprise before or after a flight. It was his emphasis on the use of airpower to defend against naval attack that precipitated the tasking: "At the Air Corps Tactical School I had devised an operational procedure to employ B-17's as a reconnaissance force to locate hostile aircraft carriers at sea when they were far enough off shore to permit an alert B-17 striking force to attack them before they could launch their aircraft. My task was to apply that operational plan to protect likely Nazi-Fascist objectives in South and Central America as well as protect our own eastern shore. This produced a requirement for an enormous increase in military aircraft."98 The plan he helped build provided the basis for the "5,500 plane program"—3,251 new airplanes, organized into 24 groups, to bring the total Air Corps strength to 5,500—that Congress approved in 1939.⁹⁹

A few months later, on 4 June 1939, Kuter returned from a liaison visit with West Coast bombardment units. It had been a long day already, fighting through poor weather

⁹⁶ Kuter, "Growth of Air Power," 136.

⁹⁷ Ibid. 136.

⁹⁸ Ibid., 137

⁹⁹ Futrell, *Ideas*, *Concepts*, *Doctrine*. 92.

with his eyes glued to the instrument panel of his open-cockpit airplane. 100 It became longer when Ethel greeted him with worrying news: He had been directed to report to the Army Chief of Staff for duty in the War Department, with a report date no later than 1 July 1939. 101 He had hoped to spend an academically challenging and career-enhancing year at CGSS, or failing that, to finally get an operational command—of a bomb squadron or even a group, as Harmon advocated. Given the pending increase in student throughput at ACTS, and Colonel Harmon's strong desire to keep him on faculty, Kuter was more realistically anticipating a sixth straight year at Maxwell Field. In fact, his trip to the West Coast had been initiated, in part, to somehow technically establish a change of station to a base in California, so that in actuality he could remain on the ACTS faculty. 102 Instead, he was to be thrust again into a major position despite his relative youth and inexperience. His soon-to-be staff peers would be consistently older than he, have CGSS diplomas, and were mostly unreceptive to innovative ideas. In Kuter's mind, "The General Staff was that remote faceless group of senior officers who had from the beginning rejected all recommendations and prohibited progress by the Army Air Corps." ¹⁰³ Ethel and Roxanne were none too pleased to leave the close-knit military community and house in Alabama for apartment "life as a civilian in a large, strange, protocol minded and politically ambitious city." Nonetheless, given the Army's traditionally rigorous application of the Peter Principle, Kuter's relative underqualification for his duties was not necessarily unusual. The Army had never issued him a

Kuter, "Along with Larry," 161.Kuter, "Growth of Air Power." 138.

¹⁰² Kuter, "Along with Larry," 160.

¹⁰³ Kuter, "Growth of Air Power." 139.

¹⁰⁴ Ibid. 139.

wife or daughter, so his family's opinions were not considered. The Kuters prepared for service in Washington. What is interesting is that General Marshall's requirements were so specific that apparently only Kuter met them.

Marshall, then the U.S. Army Deputy Chief of Staff and soon to become the full-time chief, demanded that *young aviators* who had *not* attended army schools be assigned to War Department duty. Of the ACTS instructors, Kuter was the only one that met all three criteria. The other captains (no lieutenants had joined the faculty since Kuter and Hansell in 1935) on ACTS faculty at the time—Ralph Snavely, Earle E. "Pat" Partridge and Earl Barnes—were at least two years senior (in both age and rank) to Kuter and each had already graduated from CGSS. It is plausible (indeed, given Marshall's reputation as a cultivator of talent, likely) to think that Marshall specifically wanted Kuter, given the task ahead of them and young captain's work the previous November. It is also possible that Kuter's assignment to Washington was due to Hap Arnold's influence, given the way Kuter had impressed him earlier. Regardless, it appears this was either a way to get Kuter on the staff without naming him specifically, or the Air Corps was so desperately short of men who met the Marshall's requirements that Kuter was one of the few that fit the job description. Considering subsequent evidence, the former seems more likely. Marshall

¹⁰⁵ Finney, *History of the Air Corps Tactical School, 1920-1940*; U.S. Air Force, "Brigadier General Ralph Adel Snavely"; U.S. Air Force, "General Earle E. Partridge," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106052/general-earle-e-partridge.aspx; U.S. Air Force, "Lieutenant General Earl W. Barnes," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107770/lieutenant-general-earl-w-barnes.aspx. http://www.af.mil/AboutUs/Biographies.aspx. Snavely was seven years older and commissioned four years before Kuter. Partridge was five years older and three years senior. Barnes was three years older and two years senior.

clearly came to favor Kuter, if he was not favorably disposed toward him before he arrived. ¹⁰⁶ Unfortunately, ACTS needed Kuter, too.

ACTS leaders did not let Kuter go without a fight. Every experienced instructor was vitally needed, and Kuter was one of the very few remaining "bomber mafiosos" left. Colonel Harmon went to Washington and directly protested the assignment, but his arguments fell on deaf ears. 107 Arnold fully supported Marshall's demand. The only members of the "bomber Mafia" left on ACTS staff for the 1939-40 academic year—on the eve of war, as production was ramping up and every experienced instructor was sorely needed—were Lieutenant Colonel Donald Wilson and Major Muir "Santy" Fairchild. Wilson only remained on staff for the first half of the academic year, handing over the Department of Air Tactics and Strategy to Fairchild on January 8, 1940, leaving him the sole remaining member of that core group. 108 The transition at ACTS from intellectual ferment to mass production is perhaps the reason why First Lieutenant Curtis LeMay (a graduate of the first of four ACTS classes in the '39-'40 academic year) was unimpressed by the instruction he received at Maxwell. Even though LeMay came to be

¹⁰⁶ In January 1941, Marshall wrote Kuter onto the brigadier general promotion list, over Arnold's objections, to make Kuter the youngest general officer in U.S. Army history since William T. Sherman of Civil War fame. Marshall's respect for Kuter certainly helped Arnold's decision to have Kuter stand in for the AAF Chief at the Malta and Yalta Conferences in 1945. As secretary of state, George C. Marshall made Kuter the U.S.A.'s first representative on the Council of the International Civil Aviation Organization.
¹⁰⁷ Millard F. Harmon, "Letter from Colonel Harmon to Brigadier General Yount," May 26, 1939, Kuter Collection, Volume 2, Part 2, Page 54, USAF Academy Library Special Collections. Kuter's assignment to Washington was no surprise to Colonel Harmon. Harmon had written to Brigadier General Yount on 26 May, that "Unofficial reports indicate the possible detail of Captain Laurence S. Kuter to the War Department General Staff . . . As you know Colonel Wilson . . . depends to a very considerable extent upon Captain Kuter to properly present a very important part of the courses under his jurisdiction, as well as to make great use of his originality in developing new ideas and working up new angles of approach to our tactical and strategical problems."

¹⁰⁸ Finney, *History of the Air Corps Tactical School, 1920-1940*. Clearly defining a group as amorphous as the "Bomber Mafia" is impossible, but clearly the "leading lights" of bomber theory were gone from the scene. Hal George, "Possum" Hansell, Bob Olds, Ken Walker, Herbert Dargue and Kuter were all gone by the end of the '38 academic year, if not sooner.

synonymous with strategic bombing, ACTS is never even mentioned in his autobiography, *Mission with LeMay*. ¹⁰⁹

Ethel's influence

Ethel Kuter played a major role in enabling her husband's success at Maxwell Field, even as she raised their daughter Roxanne and pursued some of her own interests. As with most officers' wives, and certainly the wives of the more professionally successful of that generation, she was heavily involved in all manner of social activities on post. The Kuter's scrapbooks and Ethel's diaries (calendars) from their time at Maxwell Field are filled with drinks and/or dinners at the Kuters' and various other officers' homes, tennis, horse shows, flower shows, parties, dances and dinners. While her on-post social engagements did not make her substantially different from other wives, other entries in her diaries mark her as unique.

Ethel played a key part in her husband's career by helping him prepare for his lectures. Since Larry Kuter entered a lion's den every time he stepped into the classroom, especially early in his time as an instructor, he needed every bit of stage presence he could muster when he taught. Ethel, the speech and drama expert, was custom-tailored to the job of helping her husband project himself as clearly and confidently as possible. In her diary, she noted not only when her husband taught, but

¹⁰⁹ LeMay and Kantor, Mission with LeMay.

¹¹⁰ Kuter, "Along with Larry," 146. In her memoir, Ethel says their "attention was always with Larry's lectures."

often the particular name of the lecture; she knew and tracked those lectures, because she was helping her husband write them and perfect their delivery. Ethel also made it a point to read books and articles relevant to Larry's work, to include *Mein Kampf*, and clipped articles of interest from the *New York Times* for her husband to read. Larry was not the only one who recognized Ethel's talents, not only as an actress, but a coach. In 1935, she started taking courses at Huntingdon College in Montgomery, but in short order was offered a teaching position there. This caused some consternation, because officers' wives were not supposed to work outside of the home at the time. Ethel, with her husband's blessing, went to Colonel Fisher to get his permission. For those taken aback by Ethel working outside of the home, the Kuters learned to respond that she was not working, but rather "just teaching." At one point, she even worked as something of a speech therapist, as she helped a young man overcome his stutter.

Other women in Larry Kuter's life provide even greater insight into the Kuters' family dynamics and the society within which they operated. Their daughter Roxanne attended the Margaret Booth School in Montgomery—a school which was unique for the time, in that Booth's intention was to found "an institution which shall accomplish for young women in Alabama what our college preparatory schools are accomplishing for boys." While Roxanne's experience at the school did not go beyond the primary grades, her attendance further indicates how the Kuters tended to be quite progressive for

¹¹¹ Ibid., 147–148.

¹¹² Ibid., 157–158.

¹¹³ Ibid., 138, 141.

[&]quot;Margaret Booth School Report Cards for Roxanne Kuter," February 2, 1936, Kuter Collection, Volume 2, Part 2, Page 36, USAF Academy Library Special Collections; "Margaret Booth (1880-1953)," text, *Alabama Women's Hall of Fame*, accessed May 15, 2015, http://www.awhf.org/booth.html.

their time, and their ability to send their daughter to such a noteworthy school (Margaret Booth graduates were held in high enough esteem they did not need to take entrance exams for Wellesley, Smith, Vassar and other colleges) further underscores that officers lived very well in Alabama in the mid-Thirties. The Kuters' relative status showed in their relationships, as well as their physical comforts. Not a few of Larry's coworkers and students were graduates from MIT, Stanford, Yale and other prestigious schools. And while the Kuters lacked the financial means of their wealthy civilian friends, they enjoyed many of the trappings of wealth.

The Kuters stayed in contact with their well-heeled friends Bill and Lily Sweet, even if the relationship was a source of strain at times. In their respective unpublished memoirs, both Larry and Ethel Kuter portray the Sweets as, first and foremost, close personal friends. They enjoyed each other greatly, and as multiple scrapbook pages attest, they spent quite a bit of time together. It seems likely, however, that this friendship had a further benefit, as the Sweets would likely have introduced the Kuters to other prominent individuals and further acquainted Larry and Ethel with American high society. The well-deserved reputation Kuter would build for diplomacy, taking on roles that were unusual for a man of his age and experience, might well be traced to time at the Sweet's homes in Binghamton and Daytona. The relationship was not without its troubles, however. Ethel was all too aware that Lily was also a smart, attractive woman who had great financial means and was "very possessive of Larry." Ethel was jealous of her friend. She appreciated her friendship with Lily, deepening it further, and happily wore Lily's hand-

¹¹⁵ Kuter, "Along with Larry," 149.

me-down clothes (after some alteration), but it took a conscious effort on Ethel's part not to view her friend as a threat. Fortunately, another of Larry Kuter's positive qualities was devotion; he remained passionately committed to his bride, and Ethel never doubted his love. The Kuters were a strongly motivated team. Their combined efforts, enabled by external circumstances at Maxwell Field, gave them visibility, connections and opportunities that likely would have been unavailable anywhere else at the time.

ACTS and its Uncertain Influence

Since Kuter's career was so influenced by his time at ACTS, it is appropriate to examine the overall impact of his teaching at the school on the Army Air Corps. By the time ACTS closed its doors to students in 1940, 916 air service and air corps officers had graduated, with 535 having attended the full yearlong course. Larry Kuter had directly taught 237 of them, all graduates of the full-year course, as a bombardment instructor from 1935-39. Of sorts, he also taught the other 381 who graduated from one of the four, 3-month short courses taught during the 1939-40 academic year. There were few staunch bomber advocates left by the time the Kuters departed Maxwell Field, and they would have had little time for original thought, given that the school quintupled its output during that last year of its existence. Students who graduated after Kuter left were thus instructed from modified versions of his bombardment lectures and course materials. It could fairly be said, then, that Kuter directly or indirectly taught bombardment doctrine to two-thirds

¹¹⁶ Ibid., 150; Roxanne Kuter Williamson, "Letter from Roxanne Kuter Williamson to Joel Higley."

of all ACTS graduates, on the eve of the greatest global bombing campaign the world has seen. Given the critical roles many of his former students later came to play, it would seem difficult to overstate Kuter's influence on bombardment doctrine, ACTS airpower thinking more generally, and the independent Air Force that was justified in great measure by the World War II bombing campaigns.

One must be careful however, not to ascribe too much importance to one school, much less one individual. ACTS was just one of several year-long schools—CGSS, Army War College, Army Industrial College, etc.—and many interwar officers attended one or more of these schools in addition to ACTS. CGSS was actually a two-year program from 1928-35, so airmen who went to Leavenworth for school should have been much more impacted by their time there than at Maxwell Field. Divining which school was the most influential is difficult if not impossible to say with any degree of certainty. The three-month short course offered from 1939-40, which more than 40 percent of all ACTS airman graduates attended, further complicates the issue. They were so abbreviated that they could have had little utility. Furthermore, those who attended ACTS typically went so late in their careers (the 1939-40 classes still had World War I veterans as students) it is unlikely they fully embraced their instructors' revolutionary ideas. Nonetheless, as General McNair's inspection indicated, ACTS was the only place where airmen were formally introduced to strategic airpower concepts, which they would put into practice in the Second World War. Kuter thus played a key role in professionally educating his fellow airmen.

While claims of ACTS' impact on its students are likely overblown and Kuter's individual influence as an instructor is even less quantifiable, studying Kuter and ACTS clearly indicates that the Army's air arm made slow but steady progress throughout the 1930s toward professionally developing its officer corps. The Air Corps Tactical School was the epicenter for the air arm's professional development efforts and the school's graduates helped leaven the overall Air Corps. In June 1929, over a decade after the First World War, less than ten percent of Air Corps officers were graduates from the Air Corps branch's primary professional military education school. When Kuter graduated in 1935, he was one of almost three hundred airmen to have graduated from the school, who comprised almost a quarter of the Air Corps officer population. ACTS graduates' proportional representation continued to grow all the way through the time Kuter left in 1939, by which time approximately a third of professional Air Corps officers were ACTS graduates. ACTS closed its doors to students in summer 1940 as the Air Corps began to grow substantially. If ACTS had remained open through 1941 and the officer corps' size had remained at its mid-1938 level, 100 percent of the Air Corps' officers could have gotten at least the 3-month short course before the Japanese struck Pearl Harbor. 117 Instead, less than four percent of Air Corps officers were ACTS graduates when the United States entered the Second World War. ACTS graduates' proportional representation in the officer corps would shrink to insignificance once wartime mobilization began in earnest. 118

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¹¹⁷ The proportions of ACTS graduates as a percentage of the overall officer corps presented are greater than they were in reality.

¹¹⁸ It must be noted that the below chart is overly optimistic with respect to ACTS graduates on active duty, but no more accurate statistics are readily available. This chart presumes that everyone who graduated from

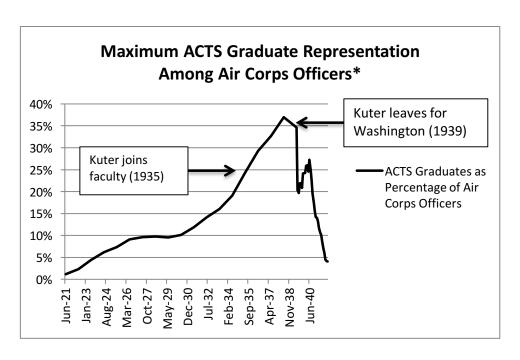


Figure 2. Maximum ACTS Graduate Representation

* Air Corps professionalization: From its inception through 1938, ACTS graduates grew as a proportion of the air officer corps. The proportional share of ACTS graduates—and by extension the core of professionally-trained officer airmen—shrank dramatically with rapid Air Corps growth from 1939 onward and the closure of the school to students in 1940.

Much has been written about how ACTS was a major force in shaping and directing the Air Corps and its successors—the Army Air Forces and the independent Air Force—with the primary proof being the number of World War II AAF general officers who were ACTS graduates. Since such a small number of Air Corps officers who served in World War II graduated from ACTS, its significance must be found in its influence on the thinking of current and future senior Air Corps (and Air Force) leaders. If that is in fact true, then those ACTS graduates who survived and reached significant positions of influence must have learned some very powerful lessons during their time at Maxwell

ACTS remained on active duty through the December 1941. This was not the case. ACTS graduates were overwhelmingly First World War-era officers, many of whom retired, died or separated before the Second World War started, so their proportional representation within the Air Corps was less than this chart indicates. Combat attrition and other causes during the war would thin their numbers even more.

Field. Kuter played a major role in writing and delivering those lessons—directly or indirectly—to two-thirds of all Air Corps Tactical School graduates, to include eighteen future four-star Air Force generals, another twenty-six eventual Air Force three-stars, a constellation of lesser Air Force generals, and many flag officers from other services. This was after Kuter had graduated ahead of future Air Force Chief of Staff Hoyt Vandenberg and (fellow bomber intellectual) Vice Chief of Staff Muir Fairchild.

Although the Kuters were unhappy with the Washington assignment, there were a number of factors that were very much in their favor—primarily because of their time at Maxwell Field. Larry Kuter was already well known to the Chief of the Air Corps, Major General Arnold, as well as Arnold's Chief of Staff, Brigadier General Walter G. "Mike" Kilner (Kuter's ACTS classmate). Brigadier General George C. Marshall, the Army Deputy Chief of Staff and heir apparent to the Chief of Staff position, likely knew of Kuter, too, through Edgar Gorrell (if not through the investigation of ACTS instruction Brigadier General McNair had led). Colonel Joseph McNarney, who led the War Plans Division, had gotten his measure of Kuter just a few months before, when they built the "5,500 Aircraft Plan." Former ACTS classmates and faculty peers Hoyt Vandenberg and Possum Hansell also arrived in Washington the same time Kuter did; Vandenberg moved into the Air Corps Plans Division, while Hansell went to the Air Corps Public Relations office. 119 Kuter's former students were likewise scattered throughout the Air Corps, with many of them filling important positions in Washington, DC. The Office of the Chief of the Air Corps (OCAC) alone had multiple former students, including Lieutenant Colonel

¹¹⁹ U.S. Air Force, "General Hoyt S. Vandenberg"; U.S. Air Force, "Major General Haywood S. Hansell, Jr."

Ira Eaker and Captains Ben Chidlaw, Richard Nugent, Patrick Timberlake and T.D. White. 120 Meanwhile, former student Captain "Opie" Weyland was assistant to the chief of the National Guard Bureau Aviation Division. 121 While Kuter would be somewhat lonely in the War Department staff, he would not lack for contacts and colleagues, thanks to ACTS.

Larry Kuter would never have been as successful as he was at ACTS, had he not been so individually capable, strongly supported by Ethel, and given extraordinary opportunities at an early age and rank by Lieutenant Colonels Dargue and George. It certainly helped, too, that he was one of the few Air Corps officers from his West Point class, at a time when the Air Corps remained a stubbornly small fraction of the overall Army. Kuter's individual excellence, combined with his long-term presence at ACTS and the Army air arm's diminutive size at a time when airpower was growing in military importance, eventually gave him the opportunity to influence army policy through his work on the War Department General Staff.

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¹²⁰ U.S. Air Force, "General Ira C. Eaker," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107172/general-ira-c-eaker.aspx; U.S. Air Force, "General Benjamin Wiley Chidlaw," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107504/general-benjamin-wiley-chidlaw.aspx; U.S. Air Force, "Lieutenant General Richard E. Nugent," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108406/lieutenant-general-richard-e-nugent.aspx; U.S. Air Force, "Lieutenant General Patrick W. Timberlake," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105417/lieutenant-general-patrick-w-timberlake.aspx; U.S. Air Force, "General Thomas Dresser White," Text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105243/general-thomas-dresser-white.aspx.

¹²¹ U.S. Air Force, "General Otto Paul Weyland," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105233/general-otto-paul-weyland.aspx.

Chapter 6: Prepping for War—Airpower Mobilization and Organization in the War Department (1939-1942)

The Kuters' move to Washington went smoothly, in no small part due to the friendships they had built at Maxwell Field. After spending time with family in Rockford and Milwaukee, they arrived in the nation's capital on 27 June 1939. Larry Kuter went that same day to his future workplace to get a feel for what would be expected of him. There, he also ran into his ACTS friend and fellow bomber zealot Major Bob Webster, who was working on the Air Corps staff. Webster's wife was out of town, and he was leaving shortly also, so the Kuters were able to housesit while looking for a place of their own. Ethel, never one to sit still, had researched Washington-area apartments before they arrived, so they found accommodations quickly. They were ready to sign a lease four days after their arrival, which was also Larry's first day of work. The move marked a substantial change. The apartment living, public transportation, political ambition, and overall big city life the Kuters found in Washington was a far cry from the world they had known in Alabama. Ethel would have to make do without their Maxwell Field maid Beatrice, laundress Idell or handyman Walter.² On a positive note, their daughter Roxanne would find boarding at the National Cathedral Girls' School, and the excellent

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¹ Kuter, "Along with Larry," Washington, D.C. 1939, 1; U.S. Air Force, "Major General Robert M. Webster," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105352/major-general-robert-m-webster.aspx. Webster was chief of the Training Section in the Office of the Chief of the Air Corps. Given that Kuter was assigned to the War Department's Operations and Training (G-3) directorate, this was a valuable connection to have.

² Kuter, "Along with Larry," Washington, D.C. 1939, 4.

art, dance and piano lessons in Washington were more to her liking than the offerings at the Margaret Booth School in Montgomery.³ While the family's transition to city life was a bit jarring, Larry Kuter's first day at work was even more so.

Kuter got a strong dose of reality on his first day of work. Although it was a Saturday, his new job began by attending a ceremony wherein George C. Marshall pinned on his fourth star and took over as U.S. Army Chief of Staff, replacing General Malin Craig. After the formalities were out of the way, Marshall spoke to his new staffers in the Chief's office; Kuter was the only airman present, and was by far the most junior of the group. The new army chief dropped a bombshell: he told those assembled that this would be a wartime staff assignment, and they urgently needed to build a warwinning force, while the fighting was still ongoing in Europe. Kuter had been thinking and teaching (some might say preaching) at ACTS about preparing for combat, but Marshall's stark words caught him off guard. As Kuter later recalled, "We left it in a state of shock, but on our way to war."

Marshall's war orientation should have been unsurprising. The *Anschluss*(German annexation of Austria) was over a year in the past, and the Germans had taken over Czechoslovakia—with no armed response from Britain or France—four months

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³ Kuter, "Growth of Air Power," 141.

⁴ Mark Skinner Watson, *Chief of Staff: Prewar Plans and Preparations* (Washington, D.C: Center of Military History, United States Army, 1950), 155. Marshall was initially only the acting Army Chief, because General Craig had unused military leave to take. There was no doubt that Marshall was in charge from that date forward.

⁵ Kuter, "Growth of Air Power," 142.

⁶ Ibid.

prior. Contrary to British Prime Minister Neville Chamberlain's sanguine pronouncements, Nazi Germany was unlikely to stay appeased for long. The military situation was no less threatening in the Pacific. The Second Sino-Japanese War was already two years old, and the Japanese were also in open conflict with the Soviets. The Nomonhan Incident, as it was euphemistically called, was in the midst of being militarily resolved along the Manchurian-Soviet-Mongolian border. The Soviets would eventually destroy a Japanese reinforced division in that encounter. Airpower played a significant role in the Japanese defeat. Unfortunately, foreign observers came away with the impression that the Japanese Army Air Force was poorly trained. With westward expansion proving unprofitable, the Japanese empire would start to look south and east, toward European and American Pacific territories. President Roosevelt's policies would further drive the Japanese and Americans toward armed conflict.

The Air Corps was especially ill-prepared for combat. When Kuter started his work in Washington, the Army's air arm had a little over 1,500 officers and 22,000 total men. ¹³ The picture was improving, though. The officer corps had grown twenty percent from the year before, but when it came to equipment, the air arm had more planes than pilots to fly them: 1,700 combat aircraft (700 bombers, 850 fighter and reconnaissance

⁷ Murray, Williamson and Allan R. Millett, *A War To Be Won: Fighting the Second World War* (Cambridge, Mass.: Belknap Press, 2001), Kindle Locations 174, 235.

Bibid., Kindle Location 941. Neville Chamberlain was hopelessly optimistic. As late as April 1940—a month before Germany invaded France and the Low Countries and with evidence mounting of that pending German attack—Chamberlain still clung to the belief that the Allied blockade would dissuade Germany from starting another world war.

⁹ Ibid., Kindle Location 2245.

¹⁰ Ibid., Kindle location 406.

¹¹ Cate et al., The Army Air Forces in World War II, 79.

¹² Murray, Williamson and Millett, A War To Be Won, Kindle Location 2322.

¹³ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 15.

aircraft, and 120 transports) and an additional 740 trainers and communications aircraft.
The raw numbers of planes (which were unimpressive by global military standards), further masked the paltry state of the force, since the Air Corps' aircraft were almost universally obsolete or obsolescent. Just sixteen of the bombers were modern, four-engine "heavy" bombers; after accounting for the one prototype B-15 and thirteen prototype B-17s Kuter had helped save in 1938, this meant just two were new-production B-17s.
The Northrop A-17, Douglas B-18 and Curtiss P-36 Hawk were the Air Corps' standard attack, bomber and fighter aircraft, respectively. All three types were obsolete when war came two years later.
The Air Corps had an excellent transport in the Douglas C-39, which—like the B-18—was derived from the DC-2 airliner. The air arm would only buy thirty-five C-39s, though, and the last one had yet to be delivered.
In an interwar Air Corps that could only afford advance bomber or fighter development (not both), air transport was not high among the Army's priorities. In the civil sector, the DC-2 was already somewhat passé, having largely been supplanted by its direct descendant,

¹⁴ Ibid., 135.

¹⁵ Ibid.

¹⁶ Craven and Cate, The Army Air Forces in World War II, Volume Six, 175.

¹⁷ Smith, "The Intercontinental Airliner and the Essence of Airplane Performance, 1929-1939," 436; U.S. Air Force, "Douglas B-18 Bolo," text, *National Museum of the U.S. Air Force*, accessed May 15, 2015, http://www.nationalmuseum.af.mil/Visit/MuseumExhibits/FactSheets/Display/tabid/509/Article/195870/do uglas-b-18-bolo.aspx; U.S. Air Force, "Douglas C-39," text, *National Museum of the U.S. Air Force*, (June 5, 2015),

http://www.nationalmuseum.af.mil/Visit/MuseumExhibits/FactSheets/Display/tabid/509/Article/198012/do uglas-c-39.aspx. The DC-2 was impressive for its time. In 1934, a DC-2 came in second in the 11,300-mile MacRobertson Race from Mildenhall, England to Melbourne, Australia. It lost only to a DeHavilland DH.88 Comet, which had been purpose-built for the race. The DC-2 was an unmodified, standard airliner; it carried three passengers and 900 pounds of souvenir mail on the journey. In an unfortunate twist of fate, the DC-2's remarkable performance spurred military aircraft development in Europe, but not the United States.

the DC-3.¹⁸ Much as during the Airmail Crisis years before, civilians still led the military in aircraft technology development.

Meanwhile in Europe, the Luftwaffe boasted superior equipment, was massively larger (and growing), and was better organized for aerial combat. The single-engine Messerschmitt Bf-109 fighter, for instance, was already in service, was being produced in large numbers, and—due to the German Condor Legions' "voluntary" participation in the Spanish Civil War—many of its pilots were seasoned combat veterans. The Bf-109's basic design was so advanced that it remained operationally useful throughout the Second World War. In 1940, in the Battle of France, the Armée de l'air's four groups of H-75s (the French designation for P-36s) would do little to stem the German advance. Germany's air arm had 208,000 flying troops (almost ten times larger than the U.S. Army Air Corps) and boasted 4,200 combat aircraft (two and a half times that of the United States). The Luftwaffe also had a sensible organizational scheme; Germany's air force was actually 373,000 men strong, because it combined the critical airpower capabilities—offensive and defensive aviation (the aforementioned 208,000 men), ground-based antiaircraft defenses (flak troops—107,000 men) and aviation support (58,000 men)—

¹⁸ "Boeing: Historical Snapshot: DC-3 Commercial Transport," accessed February 17, 2016, http://www.boeing.com/history/products/dc-3.page. DC-3 development was driven by a request from American Airlines president C.R. Smith, an individual who would feature prominently in military air transport during the war. American Airlines took delivery of its first DC-3 in 1936—three years before the Air Corps first took possession of the less-capable, DC-2 based C-39.

¹⁹ John F. Guilmartin, "The Aircraft That Decided World War II: Aeronautical Engineering and Grand Strategy, 1933-1945, the American Dimension, 8th Revision," July 2012, 13.

²⁰ Anthony Christopher Cain, *The Forgotten Air Force: French Doctrine in the 1930s* (Washington, D.C: Smithsonian Institution Press, 2002). 31

²¹ Corum, James S., *The Luftwaffe: Creating the Operational Air War, 1918-1940* (Lawrence: University Press of Kansas, 1997), 271; Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16, 135.

into one organization.²² Japanese airpower, like that of the United States, was bifurcated, split between the Imperial Japanese Army and Navy. Jealousy and competition for power would cause all manner of difficulties for America's Eastern adversary, but Japanese aircraft designs were excellent, and the crews flying them were highly experienced—even more so than the Germans or Italians.²³ Kuter and his fellow staffers had much work to do.

Kuter was assigned to the G-3 (Operations and Training) Division, and within that division was seconded to Lieutenant Colonel (later Major General) Roscoe Woodruff, who led the Training Branch.²⁴ Kuter was the only Air Corps officer in the branch when he arrived in War Department General Staff (WDGS).²⁵ Fortunately, help was on the way. One of Marshall's first moves as Army Chief was to promote Colonel Frank M. Andrews to brigadier general and install him as Assistant Chief of Staff, G-3.²⁶ Andrews

²² Corum, James S., *The Luftwaffe*, 271.

²³ Cate et al., *The Army Air Forces in World War II*, 77–78.

²⁴ Kuter, "Growth of Air Power," 144; Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 353. Woodruff had a great deal of staff experience, having been on the War Department General Staff since 1936. He would serve as an infantry division commander during the Second World War and a corps commander after the war. Kuter, as a young and inexperienced staff officer, benefited from working for an excellent mentor.

²⁵ Kuter, "Growth of Air Power," 145; U.S. Air Force, "Major General Harold M. McClelland," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106319/major-general-harold-m-mcclelland.aspx. In his unpublished autobiography, Kuter indicates he was the only Air Corps officer in G-3, at least initially. Air Corps officer Harold McClelland served in G-3 from 1938 to 1941, though; it seems likely Kuter and McClelland were in the same division, but different branches, until the Aviation Branch was established.

²⁶ Kuter, "Growth of Air Power." 146. In his manuscript Kuter suggests that Andrews might have been the commander of the European Theater of Operations on D-Day, rather than Eisenhower: "When General Marshall became Chief of Staff he ordered Frank Andrews in as G-3 without concurrence by the Secretary. He kept General Andrews in as G-3 only one year and then sent him to command all of our army forces in Panama for a year, and then for a year in command of the entire Caribbean Defense Command. A year later he moved him to Cairo to command all U.S. Forces in that Middle East U.K.-U.S. Allied Command. In February 1943 he was named Commander of U.S. Forces in the European Theater of Operations. In a flight back to the U.S. to coordinate the plans for his new command General Andrews was killed in an aircraft accident on a stormy day in Iceland on May 3, 1943. A younger, no more vigorous and active, but much

was the first airman ever to be selected as an assistant chief. He had previously been a temporary major general and commander of General Headquarters Air Force under Secretary of War Woodring and Army Chief of Staff Malin Craig. He had been demoted from that position and sent to an obscure post in San Antonio because of his advocacy for an independent Air Force. He had promoted stunts like a B-17 mission that intercepted the Italian ocean liner Rex a full 725 miles out to sea, on a day with scattered clouds and poor visibility.²⁷ The navigator on that mission was a pursuit pilot-turned bomber pilot who would achieve great prominence, then-First Lieutenant Curtis LeMay.²⁸ Andrews, rather than being hailed for the innovative use of aircraft to provide homeland defense, had let his crews violate the 100-mile limit agreed upon by the Army and Navy.²⁹ He and Kuter must have had interesting stories to share. What got Andrews fired from his job, though, was calling America—very publicly (yet accurately) a sixth-rate airpower, at a National Aeronautic Association convention in January 1939.³⁰ The 100-mile operating limit was rescinded, perhaps not coincidentally, the same month Brigadier General

less broadly experienced officer had led successfully the command of the campaign in North Africa. Dwight D. Eisenhower was named to replace General Andrews as Commander of U.S. Forces in the ETO." Given that the only U.S. offensive action against the Axis ground targets in the European theater of Operations were being prosecuted by air power in May 1943 (the Sicily invasion would not happen for another two months), it made good sense for an airman to be in charge at the time. As the weight of effort shifted from air to ground attack, it seems reasonable to assume that a ground commander would eventually have taken command. Nonetheless, this discussion suggests two things: General Marshall was a great friend of airmen, and competent senior airmen such as Andrews and Kuter posed threats to ground commanders' control within the Army structure.

²⁷ DeWitt S. Copp, *Frank M. Andrews: Marshall's Airman* (Washington, D.C: Air Force History and Museums Program, 2003), 14–17.

²⁸ Kozak, *LeMay*, 63–64.

²⁹ Futrell, *Ideas*, *Concepts*, *Doctrine*, 87.

³⁰ Copp, Frank M. Andrews: Marshall's Airman, 16.

Andrews arrived in G-3, with the publication of an Air Corps circular that allowed overwater operations out to the maximum range of multiengine aircraft.³¹

On 1 September 1939, two months after Kuter arrived in Washington, Germany invaded Poland and the Second World War thus began in earnest. The German military made quick work of their Polish adversaries, pushing in from the west, and two and a half weeks later the Soviet army invaded from the east—in accordance with the two countries' secret Non-Aggression Pact. Fortunately, before the invasion, the Poles had given their insights into the German Enigma enciphering machine to the British. This would eventually pay tremendous dividends for Allied war effort, but in the short term, the speed with which Germany invaded Poland gave added impetus to the Army's expansion efforts.³²

Despite Kuter's earlier misgivings about serving in the WDGS, his first major assignment—expanding the Air Corps further still—made him appreciate the role he had been given. Andrews was a powerful airpower advocate whom Marshall trusted. Kuter had known Andrews since their Panama mission years before, and the young captain's prior work made him highly prized in the War Department. He was intimately familiar with the 5,500 aircraft plan, which necessitated a great deal of high-level staff work (doubling the number of Air Corps aircraft and growing the officer ranks meant substantial organizational changes) in which Kuter was intimately involved. While working on implementing changes driven by the expansion plan he had helped write in

³¹ Futrell, *Ideas, Concepts, Doctrine*. 92.

³² Gerhard L. Weinberg, *A World at Arms: A Global History of World War II* (Cambridge Eng.; New York: Cambridge University Press, 1994), 50–57.

1938, Kuter was tasked with writing an even larger expansion plan than the one being implemented. Airpower was central to President Roosevelt's prewar national security strategy, so he had tasked Marshall to build a plan that would radically expand the aircraft industry. The tasking flowed bureaucratically downhill until it reached Woodruff, who put Kuter in charge. Kuter, the former artilleryman, would work alongside two higher-ranking artillerymen, Majors Walter Weible and Cyrus Shelton. Shelton's history further underscores Kuter's uniqueness on WDGS staff. Then-captain Cy Shelton was Kuter's ACTS student from 1938 to 1939. The same order that tasked Kuter to report to Washington on 1 July also canceled Shelton's orders to Hawaii and directed him to report to Washington alongside Kuter. Shelton's selection would have been much less surprising, however; he was a decade older than Kuter, had earned his commission during the First World War, and arrived to the WDGS as a graduate of the Coastal Artillery School's Battery Officers' Course, Command and General Staff School, and Air Corps Tactical School.

Since Kuter was the only airman on the team, the two majors let the young captain lead the project. Kuter got great lateral help from General Arnold's War Plans and A-3 (Air Operations) Divisions. ACTS graduates "Tooey" Spaatz, Howard Craig and (former student) O. A. Anderson supported from War Plans; Joe Loutzenheiser (another

³³ Kuter, "Growth of Air Power," 147; Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 340. Wieble would retire as the U.S. Army's Deputy Chief of Staff for Personnel—the same position Kuter held in the Air Force from 1951-53.

³⁴ Finney, *History of the Air Corps Tactical School, 1920-1940*, 131; "Orders to Commanding Officer, Maxwell Field, Alabama," June 1, 1939, Kuter Collection, Volume 3, Part 1, Page 2, USAF Academy Library Special Collections; *Official Army Register, January 1, 1939*, 680.

former student) and Luther Smith helped from A-3.35 While Kuter worked with the ground officers, two more airmen arrived in the G-3 Division, both of them former students: Lieutenant Colonels Curtis "Jan" Howard and Harold McClelland. Jan Howard was Hap Arnold's former brother-in-law and a 1915 West Point graduate (the "Class the Stars Fell On"—which included Eisenhower, Bradley, Van Fleet and many other future generals).³⁶ Howard had attended the ACTS Special Naval Operations Course, which Kuter helped design and teach, in the 1938-39 academic year (the year after the Navy lesson debacle).³⁷ McClelland had been in Kuter's first ACTS student class.³⁸ Howard made few friends in the G-3 Division, in large part because he demanded and got the establishment of an air section (which he then led). No other branch had its own section and the division's processes were not designed to function with a separate air section. Kuter later recalled, "Like Billy Mitchell, Jan had produced a considerable splash. Like Billy Mitchell he had nothing else to show for it . . . I was a member of the air section to which nothing was directly referred." Suter's assessment of Howard was a bit harsh, since—as Kuter himself admitted in 1948—establishing the air section was General Andrews' idea. 40 Still, Howard provided an early education in what not to do in a military

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³⁵ Kuter, "Growth of Air Power," 148; U.S. Air Force, "Brigadier General Clinton W. Howard," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108129/brigadier-general-clinton-w-howard.aspx.

³⁶ Kuter, "Growth of Air Power," 150.

³⁷ U.S. Air Force, "Brigadier General Clinton W. Howard"; "Schedule, Special Class, Naval Operations," January 9, 1939, Reel A2750, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL. Kuter taught about a third of the syllabus, with the naval officer on faculty, Lieutenant Commander Buracker, teaching most of the rest of it.

³⁸ U.S. Air Force, "Major General Harold M. McClelland."

³⁹ Kuter, "Growth of Air Power," 152.

⁴⁰ Laurence S. Kuter, "Organization of Top Echelons in World War II," February 28, 1949, Reel K2728, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

bureaucracy when it came to interpersonal relationships.⁴¹ Kuter did develop a great appreciation for McClelland; the two would work together again, albeit in very different roles.⁴²

Despite significant resistance and naysaying (surprisingly from a number of senior Air Corps officers), Kuter and the ground officers shepherded the new expansion plan through the WDGS coordination process. It was a major undertaking, especially for a captain. Expanding the Air Corps meant not only buying more aircraft and recruiting more airmen, but finding locations with enough land to establish airfields and favorable enough weather to allow for year-round flying training. Every field of expertise had to be grown simultaneously—personnel, intelligence, operations, logistics, plans, communications, etc.—while at the same time making allowance for growth and maintenance of ground forces. Worse still, Kuter recognized the plans he was making would favor southern congressional districts. While militarily sound (the best year-round flying was to be found in the South), he knew congressmen fighting to build facilities in their districts—no matter how ill-suited to military requirements—could scuttle his plan. The plan went through numerous revisions, and by the time Kuter and his team were ready to brief General Marshall, they had determined they could produce fifty-four combat ready groups in the timeframe they had been given.⁴³

⁴¹ Copp, *Forged in Fire*, 27. Copp notes that Howard was brilliant as an engineer, but lacking in interpersonal skills. Howard and Kuter had an especially rough relationship: "At a future time, when Howard commanded a base in Charlotte, North Carolina, and Kuter flew in on his way to somewhere, Kuter found his picture hanging in the latrine."

⁴² Kuter, "Growth of Air Power," 152. McClelland would be one of the first people Kuter hired when given command of the Military Air Transport Service in 1948.

⁴³ Ibid., 149.

The German invasion of France and the Low Countries gave added urgency to American military expansion, even as it hindered airmen's efforts. The invasion, which started on 10 May 1940, was complete less than six weeks later. 44 It is unclear just when Kuter briefed the 54-group plan, but based on the date Secretary of War Henry Stimson finally approved it, it seems the briefing occurred after the Germany expanded westward. In his unpublished memoir, Kuter recalled that when they finished briefing the Chief of Staff, with General Arnold and most of the Army Assistant Chiefs present, Marshall shocked everyone with his question: "Why is it only a 54 Group Program? Why not 56 or 58 or more?"⁴⁵ After getting over the initial shock—all the team had heard to that point were arguments against expansion—Kuter answered for the group. He noted that the facilities built to support growing the force to 54 groups could be utilized for further expansions. His response indicated just the kind of expansive thinking Marshall was looking for. He approved the plan, which came to be known as the First Aviation Objective, to go forward. Secretary Stimson approved it on 12 July 1940. ⁴⁶ A little over three months later, Marshall directed planning for a further expansion. Kuter then contributed to what became the 84-group program, better known as the Second Aviation objective, which was approved on 14 March 1941.⁴⁷

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⁴⁴ Weinberg, *A World at Arms*, 141. The Franco-German and Franco-Italian armistices both went into effect on the evening of 24-25 June.

⁴⁵ Kuter, "Growth of Air Power," 149.

⁴⁶ Futrell, *Ideas, Concepts, Doctrine*, 101. The First Aviation Objective, which was approved in 1940 but would take much longer to bring to fruition, still would not bring the Air Corps to parity with the Luftwaffe, much less the combined air might of the Axis. The Air Corps strength was to grow to 54 combat groups and 6 transport groups, for a total of 4,006 aircraft; the Luftwaffe in 1939 had over 4,200 aircraft. ⁴⁷ Ibid., 102. The Second Aviation Objective, if and when fulfilled, would bring the Air Corps to 7,799 combat aircraft. The 84-group program was sold on the basis of hemispheric defense, but the numbers and types of aircraft called for in the plan make it clear the Army was gearing up for offensive action: "1,520

Kuter's prior experience, close relationships with key individuals on the Air Corps staff, ability to work amicably with his ground Army counterparts on the WDGS, and his position as one of the few airmen in G-3 had put and kept him in the middle of mobilization planning. Given that prewar grand strategy and mobilizing the nation for war—militarily and economically—were nearly synonymous, he got a real-world education in the making of strategy. Despite the high level of Kuter's work, promotions came no faster. He pinned on major, purely in accordance with his military seniority, on 30 December 1940.⁴⁸

Kuter's position within the WDGS put him at the center of another major milestone in American airpower history: the creation of the Army Air Forces (AAF) on 20 June 1941. On that date, Army Regulation (AR) 95-5 renamed and reorganized the Army's air arm. ⁴⁹ Like the establishment of the General Headquarters Air Force six years before, it was another major step toward eventual Air Force independence. The new name—Army Air Forces—by itself gave the air arm a bit more clout. More significantly, however, added manning and a new organizational scheme allowed the air arm to function more effectively and efficiently. Kuter, as an air officer in the G-3 air section responsible for dealing with organizational change, was directly involved in staffing this regulation. 50 Hap Arnold was made a Deputy Chief of Staff under Marshall, and in short order a new Air Staff was formed, with Brigadier General Carl "Tooey" Spaatz as its chief. Santy Fairchild was given his first star and went to work for Major General Barton

heavy bombers; 1,059 medium bombers; 770 light and dive-bombers; 2,500 pursuit interceptors; 525 pursuit fighters; 806 observation, liaison, and photo; 469 transport; and 150 amphibian aircraft."

⁸ "PEP Record: Kuter, Laurence S.," Folder 2.

⁴⁹ Futrell. *Ideas*, *Concepts*, *Doctrine*, 104.

⁵⁰ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 193–194.

Yount, who remained as Chief of the Air Corps.⁵¹ An impressive airpower team was being assembled in the Air Staff, but Kuter remained in the WDGS. The War Department still owned the AAF, so airmen needed representation on Marshall's staff. Kuter was well-suited to working with his ground Army counterparts, and he was very familiar with the Air Corps' expansion plans. Better still, he had a good relationship with Hoyt Vandenberg, who had been managing Air Corps expansion as the air arm's plans chief for the prior two years.⁵²

AWPD-1

On 3 July 1941, Major General Arnold called Lieutenant Colonel Hal George with a choice: George could be a student in the next Army War College class, or he could go to Washington and work for Arnold as chief of the soon-to-be-formed Air War Plans Division (AWPD). Hal George, fortuitously, took the plans job. Less than a week later, on 9 July, President Roosevelt directed the service secretaries to determine the mobilization requirements for defeating America's potential enemies. They were to follow the strategic guidelines found in the ABC (American, British and Canadian combined) and Rainbow 5 (American joint) strategic plans. These plans, which had

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⁵¹ Kuter, "Growth of Air Power," 153–154; Perera, *Leaves From My Book of Life*, 32. Perera notes in his narrative that he was, "instructed to take [a draft of AR 95-5] over for comment to the War Department General Staff where a very intelligent officer wearing Air Corps wings, Major Laurence S. Kuter, gave me a hard time but finally appeared convinced." Perara's deep involvement in writing the regulation helps underscore how much of a legal feat AR 95-5 represented.

⁵² Meilinger, Hoyt S. Vandenberg, the Life of a General, 24.

⁵³ Hansell, *The Air Plan That Defeated Hitler*, 1.

⁵⁴ Ibid., 61.

their genesis in Admiral Stark's "Plan Dog" Memorandum, were based on a Europe-first strategy if America were to enter the war. ⁵⁵ Hal George arrived in Washington the very next day—fresh from commanding the 2nd Bomb Wing at Langley Field, where all the Air Corps' B-17s were stationed—to set up the AWPD. There, he found Lieutenant Colonel Howard Craig heading the Projects Group (with assistance from Lieutenant Colonel O.A. Anderson) and Lieutenant Colonel Kenneth Walker in the one-man War Plans Group. ⁵⁶ While small, it was an impressive group of officers. Anderson had a particularly well-deserved reputation as a thinker and planner, and Walker was a smart, intense bomber advocate.

Just over a week after George took on his new job, on 18 July, Lieutenant Colonel Clayton Bissell—an airman and former ACTS instructor assigned to the WDGS's War Plans Division (WPD)—was formally tasked to provide the AAF's mobilization requirements, as a subset of the Army's overall estimate. George worked through Spaatz, who worked through Arnold, to convince Bissell's boss, Brigadier General Gerow, that the AWPD both could and should provide the AAF's mobilization requirements. George did not intend to merely present a shopping list. Rather, he would write an airpower-heavy strategy for defeating Axis forces, with which America was not yet at war. ⁵⁷ It must have taken some arm-twisting to wrest control of the air planning process from the WPD, since it was not until 29 July that George got all the relevant planning documents

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⁵⁷ Gaston, Planning the American Air War, 13–14.

⁵⁵ James G. Lacey, *Keep From All Thoughtful Men: How U.S. Economists Won World War II* (Naval Institute Press, 2011), 22.

⁵⁶ Hansell, *The Air Plan That Defeated Hitler*, 4; Futrell, *Ideas, Concepts, Doctrine*, 109. Futrell's narrative conflicts with Hansell's. Futrell asserts that Hansell was already assigned to the AWPD, and makes no mention of Craig. Hansell's narrative would seem to be the more reliable of the two narratives.

from Gerow.⁵⁸ Within three days, Hal George had sketched out his plan of attack and identified the three men who would help him lead the planning effort.⁵⁹ His choices must have caused consternation, even within his own division. The brilliant bomber advocate Ken Walker, whom George knew well from ACTS, was already on the division's staff, so George's choice of Walker was foreordained.

The other two primary team leads were unusual choices. Rather than using the other two lieutenant colonels from his own division—Anderson and Craig—to help lead the effort, or utilizing other higher-ranking officers he could have borrowed from other Air Staff divisions (perhaps Lieutenant Colonels Max Schneider or Arthur Vanaman, or Major Hoyt Vandenberg), Hal George picked Larry Kuter and Possum Hansell. They were younger, lower-ranking (Kuter was four years junior to Vandenberg, and Hansell was even more junior), and had jobs in other divisions. Upon further review, however, Kuter and Hansell were exactly what George needed. George knew from long experience that Kuter and Hansell were highly intelligent, hard-working and—perhaps most significantly—held very similar views to his own regarding airpower. 60 He could set them loose on their respective mission areas, knowing that the young majors would act in accordance with his wishes. Better still, Kuter and Hansell brought special skills and knowledge to the team. Hansell had spent eight straight years directly associated with ACTS (at both Langley and Maxwell Fields), was a CGSS graduate, and had just returned from Great Britain with reams of British intelligence documents, while working

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⁵⁸ Byrd, Kenneth N. Walker, 67.

⁵⁹ Gaston, Planning the American Air War, 14.

⁶⁰ Hansell. The Air Plan That Defeated Hitler, 67.

as the AAF strategic intelligence chief. Few, if any, AAF officers had a better understanding of British air strategy—what it was, the thinking behind it, and how effective it was perceived to be. ⁶¹

The level of dysfunction within the War Department, particularly as it related to intelligence, is worth noting. A year prior, in 1940, General Arnold was talking to a former Army military attaché who had served in Berlin, Major Truman Smith. Smith told Arnold a great deal about Luftwaffe developments, of which the Air Corps Chief had never before heard. When Arnold asked the Army Deputy Chief of Staff why he had not received the attache's reports, he was told those reports went only to WDGS members. If General Arnold wanted to read the reports, he was free to read them in the G-2 (intelligence) Division offices. He could not take the reports with him, however. In other words, Major Kuter, as a WDGS staffer, was freely given information that Major General Arnold had to go begging for. Arnold quickly established his own Strategic Air Intelligence Section, headed by Major Tommy White and Captain Haywood Hansell. Arnold further sought and got permission to put air attachés around the world, in order to gather information on foreign air forces. 62 Given this organizational defect, it is unsurprising that ACTS instructors failed to pick up on some key airpower developments abroad during the 1930s.

Kuter brought mobilization planning expertise to the mobilization planning team.

Walker was the one who suggested that George get Kuter on the team, and for good

62 Ibid., 49–50.

⁶¹ Ibid., 49–60. Of course, British bombing strategy, operations, and tactics were highly dysfunctional at this stage of the war, as the Butts report would soon discover.

reason. 63 While both Walker and Kuter had both taught bombardment at ACTS, they had never overlapped at Maxwell Field. Walker left ACTS in 1933, a year before Kuter arrived as a student. 64 The two had collaborated on the bombardment text in 1935, so Walker had a good feel for the young major. None of the four primary planners had attended Army Industrial College, however. 65 Hal George, while highly intelligent, had no mobilization planning background, and less than a month before had his hands full leading the nation's premier bombardment wing. 66 Ken Walker was a passionate bomber zealot, but he likewise had spent the past six years in operational flying assignments.⁶⁷ Possum Hansell had been gathering everything he could on the German war machine from the British allies, but was more focused on what to bomb than how many bombers might be needed. 68 Kuter was thus the only one of the four with recent mobilization planning experience. Walker, Hansell and Kuter had, however, all been involved in calculating bombardment probabilities at ACTS, which helped planners determine bomber requirements, which would in turn form the basis for broader mobilization requirements. ⁶⁹ Kuter was unique, however, in that he had been calculating bomber

⁶³ Byrd, Kenneth N. Walker, 67.

⁶⁴ Finney, History of the Air Corps Tactical School, 1920-1940, 18.

⁶⁵ U.S. Air Force, "General Laurence S. Kuter"; U.S. Air Force, "Lieutenant General Harold L. George," text, Biographies, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107023/lieutenant-general-harold-lgeorge.aspx; U.S. Air Force, "Major General Haywood S. Hansell, Jr."; U.S. Air Force, "Brigadier General Kenneth Newton Walker," text, Biographies, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105285/brigadier-general-kennethnewton-walker.aspx.

⁶⁶ U.S. Air Force, "Lieutenant General Harold L. George."

⁶⁷ U.S. Air Force, "Brigadier General Kenneth Newton Walker."

⁶⁸ Griffith, The Quest: Haywood Hansell and American Strategic Bombing in World War II, 64.; the primary focus of Hansell's trip to the U.K. was collecting targeting material and preparing it for secure shipment to the U.S.

69 Hansell, *The Air Plan That Defeated Hitler*, 17–18.

requirements since 1934, writing Air Corps mobilization plans since 1938, and working WDGS mobilization issues since 1939.

Hal George's forward thinking and his former ACTS colleagues' presence in Washington paid off. On Sunday, 3 August, General Arnold departed Washington with General Marshall, bound for the Argentia Conference (a conference Arnold himself knew nothing about until the day before). On that day, he left a note for Hal George that he would be back on 12 August—just nine days later—at which time he wanted the AWPD's plan. The tight timeline was necessary, because Secretary Stimson was to be briefed on 12 September. 70 It seemed an impossibly compressed schedule. The four primary authors, along with others working for them, had a little over a week in which to build a realistic global wartime air strategy and a mobilization plan to support it. They needed valid, time-phased numbers of personnel, aircraft, air bases, bombs, bullets and everything else in between to train, build and maintain those elements for a global air campaign to defeat the Axis powers. If standard practice were followed, the plan would have to be vetted by AAF staffers, before briefing General Arnold, which would be followed by further review by WDGS staffers, before approval by General Marshall. The team would then brief the Army-Navy Joint Board, before finally making their presentation to Stimson. The AWPD team fully expected substantial revisions, if not total rework, between these various steps. Kuter showed up to the group for the first time on Monday, 4 August, with General Twaddle's blessing. Two days later (with just six days left to prepare the briefing to Arnold); George, Walker, Kuter and Hansell briefed the rest

⁷⁰ Gaston, *Planning the American Air War*, 1–4.

⁷¹ Kuter, "Growth of Air Power," 155.

of the AWPD team—over a dozen of them from various Air Staff divisions—on their tasks for the first time.⁷²

The team's output has been covered in multiple publications, but bears some repeating.⁷³ Five and a half days after the full team was assembled, at midnight on the evening of 11 August, Hal George's team submitted a remarkable document, which they named AWPD-1 (Air War Plans Division-Plan 1). Their stated strategic objective was simply to defeat Germany (and her Allies). To support this objective, the AAF had five primary tasks:

- 1. To conduct a sustained and unremitting Air Offensive against Germany and Italy to destroy their will and capability to continue the war and make an invasion either unnecessary or feasible without excessive cost
- 2. To provide air operations in defense of the Western Hemisphere
- 3. To provide air operations in the Pacific . . . for defense of:
 - a. Hawaii
 - b. Philippines
 - c. Alaska
 - d. Other areas
- 4. To provide for the close and direct air support of surface forces in the invasion of the Continent and for major land campaigns thereafter
- 5. Calculation of total air requirements⁷⁴

The first air objective was remarkable in its implication. The AWPD team suggested to Army leaders that it might be possible to defeat Germany *without an invasion*. More broadly, simultaneously defending North and South America, defending

⁷² Gaston, Planning the American Air War, 24.

⁷³ Phillip Meilinger's "The Prescient Planners of AWPD-1" is an excellent, brief account of the planning process. For those looking for more detail, James Gaston's *Planning the American Air War: Four Men in Nine Days in 1941* is a very accurate, yet readable account. For an insider's, but somewhat biased view, Haywood Hansell's *The Air Plan that Defeated Hitler* provides a very thorough narrative of the events of August 1941. Academic biographies, notably Charles Griffiths' *The Quest: Haywood Hansell and American Strategic Bombing in World War II* and Martha Byrd's *Kenneth M. Walker: Airpower's Untempered Crusader* also discuss AWPD-1's creation at length.

⁷⁴ Hansell, *The Air Plan That Defeated Hitler*, 76–77.

American Pacific islands and territories, and supporting offensive ground forces against German and Italian combatants would require staggering sums of men and equipment. To determine requirements for defeating Germany, the team visualized the German war machine and society as a large, interdependent web. Assuming the German economy was roughly similar to that of the United States, and armed with assistance from industrialists and bankers, the planners identified 154 primary targets for destruction (and regular redestruction), which were further broken down into six major target sets: electrical power stations, rail and water transportation, synthetic oil plants, aircraft factories, aluminum plants and magnesium plants. On the basis of the number and types of targets to be destroyed, bomber requirements—based on bombardment probability tables—were determined. To these numbers were added additional planning factors to account for poor weather, enemy defenses, camouflage and the like. Although Kuter and his peers had gotten somewhat accustomed to thinking in big numbers, their ultimate estimates dwarfed anything conceived of previously.

Hal George's planning team estimated that the Army Air Forces—which by the end of July 1941 numbered 13,000 officers and 181,000 total men—would need to grow to 179,000 officers and 2.1 million total men.⁷⁶ The numbers of aircraft needed were equally staggering; 68,000 total aircraft were required to meet AWPD-1 objectives (which included no requirement for an air offensive against Japan).⁷⁷ These massive sums of men and equipment were necessary to build the force in the United Kingdom and Near

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⁷⁵ Ibid., 70–88.

⁷⁶ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16; Hansell, *The Air Plan That Defeated Hitler*, 88.

⁷⁷ Hansell, The Air Plan That Defeated Hitler, 88.

East to 3,842 medium and heavy bombers and 2,080 pursuit planes.⁷⁸ The AWPD planners estimated this strength would be reached in April 1944, and by September 1944 the 154 targets would be eliminated.⁷⁹ Further crew and aircraft production would be required during this period, because the planners estimated monthly attrition of 1,288 bombers and 335 pursuit aircraft.⁸⁰

George, Hansell, Kuter, and Walker and their fellow planners had provided, in a very short time, exactly what the president had asked for: a very aggressive, but nonetheless achievable, estimate of AAF requirements. They had done so in the summer heat of Washington, DC, in the oppressively hot Munitions Building. Their approach to target sets was thoughtful and systematic, and considering the dearth of time and paltry state of air intelligence at the time, would have been extremely difficult to improve upon with a different group of individuals operating under the same constraints. This does not mean that their work was flawless. Critics have found much fault in the hastily-written plan. The plan came across as too mechanistic, treating warfare like a math problem, rather than the chaotic mess warfare was (and still is). They overestimated bombers' ability to defend themselves, and hence failed to comprehend the importance of escort fighters (making the fatal assumption that no fighter capable of escorting bombers deep into enemy territory could be maneuverable enough to take on Luftwaffe fighters in air-to-air combat). Kuter and his compatriots either never imagined, or at the very least never

⁷⁸ Ibid., 92–93.

⁷⁹ Phillip S. Meilinger, "The Prescient Planners of AWPD-1," *Air Force Magazine*, July 2011, http://www.airforcemag.com/MagazineArchive/Pages/2011/July%202011/0711planners.aspx. ⁸⁰ Hansell, *The Air Plan That Defeated Hitler*, 88.

⁸¹ Gaston, *Planning the American Air War*, 22. The Munitions Building was always too hot, but the weather was especially hot and muggy that week, and conditions in the "AWPD penthouse" were especially poor.

incorporated, the possibility of first liberating northwest Africa, much less invading Italy, before embarking upon an invasion of Fortress Europe. The planners never incorporated an air offensive against Japan, and—perhaps most surprising of all—they underestimated how big the AAF would eventually grow. 82 While there is much truth in the above critiques, they must be examined in their historical context.

Many criticisms of AWPD-1 come across as unduly harsh, especially when one compares the air planners' product with that of the WPD ground planners (who had almost a month's head start). Notions that the air planners were too mechanistic in their thinking fly in the face of the plan they wrote. American economic planners needed reasonably accurate estimates from the services, in terms of required men and equipment, in order to effectively harness the U.S. economy to the war effort. Had the planners lost themselves in Clausewitzian dialectical philosophizing and refused to give hard numbers, they would have directly harmed, not helped, the war effort. The planning multiples the AWPD-1 planners used in their estimates provides further evidence of their attempts to account for fog and friction in war. While the exact multiples they chose were off, the sole purpose of the multiples was to account for wartime uncertainty.

The most egregious mistake in the planning process—the failure to accept that escort fighters would be vital to the war effort, and hence developing a viable long-range fighter should be at the top of AAF development priorities—also must be considered in

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⁸² Meilinger, "The Prescient Planners of AWPD-1."

⁸³ Lacey, *Keep From All Thoughtful Men*, 8–18. Lacey, in his chapter on "Unmaking the Victory Program," essentially argues that this is exactly what the Army ground planners—Wedemeyer in particular—did. Rather than determine what might be needed, based on reasonable assumptions regarding wartime strategy, the ground planners essentially made guesses based on what they thought America might willingly afford. The numbers of men and equipment the ground planners projected were so far off the mark that they were promptly ignored. AWPD-1was a paragon of accuracy by comparison.

context. It was not clear, and it certainly was not commonly understood, that an adequate escort fighter could be designed. To be effective against Luftwaffe fighters, Allied fighters had to be as fast and agile as their adversaries. To be effective as bomber escorts, those fighters had to be capable of carrying enough fuel to the stay with their bombers close to, if not all the way, to their targets, while making additional allowance for the additional fuel burned in the midst of air combat maneuvering. All In August 1941, the planners' best-case scenario was to operate from British bases while bombing targets deep into Germany. It was not altogether unrealistic to imagine a scenario wherein the British Isles might be lost as bomber bases, requiring much further distances. The Bell P-39 and Curtis P-40, which typified the AAF's first-line aircraft at the time, were incapable of escorting bombers for any meaningful distance, and no amount of modification to those aging designs would adequately improve their range.

More significant than the current state of the art, however, was that ACTS fighter pilots still seemed mired in Great War thinking. The appearance of the B-17 in the mid-

⁸⁴ Hansell, *The Air Plan That Defeated Hitler*, 123–135. While the failure to incorporate drop tanks into fighter designs is highlighted as a major failure, simply adding jettisonable fuel tanks was no panacea. Hansell discusses this in The Air Plan that Defeated Hitler. The Republic P-47C Thunderbolt, for instance, typically deployed with external belly tanks. Unfortunately, the first of these aircraft were sent overseas on ships, and the tanks did not go with them. Once the tanks got to Europe, they realized the tanks, intended for ferrying, were made of resinated paper. They leaked and could not be pressurized, so they had little combat value. The lack of drop tanks was not the only problem; issues with radios limited the P-47s' operational usefulness early on. No amount of drop tanks could have helped in Europe in the winter of 1942-43, when the four most experienced P-38 fighter groups were diverted to Africa. A persistent problem that hindered escort fighter performance for surprisingly far into the war had nothing to do with drop tanks or range extension means of any kind, but tactical thinking. Just as ground commanders would demand defensive umbrellas of fighters overhead in Northwest Africa, bomber commanders wanted fighters to fly close formation with them. Just as ground commanders had to learn to trust airmen's will and ability to support them, even though the aircraft were not always visible, bomber commanders had to discover that they were best served when fighters were freed to pursue enemy fighters whenever and wherever encountered.

⁸⁵ John Lukacs' *Five Days in London: May 1940* is an outstanding work, which succinctly highlights how tenuous the British military position was, after the successful German invasion of Western Europe.

1930s, and the growing threats both Germany and Japan posed, heralded an era of longrange bomber missions. Fighter advocates, pursuit zealot Claire Chennault among them, clearly believed bombers were vulnerable to fighters. 86 The conclusion should have been inescapable—long-range escort fighters had to be designed in order to protect bombers against enemy fighters. It seems, though, that interwar fighter pilots—the bulk of whom had entered service during the First World War, remembered all too well that escorting bombers to their targets meant fighter pilots gave up their positional advantage to defending enemy aircraft. Flying in formation with bombers meant flying at nonoptimal altitudes and speeds, which hindered their ability to respond to—or seek out and destroy—enemy fighter formations. 87 Rather than rethinking how tactics might be altered in order to adequately protect bombers while maintaining an aggressive airborne posture, fighter advocates for the most part did not even try to push for long-range fighter escort development. As late as March 1941, former ACTS pursuit instructor Hoyt Vandenberg recommended against developing drop tanks or other range-enhancing equipment. Echoing Chennault's thinking from years before, he told fellow fighter pilot "Tooey" Spaatz in March 1941 that bomber escort was "incompatible with the mission of pursuit."88 Vandenberg, the ACTS pursuit instructor who questioned escort fighters' value, would be made the Air Staff Plans Division's Policy Section chief in January 1942. In that position, he would be "responsible for allocating virtually all aircraft produced in Britain and the United States to all the Allies."89

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⁸⁶ Futrell, Ideas, Concepts, Doctrine, 82.

⁸⁷ Hansell, The Air Plan That Defeated Hitler, 126.

⁸⁸ Meilinger, Hoyt S. Vandenberg, the Life of a General, 24.

⁸⁹ Ibid., 27.

Much has been written about ACTS bomber "Mafiosos" who were far too optimistic about bombers' ability to get through air defenses. Hal George, Ken Walker, Larry Kuter and Possum Hansell were among the most intellectually powerful dons in this group. The bomber zealots would suffer terribly for this mistake. Ken Walker would be shot down on a bomber mission, and both Larry Kuter and Possum Hansell would command bomber wings, where they watched bomber crews suffer terribly when outside of friendly fighter coverage. Hal George would be more fortunate, in that he would run global Army air transportation during the war. 91

Somehow, the interwar fighter pilot community, which substantially outnumbered bomber pilots—both at ACTS and throughout the Air Corps—has escaped historical scrutiny for its part in the Air Corps' (later AAF's) failure to develop long-range escorts. It is unsurprising that fighter pilots lost budget battles to bomber advocates during the lean interwar years. The air arm could not afford to stay on the leading edge of both bomber and fighter development due to budgetary constraints, and there would have been no need for long-range escort fighters if there were no long-range bombers to be protected. This does not explain, however, why fighter advocates were unprepared to present plans for long-range fighter development once Air Corps expansion funds started flowing in. As airpower historian John Guilmartin has pointed out, the Japanese had been using drop tanks for their A5M fighters since 1937, and their A6M fighters (the famous Zero) since 1939. Fighter pilots Tommy White and Possum Hansell, as strategic

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⁹⁰ Kuter, "Growth of Air Power," 158.

⁹¹ U.S. Air Force, "Lieutenant General Harold L. George."

⁹² Guilmartin, John F., "Criteria for Evaluating Aircraft Combat Effectiveness: An Analytical Framework for Historical Analysis," April 2013, 27.

intelligence officers, it would seem, should have picked up on this trend. Of course, having a fully manned, functional air intelligence apparatus prior to 1940 would have helped the major and captain to identify this trend and might have given them cause to advocate for drop tanks and other range-extending measures.

In the end, the AWPD-1 team, despite their hope that bombers would survive without fighter escort and their belief that long-range fighter escorts were not feasible, added thirteen experimental escort fighters to the plan. Ironically, America's three primary long-range fighter aircraft, which would ultimately destroy the Luftwaffe, were already in advanced stages of design. The Lockheed XP-38, prototype for the twin-tailed P-38 Lightning, first flew in January 1939, two and a half years before the AWPD team was formed. Deliveries of the P-38D began the same month the AWPD wrote its first plan. He Republic XP-47, prototype for the P-47 Thunderbolt (more affectionately known by its crews as the "Jug") first flew in May 1941, the same month Vandenberg argued against long-range fighter development. More P-47s would be produced than any other fighter, P-47s would shoot down more aircraft than any other American fighter, and range improvements would allow the aircraft to escort bombers deep into Germany. The last version produced, the P-47N, would boast an even longer range than the iconic P-51, while being able to take more damage and keep flying. Most remarkably, The

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⁹³ Futrell, Ideas, Concepts, Doctrine, 111.

⁹⁴ Jane's Fighting Aircraft of World War II (New York: Crown Publishers, 1989), 240.

⁹⁵ Ibid., 254.

⁹⁶ Guilmartin, "The Aircraft That Decided World War II: Aeronautical Engineering and Grand Strategy, 1933-1945, the American Dimension, 8th Revision," 32–34.

⁹⁷ Cory Graff, *P-47 Thunderbolt at War* (St. Paul, MN: Zenith Press, 2007), Kindle location 1505 of 1769. When comparing aircraft on Iwo Jima, P-47 pilots noted that "the P-47 had more guns for ground attack; a

North American NA-73X—prototype for the iconic P-51 Mustang, which came to be synonymous with long-range fighter escort—first flew in October 1940. Unfortunately, drop tank-equipped P-51Bs would not perform their first long-range bomber escort mission until January 1944. Somehow, bomber advocates in 1941—but more significantly the fighter pilots who outnumbered them—missed that there were already three basic fighter designs capable of serving as escort fighters, had they been given focused attention and development based on a more comprehensive understanding of strategic bombing requirements that were already apparent in the First World War experience of various nations.

A substantial victory for the AWPD-1 planners was in accurately estimating how large the AAF would ultimately grow. This was vitally important, because realistic, but achievable numbers enabled efficient planning. As historian James Lacey points out in his work *Keep from All Thoughtful Men: How U.S. Economists Won World War II*, the Second World War was the first war wherein the country ran out of productive capacity before it ran out of money. While this meant America came to be an industrial powerhouse, it also meant realistic requirements had to be levied in order to ensure productive capacity was put to good use. The AWPD-1 planners came remarkably close to estimating both how large the AAF would ultimately grow and when it could reach full strength for an aerial assault on Germany. The AAF ultimately peaked at a little

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hearty, air-cooled engine that was less susceptible to battle damage; and a notoriously roomy cockpit (with autopilot) for long flights over the Pacific." P-47Ns flew over 1,400 miles on combat missions.

⁹⁸ Jane's Fighting Aircraft of World War II, 248.

⁹⁹ Lacey, Keep From All Thoughtful Men, 33.

¹⁰⁰ Ibid., 73.

over 2.4 million men—just 14 percent more than the AWPD-1 estimate. 101 Regarding aircraft, the planners were off by just three months in their European bomber fleet estimate. The AAF's bomber fleet on hand, in theaters against Germany, exceeded 3,800—the number they figured they needed for the full-strength air attack on the Germans—for the first time in January 1944. 102 They estimated it would take until April, just three months later, to reach that number. 103 The AWPD substantially overestimated how long it would take to grow its fighter fleet for the war against Germany. First line fighters on hand in theaters against Germany exceeded 2,000 for the first time in April 1943—a year before they anticipated. By April 1944, when the planners anticipated starting the main bomber offensive, the AAF had over 5,400 fighters for the air war against Germany alone. Over 4,500 of those fighters were long-range, maneuverable escort fighters: P-38s, P-47s and P-51s. 104 This number was a subset of fighters in overseas combat theaters worldwide; in April 1944 the U.S. Army Air Forces overseas fielded 9,600 total fighters, of which over 7,000 were one of these three types. 105 The bomber zealots thus substantially underestimated how readily they would adopt the use of long-range escorts, a positive case study of wartime learning and adaptation. 106

¹⁰¹ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16.

¹⁰² Ibid., 155.

¹⁰³ Meilinger, "The Prescient Planners of AWPD-1."

¹⁰⁴ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 154.

¹⁰⁵ Ibid., 152.

¹⁰⁶ The AWPD team's foresight is best understood when contrasted with the WPD's ground Army expansion plan. Although the airmen's estimates were imperfect, they appear hyper-accurate when compared with those of the ground planners. In Keep from All Thoughtful Men, Lacey observes that the ground Army plan, under the leadership of then-Major Albert Wedemeyer, was grossly in error. In fact, it was wrong in almost every way possible—in terms of both strategic assumptions and ultimate mobilization requirements. Wedemeyer's plan called for the creation of 215 divisions, of which 61 were to be armored, 61 more would be motorized, and 20 would be airborne or mountain divisions. The Army ultimately created 90 divisions, of which 16 were armored, none were mechanized and 6 were airborne or mountain.

Selling the Plan

The AWPD plan was simply attached to the WPD's plan and called, "Annex 2, Requirements of the Army Air Forces." Once the team had created their product, they needed to sell it. Hal George's salesmanship strategy started by ensuring he and his three other primary team leads memorized their respective parts of the approval briefing. Kuter's part, predictably, was to explain the size of force required. They had one day to practice and memorize their parts, because the first briefing was scheduled for 13 August. Kuter memorized his lines, along with the other three. Ethel's coaching over the years certainly helped in this regard. The next part involved leveraging the relationships Kuter had built in the War Department. The first group the AWPD team briefed was General Twaddle and other G-3 staffers. The briefing lasted about two hours, and went surprisingly well. Despite the fact that the airmen were arguing for a radically expanded use of airpower, striking Germany independently of ground forces, Twaddle raised no major objections.

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In other words, the ground planners overestimated their overall division requirement by 139 percent. As a subset of this, their estimated armored division requirements were off by 280%, airborne divisions were off by 233 percent, and the percentage error for motorized divisions is inestimable, since none were created during the war. The ground Army's plan was so far off the mark that, contrary to a substantial amount of postwar historiography, it was promptly ignored. Remarkably, though, the Army's Center for Military History, as late as 1990, subscribed to the fiction that Wedemeyer was the architect of the Army's warwinning mobilization plan. As Lacey bitingly asserts, "Wedemeyer's version of the Victory Program is analogous to any one of hundreds of Powerpoint presentations given to Pentagon audiences every month—over in an hour and just as quickly forgotten." The Center for Military History's assessment of Wedemeyer would not be the only fiction the postwar CMH would perpetuate.

¹⁰⁷ Griffith, The Quest: Haywood Hansell and American Strategic Bombing in World War II, 79.

¹⁰⁸ Byrd, Kenneth N. Walker, 75.

¹⁰⁹ Kuter, "Growth of Air Power," 159.

Bolstered by their success in briefing the G-3 Division, the four-man AWPD team went on to present their briefing to multiple interested parties, in preparation for the most important one—the plan's formal presentation to the Secretary of War—which was less than a month away. Two days after briefing General Twaddle, the AWPD team briefed the Assistant Secretary of War for Air, Mr. Robert Lovett, the Chief of the Air Staff, Brigadier General Spaatz, and the Assistant Chief of Staff for War Plans, Brigadier General Gerow. According to Hansell, "There was considerable discussion but no active opposition."110 A week later, on 22 August, they briefed three ACTS graduates—Major General George Brett (Chief of the Air Corps), Brigadier General "Santy" Fairchild, and Colonel Don Wilson (who was by then on the WPD staff). General Gerow and Colonel Bundy from the War Plans Division also attended. 111 In that briefing, they "received an enthusiastic although somewhat incredulous endorsement" from their fellow airmen. 112

On 30 August, less than four weeks after General Arnold tasked the AWPD to start planning, Major Kuter was one of four men briefing General Marshall, General Arnold and President Roosevelt's representative to Russia, Mr. W. Averell Harriman. General Fairchild and multiple members of the WDGS were in attendance, too. AWPD-1 had been in ground planners' hands for almost three weeks by then, so no amount of smooth talking could overcome substantive objections to the plan. WPD staffers vigorously voiced their concerns, Hal George parried their attacks, and General Marshall remained passive. In the end, the Army Chief said, "Gentlemen, I think the plan has

¹¹⁰ Hansell, *The Air Plan That Defeated Hitler*, 93.

¹¹¹ Ibid., 93–94.
112 Kuter, "Growth of Air Power," 159.

merit. I would like for the Secretary and Assistant Secretaries to hear it." ¹¹³ Marshall's decision underscores how much he believed in airpower. Rather than sending the planners to the Joint Board, which likely would have shot the plan down, he authorized them to go directly to the Secretary of War instead. ¹¹⁴

September 1941 is among the most important months in Air Force history. Before the briefers even got the chance to brief Secretary Stimson, General Arnold took another critical step toward making the plan a reality. On 4 September, the AAF Chief took the team to brief the Mr. William S. Knudsen, who headed the Office of Production Management (OPM); five of Knudsen's division chiefs; Mr. John Biggers, who headed the President's Lend-Lease program; and—again—War Department staffers. 115 If AAF expansion was to become a reality, the nation's production planners had to be made aware of the plan and be convinced of both its value and feasibility. On 11 September, the day before the formal briefing, Secretary Stimson called General Marshall, Hal George, Ken Walker and Larry Kuter into his office for an informal discussion. It is unclear where Hansell was that day, but after an hour and a half, the secretary told the airmen that he and Marshall liked the plan, and they should be prepared to brief it to the president. 116 The abbreviated briefing on 12 September, to both Secretary Stimson and Assistant Secretary John J. McCloy, was a formality. Stimson approved the plan, seeing it (according to Hal George) "as a matter-of-fact statement of the force required to do the

¹¹³ Hansell, *The Air Plan That Defeated Hitler*, 94.

¹¹⁴ Kuter, "Growth of Air Power," 160.

¹¹⁵ Griffith, The Quest: Haywood Hansell and American Strategic Bombing in World War II, 80.

¹¹⁶ Byrd, Kenneth N. Walker, 75.

job;" McClov was happy with how offensively-oriented the plan was. 117 The plan went to the president two weeks later, on 25 September. After the plan was approved, twentythree copies were produced. Kuter signed for eighteen of them, and the remaining five went to other senior military and civilian officials. Kuter ensured the copies were securely distributed and properly accounted for, then went back to work in G-3. 118

He did not work there for much longer, though. On 4 November 1941, Major Kuter's career got another boost when he was transferred from the G-3 Division to General Marshall's War Department Secretariat. It was a remarkable opportunity. The roster of Marshall's secretaries and assistant secretaries reads like a "Who's Who" of U.S. Army senior leaders. The list includes Omar Bradley (later five-star general and Chairman of the Joint Chiefs), Maxwell Taylor (another future four-star Chairman of the Joint Chiefs), J. Lawton Collins (later four-star Army Chief of Staff), Walter Bedell "Beetle" Smith (later three-star general, Ambassador to the Soviet Union and CIA Director), and Larry Kuter. 119 Given the tasks the assistant secretaries were assigned, it is unsurprising Marshall demanded only the best men fill these positions. Whenever Marshall needed to make a major decision, the WDGS divisions would send their recommendations and studies to the Secretariat. Marshall's secretary (at the time "Beetle" Smith) parsed each project out to one of the assistant secretaries. Assistant secretaries like Kuter then had to become instant experts on whatever projects they were given. 120 Of course, access to the Army Chief also led to mentorship. As O.A. Anderson described it,

¹¹⁷ Ibid.

¹¹⁸ Kuter, "Growth of Air Power," 160.

¹¹⁹ Pogue, George C. Marshall: Ordeal and Hope, 1939-1942, 8.

¹²⁰ Kuter, "Growth of Air Power," 163–164.

"he called them secretaries, but they were an advisory group and functioned as an advisory group . . . [Kuter] was trained by Marshall, along with the other boys." 121

It appears Brigadier General Twaddle's high opinion of Kuter, along with the multiple opportunities Kuter got to brief the Army Chief, earned him the coveted position. Kuter's last efficiency report in G-3 is especially noteworthy. His direct supervisor in G-3, Lieutenant Colonel Alden H. Waitt (a chemical warfare officer), had been his ACTS student from 1936-37, and the two had taught alongside each other from 1937 to 1939. 122 Kuter had been working for Waitt for six months. Waitt signed the report on 24 November 1941, before Japan even attacked Pearl Harbor, writing that Kuter was, "A truly superior officer of inestimable value to the service and the ablest officer of his age with whom I have been associated during my entire military service. I consider that he is fitted for promotion to Colonel or even higher." [emphasis added] This was because he had "the rare combination of forcefulness and tact . . . and can distinguish the petty non-essentials from things of importance. Combined with these qualities he has a pleasing personality." Brigadier General Twaddle was even more direct; he noted, "Because of his outstanding qualifications, Major Kuter should be considered for promotion to grade of 'brigadier general', Air Corps." [emphasis added] ¹²³ The G-3 Division's loss was General Marshall's gain.

December 1941 would be traumatic for the entire country, but the drama started for Kuter even before the Pearl Harbor attack. On 4 December, the Chicago Tribune and

¹²¹ Orval A. Anderson, Interview with Orval .A. Anderson, interview by Donald Shaughnessy, April 25, 1945, 39, Reel 32036, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

¹²² "PEP Record: Kuter, Laurence S.," Folder 2; Finney, *History of the Air Corps Tactical School, 1920-1940*, 110–112, 128.

^{123 &}quot;PEP Record: Kuter, Laurence S.," Folder 2. It seems a seed was planted with this remark.

the Washington Times-Herald published an article by Chesly Manly. In bold letters, across the front page, it screamed, "F.D.R.'s War Plans! Goal is 10 Million Armed Men; Half to Fight in AEF."124 The joint Army-Navy plan, of which AWPD-1 was a significant part, had not only been leaked, but published for the world to see. The article was doubtlessly based on the actual plan, because it gave the exact number of German targets, American bombers and monthly aircraft attrition called for in AWPD-1. Worse still, it highlighted airmen's skepticism toward the possibility of invading Europe before 1944. Manly quoted directly: "It is improbable,' Air Intelligence stated, 'that a land invasion can be carried on against Germany within the next three years.",125 Kuter, who had been responsible for all but five copies of AWPD-1, suddenly became the focus of a great deal of FBI attention, as did Wedemeyer in the WPD. Both were able to demonstrate that they had followed appropriate protocols. The pressure was quite intense for two days, but suddenly the matter was dropped. It seems the leak was due to a senior civilian official who mishandled his copy of the document. The experience left an indelible mark on Kuter. He would remark later that, if the plan had been published just four days later, one could have gotten the death penalty for treason. 126

Kuter went to work on Sunday, 7 December to prepare a couple of briefings scheduled for Marshall's deputies the next day. At around noon, word came over the radio that the Japanese had attacked Pearl Harbor. He went home to get his uniform, since up to that point, officers wore civilian suits in the War Department. The transition

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¹²⁴ Chesly Manly, "F.D.R.'S War Plans!," *Chicago Tribune*, December 4, 1941, 1, http://archives.chicagotribune.com/1941/12/04/page/1/article/f-d-r-s-war-plans. ¹²⁵ Ibid., 11.

¹²⁶ Kuter, "Growth of Air Power," 162; Wedemeyer, *Wedemeyer Reports!*, Chapter III. Wedemeyer devotes an entire chapter of his memoir to the FBI's investigation of him.

from civilian to military attire at work was yet another visible reminder of the shift from peacetime to wartime practices ongoing throughout the military establishment. While hard work and tight schedules were nothing new, the pace of the next months and years would far exceed what Kuter had experienced previously. Fortunately, Kuter was used to working with little supervision. Beetle Smith's first task to Kuter and the other assistant secretaries was to select important projects that were ready to be implemented, approve them in Smith's name, and back-brief him on their actions. Kuter and the others in Marshall's secretariat would see much less of their Army Chief over the next couple months. 127

After the Japanese attack, Herbert Dargue (by then a major general) was tasked to investigate the preparedness failure at Pearl Harbor. He died en route to Hawaii on 12 December, when his airplane crashed in California. When General McNarney was recalled from Europe to take over the Pearl Harbor investigation, Kuter played a key role in getting him back to the United States. It was one of any number of random, unanticipated tasks that popped up every day during that period. In the midst of the action, Kuter was promoted to the temporary rank of lieutenant colonel on 5 January. It was not an acknowledgement of his talent, but like every promotion before he was promoted solely based on his date of rank. Wartime growth had, to that point, simply sped up the process. He still held the permanent rank of captain. This did not keep the

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¹²⁷ Kuter, "Growth of Air Power," 164.

National Aviation Hall of Fame, "Herbert Arthur Dargue: Military Test Pilot," text, *Enshrinees*, accessed May 15, 2015, http://www.nationalaviation.org/dargue-herbert-arthur/.

¹²⁹ Kuter, "Growth of Air Power," 166.

¹³⁰ "PEP Record: Kuter, Laurence S.," Folder 2.

¹³¹ Ibid

Kuters from traveling in rare circles, however. The Kuters had a party on 25 January with generals Marshall, Arnold, Spaatz, Porter, Eaker, Fairchild, and Twaddle in attendance. Eaker was in an especially good mood, since General Arnold promoted him to brigadier general that day, at the spry young age of forty-five. Future generals (and former ACTS and G-3 coworkers and/or bosses) John DeF. Barker, Hal George, Haywood Hansell, Harold McClelland, Gordon Saville, and Alden Waitt were also there. Promotions were coming fast, but nobody but General Marshall comprehended how quickly they would come for the newly-minted lieutenant colonel and others. On 28 January, Marshall made William S. Knudsen an instant three-star Army general. It would help to have such a high-placed individual, who was well-connected outside of the military, become even better connected within the Army. The AWPD had some powerful friends.

The next day, a Sunday, Marshall called General McNarney and gave him the task of reorganizing the War Department so the Army Chief could focus on strategic policy and guidance. Marshall biographer Forrest Pogue writes that McNarney picked three men to help him with the project: Colonel William K. "Bill" Harrison, Lieutenant Colonel Kuter, and Lieutenant Colonel Otto L. Nelson. Pogue says the senior AAF general picked the three because of their expertise and capacity to work under pressure.

While it was certainly true that those three individuals were solid under pressure—they

¹³² Kuter, "Along with Larry," Washington, D.C., 25.

Parton, Air Force Spoken Here, 130. Ancell and Miller, The Biographical Dictionary of World War II Generals and Flag Officers, 384.

¹³⁴ Kuter, "Along with Larry," Washington, D.C., 25.

¹³⁵ Ancell and Miller, The Biographical Dictionary of World War II Generals and Flag Officers, 177.

¹³⁶ Pogue, George C. Marshall: Ordeal and Hope, 1939-1942, 294.

had to be, in order to work for McNarney—in actuality McNarney inherited a plan that had been in the works for some time. Harrison and Kuter had been working reorganization planning for a month by then. Harvard Ph.D. thesis on Elihu Root's reorganization of the War Department, and have him reassigned from West Point to Washington. Regardless, Kuter, it seems, had carved out a niche: planning high-visibility, intensive projects that reshaped the Army. While working on the reorganization project, Kuter's life and career were reshaped by the stroke of a pen.

The Youngest Army General since William T. Sherman

On Friday, 30 January, Larry Kuter told Ethel when he got home from work that something "unbelievable" had happened, but he could divulge nothing further. Ethel, accustomed to her husband having to keep secrets, pressed no further, but wondered what he could possibly mean. On Monday, Larry called home from a secluded phone in the Munitions Building. What Beetle Smith had told Larry three days earlier was now confirmed—General Marshall had written both Smith's and Kuter's names onto the next brigadier general promotion list. Smith's promotion was noteworthy enough, since he

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¹³⁷ David G Wittels, "THESE ARE THE GENERALS--McNARNEY.," *Saturday Evening Post* 215, no. 33 (1943). McNarney was a notoriously demanding boss, but at the same time Kuter admired him. When interviewed, Kuter said, "General McNarney is distressingly logical, but absolutely fair. He will break and overenthusiastic officer's heart by quietly, icily pointing out the holes in his idea. But if the idea is sound, he will put it into effect immediately—and see that the officer gets credit for it. He is ruthless, all right, but just as ruthless with himself." Fortunately for Kuter, he and the others on the reorganization planning team had done their homework.

¹³⁸ Kuter, Interview of Brigadier General Laurence S. Kuter, 14.

¹³⁹ Kuter, "Growth of Air Power," 173.

¹⁴⁰ Ibid., 168.

leapt past a number of more-senior colonels and (like Eaker) was only forty-six. Marshall needed a man to act as secretary for the newly-formed American-British Combined Chiefs of Staff (CCS), he knew and deeply trusted Smith, and the job required that Smith wear a star. 141 Kuter had a friend in a strategically critical position in the American-British military alliance.

Kuter's promotion was all the more remarkable, since he was a decade younger than Smith. Marshall promoted Kuter for much the same reason he promoted Smith, but the decision had much wider implications for the Army Air Forces. Just as Marshall put Smith in the CCS secretariat in order to ensure it ran smoothly, he intended to move Kuter to the Air Staff in order to enable a higher-functioning organization. Marshall also intended to send a message, and Kuter was to be the unwitting messenger. Marshall picked Kuter for promotion as yet another element of overhauling the Army, and in particular the Army Air Forces, at the dawn of American entry into the war. According to Marshall, "My main difficulties came from the fact that [Arnold] had a very immature staff. They were not immature in years, because they were pretty old, but I used to ... say [they were] antique staff officers or passé airmen—passé fliers, I guess—because they were not trained at that kind of staff work and they were busy taking stands . . . about promotions." ¹⁴² In other words, Hap Arnold's key advisors were, for the most part, either Great War-era airmen who had spent so much time on higher-level staffs that they had little awareness of (or interest in) current realities in the air arm, or they were long-

¹⁴¹ D. K. R. Crosswell, Beetle: The Life of General Walter Bedell Smith (The University Press of Kentucky,

¹⁴² Pogue, George C. Marshall: Ordeal and Hope, 1939-1942, 290.

time flyers who had assiduously avoided staff work for much of their careers and thus served Arnold under duress. Either way, the Air Staff was due for a shakeup.

Marshall had been urging Arnold for some time to promote promising young officers to senior officer ranks, so that key staff positions would be could be filled by competent, energetic individuals who knew how to get things done. This would necessarily mean the promotion of younger officers—primarily those commissioned in the 1920s—to positions of authority over Great War-era aviators. If Arnold did the promoting, his staff would openly revolt. Marshall's unilateral decision eliminated that concern. Hap Arnold biographer Thomas M. Coffey summarized it best: "Arnold was delighted because he shared Marshall's admiration of Kuter, who was as diligent as he was resourceful. Arnold once told his son David that Kuter and [future General Lauris] Norstad were 'the brains of the Air Force.' And since it was Marshall who had promoted Kuter, none of Arnold's staff men could complain to him about it." ¹⁴³ Arnold got a competent senior staff officer who both he and Marshall trusted, the older "passé" staff officers were served notice that they needed to improve their performance, and ambitious "Kuter-esque" types were given hope that they might advance on merit, rather than on mere seniority.

Marshall picked Kuter for rapid promotion for the same reason Kuter had been selected early to attend ACTS as a student, been made a bomber instructor directly out of ACTS, and gotten yanked from Maxwell to serve in Washington. There had always been plenty of more-senior officers to fill the jobs Kuter had held, but—owing to the seniority-

¹⁴³ Coffey, *Hap*, 247.

based, "Dead Men's Shoes" dynamic discussed earlier—there were precious few with the requisite vision, drive and experience to lead the air arm in the directions it needed to go. The photogenic, articulate, strategically-minded and bureaucratically-savvy Larry Kuter was literally and figuratively the poster boy for the young officer vanguard Marshall wanted to see leading the AAF. It certainly did not hurt that Ethel completed the ideal image. She was active in all manner of Air Force and Red Cross support activities. 144

Kuter quickly learned what instant fame meant. Newspapers around the country proclaimed that he was the youngest Army general, at age 36, since Custer. This was incorrect; he was the youngest since William T. Sherman. Not only did Kuter have the job of working for McNarney, who was no easy boss to work for, on the War Department reorganization; but he also got flooded with requests for interviews, radio shows and public speeches. This came on top of mountains of congratulatory mail and telegrams from friends and family around the country, to which the Kuters felt obliged to respond. Fortunately, the majority of those who wrote seemed genuinely happy to see him promoted. Kuter soon got help from the War Department Public Relations Office, which ran interference for him. The P.R. office did not shield him from his coworkers, however. Kuter recalled one of his fellow assistant secretaries slipping him a note once that read, "If you are not too busy too busy with the press, General Marshall would like to see you." The passive-aggressive note came from Lieutenant Colonel Maxwell Taylor, who would attain great prominence later as Chairman of the Joint Chiefs of Staff during

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¹⁴⁴ Kuter, "Along with Larry," Washington, D.C. 23. During this period, Ethel wrote, arranged and/or presented radio programs for the Red Cross, Blood Donors, Nurses Aides, and the War Fund Drive.
¹⁴⁵ U.S. Air Force, "General Laurence S. Kuter."

¹⁴⁶ Kuter, "Growth of Air Power," 169.

the Vietnam War. Kuter earned his first star ahead of future Air Force Chiefs of Staff
Hoyt Vandenberg and T.D. White; and future Joint Chiefs Chairmen Arthur Radford,
Nathan Twining, Lyman Lemnitzer and Maxwell Taylor—all of whom were older and
commissioned earlier than he.¹⁴⁷

It is worth noting how professionally underdeveloped Larry Kuter was for general officership. He had never commanded a wing, group or even squadron—in peacetime or in combat. He functioned briefly as a squadron commander early in his first flying assignment at Langley Field a dozen years before, but the largest and most recent unit he had formally commanded was a flight. The last flight he had led was at Maxwell Field, which he did as a part-time job, while primarily serving as an ACTS instructor. Kuter did not lack for talent, work ethic, ambition or senior officer recommendations that he be given a command. The efficiency reports throughout his career and, most dramatically, Marshall's choice to give him a star at such a young age, indicate he was well-qualified to lead. Kuter's leadership qualities could not have kept him from command to that point.

Kuter had not yet gotten to command because—despite the consistently superlative ratings from senior officers throughout his career—his intellectual and administrative skills were sorely needed, but in short supply within the air arm. General Arnold is well known for having made it a point to send his best officers overseas to command assignments, since he remembered his own First World War experience all too

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¹⁴⁷ Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 187, 317, 451, 453, 457, 597. From this group, all but Taylor and White were at least five years older than Kuter. The earliest any of them pinned on his first star was four months behind Kuter; in June 1942, Lemnitzer and Twining were made general officers. White was promoted to brigadier general in November. Radford, Taylor and Vandenberg followed a month later.

well, where he was a victim of his own competence. He was kept stateside, where he was considered more valuable for his leadership and administrative abilities in building the Army's air arm and sending it to war than he was for going overseas and leading it. Kuter was doubtlessly in the top echelon of Arnold's officers, but it seems in Kuter's case that Arnold ran into the same problem his Great War bosses had earlier. Arnold trusted Kuter; his boss General Marshall did, too; and—perhaps most importantly—he recognized Kuter's administrative talents and knew that few others in the AAF were better-acquainted with the air arm's mobilization plans. Airpower strategy, mobilization and Larry Kuter were so closely linked that Marshall and Arnold had—and would have—a very difficult time letting the young general go.

Marshall's Plight

During the latter part of Kuter's tenure in Marshall's secretariat, Hal George and Possum Hansell had a proposal for the Army Chief. Marshall had Kuter sit in on the discussion. Kuter's former AWPD teammates were greatly concerned about German submarines' ability to intercept ships making their way across the Atlantic. They proposed that the Azores be seized in order to provide airfields from which to operate and thus provide shipping security. Marshall listened, asked from whence the requisite amphibious division and naval force to execute this plan might come, and the planners

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¹⁴⁸ Coffey, *Hap*, 92. Coffey's description of Arnold's First World War experience is remarkably similar to Kuter's two and a half decades later, except worse. Arnold at least let Kuter serve overseas for six and a half months; Arnold himself essentially missed the First World War, arriving at Verdun literally on Armistice Day. At the end of the war, Arnold wrote in his diary that, "It looks as if I will go down in history as a desk soldier."

responded they would be provided if the president demanded them. It was an obviously incomplete plan that should never have made it to Arnold, much less to Marshall. When Kuter followed up with his colleagues after the briefing, George and Hansell told him they had intended simply to draw Arnold's attention to the Azores. Somehow, they still did not appreciate the way Hap Arnold worked; in much the same way Arnold had peremptorily sent Kuter to Colonel Bull Wesson years before to discuss the young lieutenant's concerns with bombsight developments, the AAF Chief sent his planners right into the lions' den otherwise known as George C. Marshall's office. Kuter had his marching orders; he would go to the Air Staff, and ensure no such "half baked" plans got to Arnold again. Before he left, though, Kuter would help McNarney gain functional independence for the Army Air Forces, while streamlining the Army force structure.

Overhauling the Army Structure

Kuter's last major project in the War Department was to work, as an airman, for an airman (McNarney), to write and implement a plan put forward by airmen (Spaatz and Arnold), in order to give airmen the closest possible thing to wartime service independence possible (air forces would be coequal with ground forces), with the support of one of airmen's greatest Army advocates (Marshall) and the support of one of the most pro-airpower presidents in history (Franklin D. Roosevelt). The job was much more difficult than it sounds, decades after the event. Regardless, by 2 March 1942,

¹⁴⁹ Kuter, "Growth of Air Power," 171.150 Ibid.

McNarney's team, of which Kuter was a vital part, would completely overhaul the WDGS and change the balance of bureaucratic power within the Army.

Organizational dysfunction had long been the bane of General Marshall's existence, due to the amount of bureaucratic red tape required to make decisions within the War Department. In mid-August, while Kuter and the rest of the AWPD-1 team were selling their plan, Marshall convened a committee to consider what the Army's wartime functions should be. Then-Lieutenant Colonel William K. Harrison of the WPD staff recommended that the Army be split into three separate commands—responsible for air, ground and supply forces—and that those commands report directly to the Chief of Staff. Harrison's boss, General Gerow, shot down the recommendation as too drastic, and on 30 August essentially recommended maintaining the status quo. ¹⁵¹ On 24 October, General Spaatz formally submitted a plan based on Harrison's concept, but it was not accepted. 152 In mid-November, though, General Arnold went directly to Marshall with a detailed plan, shortly thereafter the WPD broadly concurred with the plan (which had originally come from a WPD staffer), and soon Marshall pronounced himself "favorably impressed" by the Arnold (read Harrison) plan. 153

Marshall settled on McNarney as his man to lead the overhaul, but the Pearl Harbor attack and Dargue's death while en route to Hawaii to investigate readiness failures set back the reorganization. McNarney was sent to Hawaii to replace Kuter's longtime bomber mentor, but his absence does not seem to have slowed down the process

¹⁵¹ Pogue, George C. Marshall: Ordeal and Hope, 1939-1942, 291.

¹⁵² Futrell, *Ideas, Concepts, Doctrine*, 128.

¹⁵³ Julian E. Hewes, From Root to McNamara: Army Organization and Administration, 1900-1963 (Washington, D.C: U.S. Government Printing Office, 1975), 71.

as much as one might think. While McNarney was gone, in late December 1941, Colonel Harrison and Major Kuter started doing preliminary planning for the reorganization, and during this time they identified Otto Nelson as a desirable member of the committee and had him reassigned from West Point to Washington. McNarney had just recently returned from Hawaii when Marshall called him in on 25 January and gave him the assignment to overhaul the Army structure. 155

McNarney inherited a team that had already done a substantial amount of legwork for him. Harrison, Kuter and Nelson were already sold on the Harrison initiated/Hap Arnold supported plan to split the Army into the Army Air Forces (AAF), Army Ground Forces (AGF) and Army Services of Supply (which for simplicity's sake will be referred to by its later title—Army Service Forces, or ASF). As implied by the names, the AAF would focus on air combat, the AGF on ground combat, and the ASF would support both air and ground forces. Kuter was responsible for matters pertaining to the AAF, Harrison for the AGF and Nelson for the ASF. Kuter was fortunate, since his ACTS classmate and fellow instructor Byron "Hungry" Gates was leading reorganization planning as the AAF's Director of Management Control. Gates had recruited and commissioned management expert Charles B. "Tex" Thornton, who had brought along with him Robert

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¹⁵⁴ Kuter, "Growth of Air Power," 173; Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 238. Kuter's narrative fits with Nelson's assignment history; Nelson went directly from teaching at West Point in 1941 to working alongside Kuter in the War Department Secretariat in 1942. For Nelson to have gotten orders and moved to Washington in time to start working for McNarney on the reorganization in late January, Harrison or Kuter would have had to identify him and get him reassigned in December, or early January at the very latest.

¹⁵⁵ Pogue, George C. Marshall: Ordeal and Hope, 1939-1942, 293.

¹⁵⁶ Army Services of Supply, if abbreviated, would yield a less favorable short form than ASF.

"Bob" McNamara (future Secretary of Defense), Barton Leach (later Harvard Law School Dean) and Guido Perara. 157

Six days after getting the tasking, (on 31 January—the day after Kuter first heard he would be on the brigadier general promotion list), the team presented their recommendations to Marshall. Marshall approved their plan, and told McNarney that Arnold (unsurprisingly) would be the AAF Chief, McNair would lead the AGF, and a relative unknown, Brehon Somervell, would lead the ASF. On 5 February, the team presented their plan to the War Department's division chiefs. Not only would the overall Army be reorganized, but the WDGS would be slashed. Three of the four numbered divisions (G-1, -3 and -4) would be cut to 8-10 men each. The War Plans and G-2 Divisions—due to the global nature of the war—would be cut less dramatically. Marshall underscored his support for the reorganization and gave his division chiefs two days to register their complaints. Marshall liked to call McNarney's committee, of which Kuter became the second-most senior member with his promotion on 2 February, the "Soviet Committee." Its willingness to substantially alter the reorganization plan was as miniscule as its authority was vast.

Just a week and a half later, on 16 February, McNarney briefed a broader audience, but this time he had little interest in feedback. It was at this meeting that McNarney, never one to mince words, cut off discussion by saying, "It is not a voting committee. It is not a debating society. It is a committee to draft the necessary

¹⁵⁷ Kuter, "Growth of Air Power," 173.

¹⁵⁸ Ibid., 177; Hewes, *From Root to McNamara*, Chapter 3. Kuter's account closely fits with the official Army history regarding the Marshall reorganization.

¹⁵⁹ Pogue, George C. Marshall: Ordeal and Hope, 1939-1942, 294.

directives."¹⁶⁰ On 2 March 1942, War Department Circular 59 formally outlined the Army reorganization plan. Four days later, Major General McNarney, Brigadier General Kuter and Colonel Harrison testified before Congress. Kuter, unsurprisingly addressed the AAF part of the reorganization. His responses to questions from then-Senator Truman and others were well-received. One particular exchange during Harrison's portion of the testimony was noteworthy:

Colonel Harrison: The Air Force now has complete autonomy except where it must be coordinated with the rest of the Army, and that is in two places: where you have an over-all limitation on personnel; or on financial matters, equipment, somebody must distribute it . . .

Senator Hill: The truth is that they are on absolute equality now, it seems to me, with the ground forces. It happens at the present time that the present Chief of Staff, General Marshall, is a ground man. That *Chief of Staff, however, under this set-up, might at some future time be an airman*?

Colonel Harrison: That is right, and in the General Staff, as far as practical, we are trying to get a 50-50 arrangement of air and ground officers, and we are trying to make sure that the key positions are held 50-50, in that ratio. ¹⁶² [emphasis added]

The Army was about to be redefined, to the extent that half of its officers would be airmen, and leaders held out the possibility that an airman could be the Army Chief. The committee chairman, Senator Robert Reynolds from North Carolina, concluded by thanking the three officers for their "kindness in coming here today and furnishing us with this information." The senators' response was remarkably bland, considering the scope and effects of the pending overhaul—on the Army and the way Americans would

¹⁶⁰ Ibid., 195.

¹⁶¹ Hearing Before the Committee on Military Affairs on S. 2092: A Bill to Establish a Department of Defense Coordination and Control, and for Other Purposes (Washington, D.C: U.S. Government Printing Office, 1942), http://congressional.proquest.com.proxy.lib.ohio-state.edu/congressional/result/pqpresultpage.gispdfhitspanel.pdflink/\$2fapp-bin\$2fgis-

state.edu/congressional/result/pqpresultpage.gispdfhitspanel.pdflink/\$2fapp-bin\$2fgishearing\$2f6\$2f9\$2f7\$2f5\$2fhrg-1942-mas-0010_from_1_to_29.pdf/entitlementkeys=1234|app-gis|hearing|hrg-1942-mas-0010.

¹⁶² Ibid., 23.

¹⁶³ Ibid., 27.

wage war. The reorganization plan was approved, and on 9 March the plan went fully into effect. Kuter was reassigned to the Air Staff. It had been a very busy two and a half years in the WDGS.¹⁶⁴

Wartime Mobilization, the Air Corps and Larry Kuter

Brigadier General Kuter packed up his office in the War Department Secretariat and moved to the Air Staff. He was assigned to work for his old ACTS boss, Major General "Miff" Harmon. 165 Kuter had to be all too aware that he had a substantial hand in creating the AAF he was helping lead—for both good and ill. He had educated and trained many of the war's bomber leaders, first at the Second Bombardment Wing at Langley Field, then—more significantly—at the Air Corps Tactical School. He had played a substantial role in testing, advocating for and protecting the technologies found in the B-17s he and his crews would fly. From operationally testing the Boeing B-9, the B-17's not-so-distant ancestor, at Langley Field; to arguing for precision bombing doctrine and bombsight development as an ACTS instructor; to helping save Boeing's bombers (and not only the B-17, but the B-15—predecessor to the B-29) from the budget axe as an Air Corps Board technical representative in 1938; Kuter had been in the center of bomber developments for over a decade.

Kuter's work as a mobilization planner had ensured that four-engine bombers were starting to roll off American assembly lines in substantial-enough numbers that

¹⁶⁴ Kuter, "Growth of Air Power," 179–180. ¹⁶⁵ Ibid., 182.

overseas bomber commanders (he would eventually be one) would actually have units to command, and they would be the centerpiece of a strategy he had helped write. Of course, as his crews were literally being shot down over Europe, he would be painfully reminded of how he had figuratively shot down the idea that bombers were too vulnerable to fighter aircraft and anti-aircraft artillery. It would seem that he had almost no one to blame (or thank) but himself and his fellow bomber Mafiosos for his relative success as a wartime commander. Kuter and his fellow bomber barons have certainly gotten a great deal of attention in the decades since the war, and rightfully so. In fairness, though, one must remember how little opportunity had been afforded Kuter and his peers to gain the experiences necessary to make more balanced choices. On the other hand, thinking is free, and they seriously misjudged the lessons of World War I that were readily available for study in this regard.

AAF Strategy, Mobilization and Larry Kuter

Kuter's prewar and wartime experience is so inextricably linked with Second World War mobilization that it deserves special attention. Wartime mobilization is the "process by which the Armed Forces of the United States or part of them are brought to a state of readiness for war or other national emergency, which includes activating all or part of the Reserve Component as well as assembling and organizing personnel, supplies,

and materiel."¹⁶⁶ Mobilization planning was vitally important because it enabled or restricted possible courses of action military leaders could take. No wartime strategy could succeed if the requisite men and materiel were not organized, trained, equipped and deployed to fulfill that strategy.

Mobilization planning was so important to the interwar Army that it was baked into Army officers' patterns from the outset of their careers, as evidenced by their efficiency reports. Line "Q" on Kuter's efficiency reports (until the form was changed on 1 January 1936) first asked the rater, "What is the highest command (or assignment in case of a staff officer) he is qualified to hold in peace?" then, "In war?" It was a valid and important question, since Army officers were all too aware that their service was too small to fight all but the most poorly equipped armies of the world. The necessity to be prepared for wartime mobilization drove the creation of the Army Industrial College, and it was thus for good reason that senior air officers had high-potential individuals like Hap Arnold, Santy Fairchild, Bennett Meyers and Barton Yount attend the mobilization-centric school. The consequences of misbegotten mobilization, as the First World War had painfully demonstrated, were far too grave.

The Army Air Forces' rapid growth is best comprehended when compared with the Army Ground Forces. The causes and consequences of wartime Army ground mobilization have gotten plenty of attention, in both popular and academic presses, but

¹⁶⁶ Joint Chiefs of Staff, "Joint Publication 1-02: Department of Defense Dictionary of Military and Associated Terms," 161.

¹⁶⁷ "PEP Record: Kuter, Laurence S.," Folder 2. Kuter's Officer Efficiency Reports (W.D., A.G.O. Form No. 67) included this question in the 1 February 1933 version, but the 1 January 1936 and later versions did not.

¹⁶⁸ Official Army Register, January 1, 1939, 21, 236, 521, 839.

the Army Air Forces' (AAF) growth is poorly understood. For the Army Ground Forces (AGF), Peter Mansoor's *The GI Offensive in Europe: The Triumph of American Infantry Divisions* enumerates the challenges that Lieutenant General McNair faced in growing the AGF during the war, in the course of telling the wider story of the performance of U.S. Army infantry divisions during the Second World War. Preparing troops for ground combat was a tremendously difficult task, which was made all the more difficult by competition with other services and within the Army itself for talent. Mansoor notes that the AAF and Army Service Forces (ASF) received disproportionately high percentages of high-quality men, and reasonably concludes that infantrymen died unnecessarily, due to being led by less competent officers and noncommissioned officers than the ground combat forces required. Mansoor's argument is difficult to refute; the air arm did absorb a substantial amount of Army personnel and resources, especially through 1943, when the ground Army needed to assess, train and equip soldiers for the major military operations that lay ahead (while simultaneously fighting around the globe).

What is often missed, or at the very least poorly understood, is how much more rapidly the AAF grew than did the ground Army (which for the purposes of this discussion is the rest of the Army, or the AGF and ASF combined). While it is well known that the AAF grew quickly during the war, what is less well appreciated is how dramatic that growth was. As previously noted, the Air Service's and its successor Air Corps' officer corps remained essentially unchanged (at around 1,250) throughout the 1930s; this is how the air arm was able to send such a large proportion of its officers

¹⁶⁹ Mansoor, The GI Offensive in Europe.

through ACTS (and to a lesser extent other PME schools like CGSS) during the decade. ¹⁷⁰ Ground Army officer strength likewise remained little changed during this period, at around 11,000.¹⁷¹ This numerical stasis, and in particular the Air Corps/ground Army proportional mix, began to change dramatically in 1938, in no small part due to President Roosevelt's sponsorship and the resultant Air Corps expansion program Kuter (despite having not attended the Industrial College) helped initiate in November of that year.

The ground Army's wartime growth was impressive, especially when one considers that it occurred in the midst of combat losses and other forms of personnel attrition before and during the war. The ground Army's officer corps grew from 11,000 in June 1938 to a peak of 408,000 by the end of Second World War in August 1945—more than thirty-six times larger in just over six years. 172 Meanwhile, the ground Army's enlisted force grew in lockstep with their officer leaders, peaking slightly earlier in May 1945 at 5.4 million soldiers, or thirty-five times its 1938 size. ¹⁷³ This rapid growth was necessary because quantity had a quality of its own in industrial age warfare. The ground Army's problems were far from solved by simply throwing more men into the breech,

¹⁷⁰ Secretary of War, Annual Report of the Secretary of War to the President: 1930, 309; Secretary of War, Annual Report of the Secretary of War to the President: 1938, 52. The Air Corps officer corps numbered 1,271 in June 1930 and 1,287 in June 1938.

171 Ibid.; the Ground Army officer corps numbered 10,889 in 1930 and 11,192 in 1938.

¹⁷² Secretary of War, Annual Report of the Secretary of War to the President: 1938, 52; Statistics Branch, Control Division, "Statistical Review of World War II" (Headquarters Army Service Forces, War Department), 197, accessed May 15, 2015, http://www.ibiblio.org/hyperwar/USA/StatReview-ASF.pdf; Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16. Statistics for the Ground Army are determined by subtracting Air Corps/Army Air Forces personnel numbers from total Army numbers. The Ground Army officer corps grew from 11,192 in June 1938 to 407,943 in August 1945, for 3,545% growth.

¹⁷³ Ibid.; the Ground Army's enlisted force grew from 152,067 in June 1938 to 5,383,713 in May 1945, for 3,440% growth.

however. Any organization that grows thirty-five times larger in seven years, much less one embarking on a global war, the likes of which was never seen before or since, is presented with any number of organizational and leadership challenges. The situation is even worse when that organization is fighting a war while getting less than its proportional share of talent. That the AGF got a suboptimal number of talented men—especially in 1943, when the ground Army was gearing up for the invasion of continental Europe—is not in dispute. The question is what branch was responsible for shorting the AGF of its brainpower.

While the ground Army's combat forces undoubtedly suffered for quality men in 1943, existing narratives miss how much the Air Service and its successor Air Corps suffered for personnel for two decades—from 1918 through 1938—and how this directly contributed to the subsequent quality crisis in the ground Army during the war. In other words, prewar decisions by interwar Army leaders and their civilian superiors, exacerbated by the Depression-induced funding shortfalls, disproportionately hurt the air arm before the war, which in turn hurt the entire Army—but especially the AAF and AGF—during the war. This dynamic also explains Kuter's meteoric rise through the ranks, from the temporary rank of major as late as 4 January 1942 to brigadier general on 2 February, twenty-nine days later. Unfortunately, no existing historical narrative fully captures how much of a drain on personnel resources the ASF must have been.

The AAF's growth eclipsed that of the ground Army during the war—especially when it came to the officer corps. AAF growth overall was remarkable for its rapidity.

The AAF enlisted force grew proportionally as much (thirty-six times its 1938 size) by

June 1942 as the ground Army enlisted force finally did three years later. ¹⁷⁴ The AAF's officer corps grew about as quickly as its enlisted force until mid-1942, at which time it outpaced both the AAF enlisted corps and the ground Army's enlisted and officer ranks. The AAF's officer corps reached thirty-six times its 1938 size in May 1942, just one month before its enlisted force reached that proportional milestone, and again more than three years ahead of when the ground Army officers had grown the same amount percentage-wise. 175 By November 1942, though, when Kuter headed to Europe, the AAF's officer corps was eighty-six times and the AAF enlisted force was seventy-four times their 1938 sizes, respectively. 176

The AAF did not stop growing when Kuter left Washington, but its growth was in large part due to the mobilization planning and execution work Kuter and others had done to that point. The AAF enlisted force did not peak until November 1943, at over 2.1 million airmen—one hundred and twelve times larger in five and a half years (and a year and a half before the ground Army enlisted force finally peaked in May 1945). 177 While this statistic is remarkable enough, the AAF officer corps growth significantly outpaced even the AAF enlisted force. The AAF's officer corps ultimately grew to over three hundred times its 1938 size by May 1945 (V-E Day), equating to a growth rate nine times

¹⁷⁴ Secretary of War, Annual Report of the Secretary of War to the President: 1938, 52; Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16; Statistics Branch, Control Division, "Statistical Review of World War II," 197.

175 Ibid.

¹⁷⁶ Secretary of War, Annual Report of the Secretary of War to the President: 1938, 52; Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16.

¹⁷⁷ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 197.

higher than the ground Army officer corps—throughout almost the entirety of the war. ¹⁷⁸ Growth in its officer corps had untold impacts on the AAF, the U.S. Air Force that succeeded it, and Kuter in particular. Three charts help describe the challenges Kuter and fellow AAF officers faced throughout the war, but especially in 1942 and 1943.

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¹⁷⁸ Secretary of War, *Annual Report of the Secretary of War to the President: 1938*, 52; Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16; Statistics Branch, Control Division, "Statistical Review of World War II," 197.

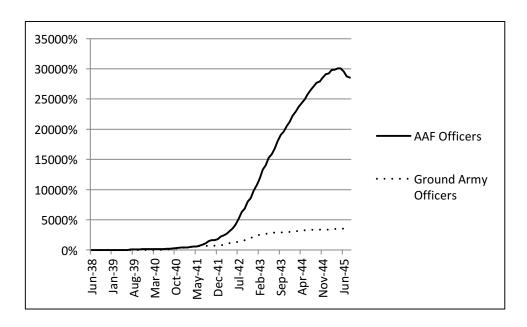


Figure 3. Proportional Growth of AAF and Ground Army Officers (From 1938)¹⁷⁹

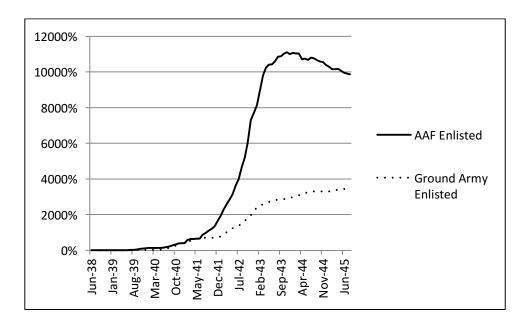


Figure 4. Proportion Growth of AAF and Ground Army Enlisted (from 1938)¹⁸⁰

¹⁷⁹ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16; Statistics Branch, Control Division, "Statistical Review of World War II," 197.; Annual Reports of the Secretary of War to the President, 1938-1941. ¹⁸⁰ Ibid.

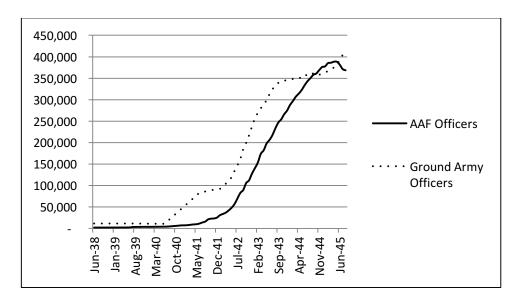


Figure 5. Numerical Growth of AAF and Ground Army Officers¹⁸¹

Kuter would certainly benefit from the numerical size of the AAF he had helped build and the B-17 he had helped save, but little else. Those he led were incredibly green, and were almost entirely unfamiliar with the precepts Kuter and others had taught at ACTS. When he headed overseas in November 1942, less than one percent of all AAF officers were ACTS graduates, barely one in twenty had been commissioned for two or more years, and four-fifths of AAF officers had been civilians a year prior. These, of course, were global numbers; the statistics were bleaker overseas, since relatively few long-serving First World War-era officers (which described most of the interwar Air Corps officer corps) deployed to lead combat flying units.

¹⁸¹ Ibid

¹⁸² Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16. Just over 900 airmen graduated from ACTS during its entire existence, and by the end of October 1942, the AAF officer corps numbered over 105,000.

Kuter and his fellow air leaders grew the force at a breakneck pace, despite the manifest challenges associated with building an air force. The technical complexity of aircraft required competent individuals to both maintain and operate them. The aerial environment in which airmen operated those aircraft was inherently dangerous: fog, thunderstorms other natural phenomena routinely killed airmen even without the help of enemy action. As a result, the Army Air Forces suffered three hundred or more flying fatalities in the continental United States every month from December 1942 through January 1945, with monthly stateside flying deaths averaging over five hundred for six months, from May through October 1943. The AAF lost another 400 crews—320 of them bomber crews, each with up to 10 souls on board—simply flying from the United States to overseas destinations between 1943 and 1945. 184 Army ground soldiers were not the only ones who suffered due to poorly qualified or trained personnel.

Quality of AAF Enlisted Force

One persistent and little challenged notion in military historiography is that the AAF enlisted force got too many high-quality recruits during the war, which robbed ground combat units (from the AGF) of the quality individuals it needed to lead men in ground combat. The impression given is that men who might have been platoon leaders in the ground Army were instead sweeping hangars or scrubbing toilets in the Army Air Forces. While anecdotal evidence of this dynamic could have been—and was—found,

¹⁸³ Ibid., 319. ¹⁸⁴ Ibid., 93.

the root causes of Army ground combat units getting shorted for talent have been misidentified. The source of this misapprehension seems to be an official Army history: Palmer, Wiley and Keast's 1948 work *United States Army in World War II: The Army Ground Forces, the Procurement and Training of Ground Combat Troops.*

The Army historians correctly note that the AGF suffered from a lack of high-quality recruits during the war. This is because the AGF was competing for talent not only within the Army (with the Army Air Forces and Service Forces), but outside the Army as well, with the Navy and Marine Corps—both organizations that accepted high-quality volunteers until the process was finally halted as skewing the distribution of the nation's manpower. Unsurprisingly, the Marine Corps had greater appeal for those itching for ground combat, and most Army recruits preferred service in the AAF or ASF to the AGF. The AGF clearly got too few talented recruits, as was abundantly clear in the number of low-quality individuals ground units were forced to accept in order to flesh out their units. Unfortunately, in their analysis, the historians missed how much the AAF's officer corps grew, and how massive growth in officer strength actually led to the AAF enlisted corps getting far *fewer*, not substantially more, high-quality recruits than the ground Army did. 185

Understanding how and why the AAF's actually got too few, rather than too many, high-quality recruits for its enlisted force in 1943—and by extension how a myth was created—starts with examining the Army General Classification Test (AGCT).

When men were recruited into the Army, they were placed into one of five AGCT

¹⁸⁵ Palmer, Wiley, and Keast, *The Procurement and Training of Ground Combat Troops*, 18.

classes, according to their perceived intelligence. Class I recruits were assessed to have the highest intelligence, and Class V were assessed to have the lowest. To be selected for officer training, recruits had to be in Classes I or II. The numbers of Class I and II recruits exceeded officer accession requirements, so the additional high-quality individuals were used to build the noncommissioned officer ranks. While AGCT categorization was a blunt instrument—humans are too varied in the kinds of intelligence they possess and the relative skills they hold—the official Army historians used the distribution of recruits as a proxy for determining if talent was apportioned equitably. The relative number of Class I and II recruits the AAF, AGF and ASF seem to support the notion that the AAF got too much talent. A higher proportion of the AAF's recruits in 1943 were Cat I and II than the ASF or AGF, as indicated from the below chart in the official Army history:

Branch	Classes I and II		Class III		Classes IV and V		Total	
Diancii	Number	Percent	Number	Percent	Number	Percent	1 Otal	
Ground Combat Arms [AGF]	308,180	29.7	345,720	33.3	382,596	37.0	1,036,496	
Services [ASF]	348,553	36.5	271,746	28.5	334,294	35.0	954,593	
Army Air Forces [AAF]	247,141	41.7	185,489	31.3	159,282	27.0	591,912	
Total	903,874	35.0	802,955	31.1	876,172	33.9	2,583,001	

Table 2. Distribution by AGCT Classes of All Men Inducted into the Army, Processed at Reception Centers, and Assigned to the Various Arms and Services during 1943¹⁸⁷

¹⁸⁷ Ibid., 18.

¹⁸⁶ Ibid., 15. According to the historians, "The best single precise index to quality of personnel (physical fitness of all general-service men being assumed equally adequate) was the score on the Army General Classification Test."

While it is evident that a higher proportion of the AAF's recruits in 1943 were AGCT Class I and II individuals, this did not equate to the AAF enlisted force getting a disproportionate share of those people. What the official Army historians apparently did not consider was the net impact of AAF growth. The interaction between rapid growth and distribution of high-quality individuals is reflected in the chart below, which incorporates AAF and Ground Army end strength growth and casualty statistics:

	Total AGCT Class I/II	Officer Growth	Officer Battle Casualties	Officer Growth + Casualties	Officer Percentage Class I/II	Enlisted (and other) Growth	Enlisted Battle Casualties	Enlisted Growth + Casualties	Enlisted % Class I/II (max)
Army Air Forces (AAF)	247,141	147.080	8,770	155,850	100%	629,753	12,301	642.054	14%
Ground Army (AGF + ASF)	656,733	107,096	3,233	110,329	100%	1,200,831	49,648	1,250,479	44%
Total	903,874	254,176	12,003	266,179	100%	1,830,584	61,949	1,892,533	35%

Table 3. Distribution of AGCT Class I/II Recruits in 1943: AAF vs. Ground Army¹⁸⁸

In 1943 alone, AAF officers' total strength grew by one hundred forty-seven thousand, while suffering nine thousand battle casualties, an indeterminate number of non-battle casualties and an unknown number of non-injury losses (e.g., retirements and separations). Only AGCT Class I and II individuals could be used to backfill these losses

individuals, the maximum number of Cat I/II individuals inducted into the enlisted force was whatever was left after filling the officer ranks.

¹⁸⁸ Palmer, Wiley, and Keast, *The Procurement and Training of Ground Combat Troops*; Office of Statistical Control, "Army Air Forces Statistical Digest: World War II"; Statistics Branch, Control Division, "Statistical Review of World War II." The total AGCT Class I/II recruits come from the preceding chart. AAF officer and enlisted growth and battle casualties are taken from the AAF Statistical Digest. Ground Army officer and enlisted growth and battle casualties are determined by subtracting AAF numbers from total Army data in the the Statistical Review. Since officers had to either be Class I or II

and grow the officer corps, so just fourteen percent—at best—of those added to the AAF enlisted ranks that year were high-quality, Category I or II individuals. This was in stark contrast with the ground Army branches. 657,000 Category I and II individuals went to the ground Army (AGF and ASF combined), of whom only about 110,000 were needed to grow or backfill the ground Army officer corps. This meant there were enough high-quality individuals to give the ground Army enlisted force proportionally as many as three times more Category I and II individuals than the AAF got that year. To be fair, the AAF did "steal" a number of enlisted troops from ground branches to flesh out its numbers, and ground units lost an indeterminate number of enlisted ground troops when they pursued commissions in the AAF. 189

If the AAF enlisted force robbed the AGF enlisted force of talent, it is difficult to see how it could have happened in 1943, as official Army historians suggested. If the ground Army (AGF and ASF combined) got at least—if not substantially more than—their fair share of talent that year, yet ground combat did in fact suffer for talent, then the it follows that the culprit was the ASF. One thing seems to be clear; in 1943, airmen did most of the fighting and dying within the Army officer corps. Almost three-quarters of the Army's officer battle casualties were in the Army Air Forces in 1943, even though

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¹⁸⁹Ibid.; the AAF grew by 777,000 in 1943, but only 592,000 men were recruited directly into the AAF that year. This would indicate that approximately 185,000 men who were already in the Ground Army (AGF or ASF) transferred to the AAF. If a disproportionate number of those transferred to the AAF were Class I or II individuals, this would tend to bring the AAF and ground Army closer to parity in talent allocation. There is nonetheless no clear proof that the AAF got an unfair share of highly-qualified individuals.

airmen never comprised more than forty-five percent of the Army's total officer corps throughout that year. 190

The impact of tremendous AAF growth—throughout the war, not just in 1943 on Kuter, the Air Force and American society is difficult to overstate. For Kuter, he would find himself very near the top of a tall and rapidly-expanding pyramid of AAF officers. The fact that he was competent, energetic and somehow able to manage the associated pressures of that growth (and particularly working for the explosive Hap Arnold) meant he would stay in the top echelons of Air Force leadership after the war. As indicated earlier, Kuter's familiarity with mobilization plans and capacity for promoting those plans to hostile audiences, in addition to other admirable personal qualities, meant that Hap Arnold would be loathe to let Kuter go from Washington for very long at a time. The AAF headquarters would, out of necessity, take on a more managerial approach to warfare, since doing so was absolutely necessary in an organization growing so dramatically. For the broader AAF, the rapid growth meant that commanders were constantly struggling with fresh, inexperienced personnel. The Army would be reshaped, as air officers went from comprising about a tenth of the officer corps to over half. For American society, the AAF's need for talent would open doors for women and African Americans in ways that were unimaginable in the depths of the Great Depression. The American landscape would be reshaped by the great number of airfields, factories, mines and wells that needed to be created or expanded to meet the growth of a 2.4 million man air force, built almost from scratch, with the majority of growth occurring in the first two

¹⁹⁰ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16; Statistics Branch, Control Division, "Statistical Review of World War II," 197.

years after Pearl Harbor. Larry Kuter's experience in the AAF going forward would very much be a product of the work he had done in the past.

Chapter 7: The Learning Curve—Managing Wartime Growth in Washington, Bombing in Europe and Tactical Airpower in Africa (1942-1943)

Kuter's life from March 1942, when he joined Hap Arnold's Air Staff, through July 1943, shortly after his return from Northwest Africa, was emblematic of the AAF writ large. His experience can be summarized by taking on better-experienced and equipped adversaries, while being hamstrung by misguided thinking and misbegotten organizational structures, when his enemies were at times both foreign and domestic. A degree of organizational chaos, particularly early in war, is normal—no matter the branch, service or country. Kuter and the AAF he served, though, faced peculiar challenges during this period. Throughout the war, Kuter was particularly impacted by six primary forces: Hap Arnold's leadership style, the AAF Chief's comprehensive vision of airpower, the AAF's rapid wartime growth, the wartime learning process, internecine battles over control of airpower, and posturing the AAF for postwar service independence. The four phases of Kuter's life during this period illustrate the interplay among the above forces. World War II, for him, can be broken down into: building, organizing and executing global air warfare from Washington (March to October 1942); building, organizing and executing strategic air warfare in Europe and then tactical air warfare in Northwest Africa (November 1942 to May 1943); planning for an independent postwar U.S. Air Force, while achieving long-sought goals of creating theater air

commands in the Pacific and Europe—again from Washington (May 1943 to May 1945); and transitioning into military air transport while ending the war in the Pacific (May to September 1945). This chapter focuses on the first two of these periods.

Building, Organizing and Executing Global Air Warfare in Washington

In September 1973, after he had retired from careers in both the Air Force and Pan Am, Kuter published an article in *Air Force* magazine titled, "How Hap Arnold Built the AAF." He began the article with his characteristic wit, noting, "In the beginning God created the Heaven and the earth. Considerably later, Gen. H. H. 'Hap' Arnold created the Army Air Forces. The axioms of sound business management were not adhered to very closely in either case." Perhaps nobody else was better able to assess the general's wartime leadership style than the one who had spent much of the Second World War right next to him. While Kuter and Arnold's careers had intersected at many points before, the young general would become closely tied to Arnold during the war. Kuter was right at Arnold's side during its early stages, as the air arm exploded in size and entered into Pacific and European air combat.

Kuter literally drew closer to his boss before he even left the War Department

General Staff. On 5 March, the day before he testified before Congress on the Army
reorganization, Larry Kuter called Ethel and told her to start packing; they were to move
into Quarters 28 at Fort Meyer—where the Army's most senior brass lived (the Marshalls

¹ Kuter, "How Hap Arnold Built the AAF," 88.

lived in Quarters 1 and the Arnolds in Quarters 8). Ethel, concerned that other AAF officers and their wives were jealous enough of the Kuters already, objected. She relented, though, when Larry told her she would have to explain her refusal to General Marshall, who had directed the move. Fortunately, the Kuters had no problem getting out of their apartment lease early; Macomb Gardens was willing to let them go, since there was plenty of competition for Washington-area housing. The Kuters formally took possession of their quarters on the 11th. Larry and Ethel Kuter had become very much part of the inner circle of Army leaders.²

The Kuters found Ft. Meyer to be surprisingly similar to Maxwell Field, even as they knew the move marked a substantial change in their status. Their new neighbors were Brigadier General Santy Fairchild and Colonels Hal George and Id Edwards. Much like their ACTS days, Fairchild, George and Kuter would often find themselves in one anothers' homes, solving the AAF's problems over glasses of cheap whiskey. This time, however, they were no longer in Montgomery, Alabama, far from the reach of Washington politics and grand strategic plans. Rather, generals Marshall and Arnold lived close enough that Kuter would often ride to work with Arnold and catch a ride home with Marshall. Generals Somervell, Eisenhower and McNarney; as well as former fellow WDGS Secretariat members Brigadier General Beetle Smith and Colonel Max Taylor; were also in the neighborhood. Kuter and his senior AAF officer peers' intimate working relationship with the volatile Arnold could—and often did—lead to late night

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² Kuter, "Along with Larry," 31; William R. Finney, "Memo: Assignment of Quarters," March 11, 1942, Kuter Collection, Volume 3, Part 2, Page 5, USAF Academy Library Special Collections; Coffey, *Hap*, 260; William Gardner Bell, "Quarters One: The United States Army Chief of Staff's Residence" (Center of Military History, United States Army, 2011), 22.

complaints to each other about their indomitable boss. They could not, however, have missed that they were no longer fighting the senior officer establishment, but rather they were among its key members. Kuter was part of the nation's airpower brain trust, and it would be very helpful to have him so relationally and physically close to those with whom he would work very intensely over the next few years.³

Ethel Kuter came to occupy a significant position among military wives at this time, too. Her work with the AAF Branch of the Army Emergency Relief (AER) organization underscores her own wartime prominence, even as it showcases the pressures the Arnolds, Kuters and other military families experienced. America was at war, the Army and its subordinate AAF were growing at exorbitant rates, thousands of airmen were dying or being injured in training accidents, and short-notice deployments to overseas locations were leaving airmen's families stranded in locations all over the United States. The Army Relief Society, which had long supported army families during emergencies such as these, only existed to help regular (not reserve) army servicemen and their families. This created an especially knotty problem for airmen, since the AAF had a substantially higher proportion of reserve officers and enlisted in its ranks than the rest of the army. Recognizing a great need, General Arnold created a special organization to support AAF airmen, called the Army Air Forces Relief Society. Arnold's effort

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³ Kuter, "How Hap Arnold Built the AAF"; Kuter, "Growth of Air Power," 199; Kuter, "Along with Larry," 31; *Official Army Register, January 1, 1943* (Washington, D.C.: Government Printing Office, 1943), 263, 280, 324. Kuter's article refers to George and Edwards as generals, but when the Kuters first moved to Fort Myer, the two of them were still colonels. Kuter primarily worked with Fairchild and George, because Edwards was not serving in an AAF billet, but rather as Assistant Chief of Staff for Training on the War Department General Staff.

highlighted to General Marshall that the proportion of regular officers was shrinking across all army branches, which led to a broader army effort to meet servicemen's needs.⁴

Army Emergency Relief was established on 9 March 1942 as a private, nonprofit organization dedicated to providing financial assistance to distressed Army personnel and their families, with an AAF Branch falling under the AER umbrella. The Army Air Forces Relief Society (later to become the Air Force Aid Society, with its still-functioning Air Force Assistance Fund) that Arnold had initially established was allowed to exist, but it could neither solicit nor distribute funds on airmen's behalf. It was a political issue: creating a totally separate AAF support organization was unpalatable to Army leaders, since doing so smacked of a drive for Air Force service independence. What funds the AAF Relief Society collected went to the AER's AAF branch, which could distribute funds. The AER's AAF branch thus represented a compromise position, which was much like the AAF it supported: airmen had functional independence when it came to caring for AAF members' and their families' needs, but they were not allowed to get out from the under the larger army umbrella.⁵

Ethel got heavily involved in the AER because of her relationship with Eleanor "Bee" Arnold, the chief's wife. Bee's influence at times made Ethel's wartime experiences seem at times only marginally less intense than those of her husband. Ethel got involved in the AER's AAF Branch because Hap Arnold told her to do so. In orders issued on 21 March, the army arranged for the establishment of relief sections at or near

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⁴ Kuter, "Along with Larry," 32–34; Kuter, "Growth of Air Power," 214; George Catlett Marshall, *The Papers of George Catlett Marshall:* "*The Right Man for the Job,*" *December 7, 1941-May 31, 1943*, ed. Larry I. Bland and Sharon Ritenour Stevens (Baltimore: Johns Hopkins University Press, 1991), 137–139. ⁵ Kuter, "Along with Larry," 32–34; Kuter, "Growth of Air Power," 214; Marshall, *The Papers of George Catlett Marshall*, 137–139.

posts, where women could assist with local relief efforts. Less than a month later, on 20 April, about a month into his service on the Air Staff, Larry Kuter brought Ethel a letter addressed to her from the AAF Chief. General Arnold requested (though since it came from Larry's boss, it had the effect of an order) that Ethel attend a meeting for the AER's AAF Branch headquarters staff. This was just the beginning of work Ethel would do at Bee Arnold's request; generals Arnold, Kuter and others were coping with the demands of building a war-winning air force, so the task of caring for servicemen's families substantially devolved to their wives. Bee Arnold effectively ran the AER's AAF headquarters section staff during the war. Hap Arnold picked Ethel to be the organization's secretary. She and Bee were to be the only civilians on the leadership team. Ethel, in trying to meet with Hap Arnold's characteristically short-notice requirement, scrambled to prepare for the first meeting. She had never served as the secretary of any organization, much less one of this significance, and less than forty-eight hours remained before the event. She hurried over to Strayer Business College, where she tried to get some idea of what might be expected of her. She got little advice, other than to be prepared to take copious notes.⁶

On Wednesday, 22 April, Ethel accompanied Bee Arnold to the AER AAF
Branch's first meeting. While Generals Arnold (president) and Leland "Lee" Miller
(treasurer) were absent. Bee Arnold (first vice president) and Brigadier General "Benny"
Meyers (second vice president) were there, along with Ethel. World War I ace Eddie

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⁶ Kuter, "Along with Larry," 32–34; Arnold, Henry H., "Letter from H.H. Arnold to Mrs. Laurence Kuter," April 17, 1942, Kuter Collection, Volume 3, Part 2, Page 27, USAF Academy Library Special Collections; Army Emergency Relief, "Our History," text, *Army Emergeny Relief*, accessed May 15, 2015, https://www.aerhq.org/Meet-AER/Our-History.

Rickenbacker attended, too, as the Army Air Forces Relief Society representative. Ethel would thus have regular contact with the Army's most powerful airman, his wife, the Air Staff's aircraft procurement point man (Meyers) and the AAF's budget and fiscal officer (Miller). Ethel's role as professional force multiplier for her husband continued, by further deepening and expanding his network of important relationships. She would work with a host of other high-ranking AAF generals' wives: Mary (Mrs. Howard C.)

Davidson, Ruth (Mrs. Ira) Eaker, Kit (Mrs. Idwal) Edwards, Ruth (Mrs. Carl "Tooey")

Spaatz, Mary (Mrs. St. Clair) Streett, Gladys (Mrs. Hoyt) Vandenberg, and Mildred (Mrs. Barton) Yount. Establishing the AAF Branch was also another important step toward eventual Air Force independence; long before the Air Force was its own service, it would have a reputation for taking care of its own.

Bee Arnold's influence (aided by her physical proximity) would lead to Ethel taking on even more responsibilities. Another early invention of Bee's was the "Spotters" organization. Much like aircraft spotters existed to alert of others of approaching aircraft, these spotters were AAF wives who actively scanned the AAF populace to ensure no other airmen's wives were left to fend for themselves alone, and that they volunteered to support of the war effort, just as their husbands did. In short order, Ethel found herself splitting her time between serving as AER's AAF Branch secretary, local and national chairwoman of the Spotters, treasurer of the Air Corps Women's Club, collector and editor of the Air Forces material for the *Army Navy Woman* magazine, volunteering at the

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⁷ Kuter, "Along with Larry," 35; U.S. Air Force, "Major General Bennett E. Meyers," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108677/majorgeneral-bennett-e-meyers.aspx; Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 425.

Red Cross, and appearing on radio. Because of her many and varied efforts, she would be featured in a January 1943 article in a Washington newspaper, *The Evening Star*.

Fortunately for Ethel's health and emotional wellbeing, on 22 October 1943 she would resign from many of those duties (on doctor's orders). Bee Arnold would soldier on. She would bear the strain of working with countless widows, orphans and injured airmen through AER. She also bore the bulk of the responsibility for leading the forty thousand volunteers who came to work in organizations under her. She would work seven days a week, driving herself to the point of a breakdown in 1945—which came shortly after one of Hap's stress-induced heart attacks. In March 1942, Larry Kuter was just starting to work for Hap Arnold. If General Arnold was willing to push his wife to work to the point of mental breakdown, he would have little sympathy for the AAF officers like Larry Kuter who worked for him.⁸

As Larry finished his work on the War Department reorganization and transitioned into his new Air Staff job, Ethel managed the family's transition to new accommodations. Three things became immediately apparent for Brigadier General Kuter as he moved to his new office: the speed at which the AAF was expanding created substantial challenges, the AAF's expanded clout on both the national and international stages meant even more work for the Air Staff, and Arnold's staff needed to be overhauled in order to manage the task ahead.

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⁸ Kuter, "Along with Larry," 35–36; Daso, *Hap Arnold and the Evolution of American Airpower*, 199–200; Beth Blaine, "By the Way--," *The Evening Star*, January 8, 1943, Kuter Collection, Volume 3, Part 2, Page 28, USAF Academy Library Special Collections; Ethel Kuter, "Memo to the President, the Officers and the Members of the Board of Control," October 22, 1943, Kuter Collection, Volume 3, Part 2, Page 27, USAF Academy Library Special Collections.

The Air Corps' rapid growth was its most notable characteristic in March 1942. By that time, there were 548,000 total people in the AAF, of whom 36,000 were officers: the air arm had grown to twenty-seven times its 1938 size in less than four years. Longserving regular officers were indeed uncommon. ACTS graduates like Kuter were trending toward unicorn status; they comprised less than two and a half percent of the officer corps, and their proportional representation continued to shrink. 10 The aircraft fleet, while growing as quickly as possible, did not keep pace with that of personnel; total aircraft on hand was a little over 16,000 planes—less than five and a half times the size of the 1938 fleet. Within this number, though, the trainer fleet had grown over thirteen times larger, and already exceeded 10,000 aircraft. There were 2,600 fighters and just over 2,000 bombers on hand. 11 The slower-growing AAF aircraft fleet was largely due to limited American aircraft production capacity, but competition for production slots with the Navy, its subordinate Marine Corps, and foreign allies—particularly the British—also factored prominently. Aircraft sorely needed for training and equipping American units were being shipped overseas under Lend-Lease to replace Royal Air Force losses. 12 Given Kuter's long experience with mobilization planning and the fact that his boss's worries quickly became his own, aircraft and personnel production would be of significant concern during his time on the Air Staff. The dilemma of producing aircraft

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⁹ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 15–16.

¹⁰ Finney, *History of the Air Corps Tactical School, 1920-1940*, 42. Two and a half percent is an optimistic estimate. ACTS had closed its doors in 1940, having produced 916 air officer graduates. If every one of the graduates were still alive and serving on active duty in the AAF at this time, they would have comprised approximately two and a half percent of the officer corps. Given retirements, separations and deaths, ACTS graduates' proportional representation was undoubtedly substantially lower.

Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 135.

¹² Craven and Cate, *The Army Air Forces in World War II, Volume Six*, 423. Over half of the combat aircraft produced in American factories in 1941 went to other countries, with the bulk of those going to the United Kingdom—the United States' most significant potential ally.

and men to maintain them led to Kuter's first big assignment, less than a month after his arrival in Arnold's staff.

On a Thursday in March, Arnold directed Kuter to grab Colonel Luke Smith and bring him into the chief's office. Smith was one of General Yount's staff officers who had a reputation for getting things done. When Kuter arrived with the colonel in tow, Arnold said he was concerned that official Army schools were unable to train the requisite numbers of maintainers. Arnold had a solution, though. In keeping with the chief's standard practice and the urgency of the times, the idea was as unorthodox as it was necessary. He directed Kuter to find out how many aircraft of each type were being produced each month. He then directed Smith to send five maintenance trainees directly to the factories where they were being built, for every aircraft that was to be produced. Kuter's unenviable job was to call the company presidents and tell them that: (1) the first tranche of trainees would arrive on Monday—just four days later, (2) their companies would be responsible for training five new maintainers for every aircraft produced, without any relief from production quotas, (3) those manufacturers were responsible for providing the trainees' room and board, and (4) these were Arnold's orders, not subject to change. Arnold expected a progress report from Kuter and Smith on Tuesday morning. As Kuter later recalled, the chief's directive, while inelegant, worked: "On Tuesday morning, General Arnold was given a report . . . Thousands of young men were getting some kind of training on new types of aircraft, and ... progress was being made. It's just possible that the war could have been lost if the program had been handled in the 'right

way."¹³ The war could as easily have been lost if Arnold had lacked people with the will, ability and endurance to implement his plans.

The strain of working for Arnold was underscored at a meeting Kuter attended on 17 May 1942. The chief had called a meeting for ten o'clock that Sunday, to discuss discrepancies in reported numbers of aircraft that had been built between the A-3 (operations and training) branch and A-4 (supply) branch. The particular focus of Arnold's ire that day was Colonel Steve Ferson, a fifty-one year old Great War veteran in A-4. About two hours into the meeting, as Ferson was struggling to answer Arnold's questions, the A-4 staffer started struggling for his life. Ferson fell out of his chair, dying of a heart attack. The senior Air Corps doctor, Dave Grant, tried to revive him, but his efforts were futile. In light of that tragedy, Arnold gave his staff the rest of that Sunday off. Seven day a week operations, long hours, the inherent stresses of running a global air war and staffers' ages (First World War airmen were getting long in the tooth by then for such work) meant heart attacks were not uncommon. Many of those attacks were covered up. A Kuter later recalled, "It was pretty bitter . . . It was intense, unrelenting, hard work."

The AAF was growing not only numerically, but in stature among U.S. and Allied military forces. This meant Arnold needed competent air officers, capable of working effectively with other branches, services and countries, to serve as air planners for the

¹³ Kuter, "How Hap Arnold Built the AAF."

¹⁴ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 260; *Official Army Register, January 1, 1943*, 995.

¹⁵ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 261; *Official Army Register, January 1, 1943*. A substantial number of wartime AAF generals, especially early in the war, were First World War veterans born in 1891 or earlier, and thus were at least 50 years old at the start of the Second World War. Of those, more than a few reached age 60 before or during the war.

U.S. Joint Chiefs of Staff and Allied Combined Chiefs of Staff (JCS and CCS) organizations. On 9 February, a week to the day after Kuter pinned on his first star, General Arnold attended his first meeting as a full-fledged member of the JCS, which meant (at least in British eyes) he was the functional equivalent of both General Marshall and Admiral Earnest King, the Chief of Naval Operations. This arrangement had been agreed upon at the Argentia Conference in August 1941, while the AWPD-1 team was throwing together its war plan. This was done because it matched the British command and coordination structures. The Royal Air Force (RAF) had long been an independent service, coequal with the Royal Navy and British Army, so America needed an analogue to the RAF contingent on the Anglo-American CCS. 16

While this tripartite construct facilitated international coordination, it was a source of conflict within the United States military. Among the American joint chiefs, relationships were strained; King objected to Arnold's JCS position on the basis that his own aviation chief, Admiral John Towers, did not have an equivalent role. King had natural allies, in that the JCS chief, Leahy, was also a Navy admiral, and the President Roosevelt was former Assistant Secretary of the Navy. Marshall needed support in JCS and CCS meetings. Arnold, who made it a point not to publicly disagree with his boss (even though within the CCS they were theoretically equals), thus proved invaluable. 17 It would not take long for Kuter, whom both Marshall and Arnold trusted, to become embroiled in high-level joint and combined air planning. This would inevitably put Kuter

¹⁶ Coffey, *Hap*, 252. ¹⁷ Ibid., 252–253.

in the middle of numerous, often acrimonious struggles over services' proper roles and missions.

The AAF's stature and rapid growth meant that the Air Staff was stretched evermore thinly. The antique and passé Air Staff officers whose lack of capacity motivated Marshall to jump-promote Kuter could not easily be replaced. Reassigning or forcibly retiring underperforming Great War-era staff officers meant either: (1) replacing those individuals with other Great War veteran aviators—who were likely even less suited for and/or interested in staff work; (2) pulling from the small pool of regular officers like Kuter who were commissioned between the wars—which likely meant robbing operational or training units of much-needed talent in the midst of the massive wartime buildup; (3) recruiting ground Army officers to advocate for air interests (a dubious enterprise, given divided loyalties); or (4) directly hiring reservists or civilians into the Air Staff (using brainpower and work ethic to overcome a dearth of military training and experience). Arnold would end up using all four options, each of which entailed varying levels of risk and frustration, to flesh out his headquarters.

Kuter would be one of the few officers who arrived on Arnold's staff with all the traits the AAF Chief desired: energy, intellectual breadth, at least a year of professional military education, substantial higher headquarters staff experience, the ability to get along with people who held dissenting views, and the physical and emotional capacity to cope up with Arnold's leadership style. Brigadier General Harold W. Bowman, who knew Kuter well, described him thusly: "Tall, handsome, well-proportioned, thoughtful, personable, highly intelligent. Because of his cool, calm, confident manner, he was the

perfect compliment [sic] for Gen. Arnold, who was impetuous, temperamental, and explosive. He made Larry his executive. Kuter was the only one who could keep the lid on, and probably the only member of the staff who wasn't afraid of the boss." Kuter's rare combination of competencies would mean Arnold would lean on him significantly, and would not let him go from the Air Staff for very long.

Arnold had taken a substantial step in organizing his staff for war in mid-February with the creation of his Advisory Council. The AAF Chief faced the same problem leaders of global empires had been experiencing for centuries—the workload was too great for him to carry himself, but at the same time he could ill-afford to let bureaucrats and their procedures get in the way of hearing and implementing good ideas. This council, which initially consisted of two (but at times included as many as four) people, was a partial solution to Arnold's dilemma. He set these people aside "to do my thinking for me"—to serve as sounding boards, special projects officers and out-of-the-box thinkers—because the Chief was simply too busy to do everything on his own. 19 It was a mutually beneficial relationship; Arnold could task council members to get answers or make plans, without having to wait for the ponderous staff coordination process that attended most decisions and recommendations. Advisory Council members, much like Kuter in Marshall's WDGS Secretariat, benefited from the Chief's mentorship and training. The broader AAF benefited, because after a comparatively short period of working directly for Arnold, most Advisory Council members (at least those who were

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¹⁸ Harold W. Bowman, "Notes on Personalities, U.S. Air Forces Europe, WW II," August 14, 1945, Reel 35247, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL. ¹⁹ Coffey, *Hap*, 248.

line officers) typically went out to the field armed with intimate knowledge of the Chief's vision and made it a reality. Arnold's advisors thus provided invaluable linkages between Washingtonian strategy and real-world operations. The council was unusual, though, and thus caused significant consternation within the Air Staff. The council members were invariably young and/or militarily experienced, and their direct access to the boss threatened senior staffers' influence. Detractors would refer to Advisory Council members as "the Gestapo," "the kibitzers," or "the kids." 20

Kuter was much less threatened by the Advisory Council; in fact, he claimed to be the originator of the idea. The first two members were intellectual fighter pilots: Colonel Charles P. "Pre" Cabell and Lieutenant Colonel Lauris "Larry" Norstad. Cabell had graduated from West Point two years ahead of Kuter, from ACTS in 1939 (Kuter's last student class), and from CGSS in 1940. Cabell had been on the Air Staff for ten months before being promoted to Colonel and taking lead of the Advisory Council in February 1942. Norstad graduated from West Point three years after Kuter, the three-month ACTS short course during the 1939-40 academic year was the only postgraduate professional military education he had received, and his higher headquarters staff experience consisted of a little over a year as the General Headquarters Air Force assistant chief of staff for intelligence. Fighter pilot Lieutenant Colonel Jacob Smart, who would replace Norstad in the summer of '42, arrived to the Council having not attended any professional military education school since graduating West Point (in

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²⁰ Jordan, Norstad: Cold War NATO Supreme Commander: Airman, Strategist, Diplomat, 21–22.

²¹ "General Charles Pearre Cabell," Official Website of the United States Air Force, *Biographies*, accessed August 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107529/general-charles-pearre-cabell.aspx.

²² "General Lauris Norstad."

1931—a year behind Norstad), and with a total of seven months of Air Staff experience.²³ Kuter's rank, Washington experience and depth of relationship with Arnold substantially exceeded those of the Advisory Council members. Just as importantly, Kuter was their intellectual equal. Unfortunately for the AAF, there were too few such men; the Advisory Council members' staff experience, even though relatively minimal, substantially exceeded that of most AAF officers.

Kuter was not only unthreatened by men like Cabell and Norstad (and the string of high-potential officers who followed them in the Advisory Council—Jacob Smart, "Rosie" O'Donnell and Fred Dean, most notably), but he encouraged their use. In an oral history interview, Kuter claimed credit for suggesting the Advisory Council idea to Arnold, even before moving to the Air Staff. As Kuter described it, the Advisory Council members' close contact with the Chief meant they also served as informants. Cabell, Norstad and their successors maintained real-time awareness of what Arnold was thinking, so they kept the Air Staff chief and deputy chief (Kuter initially) apprised of what concerned Arnold the most, and who Arnold had tasked with various projects. Kuter, keeping tabs on projects already started, worked to eliminate duplication of effort within the Air Staff (an occupational hazard under Arnold's leadership), while at the same time giving key staff members as much warning as possible before the Chief approached them with a new ideas and projects.²⁴

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²³ "General Jacob Edward Smart," Official Website of the United States Air Force, *Biographies*, accessed August 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105599/general-jacobedward-smart.aspx.

²⁴ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 229–232.

Kuter's claim that he originated the advisory council idea is plausible. In February 1942, he was still a member of Marshall's secretariat. The Army Chief had significant concerns about products coming from the Air Staff, Arnold was overworked and Kuter did not yet work directly for Arnold, so installing Cabell and Norstad as assistants and informants would have provided invaluable insights for Kuter, who was then Marshall's point man for AAF issues. Regardless of how the idea originated, Kuter worked productively with Advisory Council members to support and advise the AAF Chief. One aspect of Kuter's wartime experience can't be missed. While the Advisory Council members were usually short term help, Arnold rarely let Kuter be gone from Washington for long. From March 1942 until after V-E Day in May 1945, there would just be one six and a half month period when Kuter was not assigned to the Air Staff. ²⁵

Kuter's consistent presence throughout the war would prove especially helpful as the Advisory Council (much like the rest of the Air Staff) became increasingly civilianized. Lieutenant Colonel William McRae, an Oxford-trained lawyer who would later be appointed as a U.S. Federal Court judge, served on the Advisory Council in 1944

²⁵ Kuter would work directly with every one of the Advisory Council members, a list of which reads like a "Who's Who" of wartime and postwar military and civilian thinkers and leaders. Norstad, who only served on the council for six months before heading overseas to serve as a staff officer, would retire as the four-star Supreme Allied Commander, Europe. Cabell, who spent fifteen months on the council before joining the first-ever class of the Army-Navy Staff College, would also earn four stars and ultimately serve as the CIA Deputy Director. Smart, who spent a year and a half on the Advisory Council, likewise ultimately reached four-star rank, retiring as the U.S. Air Forces in Europe Deputy Commander. Fighter pilot Colonel Emmett "Rosie" O'Donnell became the first combat veteran to join the Council when he took over from Cabell, his ACTS classmate, in 1943; he would serve as the four star Pacific Air Forces commander, taking over the position from Kuter. Colonel Fred M. Dean also arrived to the council in 1943 as a combat veteran. Dean, who served under Kuter in Northwest Africa, served on the Advisory Council from 1943 through the end of the war and retired a three-star general.

and 1945.²⁶ Lieutenant Colonel Harper Woodward, a Harvard-trained lawyer who would serve as a lawyer and advisor to the Rockefeller family for thirty-four years after the war, served during the same time.²⁷ Business lawyer Major Samuel L. Gwin became the third lawyer on the Advisory Council in 1945.²⁸ These men added to the many civilians in Hungry Gates' Office of Management Control, which included Colonel "Tex" Thornton, organizer of Litton Industries after the war; management expert and future Defense Secretary Lieutenant Colonel Robert S. McNamara; lawyer and future Philadelphia Mayor Joseph S. Clark; and Boston corporate lawyer Colonel Guido Perera.²⁹ Those businessmen and lawyers, many of them very well-connected, helped manage the AAF enterprise, direct combat operations, and build the intellectual and legal foundation for the postwar Air Force independence. Kuter helped ground this talented group of men—who had little, if any, prewar military experience—in military realities and integrate them into the AAF bureaucracy.

The civilianization of the AAF staff Kuter saw in Washington was due to the diaspora of professional military airmen. By the time Kuter arrived on the Air Staff, Lieutenant General Frank M. Andrews had been overseas for well over a year, and was

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²⁶ United States Civil Service Commission, *Official Register of the United States: 1944* (Washington, D.C: U.S. Government Printing Office, 1944), 105; United States Civil Service Commission, *Official Register of the United States: 1945* (Washington, D.C: U.S. Government Printing Office, 1945), 103; Federal Judicial Center, "Biographical Directory of Federal Judges: McRae, William Allan, Jr.," text, *Federal Judicial Center*, accessed May 15, 2015,

http://www.fjc.gov/servlet/nGetInfo?jid=1601&cid=999&ctype=na&instate=na.

²⁷ United States Civil Service Commission, *Official Register of the United States: 1944*, 105; United States Civil Service Commission, *Official Register of the United States: 1945*, 103; Alfred E. Clark, "Harper Woodward, Lawyer, Is Dead," *The New York Times*, April 17, 1981, sec. Obituaries, http://www.nytimes.com/1981/04/17/obituaries/harper-woodward-lawyer-is-dead.html.

²⁸ United States Civil Service Commission, Official Register of the United States: 1945, 103.

²⁹ Kuter, "How Hap Arnold Built the AAF," 89.

proving exceptionally competent as theater commander in the Caribbean.³⁰ Kuter's former bomber instructor and fellow ACTS bomber advocate Colonel Ralph Snavely had been in England since May 1941; Brigadier General Ira Eaker joined him in county in February 1942, when he arrived and began organizing the 8th Bomber Command.³¹ Colonel Clayton Bissell left the WPD in January 1942 for China, to serve as Major General Stilwell's primary air staff officer. 32 The global dispersal only accelerated after March 1942. In April, Hal George pinned on his first star, catching up to his former subordinate's rank. George remained stationed stateside, though his focus was overseas. Even though he is typically remembered as a bomber zealot, George commanded the Army's global air transport system—the Air Corps Ferrying Command, which later became the Air Transportation Command. He would spend much of the war traveling the world in the act of leading this organization.³³ In May, Major General Tooey Spaatz left for England to take command of the 8th Air Force, which would execute the American air campaign against Germany.³⁴ In June, Colonel Howard Craig left his position as Air Staff plans chief to become Spaatz's air operations chief.³⁵ In July, fellow AWPD-1 coauthor Brigadier General Ken Walker deployed to the Southwest Pacific, never to return. He would earn a Medal of Honor on an unescorted B-17 bomber mission against Rabaul in

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³⁰ Copp, Frank M. Andrews: Marshall's Airman, 18–21.

³¹ U.S. Air Force, "Brigadier General Ralph Adel Snavely"; U.S. Air Force, "General Ira C. Eaker."

³² U.S. Air Force, "Major General Clayton Lawrence Bissell," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107747/major-general-clayton-lawrence-bissell.aspx.

³³ U.S. Air Force, "Lieutenant General Harold L. George."

³⁴ U.S. Air Force, "General Carl A. Spaatz," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105528/general-carl-a-spaatz.aspx. ³⁵ U.S. Air Force, "Lieutenant General Howard Arnold Craig," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107357/lieutenant-general-howard-arnold-craig.aspx.

Papua, New Guinea. When he was last seen, multiple Japanese fighters were chasing his unescorted bomber.³⁶ In August, Possum Hansell got his first star and went to England to help Eaker stand up the 8th Bomber Command.³⁷ Those left stateside, like Colonel Bob Webster (who took command of the 1st Air Support Command at Mitchel Field in August 1942) and Curtis LeMay (leading the newly-formed 305th Bomb Group), were working furiously to prepare themselves and their crews for war.³⁸ LeMay's trials during this period alone would explain the infamously sour-faced general's focus on aircrew training.³⁹ O.A. Anderson, the intellectual balloon pilot, remained on the Air Staff, however.⁴⁰ The steady exodus of experience from Washington explains why Arnold had such a hard time letting Kuter go.

Because Arnold, much like Marshall, was vitally needed in Washington, Kuter quickly became AAF Chief's eyes and ears, even as the young general supported the AAF's public relations efforts. On 18 June 1942, Kuter was in Midland, Texas for a site visit of the AAF's biggest bombardier training center. He was scheduled to speak the next day in Dallas, where the Junior Chamber of Commerce intended to honor him for his selection as the Army's youngest general. While in Midland, Kuter got a call from Arnold, retasking him to go to Alaska. When Kuter sought more detailed guidance, Arnold replied, "Don't worry. I'll tell the Jaycees you can't make it. As to Alaska, you

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³⁶ U.S. Air Force, "Brigadier General Kenneth Newton Walker."

³⁷ U.S. Air Force, "Major General Haywood S. Hansell, Jr."

³⁸ U.S. Air Force, "Major General Robert M. Webster"; Kozak, *LeMay*, 77.

Kozak, *LeMay*, 77. When LeMay was given command of the 305th he had thirty-five crews, but only three B-17s with which to train them. He was one of only three pilots in the command who had been trained to fly the B-17.

⁴⁰ Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 361.

⁴¹ "General Kuter of Army Air Forces in Midland to Visit Bombardiers," *Midland Reporter-Telegram*, June 18, 1942, Kuter Collection, Volume 3, Part 2, Page 13, USAF Academy Library Special Collections.

know things haven't been going right since the Dutch Harbor attack a few days ago. You'll see some things to fix. Get going! Goodbye."⁴²

Much like the early days of the Airmail Crisis, Kuter was once again tasked to fly an unfamiliar aircraft—this time a Lockheed Lodestar—to an unfamiliar field, with minimal guidance from his military superior. Fortunately for Kuter, he was wellaccustomed to ambiguity. Unhappily, he was flying a civilian aircraft that had been impressed into military service. While this would normally not be a problem, but this plane had been built for export to Brazil. The instruments were in the metric system, and the manuals were in Portuguese. Fortunately, this time he had more help than a hapless clerk in the right seat. Kuter had Hungry Gates—who had accompanied him on the trip tasked to accompany him to Alaska. He reasoned that, if things needed to be fixed in Alaska, Gates' office would be part of the fixing. Kuter then called Hal George in Washington. George tasked his aide to gather Kuter's and Gates' suitcases, as well as any and all necessary aeronautical charts for the journey. He then directed an experienced bush pilot to accompany the aide to a meeting spot in Canada. Kuter and Gates made their way to Denver, where they were given cold-weather flying gear, courtesy of former ACTS commandant Brigadier General "Jack" Curry. Kuter's dress whites, while perhaps good camouflage in the snow, were not going to work in the Aleutians. They met the aide, their luggage and the bush pilot in Edmonton, Alberta. As they made their way to Alaska, they still had no clue as to the true purpose of the visit, other than that the

⁴² Kuter, "How Hap Arnold Built the AAF."

Japanese had invaded—and were holding onto—two remote American islands in the Aleutian chain, Attu and Kiska.⁴³

Kuter and his small crew made their way out to the furthest point of American air operations in the Aleutians. There, they talked with the commanders, crews, maintainers and other support personnel to get a feel for how the anti-Japanese operations were progressing. They then worked their way back to mainland Alaska, conducting similar site visits along the way. By the time they got to Anchorage, the theater's air, ground and naval commanders had gathered together to hear what the young general planned to include in his report to Washington. It was the first time the three joint leaders had ever met. Kuter's findings were substantial. First, the Japanese capture of a couple far-flung islands, while perhaps psychologically significant, did not pose a substantial threat to America. Second, multiple personnel, equipment, training and procedural shortfalls had been identified. Third, Kuter had gathered excellent material to feed back into the AAF propaganda machine upon his return. Fourth and finally, the young general got to see for himself how lower-level reports were modified—and became ever-more alarmist—as they progressed through higher-level commands. While commanders in the Aleutians indicated that the Japanese posed a minimal threat to American operations, West Coast commanders had ultimately received reports—after intermediate-level amplification that the Japanese posed a grave threat to the Western Seaboard.⁴⁴

Kuter's visit to Alaska had multiple, positive effects. First, Arnold got the ground truth, that the Japanese presence in the Aleutians was operationally insignificant. Second,

⁴⁴ Kuter, "How Hap Arnold Built the AAF."

⁴³ Ibid.; Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 380.

new technologies, procedures and organizational constructs were adopted. The AAF proceeded to adopt radio altimeters, build better bomb fuzes, and develop skip-bombing techniques. Third, air and ground servicemen got better training. Multiple fighter pilots and their aircraft had been lost due to poor instrument flying training. Colonel William "Wild Bill" Eareckson, a 1924 West Point graduate and interwar airship pilot who commanded the local B-24 bomber unit, had to fly as a tail gunner, because none of his enlisted tail gunners were trained for low-level operations. On the ground, Eareckson had to train his cooks on how to make biscuits. Training improved for officer and enlisted crewmembers, and competent cooks were secured. A unit dedicated to ferrying aircraft over long stretches, through poor weather, was established. Finally, and perhaps most importantly, joint coordination improved. The commanders from different services and branches had finally met and were talking with each other. There was no formal joint command yet to force those commanders to work together, but—as with Arnold's aircraft maintenance training plan—rapid (albeit inelegant) progress had been made in minimal time.45

In the longer view, Kuter had reconnected with and taken a measure of Eareckson, who graduated from flying training at Brooks Field just one class behind Kuter. ⁴⁶ Eareckson would prove an outstanding combat leader during the war, earning multiple awards for bravery. He was so caustic and outspoken that he would never advance beyond Colonel, but when Kuter sought to re-create the Air Force's special

45 Ibid

⁴⁶ Official Army Register, January 1, 1943, 257.

operations capabilities during the Korean War, Eareckson would head it up. 47 Kuter had also linked up with Captain John S. Chennault, the son of his ACTS doctrinal arch nemesis Claire Chennault. The younger Chennault, like his father, commanded a fighter unit, and his unit's aircraft—like those of his father's—were painted with iconic "flying tiger" emblems. The official press release about his mission became front page news in newspapers around the country, to include the *New York Times, Washington Post* and *Washington Sunday Tribune*. The story highlighted how the Army's youngest general had just returned from Alaska with reports of American naval and air forces—with Eareckson and Chennault identified by name—striking back against Japanese forces in the Aleutian Islands. Kuter's words were repeated around the country: "The Japanese are now between two Flying Tigers, and both of them are clawing . . . General Claire Chennault has a large family. Four sons are helping Uncle Sam win the war. Tokyo should be informed that our supply of Chennaults is practically unlimited!" **

In between putting out Arnold-lit fires and serving as the chief's overseas representative, Kuter remained wedded to issues of mobilization planning, Army organization and defending AAF prerogatives. Kuter's role was best exemplified by a diary of actions he took on Arnold's behalf between 18 September and 1 October 1942,

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⁴⁷ Clyde Bergwin, "Terminal History of the Air Resupply and Communications Service, 1 Jun-31 December 1953," December 31, 1953, 3, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL; Michael E. Haas, *Apollo's Warriors: US Air Force Special Operations During the Cold War* (Honolulu, HI: University Press of the Pacific, 2002), 112. In 1951, the Air Force sought to re-create the special operations capability that the AAF developed during the Second World War. The Air Resupply and Communications Service (ARCS), under the Military Air Transport Service (MATS), was thus born. Kuter commanded MATS during this period, and Eareckson was the MATS coordinator for ARCS affairs. When time came to stand up the first ARCS wing (the 580th), Kuter picked Eareckson to command it.

⁴⁸ War Department Bureau of Public Relations, Press Branch, "U.S. Bombs Lash Japanese in Aleutians Despite Dense Fog and Rain, Says General Kuter," July 5, 1942, 2, Kuter Collection, Volume 3, Part 2, Page 14, USAF Academy Library Special Collections.

when the chief touring the Pacific. The first major issue Kuter addressed during this period was that of aircraft accident rates, which were garnering a great deal of public attention. As ever-increasing numbers of would-be pilots, navigators, radio operators and other trainees entered flying training, the number of accidents naturally increased. Due to scope of the AAF expansion, the raw numbers of accidents shocked the American public. In July 1942 alone, the AAF suffered 1,054 accidents (34 accidents *per day*, which led to 218 deaths and 221 aircraft wrecked) in the continental United States alone (a rate of 82 accidents per 100,000 hours). When the continental working with Assistant Secretary Lovett to craft the AAF's response to Congress and the American people.

Kuter's inputs are instructive. He recommended going on the offensive by quoting statistics: in the first seven months of 1942, the AAF's accident rate was actually 15 percent *below* the Air Corps's peacetime accident rate from 1930 to 1940. AAF expansion explained the numerical increase in crashes: the AAF flew 46 percent more flying hours in those seven months than the Air Corps had done in all of the 1930s (the air arm was averaging about *25 times more flying hours* per month than during the interwar period), and the AAF was just getting warmed up. Kuter suggested Americans take comfort in the fact that flying was substantially safer than before, but at the same time they should be prepared for far more deaths, due to substantially increased training and operations.⁵⁰

⁴⁹ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 309.

⁵⁰ Laurence S. Kuter, "Diary of Brigadier General Laurence S. Kuter, [18 Sept. 1942-1 Oct 1942], Actions Taken by the Deputy Chief of Air Staff--to Be Called to the Attention of Gen. Arnold upon His Return," October 1, 1942, Reel A1592, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

Kuter was right; flying was statistically much safer in 1942 than when he was a line aviator. The AAF averaged 74 accidents per 100,000 flying hours in the United States in 1942. This compared favorably with the first five years of Kuter's operational flying career; from 1930 to 1934, when the Air Corps suffered 117 peacetime accidents per 100,000 hours. The Great War generation of Army airmen, which comprised the bulk of AAF senior leaders, was even more inured to flying fatalities and injuries; from 1921 to 1925, the Air Service had averaged 380 accidents per 100,000 flying hours. The rate peaked as high as 506 in 1922.⁵¹ To Kuter, and even more so the First World War veteran pilots with whom he primarily associated, Americans needed to stop wringing their hands over such comparatively reduced accident statistics. Of course, American public and congressional support had to be maintained. Kuter recommended that Lovett not include, in his response to Ohio congressman Dow Harter, that the accident rate had increased since 1940: "I objected to the insertion in the increase in rate on the grounds that it was unnecessarily alarming, and that we could not meet it . . . without disclosing most confidential data."52 Stateside accident rates would not improve until 1943, at which time they would drop each year until the end of the war. By 1945, the accident rate had dropped to 42 accidents per 100,000 hours—a fraction of the rate Kuter, his peers, and those senior to them had previously experienced.⁵³

Perhaps most significantly, the AAF's accident rate statistics directly reflect the Army air arm's poor training and equipment status through the interwar period.

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⁵¹ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 308.

⁵² Kuter, "Diary of Brig. Gen. Kuter."

⁵³ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 309.

Peacetime aircraft accident rates, in general, negatively correlate with pilot proficiency and aircraft sophistication. Experienced aviators, flying modern aircraft in peacetime conditions, frequently enough to maintain their skills, tend to have lower accident rates than inexperienced pilots who infrequently fly older, less sophisticated aircraft. From an interwar low of 51 accidents per 100,000 flying hours in 1940, the Air Corps/AAF accident rate climbed to 74 accidents per 100,000 flying hours in 1942.⁵⁴ This was in spite of the fact that the pilots were flying more frequently (which enhanced proficiency), and in newer (and thus safer) aircraft, than two years prior. What the AAF aviators lacked was experience. Any advantage Americans might had in terms of a reasonably substantial group of well-trained, experienced professional military aviators (and/or competent civilian pilots ready to supplement them) upon which to expand the air arm had evaporated well before the Japanese attacked Pearl Harbor. Experienced pilots were no match for the masses of students coming through the AAF pipeline, so continental U.S. accident rates did not dip below 51 per 100,000 hours (the lowest prewar annual rate) until 1945, when adequate numbers of veteran pilots returned from overseas combat to train their replacements and training was slowing down.⁵⁵ Until then, Kuter could count himself lucky to have survived thus far in his flying career. AAF crews' inexperience would be painfully obvious during Kuter's first experience as a wartime commander.

Another major issue during this period harkened back to Kuter's role in the War Department reorganization. He found himself in the middle of turf battles between the AAF and Army Services of Supply (SOS—changed to the Army Service Forces in

⁵⁴ Ibid., 308.

March1942). First was the issue of training: SOS servicemen (such as the cooks he observed in Alaska) were arriving to AAF units unready to perform their assigned support missions. Because the SOS's overstretched training system was not meeting AAF needs, Kuter pushed for the AAF to formally take responsibility for training its own service personnel. It was a sensible recommendation; formally giving the AAF responsibility for training its service forces was simply a recognition of what the air arm was already doing, and it allowed the AAF to act even more as a functionally-independent service within the Army.

A second point of contention between the AAF and SOS was that of bureaucratic authority: the SOS demanded that the AAF provide statistics on diverse topics. Kuter, author of the army reorganization that made the AAF coequal with the other two branches, led the AAF resistance to the SOS demands. If the AAF and SOS were coequal, then one branch could not make demands of another. In Kuter's mind, if the War Department or Congress wanted AAF statistics, they could ask the AAF.⁵⁷ When Kuter initially saw the request from the SOS to provide the number of combat-ready crews and aircraft as of 31 August (with that information to be provided no later than 21 September), he initially tried to ignore it. Kuter noted to Arnold that, "This paper was filed without action until the top echelon of the Air Staff may have time to cool off." The issue did not go away. The young Brigadier General Kuter soon found himself, as the sole AAF representative, in a meeting with Lieutenant General Somervell, a colonel

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⁵⁶ Kuter, "Diary of Brig. Gen. Kuter."

⁵⁷ At the end of July, he was one of twenty Army generals at a conference headed by Lieutenant General Somervell, "one of the greatest concentrations of military brainpower Chicago has ever known," which met to discuss decentralizing the administration of the SOS.

⁵⁸ Kuter, "Diary of Brig. Gen. Kuter."

and a senior civilian to discuss this issue. The third source of conflict was responsibility for particular missions. When the Surgeon General (an SOS function) claimed bureaucratic ownership of the mission to air evacuate wounded personnel by air, Kuter helped block that move, ensuring that air evacuation remained an AAF responsibility. ⁵⁹

Kuter thus played an important role in helping build toward eventual service independence. By the fall of 1943, the War Department would approve the integration into the AAF of Army Service Forces personnel serving in AAF units. Craven and Cate, in their multivolume history of the AAF in World War II, note that:

Although the AAF did not completely succeed in throwing off ASF supervision of its logistical activities, it had gone a long way toward that goal by the end of the war. Confident that it was destined to become a separate military service in the postwar period, the AAF made its organizational changes and arrangements with the future in mind. These arrangements were not always compatible with maximum operational efficiency, but it would be difficult to show that they seriously interfered with the prosecution of the war. In the Air Technical Service Command the AAF had developed a solid logistical foundation on which to erect a separate air force. ⁶⁰

The transfer of SOS (ASF) personnel would explain how the AAF benefited from a disproportionate allocation of talented recruits. The November 1942 Inspector General report that postwar army historians cited in their study of the procurement of AGF troops found that over a third of privates at AAF bases were high-end AGCT class I and II individuals. More than half of them filled jobs reserved for SOS personnel: "messengers, warehousemen, clerks, guards, orderlies, truck-drivers, firemen and assistant cooks." 61

⁵⁹ Ibid.

⁶⁰ Craven and Cate, The Army Air Forces in World War II, Volume Six, 375.

⁶¹ Palmer, Wiley, and Keast, *The Procurement and Training of Ground Combat Troops*, 25.

The official historians did not cite how many of those individuals were originally recruited as AAF personnel, versus how many were recruited into the SOS/ASF.

The AAF got a disproportionate share of talented individuals, but it had little to do with the initial distribution of recruits between the Army's branches. Rather, the AAF benefited from higher-quality recruits because many ASF soldiers (of which a disproportionate number were high-quality AGCT Class I and II individuals) were either permanently transferred into the air arm, or at the very least served on AAF bases. There was good reason for AAF bases to get a higher proportion of talented ASF soldiers. Just like essentially every other function in the air arm, the AAF was building its support and logistics infrastructure from scratch, and it was growing at exorbitant rates. Just like on the Air Staff, the AAF used excess talent to compensate for a dearth of time and training opportunities. In fighting bureaucratic turf wars with the SOS, Kuter helped ensure AAF wartime success, while laying the foundation upon which eventual Air Force service independence would be built.

The last major issue Kuter dealt with during this period was defending a document that he did not write. Much like the request that initiated AWPD-1 planning two years before, on 25 August 1942, President Roosevelt requested that General Arnold estimate "the number of combat aircraft by types which should be produced for the Army and our Allies in this country in 1943 in order to have complete air ascendancy over the enemy." [emphasis added] Possum Hansell was recalled from England to head up the planning. Ken Walker was already deployed to the Southwest Pacific, but George, Kuter

⁶² Griffith, The Quest: Haywood Hansell and American Strategic Bombing in World War II, 94.

and Fairchild were in Washington, and thus could provide some assistance. O.A. Anderson, as AAF Plans Chief and another participant in the AWPD-1 planning years before, would be heavily involved in the new plan, called AWPD-42. Unfortunately for Hansell, he had to deal with a tight timelines, but without the combined intellectual firepower AWPD-1 planners enjoyed. Hansell was given just eleven days to produce the updated strategic air war plan. Worse still for the AAF's bombing campaign, he had to conduct his rushed planning at a time when the American Eighth Air Force had only flown six combat missions against Europe, and it was still not widely believed that a long-range escort fighter could be built.⁶³

Americans had just started dipping their toes into European air combat, Roosevelt's time allowed minimal time for reflection, and many of the same actors either wrote or otherwise influenced the plan, so AWPD-42 was very much a modification and expansion of AWPD-1. The basic strategy was still to destroy Germany's capability and will to fight by attacking the country's industries and systems. Germany-first still prevailed, with airpower supporting a strategic defensive in the Pacific. The original basic target sets remained largely the same, although they were given different relative priorities. Hansell's plan still asserted that, "our current type bombers can penetrate German defenses to the limit of their radius of operation without excessive losses." The AAF still needed to massively grow in order to meet wartime requirements. While the above underlying premises would not go unchallenged for the moment, these concerns would not be the primary sources of controversy surrounding AWPD-42.

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⁶³ Hansell, The Air Plan That Defeated Hitler, 100–112.

⁶⁴ Futrell, *Ideas, Concepts, Doctrine*, 131.

Kuter's direct role in writing AWPD-42 was relatively minimal. In a planning conference, he—along with Major General Echols and Meyers, Brigadier General Hansell (he got his first star in August) and Colonel Edmund Langmeade worked out a plan to increase the amounts of spare parts for AAF bombers, because (in their estimation) the plan had too few heavy and medium bombers. In a later meeting, Kuter and others reworked the plan so that the "ration of long range to short range airplanes was restored." Kuter's wartime experience would lead to him to wish a different ratio existed when he took command in England. AWPD-42 was very much Hansell's plan. Kuter's role would primarily be dealing with its bureaucratic aftermath.

The changes reflected in AWPD-42 impacted Kuter in multiple ways. First was the greater priority given to eliminating the German U-boat threat. So many Allied ships were being sunk that the German submarine operation posed an existential threat to the war effort. This was reflected in AAF statistics (the same ones the Air Staff refused to surrender to the SOS). A mid-1942 study found that 2.3 percent—about one in forty—of all aircraft flown to overseas destinations were lost due to accidents en route (with the loss of many of their crews). While this figure was staggering enough, another 7.9 percent—one in thirteen—of aircraft sent overseas by ship were lost when the ships they were on were sunk. While there was no disagreement as to the severity of the German U-boat problem, there was great dissention over how to address it, and who should own the mission. Hansell wrote into the plan that the Navy should not be allocated any

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⁶⁵ Kuter, "Diary of Brig. Gen. Kuter."

oo Ibid.

medium or heavy bombers in the 1943 production year.⁶⁷ Efficiency dictated that America's long-range bomber fleet be centrally controlled, and (in the spirit of the MacArthur-Pratt Agreement inked over a decade before) the Army should be responsible for land-based overwater operations, so there was no need for the Navy to operate long-range bombers. While logically reasonable, this issue would put Kuter in the middle of another Army-Navy bureaucratic fracas, much akin to the Navy lesson debacle he had precipitated years before at ACTS.

Further growth in the projected AAF end strength would create challenges within the Army, too. In AWPD-42, Hansell called for a final AAF strength of 2.7 million men. Creating even more airmen than envisioned in previous plans would mean either few ground soldiers and/or further diluting quality of recruits. The total number of aircraft to be produced in the U.S. in 1943—this time Hansell had to plan for the U.S. Army, Navy and America's allies—was increased to a staggering 131,000 planes. Given limited total American productive capacity, further expanding aircraft production would necessarily mean cutting into quotas of ships, tanks and/or other vitally-needed wartime equipment. Kuter would find himself in the middle of another firestorm, set aflame by his longtime friend.

AWPD-42 would cause controversy not only between the Army and Navy, but between branches within the Army, as well. Without particularly intending to do so, Hansell's plan called for a dramatic shift in the Army's overall makeup. Whereas the

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⁶⁷ Hansell, The Air Plan That Defeated Hitler, 104.

⁶⁸ Ibid., 109

⁶⁹ Futrell, *Ideas, Concepts, Doctrine*, 131.

Army's 1941 plan (of which AWPD-1 was a key part) called for 215 ground combat divisions and 251 air combat groups, AWPD-42 called for a further expansion to 281 air combat groups, while the ground Army was revising its estimates downward. By the winter, the AAF would revise its plans down to 273 groups, but the ground Army would be reduced far more dramatically, down to just 89 divisions—a fraction of Wedemeyer's original plan. AWPD-42 would be a tough sell for anyone. It would be even harder for Kuter, because Hansell skipped town before briefing the plan to Arnold or Marshall.

When Hansell finished writing AWPD-42, he sent it to the Government Printing Office. Thirty of the copies were bound, and the first fifteen were numbered and embossed with the names of those for whom they were intended. President Roosevelt was to be given copy number one. Mr. Harry Hopkins, who was to receive bound copy six, happened to stop by the printing office and grabbed his personal copy, unbeknownst to Hansell. He must have read it in some detail, since the next morning he endorsed the plan to the president. The problem was that neither Secretary Stimson (copy two) nor General Marshall (copy five) had received Hansell's final plan. Marshall, furious that he had been blindsided, called the two airmen on his plans division staff, Sammy Anderson and Joe Smith, and gave them one hour to prepare a brief. Anderson and Smith, in a panic, called Hansell to get a quick rundown on the plan, since they were also unfamiliar with it. Hansell briefly described the plan, recommended they endorse it, and once off the phone promptly made an appointment with Arnold. Hansell expressed his desire to get back overseas, and Arnold—recognizing Hansell was in hurry, but (at least in theory) not fully

⁷⁰ Ibid.

comprehending the situation—cleared him to leave. Possum Hansell then called his friend Hal George, who had him on an Air Transport Command plane heading to England within an hour.⁷¹

In addition to his other duties, Kuter was the senior air planner on JCS Joint Planning Staff. It was a natural fit, given his extensive planning background, close relationships with senior air and ground planners, familiarity with naval operations, tact and ability to keep secrets. He missed out on the initial berating that Anderson and Smith received, but due to the joint and Allied implications of Hansell's plan—not to mention his prior co-authorship of AWPD-1—

he quickly became embroiled in the aftermath. In early September, Kuter was primarily focused on aircraft production schedules.⁷² Conflicts over those schedules would soon pale in comparison to the Army-Navy battle over bombers, of which Kuter found himself in the middle.

Shortly after AWPD-42 was published, on 24 September, the Navy rejected AWPD-42 in its entirety. Kuter's initial response was combative; he: "Encouraged Operations Division to prepare reply as equally terse and blunt a statement that strategic basis was in strict accord with CCS 90 [a Combined Chiefs of Staff directive] that assignment of all Army aircraft to AAF was intended and sound, and that rejection by the Navy of reconsideration of the priorities essential to provide a war-winning Air Force was no surprise." Kuter's tone changed, and he quickly shifted to the defensive, when

⁷¹ Hansell, *The Air Plan That Defeated Hitler*, 111–112.

⁷² Kuter, "Diary of Brig. Gen. Kuter."

⁷³ Ibid

"General Marshall expressed his grave displeasure to General Stratemeyer and General Kuter because he was not told that AWPD-42 transferred heavy and medium Army type land-based bombers in the Navy Column to the Army Column in view of the directly related consequences." Kuter nonetheless remained optimistic, reporting to Arnold that, "All is by no means lost yet."⁷⁴

Kuter, since he had been largely uninvolved in writing and staffing Hansell's plan, scrambled to figure out what had gone wrong. First, he learned that Marshall's deputy, General McNarney, had been fully briefed on the change, and "that he regretted not having called it to the Chief's attention."⁷⁵ Colonel Robert N. Young, an infantryman serving as Marshall's assistant secretary (the same job Major Kuter held less than a year before), would show his chief the memo "which called that item to the Chief's particular attention and will tell the Chief that paragraph was written at the instigation and insistence of the Air Staff." The AAF's bacon had been saved. Marshall accepted that he had, in fact, been briefed on the proposed bomber reassignment in AWPD-42. The senior air staffers involved all kept their jobs, and Kuter shifted back to offensive, feeding Assistant Secretary Lovett the data necessary to sell the plan, particularly to Mr. Hopkins.⁷⁷

In the end, much like Arnold's other short-notice taskings, Hansell's hastily-built and poorly-coordinated AWPD-42 plan proved far more effective than a deeplyconsidered, thoroughly vetted one ever could have. Hopkins became convinced of the

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ Ibid.; Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 356.

plan's merit, and he in turn convinced both President Roosevelt and Secretary Stimson to accept all but the plan's naval requirements. Precision bombardment, which Kuter, Hansell and their fellow bomber mafiosos had been preaching for over a decade, was central to America's European air strategy. Arnold had saved Hansell's career, by getting him out of town before Marshall could get his hands on him. Kuter had not only a role in defending precision bombardment strategy well into 1942, but he would later implement that strategy as an operational commander.

A final key indicator of Kuter's importance as an airpower planner and advocate is his early access to highly-classified intelligence. British codebreakers had cracked Germany's "Enigma" enciphering machine, which enabled their intelligence operatives to read the Germans' high-level, coded correspondence. Intelligence derived from these intercepts was called "Ultra," as in, it was not just top secret, but something above that—ultra-secret. Japanese diplomatic codes had likewise been broken, and intelligence from that effort was referred to as "Magic." The intelligence from these codebreaking efforts was invaluable. If the Germans or Japanese had discovered their respective enciphering systems were compromised, they would have changed them, and access to that intelligence would have been lost. The potential negative consequences of leaking this intelligence were so grave that access to this information was severely restricted. The Allies would not act on this information unless it could be purportedly validated by other sources.

Kuter, in his memoirs, states that he held such a highly-placed and trusted position that he was made aware of Ultra during this period, sometime between March

and October 1942. Strangely, during that period (at least according to the authoritative history *Piercing the Fog: Intelligence and Army Air Forces Operations in World War* II) the Joint Chiefs of Staff and Joint Staff planners like Kuter were only given access to summaries of Magic intercepts, the WDGS G-2 (intelligence) division was not initiated into Ultra operations until Spring 1943, and the G-2 did not start sharing its Ultra information with its Air Staff counterparts until early 1944. More surprisingly still, Hap Arnold did not even learn of the Magic Diplomatic Summaries until after the Pearl Harbor attack, and General Marshall—according to his biographer Forrest Pogue—never formally gave Arnold access to Ultra intelligence.⁷⁸

Either Kuter was confused about having been given access to Ultra at this early date or current historiography regarding access to Ultra is inaccurate. Both possibilities raise significant historiographical questions, which deserve some attention. If Kuter, as the most senior air planner for the JCS, was not made aware of or given access to Ultra intercepts, then this would—at a minimum—make criticisms of strategic bomber advocates (and air planners more generally) less valid. That Air Staff planners—and even Hap Arnold himself—were formally denied valuable, strategic-level Ultra intelligence until well after Army ground commanders and staffers were given access to that same information further indicates airmen were treated as substantially less than equal partners by their ground Army peers. It is difficult to accept the notion that the AAF operated as a functionally independent service, when Marshall actively withheld vital information from

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⁷⁸ U. S. Government et al., *Piercing the Fog: Intelligence and Army Air Forces Operations in World War II* - *ULTRA, MAGIC, Y-Service, European Theater, Air War in Europe, Pacific and Far East, Planning the Defeat of Japan* (Progressive Management, 2015), 9.

Arnold, his notional peer. Of course, if Kuter's assertion is correct, and he was in fact trusted with Ultra intelligence well before current historiography indicates, then this would show that Kuter was a very important wartime figure indeed, aspects of Second World War air intelligence histories need to be adjusted, and Hap Arnold's will and ability to overcome bureaucratic roadblocks to get the information he needed—and which he shared with trusted lieutenants—was truly impressive. Either way, airmen's desire for service independence was further validated. If airmen were shut out from key information in early- to mid-1942, when airpower was the Army's primary offensive contribution to the European war effort and George C. Marshall—likely the most pro-airpower Army Chief ever to serve—was in charge, it is easy to see why airmen wanted to be free of the ground-oriented service.

Piercing the Fog, in a roundabout way, suggests how Kuter and current air intelligence historiography might both be true (at least in broad strokes). That work notes that some senior Eighth Air Force staff in England were read into Ultra "at a much earlier date" in the war. Although the date at which this occurred and who those staffers were is unclear in the narrative, Possum Hansell had been coordinating with British counterparts since well before American entry into the war, and he deployed to England again relatively early in this period as a senior AAF planner. Hal George, as exemplified by Hansell's quick exit after publishing AWPD-42, had a tremendous capacity to move high-priority people—and with them information—quickly around the world. Arnold's connections within Washington were legendary, and he was never one to be denied vital

79 Ibid.

information. Somehow, according to Marshall biographer Forrest Pogue, Arnold "found out on his own" and started using Ultra intelligence well before he was officially allowed to do so.⁸⁰ It is not unreasonable to believe that Arnold read his senior air planner, Kuter, into Ultra, as well. Regardless, the depth and breadth of secrets Kuter carried in his mind would make it difficult to serve as a wartime commander. Nobody who was read into the Ultra program could put himself in a position where he might risk being captured.

While Kuter was enjoying an extraordinarily successful career and he at least got to sleep at home (even if General Arnold's demands rarely left time for much else), he could not ignore that the war overseas was passing him by. Working for Hap Arnold was a motivator, too; serving directly under him in Washington made overseas combat appear to be a vacation by comparison. His wishes were about to be granted.

Building and Executing Strategic Air Warfare in Europe

On Thursday, 8 October 1942, Larry Kuter learned he would soon be released to serve overseas. On that day, Arnold—who had only recently returned from his Pacific tour—called Kuter and his new boss George Stratemeyer (now a major general) into his office. Arnold wanted to get Kuter out of Washington and into a combat leadership position overseas. Kuter, jumping at the opportunity, indicated his office was well-organized and he could leave immediately. Stratemeyer, who had only been Chief of the Air Staff since June and had just lived through the AWPD-42 blowup, objected on the

⁸⁰ Ibid.

basis that he needed someone competent as his deputy, and it was unlikely one could be found on such short notice. Arnold's mind was made up; he gave the two men until Sunday to find a suitable replacement. Within Arnold's timeline, they settled on Brigadier General Thomas J. Hanley: a 1915 West Point graduate and Great War-era pursuit pilot who had served as one of the initial ASFOS (predecessor to ACTS) instructors from 1920 to 1921, and was a graduate of both the Army Industrial College and CGSS. Kuter's backfill was thus someone with a dozen more years of military experience, with three times the postgraduate professional military education, who had had previously held squadron, group and wing commands. Kuter had never formally commanded more than a flight. Kuter must have occupied a critically important position, to have rated a replacement with so much more experience. 81

On Monday the 12th, Arnold sent messages to both Spaatz in Europe and Kenney in the Pacific. The messages both read: "Personal from Arnold. In keeping with policy desire my Deputy Chief of Staff, B. G. Kuter be given duty in combat theater for six months. *No replacement required from you. I want him back.*" [emphasis added] Both Spaatz and Kenney responded that they would be happy to have Kuter, but unlike Kenney, Spaatz had a plan: ten days in 8th Air Force headquarters, ten days in 8th Bomber Command headquarters, ten days in a heavy bomber wing headquarters, fifteen days with a B-17 group, fifteen days with a B-24 group, a month as a bombardment group

82 Kuter, "Growth of Air Power," 208.

⁸¹ Kuter, "Growth of Air Power," 208; U.S. Air Force, "Major General Thomas James Hanley, Jr.," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106812/major-general-thomas-james-hanley-jr.aspx; George Washington Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume IX, 1940-1950*, ed. Charles N. Branham (Chicago: The Lakeside Press, 1950), 203, 537.

commander, and three months as a heavy bombardment wing commander. Spaatz's plan was exactly what Kuter needed: the young general's last operational bomber assignment was in 1934, when his unit's primary aircraft was the Keystone bomber. Kuter had maintained his flying currency, but over three straight years as a strategic-level Washington staffer meant he sorely needed to be re-initiated into the world of bomber tactics and operational-level execution. He had never flown a B-17, B-24, B-25 or B-26—the primary heavy and medium bombers. Arnold decided to send Kuter to Europe, and told Spaatz Larry would arrive by 7 November. Spaatz's plan, assuming he even intended to implement it, would be substantially different from Kuter's actual experience.

The three weeks Kuter had between being notified he was leaving for Europe and his departure for overseas were intense. First, he had to bring Hanley up to speed on the many projects he was working on, as well as read him into the Ultra intelligence program. Hanley was one of the "antique" officers Kuter had leapfrogged ahead of when Marshall jump-promoted him in February. Hanley, despite his substantial seniority, had not pinned on his first star until May. The handover was brief, since Kuter started his B-17 training at 8:00 A.M. on Wednesday the 14th—at Bolling Field in Washington. There, he met Colonel (later Major General) Carl McDaniel, a former flying sergeant who commanded the AAF Combat Crew Training School and was base commander at Hendricks Field, Florida. Despite the fact that Kuter had never flown a B-17 and he had never performed a "blind" (instrument-only, no visual reference allowed) takeoff in any aircraft, Danielson—after helping Kuter strap in and giving him a rudimentary

⁸³ Ibid., 208–209.

familiarization with the cockpit—put a hood over the general and had him make his firstever Flying Fortress takeoff on instruments alone. Kuter muddled through the flight to
Hendricks Field under McDaniel's instruction. After a brief lunch and the opportunity to
drop his bags at billeting, Kuter was introduced to the field's senior B-17 instructor, 24year old Lieutenant Anthony Perna. Perna had been a rated army aviator for less than two
years, having earned his wings on 20 December 1940. He had been training others to fly
bombers ever since. By that evening, Kuter had practiced handling multiple emergency
procedures in the aircraft, including landings with one, and even multiple, engines out.

By the end of the next day, Kuter had flown in formation, practiced bombing and aerial
gunnery, and done yet more night and blind flying.⁸⁴

Meyer. Her husband was deploying overseas, Hanley had replaced him, and generals Marshall and Arnold would surely want the Hanleys to move into the neighborhood. When General Arnold got word of Ethel's plans, he stopped them in their tracks. He informed her that she would not have to move; he was only letting her husband go for six months and Larry would return directly back to the Air Staff, so there was no need for the Kuter family to relocate. Arnold formally sent a letter to Marshall on 17 October requesting that the Kuters be allowed to stay, and with the Army Chief's blessing, Ethel

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⁸⁴ Ibid., 209–213; U.S. Air Force, "Major General Carl B. McDaniel," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106272/major-general-carl-b-mcdaniel.aspx; Jacob C. Vishneski, Interview with Colonel Anthony J. Perna, March 13, 2008, Adams Center, Virginia Military Institute,

http://digitalcollections.vmi.edu/cdm/ref/collection/p15821coll13/id/425; Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume IX, 1940-1950,* 203.

was allowed to remain in Quarters 28. There was at least a sliver of stability in the Kuters' life during this period.⁸⁵

Meanwhile, in Florida around that time, Kuter found himself taking off blind in a B-17 from Henderson Field and practicing a precision instrument approach into Eglin Field (named after Kuter's former ACTS faculty peer). There, he undertook similar training in the four-engine B-24 and two-engine B-25 and B-26 bombers. On 30 October, just sixteen days after starting his training, Kuter landed back at Bolling Field—again flying on instruments—but this time in a B-24. In less two and a half weeks, he had gotten qualified (at least nominally) to fly four bombers. He had flown none of them before, and all were far more advanced than anything he had flown as a bomber pilot at Langley or Maxwell Fields. During his brief time home (just two days), Larry Kuter spent as much time as possible with Ethel and Roxanne, but the presence of the official phone in his residence and the nature of his prior Air Staff work meant multiple interruptions. While in Washington, Kuter also discussed air transport at length with Hal George, who urged his protégé to defend the integrity of the global Air Transport Command and resist efforts to parcel the command's aircraft out to theater commanders. On 1 November, Kuter boarded a B-24—which Hal George's ATC crews were responsible for ferrying overseas—bound for England. 86

As Kuter headed overseas for his first wartime command—and his first command of any kind since serving as a part-time flight commander at Maxwell Field—the AAF

⁸⁵ Kuter, "Along with Larry," 40; Kuter, "Growth of Air Power," 214; Henry H. Arnold, "Memorandum for the Chief of Staff," October 17, 1943, Kuter Collection, Volume 3, Part 2, Page 24, USAF Academy Library Special Collections.

⁸⁶ Kuter, "Growth of Air Power," 213–217; Kuter, "Along with Larry," 41; "PEP Record: Kuter, Laurence S.," Folder 1.

had grown to half its ultimate wartime strength. The air arm had 105,000 officers and over 1.2 million total people by 31 October 1942. 87 This meant that ACTS graduates like Kuter were even more unique, as they comprised less than one percent of the officer corps. The officer corps had grown three times larger, and the enlisted corps over two times larger, in the seven months since he joined Arnold's staff. The air arm was over sixty times larger than it was in 1938, and it was just starting to engage in overseas combat. In terms of global air operations, airmen (with substantial help from the Navy) had struck Tokyo via the Doolittle Raid in April, just four months after the Pearl Harbor attack. Across the Atlantic, American bombers and crews were already attacking the Axis on continental Europe. This numerical growth and rapid entry into air combat against highly-experienced, technologically-sophisticated air forces on two halves of the globe was a major feat, in which Kuter had played no small role. In the midst of this, he also played a part in changing the AAF's genetic makeup, both literally and figuratively. Because of the growth Kuter had helped make a reality, females and African Americans were becoming Army aviators. Civilians, notably businessmen and lawyers, were growing in clout on the Air Staff. America's primary air arm was being redefined, and Kuter been in the midst of it all. Leading airmen in a combat zone would be a new experience entirely.

Upon Kuter's arrival in Prestwick, Scotland, he transferred to a C-47 cargo plane and arrived to Spaatz's 8th Air Force headquarters on 7 November, as originally advertised by Arnold. It was refreshing to reconnect with Tooey Spaatz and Possum

⁸⁷ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 16.

Hansell, and the three were able to enjoy some bourbon Kuter had brought from the U.S., but there was little time for reverie. The timing of Kuter's arrival suggests why Arnold chose to send him overseas when and where he did. Operation Torch, the Allied invasion of northwestern Africa, kicked off the very next day. Opening this major front in the war created a multitude of issues, not the least of which was command and control of airpower. Hap Arnold wanted Spaatz to be made commander over all AAF forces in Europe and Africa. Kuter was intimately familiar with Arnold's desires, airpower organization was his specialty, and he was intimately familiar with JCS-level plans for Torch. Kuter spent his first ten days in England interpreting message traffic from Washington and getting familiar with the 8th Air Force (in accordance with Spaatz's original plan). Kuter, knowing the background behind the messages from stateside, was first able to explain the messages' intent, and was further able to identify problems that those in Washington poorly understood. ⁸⁸

Kuter found a profoundly long list of issues to address. First, and most obviously, the aircrews arriving in theater were poorly trained and terribly inexperienced for the tasks they were given. They were dangers to themselves and the airmen's plans for airpower employment. Second—and this was an issue well known to Kuter already—a theater air command structure needed to be created in order to ensure unity of air efforts. Three numbered air forces—the 8th (in England), 9th (in Egypt) and 12th (Northwest Africa)—were working toward the same goal of defeating the European Axis forces, but no central air organization existed to coordinate their efforts. Third, the 12th Air Force

⁸⁸ Kuter, "Growth of Air Power," 219–220; "PEP Record: Kuter, Laurence S.," Folder 1; Davis, *Carl A. Spaatz and the Air War in Europe*, 114–115.

had robbed the 8th of much of the experience, talent and equipment it had built up during its brief existence (and was continuing to do so). Airpower's promises could never be fulfilled if a critical mass of experienced aviators could not be built to execute air plans. Fourth, airmen needed to a way to determine whether, and to what extent, bombers were being effective. Improved aircrew and aircraft quality would be largely irrelevant if they attacked the wrong targets. Fifth, the entire mobilization and training plan for bomber crews needed to be overhauled. There were too few bomber groups in existence and bomber crews were dying and getting injured at terribly high rates, so the AAF's training plan needed to be reoriented toward providing individual crews to shore up existing bomber groups, rather than building organizations from scratch. Sixth, bomber tactics even if the green bomber crews could maintain adequate formation positions, and bomb and shoot reasonably accurately—had to be adjusted. These were just the problems Kuter faced in his first month and a half overseas. The miserable English winter weather and ever-presence of mud that defined most bomber bases around East Anglia would only further heighten the frustrations he experienced.⁸⁹

Kuter's first task was to draft a memo from Spaatz to Arnold regarding aircrew training and replacements. AWPD-1 had been built on the premise that the first American crews would not enter into combat until early 1944, which would have left time for groups to be fully trained before arriving in theater. Rushing them in piecemeal, a year and a half earlier than planned, against experienced and determined German adversaries, was producing predictably poor results. The AAF, and the American war effort as a

⁸⁹ Kuter, "Growth of Air Power," 220-221.

whole, could not afford the morale and propaganda defeat that would attend the dissolution of the first air groups and wings that entered combat, so Spaatz needed Arnold to reorient stateside training schedules and send him replacement crews to backfill his rapidly-depleting groups. 90

Next, Kuter had to deal with his former War Department Secretariat boss, Brigadier General Beetle Smith. Smith was chief of staff to Lieutenant General Dwight D. "Ike" Eisenhower, the newly-appointed overall Allied commander for the North African Theater of Operations (NATO). First, on 11 November, Kuter attended a planning conference for a proposed cross-channel invasion in late 1943. He had known, since at least 1941 during the writing of AWPD-1, that the timing such an invasion would likely be impossible—logistically and otherwise—at that time. While he did not attack the plan's feasibility, Kuter did object (along with Spaatz, Possum Hansell and Howard Craig) to Smith's air-related plans for the invasion. While Kuter and others were trying to build the theater air commander's authority, Smith sought to emasculate it. The airmen envisioned a command structure wherein the Allied commander gave mission-type orders to co-ordinate/co-equal air, ground and naval commanders to execute their missions. Smith instead wanted Spaatz, the theater's senior airman, to be a staff officer. In Smith's plan, Spaatz would head up an air section within Eisenhower's staff. Predictably, Spaatz and the airmen disagreed. Kuter's clash with his old boss continued the next day, at a meeting between Spaatz, Kuter and Smith. The notion that Spaatz should not only be a commander, but furthermore act as commander over all three numbered air forces in the

⁹⁰ Ibid., 221.

European and Mediterranean theaters, was a non-starter for Smith. Smith's resistance seems odd, though, since Eisenhower had said he was in favor of a theater command. On 29 October, Eisenhower had actually endorsed the overall theater command construct the airmen wanted. It seems Smith was less concerned with his boss's desires than Army prerogatives. According to Smith's biographer, "'So far as [Smith] was concerned,' [Air Chief Marshal] Tedder believed, 'a separate air force in America 'would come over his dead body.""

Unable to convince Smith, the airmen set their sights on taking their ideas regarding airpower leadership directly to Eisenhower. In addition to Hansell and Kuter, Spaatz decided to take his chief of staff Brigadier General Asa "North" Duncan (a World War I veteran airman who had flown in the Meuse-Argonne Offensive in 1918) and Colonel Charlie Booth (8th Air Force assistant chief of staff) with him to talk directly with Eisenhower. On 17 November, they all departed for Gibraltar. It would be a flight Kuter never forgot. Spaatz took Hansell with him in his staff airplane. The RAF courier plane Kuter, Duncan and Booth were to take was canceled for an unknown reason, but there was a flight of B-17s departing that day. It was being reassigned from the 8th Air Force to the 12th in Africa. Kuter and the other two staffers each went on different aircraft. Duncan went with the squadron commander, Kuter went with the leader of the first flight, and Booth with the leader of the second flight. The bombers were from the 97th Bombardment Group, who had flown the AAF's first-ever heavy bombardment

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⁹¹ Crosswell, *Beetle*, 2010, 401; Wesley Craven and James Cate, eds., *The Army Air Forces in World War II, Volume Two: Europe: Torch to Pointblank, August 1942 to December 1943* (Washington, DC: Office of Air Force History, 1983, 1949), 65; Davis, *Carl A. Spaatz and the Air War in Europe*, 114; Spaatz, Carl A., "Digest of a Conversation Between General Eisenhower and General Spaatz," October 29, 1942, Spaatz Collection, Library of Congress.

mission from England exactly three months prior. By flying with the most experienced heavy bomber group thus far in the war, Kuter would get the opportunity to see firsthand what he had been laboring to build over so many years. 92

The 97th was tragically unimpressive. After takeoff, the formation flew low, due to reports of German fighters flying from Brest, France. About 100 miles out to sea, Kuter was in the back of the aircraft checking machine guns when one of the crew told him the lead (Duncan's) aircraft had an engine fire. Kuter swapped positions with the copilot and directed the aircraft commander to draw closer to the lead aircraft. As they neared the troubled plane, they saw fire and smoke pouring from behind one of the engines. Shortly thereafter, the Flying Fortress crashed into the choppy seas below. Yellow objects that might have been life vests could be seen near the flaming wreckage, and one of the crewmembers thought he "saw a man waiving through the flames," but no bodies, much less survivors, would be recovered. The crash was a tragedy, but such loss was not—in and of itself—terribly surprising. What was appalling was the state of training and discipline the flight indicated.⁹³

Kuter had much to share with the 12th Air Force commander, Jimmy Doolittle (leader of the famed Doolittle Raid on Tokyo) and his operations deputy Lauris Norstad (prior Advisory Council member) when he arrived in Gibraltar. 94 Planning and briefing standards were lax; the squadron commander had not prebriefed what to do in the event

Kuter, "Growth of Air Power," 226–228; Copp, Forged in Fire, 321.
 Kuter, "Growth of Air Power," 226–228.

⁹⁴ U.S. Air Force, "Lieutenant General James Harold Doolittle," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107225/general-james-harolddoolittle.aspx; Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume IX, 1940-1950, 651.

of an aircraft ditching. The crews lacked initiative; when the aircraft Duncan was flying on went down, Kuter had to take command of the flight, because none of the other notionally-experienced crews did so. The group lacked standard operating procedures; Kuter had to break radio silence (risking detection in the process), because no standard was in place for passing formation leadership from one aircraft to another while maintaining radio silence. The aircraft were poorly maintained; when Kuter arrived to the aircraft, oil, grease and mud streaked its interior and exterior. The crews were complacent and/or ignorant; even when within range of German Ju88s at Brest, the crew left their guns unmanned. Worse still, the crewmembers did not seem all that bright; just after watching Duncan's aircraft go down in flames, Kuter saw a crew member in the bomb bay, hand-pumping fuel from an auxiliary tank to an already-overflowing wing tank. Kuter later recalled, "Even the poorest commercial airlines would not have accepted the flight deck discipline, use of check lists or sloppy behavior which I observed."95 If the men from this crew were flight leaders for America's most combat-experienced heavy bomber group, then Kuter could only imagine what could be expected from inexperienced crews flowing in from the United States. When he arrived at Gibraltar, Kuter counted himself lucky to have survived the trip. 96

When Kuter reconnected with the rest of the party from England, Spaatz told him not to push for establishment of an overall theater air command. It was an odd directive, since General Arnold was very much in favor of a theater command, and Eisenhower had

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⁹⁵ Kuter, "Growth of Air Power," 228.

⁹⁶ Ibid., 226–228; Copp, Forged in Fire, 321.

already agreed to such an arrangement on 29 October. 97 Arnold wanted the theater command structure, because it would allow Spaatz to move aircraft between subtheaters, as mission requirements and/or operational efficiency dictated. Eisenhower saw the theater command concept as a bulwark against encroachment from Pacific theater commanders. One strong European air commander would have greater success than three separate numbered air forces, fighting not only MacArthur and Nimitz in the Pacific, but also with each other, for scarce air resources. Spaatz likely had the right idea at that point; effective command relationships in the Northwest African Theater needed to be resolved before an overall European theater air command could be discussed. Then Spaatz, in keeping with his standard modus operandi, departed for Algiers and Oran (with Colonel Booth in tow) to examine facilities in Northwest Africa, leaving Kuter and Hansell to do the organizational planning for Spaatz's new command. 98 The two long-time friends and coworkers got to work, overhauling their proposals in light of the new guidance. They had little time, since they were scheduled to meet with Ike the following day. It was not the first time the two had to work together to meet a short-fused requirement.⁹⁹

Kuter arrived at the meeting with a number of advantages. Eisenhower and Kuter had a working relationship going back to at least December 1941, when Kuter was a major in Marshall's WDGS secretariat and Eisenhower moved into the WDGS War Plans

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Davis, Carl A. Spaatz and the Air War in Europe, 141.

⁹⁷ Spaatz, Carl A., "Digest of a Conversation Between General Eisenhower and General Spaatz."

⁹⁹ Kuter, "Growth of Air Power," 228; Davis, *Carl A. Spaatz and the Air War in Europe*, 114–116. Kuter's account and Spaatz biographer Richard G. Davis differ substantially on the account of this mission to Gibraltar. Davis indicates that Spaatz went to Gibraltar fully intending to sell the theater air commander concept, but Kuter tells a

(later Operational Plans) Division as a brigadier general.¹⁰⁰ They had even been neighbors for a couple months, from the time the Kuters moved into Fort Meyers until Eisenhower headed overseas in May 1942. Ike was well aware of Marshall's high regard for Kuter. Second, Kuter was a Joint Staff planner, so he could add insight and color to messages the Allied commander had received from Marshall, the U.S. joint chiefs and the Allied combined chiefs. ¹⁰¹ Third, Kuter had been immersed in military organizational matters for so long that he could speak authoritatively on the subject, regardless of his affiliations with then nation's most senior military leaders.

Although enjoined against pushing for an overall European theater air command, Kuter used multiple lines of attack to support Arnold's push for centrally-controlled airpower, while arguing against the further diversion of heavy bombers to the theater. Kuter discussed AWPD-1 and AWPD-42 (both of which General Marshall and Secretary Stimson had endorsed) and used General Arnold's own words to underscore the assertion that deploying heavy bombers to Northwest Africa was a diversion from those aircraft's primary purpose—directly attacking vital centers in Europe. He highlighted Marshall's War Department reorganization to underscore the notion that a senior commander should have a small, policy-oriented staff, and leave operational execution to coequal air and ground organizations (much as the AAF and AGF functioned stateside). While Kuter made it a point to distinguish between higher-level policies and his own personal opinions, he made as strong a case as he could for a central theater command. Upon his

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¹⁰⁰ Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume IX, 1940-1950, 196, 537.
¹⁰¹ Ibid.; Kuter, "Growth of Air Power," 229.

return from Africa, Spaatz met with Eisenhower, too. By 21 November, Eisenhower had agreed, in principle, to eventually establishing an overall theater air command, in charge of all European subtheaters (pending the outcome of Northwest Africa operations). It was a major victory for airpower advocates, although it would be short-lived.¹⁰²

The Gibraltar meetings led to substantial leadership changes, which gave Kuter the first opportunity in his career to command a wing. Eisenhower decided to pull Spaatz down to Africa, which had a cascading effect within the U.S. 8th Air Force. The moves also illustrate how poorly American airmen were prepared for leading bombing operations through the interwar years. In the plan, fighter pilot Tooey Spaatz would initially be a staff officer (in accordance with Beetle Smith's plan), serving as Eisenhower's Acting Deputy Commander in Chief for Air, Allied Force. ¹⁰³ Fighter and interwar test pilot Jimmy Doolittle (who, like Kuter, prior to the war had never commanded more than a flight) would keep command of the 12th Air Force in Northwest Africa (with fighter pilot Lauris Norstad as his operations officer). ¹⁰⁴ Fighter pilot Ira Eaker would move up from 8th Bomber Command and take command of the 8th Air Force from Spaatz. ¹⁰⁵ Fighter pilot (and Eaker's longtime friend) Newton Longfellow would take command of 8th Bomber Command, leaving an opening in the 1st Bombardment Wing—to be led by the one career bomber pilot in the command, Larry Kuter. ¹⁰⁶ Fighter

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¹⁰² Davis, Carl A. Spaatz and the Air War in Europe, 115; Kuter, "Growth of Air Power," 230–231.

¹⁰³ Craven and Cate, The Army Air Forces in World War II, Volume Two: Europe: Torch to Pointblank, August 1942 to December 1943, 107.

¹⁰⁴ U.S. Air Force, "Lieutenant General James Harold Doolittle"; "General Lauris Norstad."

¹⁰⁵ U.S. Air Force, "General Ira C. Eaker."

¹⁰⁶ Parton, *Air Force Spoken Here*, 33. Eaker and Longfellow had an association with each other that stretched back to at least 1919, when the two had flown fighters together in the Philippines.

pilot-turned bomber advocate Possum Hansell would command the 3rd Bomb Wing. which was more a wing in name than in actuality given lack of crews and aircraft. 107

In terms of both rank and bomber backgrounds, the personnel moves were surprising. Both Kuter and Hansell outranked Longfellow, and both had been in the bomber strategy and advocacy business much longer than their soon-to-be boss. Eaker and Longfellow had been among Kuter and Hansell's first students at ACTS. 108 Longfellow's promotion in responsibility was not entirely surprising, though, since he had some actual bomber combat experience to that point, whereas neither Kuter nor Hansell had. He was also a longtime friend of Eaker's, and thus a known quantity. But Longfellow was a poor senior leader. As a colonel, he was derisively referred to by his subordinates as the "Screaming Eagle," and when promoted to brigadier general (on 31 October—9 months after Kuter), he became the "Shouting Star." ¹⁰⁹ Eaker would find himself essentially doing double duty, effectively working as the dual-hatted 8th Air Force and 8th Bomber Command commander, and treating Longfellow as a glorified chief of staff.110

Kuter, the highest-ranking officer in 8th Bomber Command, was given command of the 1st Bombardment Wing—the command's premier wing, to which belonged every B-17 in England. 111 Other than Hansell's 3rd Bombardment Wing, the only other bomb

¹⁰⁷ Griffith, The Quest: Haywood Hansell and American Strategic Bombing in World War II, 102; Maurer Maurer, ed., Air Force Combat Units of World War II (Washington, DC: Office of Air Force History, 1983), 413–414. The 3rd only had one group of B-26s when Hansell took command, and it was so short on personnel and equipment that it would not enter combat until May 1943.

⁰⁸ Finney, *History of the Air Corps Tactical School*, 1920-1940, 125–126.

¹⁰⁹ Parton, Air Force Spoken Here, 214; Official Army Register, January 1, 1943, 540.

¹¹⁰ Parton, Air Force Spoken Here, 213.

¹¹¹ Copp, Forged in Fire, 324–325; Maurer, Air Force Combat Units of World War II, 373–374.

wing in the country was the understrength 2nd (the same wing in which Kuter and Hansell had served at Langley in the Thirties). It had just two groups of B-24s, and was thus incapable of flying missions on its own. Its B-24s had to accompany the 1st's B-17sinto combat, which meant that, functionally, Kuter's wing was responsible for executing the entirety of America's European strategic bombing effort. 112

The command situation was all the more difficult for Kuter, since he had previously lobbied Assistant Secretary Lovett to be appointed the first person to command the 8th Bomber Command. 113 It would have been logically supportable, given Kuter's early promotion to brigadier general and his deep knowledge of bomber operations. The higher-ranking and far more experienced Eaker, who had a long history working with Arnold, had been selected instead. When Kuter deployed, though, he expected (at least according to a postwar interview with O. A. Anderson) to eventually command the 8th Bomber Command. 114 When Eaker vacated the 8th Bomber Command billet and picked Longfellow instead, the decision would have stung. There is no evidence, however, that Kuter protested. Even if he did, he had more than enough other concerns to occupy him. He had just over a week before taking command on 2 December, and before then, he and Possum had to ghost write Spaatz's Gibraltar trip report and familiarize themselves with the 8th Air Force and Bomber Command staffs, as well as get to know their British counterparts.

¹¹² Copp, Forged in Fire, 324.

Parton, *Air Force Spoken Here*, 214.

Anderson, Interview with Orval .A. Anderson, 39.

The two longtime friends' draft letter was in Spaatz's hands by the evening of 23 November. 115 It outlined many of the problems the two would experience as commanders: poorly trained crews, inadequate bombing accuracy, uncertain bombing results, and poor target selection—most notably hardened submarine pens that were largely impervious to air attack. 116 That same day, Spaatz briefed Eaker on the theater command plans Spaatz had sanctioned, but which Kuter and Hansell had written. 117 After some editing by Spaatz, the letter was sent at 2:30 the next morning. 118 Kuter then went about getting to know people as well as he could in the 8th Air Force, the 8th Bomber Command and others in the British Bomber Command, since only a week remained before he took command of the 1st Bombardment Wing. What Kuter found on the 8th Bomber Command staff left much to be desired. The staff was largely populated by reserve officers, few (if any) of which had attended Command and General Staff School. One bright light on Eaker's staff, though, was Colonel Harris Hull. Hull was a journalist and interwar reserve officer who had not attended any professional military education schools. He was the one who came up with the idea of intercepting the ocean liner Rex in 1938—the publicity stunt that cost Andrews his job and had reignited the feud between the Army and Navy regarding long-range overwater operations. In late-1942, Hull was the 8th Bomber Command's A-2 (Intelligence) officer. Kuter would recruit Hull to serve

¹¹⁵ Kuter, "Growth of Air Power," 235.

Parton, Air Force Spoken Here, 201. Kuter, "Growth of Air Power," 234.

in multiple commands in subsequent years. Hull was an aberration, though, in a command that was ill-suited for leading a massive bomber campaign. 119

On 1 December 1942, Larry Kuter formally took command of the 1st Bomb Wing. His marching orders from Eaker were to: (1) improve the B-17s' mission readiness rates; (2) reduce the aircraft abort rate (the rate at which launched on missions, but subsequently returned to base before reaching their assigned targets), (3) improve bombing accuracy, and (4) write a manual for wing commanders, which outlined commanders' tasks and proposed solutions. Kuter started by visiting the 2nd Bomb Wing commander, Great War-era veteran fighter pilot Brigadier General James P. Hodges. Hodges' unit had just started flying combat missions the month prior, since before then the 2nd had been devoted to preparing units for deployment to Northwest Africa. Kuter also checked in on the Royal Air Force pathfinder group at Huntington, which marked targets for the British night bombers. He then visited his group commanders.¹²⁰

Considering that the ASFOS (ACTS' predecessor) had opened its doors over two decades prior, that the Air Corps expansion had begun three years before, AWPD-1 was over two years old and the U.S. had been at war for a year, Kuter's four operational bomb groups were surprisingly ill-trained and equipped for strategic bombing operations. The 91st at Bassingbourn, commanded by Colonel Stanley Wray, the 303rd at Molesworth, led by Colonel James H. "Jimmy" Wallace, and the 305th at Grafton Underwood, commanded Colonel Curtis LeMay, had all seen their first air combat less than a month

¹¹⁹ Ibid., 237; U.S. Air Force, "Brigadier General Harris B. Hull," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106731/brigadier-general-harris-b-hull.aspx; Parton, *Air Force Spoken Here*, 111.

¹²⁰ Kuter, "Growth of Air Power," 239–243.

prior. ¹²¹ His most combat-experienced group (at least among those that would remain in his wing) was the 306th at Thurleigh, led by Charles B. "Chip" Overacker, which had first entered combat on 9 October. ¹²² The 97th and 301st Bomb Groups, Europe's most experienced bomb groups, had been transferred out of the 1st Bomb Wing's to the 12th Air Force in Northwest Africa. ¹²³ Kuter initially had a fifth bomb group—the 93rd—at Alconbury, led by Colonel Ed Timberlake. When Kuter took command, though, the 93rd was also prepping for deployment to Africa; Timberlake and his comparatively experienced crews (they had first entered combat in October) were gone two weeks into Kuter's tenure. The 92nd Bombardment Group was also in England, at Bovington, but its sole purpose was training replacement crews. It had seen some action in September and October, but it would not bomb another strategic target until May 1943. ¹²⁴ Worse still, none of Kuter's group commanders had previously held group commands, so they were learning their respective roles as geographically dislocated air base and operational flying group commanders, while Kuter learned the ropes as a first-time wing commander.

Kuter implemented a number of valuable changes early in his command tenure, even though he would not get the opportunity to see his initiatives bear much fruit. First, he identified areas in which each group was particularly strong, and set about having them train their peers. The 306th had the best bombing accuracy (at least initially), so Overacker was made responsible for devising a rating system for bombardiers and teaching the other groups how to use the bombing training aids his men had devised. The

¹²¹ Maurer, Air Force Combat Units of World War II, 156–158, 175–176–179.

¹²² Copp, Forged in Fire, 325.

¹²³ Maurer, Air Force Combat Units of World War II, 166–168, 173–174.

¹²⁴ Ibid 158–159

305th's aircraft were the best maintained and repaired the quickest after battle damage, so LeMay was put in charge of teaching others the best maintenance practices and creating a rating system for maintainers. Wallace was given responsibility for identifying administrative and disciplinary best practices and devising appropriate metrics to track progress. Wray was given a smattering of other issues to address. By institutionalizing information sharing and encouraging friendly competition through the tracking of key performance metrics, Kuter help accelerate wartime learning. There was much to learn.¹²⁵

Training issues occupied much of Kuter's time during this period. On 5

December, 8th Air Force operations research analysts arrived and stared evaluating the 1st

Bomb Wing's operations. Dr. James Alexander, a mathematician, and Dr. H. P.

Robertson, a physicist—both of them on loan from Princeton—came to the obvious conclusion that the crews needed more practice. Unfortunately, on many of the days when the weather allowed for crew training, the weather was also amenable to bombing the enemy. Political pressure and operational necessity meant that much of the training that might have been conducted over England (to compensate for inadequate pre-combat training stateside) was foregone in favor of attacking the Axis. The results were predictably poor. A tense meeting with British fighter units on 22 December led to more training: "However, they were fed up—they were bloody well fed up with the bloody bombers firing their massed heavy machine guns at them instead of the bloody

¹²⁵ Kuter, "Growth of Air Power," 249.

¹²⁶ Ibid., 254–255; Charles W. McArthur, *Operations Analysis in the United States Army Eighth Air Force in World War II* (Providence, R.I: American Mathematical Society, 1990), 22.

Bosch."¹²⁷ Kuter and his group commanders pledged to improve their crews' aircraft identification skills.

Since Kuter's wing was the only reasonably-functional heavy bomb wing in all of the AAF, it led bomber tactics development. While crews' capacity to execute bomber tactics remained limited due to inadequate training, Kuter and his group commanders continued to tweak their formations in order to achieve the greatest possible effects while trying to identify and track useful performance metrics. Again, the operations analysts were helpful in this regard. A major innovation during this period was the "combat wing" concept. Combat losses, slow-arriving replacements and aircraft maintenance issues meant that the wing's four groups were typically at half strength by the time they reached the target area. To make the formation more manageable, Kuter elected to combine the four understrength groups (when on the ground) into two full-strength groups in the air. 128 LeMay and Wallace were designated as the first two combat wing leaders. 129 This concept would be replicated in later 8th Air Force wings. Another major innovation during this period was the "combat box"—a modified stagger formation LeMay had concocted that maximized the bombers' ability to provide mutually supporting defensive fire. At a meeting Kuter called to standardize formations within the wing, LeMay argued strongly for the adoption of his formation. As Thomas Coffey, LeMay's biographer, noted, "[LeMay's] argument was almost superfluous. The deciding argument lay in the fact, already well known to Kuter, that the 305th Group was putting more bombs on

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¹²⁷ Kuter, "Growth of Air Power," 259.

Hansell, *The Air Plan That Defeated Hitler*, 115.

¹²⁹ Kuter, "Growth of Air Power," 254.

targets and suffering fewer losses (only two to date) than any other group."¹³⁰ Operations analysis was beginning to have a positive impact on combat operations. ¹³¹ With some tweaks, Kuter's wing adopted LeMay's concept, and the 1st Wing's formations informed the many other bomb wings which eventually followed after it. Unfortunately—outside of actual combat missions—the 1st Wing only got one opportunity in the entire month of December to practice its formations as a wing.

In late December, Kuter got word that his stint as wing commander was being cut short, and he was being reassigned to Northwest Africa. Kuter's memoir indicates that Spaatz drove the change; Tooey needed a chief of staff, because he had just made his prior chief of staff (Howard Craig) the commander of the 12th Air Support Command. 132 Eaker's biographer James Parton (a magazine and newspaper publisher who was then a captain and Eaker's aide) indicated it was because Kuter had not flown on any combat missions out of England—a mortal sin for Eaker, who valued combat leadership. 133 Kuter was, of course, prohibited from flying over enemy lines, due to his knowledge of Ultra. Another possibility was that Kuter was pushing back against ill-advised missions. On 8 December, 8th Air Force operations analysts submitted a report that bombing submarine

¹³⁰ Coffey, Iron Eagle, 44.

¹³¹ LeMay and Kantor, *Mission with LeMay*, 250. LeMay, in his autobiography, remarked on Kuter's analytical focus: "it took him a while to get [the bomb groups] keeping adequate records . . . We started having commanders' meetings. I retain an uncomfortable recollection of Kuter's singling me out, when the 305's derelictions in the Intelligence arena came to my attention. That was not nice to, to have him point the finger, literally and figuratively." LeMay quickly corrected the deficiencies Kuter identified.

Kuter, "Growth of Air Power," 261.

¹³³ Parton, Air Force Spoken Here, 211.

pens—the primary focus of heavy bomber activity during Kuter's tenure—was futile.

Eaker nonetheless kept directing missions against them. 134

Personality conflicts certainly did not help. Parton said that there were "stiff relations" between Eaker and Kuter at that time. 135 Eaker and Kuter might have clashed because they were too much alike: both were very ambitious. Kuter would not have had such a meteoric career up to that point, nor would he have considered pushing to be the 8th Bomber Command's first commander with Lovett, had he lacked a strong desire for professional prominence. Eaker was at least as ambitious, but he lacked Kuter's social graces. Brigadier General Harold W. Bowman, who knew both officers well, but especially Eaker, said that, "Ira Eaker was personally ambitious. He sincerely believed that the higher he climbed, the more he could contribute to the country and the Air Force. It was not easy to see where his ambition and his loyalty and patriotism separated." ¹³⁶ Regarding Eaker's social graces, Bowman noted that, "Ira Eaker lacks a sense of humor. I never heard him tell a joke, and seldom, if ever saw him smile." This was a far cry from Kuter's persona. If Kuter was confident enough in his knowledge and skills to stand up to Arnold, it is no surprise that he did not easily kowtow to Eaker (Kuter's former student, who pinned on his first star less than two weeks before Kuter did) or Longfellow, who Kuter out ranked. Given subsequent events, it is clear that the move was mutually

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¹³⁴ McArthur, *Operations Analysis in the United States Army Eighth Air Force in World War II*, 23; Hansell, *The Air Plan That Defeated Hitler*, 114. The report concluded that, "no bomb available to the Eighth Bomber Command was capable of perforating the roofs of pens from any practicable bombing height." The first mission the 1st Bomb Wing flew after Kuter departed and Hansell took over was against the submarine pens at St. Nazaire; seven of eighty-five bombers were lost, with no appreciable impact to German submarine operations.

¹³⁵ Parton, Air Force Spoken Here, 214.

¹³⁶ Bowman, "Notes on Personalities, U.S. Air Forces Europe, WW II."

¹³⁷ Ibid.

beneficial; Spaatz needed more American talent in Africa, and Eaker was happy to see Kuter go.

The report Eaker wrote on Kuter reflected the two commanders' difficult relations. Eaker rated Kuter's duty performance, physical activity and physical endurance as merely "excellent" (rather than the "superior" rating Kuter normally received), and his professional knowledge as merely "very satisfactory." Eaker recommended Kuter for staff work (no mention of command), and rated him 24/35 among his general officers. Had Kuter been given 8th Bomber Command and Longfellow remained as 1st Bomb Wing commander, the 8th Air Force/8th Bomber Command relationship might have been even more damaging to European bombing operations than leaving the ineffective Longfellow in place. At least Kuter, as commander of the only fully functional American bomber wing in England (and by extension in all of 8th Air Force), was positioned to implement positive changes to bomber operations.

While personality conflicts at a minimum made it much easier for Eaker to let Kuter go, Spaatz's personnel situation makes it clear how sorely needed Kuter was in Africa. The Mediterranean was the most important theater in the war at the time.

Northwest Africa was where American forces first met the Germans and Italians in combat, and it was there that the Americans and British were forged into a war-winning force. Tooey Spaatz needed the right men to make America's air combat forces effective, and they were in desperately short supply. Relations between the U.S. II Corps and the 12th Air Support Command (12 ASC), which was designated to support them, had

¹³⁸ Eaker, Ira C., "Laurence S. Kuter Officer Efficiency Report," March 3, 1943, Laurence S. Kuter PEP Record, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

devolved to the point that Spaatz had to give up his chief of staff, Howard Craig, to take command of the 12 ASC. ¹³⁹ Spaatz needed a man with Kuter's background to backfill Craig. Kuter, disappointed that he would be unable to see the fruits of his initiatives, prepared for another short-notice move.

A bit of good news was that Possum Hansell replaced Kuter at the 1st Bomb Wing and Colonel Fred Anderson—who would prove a highly effective bomber commander—replaced Hansell in the 3rd. Hansell, being likeminded, would continue and improve upon many of Kuter's initiatives. Anderson had graduated from West Point a year behind Kuter, and as a lieutenant had helped edit Kuter's ACTS bombardment text in 1935 (when Captain Kuter visited Walker's command at Henderson Field). Better still, Anderson was a graduate of the ACTS short course, and had been Gene Eubank's deputy in the Air Staff bombardment directorate for the past year. He was well acquainted with ACTS bombardment doctrine. Anderson would prove so effective that took over the 8th Bomber Command from Longfellow six months later. 141 The downside was that these comparatively young officers' talents would be diluted by the deluge of crews that would flow into the theater in the coming months and years.

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¹³⁹ U.S. Air Force, "Lieutenant General Howard Arnold Craig"; Kuter, "Growth of Air Power," 263.

¹⁴⁰ Kuter, "Growth of Air Power," 125.

¹⁴¹ U.S. Air Force, "Major General Frederick Lewis Anderson Jr."; Parton, *Air Force Spoken Here*, 270–287.

After multiple weather-induced delays, Kuter departed from England and arrived in Spaatz's headquarters on 13 January 1943, a day before the start of the Casablanca Conference—an Allied meeting that would lead to the development of the Combined Bomber Offensive against Germany, and in Northwest Africa would enable forging Allied airpower into an effective force. When Kuter arrived in Algiers, he was taken to Spaatz's villa, where he found both his boss and a room waiting for him. Spaatz told him that plans had changed, and that Kuter would not be the chief of staff. 142 Three days prior, Spaatz had signed an order designating Kuter as chief of the Headquarters Allied Air Force Operations (A-3) Section, but that was also about to change. ¹⁴³ In order to facilitate Allied cooperation—and owing much to the fact that British air officers were on the whole far more experienced than their American counterparts—commands were going to be "layered." If an organization was commanded by a British officer, the deputy would be American; if an American commanded, a British officer would be deputy. What job Kuter would be given remained to be decided, pending the outcome of the Casablanca Conference.

Kuter's first full day in Africa started humorously. After sleeping in (Spaatz was gone to the conference and Kuter's position had yet to be determined), Kuter woke, had breakfast, and made his way to Spaatz's official office in the Hotel St. George. As Kuter later recalled, "The commander's office was unoccupied and appeared to have been

 ¹⁴² Kuter, "Growth of Air Power," 267.
 ¹⁴³ 10 Jan 43, General Orders Number 2, Headquarters Allied Air Force. IMG_2381.JPG.

unused. That convinced me that it was Tooey's formal office."¹⁴⁴ Spaatz was not one to be chained to a desk. Kuter did find the chief of staff's office occupied by a British officer, Air Vice Marshal Robb (a two-star equivalent). Kuter set about to educate Robb, who would ultimately reach Air Chief Marshal (four-star) rank later in his career, on the duties of an American army chief of staff, since there was no equivalent duty in the RAF.¹⁴⁵

While Kuter did not participate in the Casablanca Conference, the Allied meeting had a tremendous impact on the war effort, Allied airpower employment, and Kuter in particular. First and foremost, President Roosevelt declared that he and Churchill would accept nothing less than unconditional surrender by the Axis powers. While historians continue to debate the impact of Roosevelt's demand, the implication for American airpower was clear: less-limited ends meant less-limited means for achieving those ends—there would be fewer qualms about collateral damage when airpower was employed. Furthermore, airmen's hopes of European victory without need of an invasion were dashed. Since before America's entry into the war, as exemplified by AWPD-1, American airmen had hoped that victory over the Axis might be secured without the need for an invasion. While they would still cling to their faith in strategic bombardment, airpower alone could and would never achieve the president's essentially largely unlimited war aims. Since an invasion was inevitable (if it had not been all along), the Mediterranean theater was all the more vital. It was where the war-winning Allied

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¹⁴⁴ Kuter, "Growth of Air Power," 267.

¹⁴⁵ Ibid

¹⁴⁶ Weinberg, A World at Arms, 439.

combined force that eventually invaded the continent would be built. Simultaneously, air warfare in the European theater would be all the more brutal, as airmen vainly sought to render a cross-channel invasion unnecessary.

Another major development at the conference was that Europe and the Mediterranean would be divided into two separate, distinct theaters, each with their own independent command structures. This meant that Arnold's desire to combine the European and Mediterranean Allied air forces under one umbrella organization were dashed. Rather than having one American commander over all American air forces in Europe and Africa, a combined British/American Mediterranean Air Command (MAC) would be established that incorporated all Allied air forces in Northwest Africa, Malta and the Middle East. In Europe, American and British air efforts would not be similarly integrated, but Ira Eaker did secure approval for what would become the Combined Bomber Offensive. The Allies would strike the Axis around the clock, with the British bombing at night and the Americans during the day. This situation irked Spaatz, who wanted to return to command the 8th Air Force in England, and he pressed Arnold at the conference to let him do so. His request was denied. Arnold wanted Spaatz in Africa, right next to Eisenhower, and overseeing the much-larger operation down south. 147

One very positive note for American airmen was that Lieutenant General Frank M. Andrews, Kuter's former WDGS G-3 boss who had once been fired for his airpower promotion activities, was selected to replace Eisenhower as Commanding General, U.S.

¹⁴⁷ Davis, Carl A. Spaatz and the Air War in Europe, 155–156.

Army, European Theater of Operations. 148 The implications were huge. An airman, highly regarded by Marshall, would lead the Allies' airpower-centric European combat operations, just when adequate numbers of airmen and aircraft—as a result of Air Corps/AAF expansion plans Kuter had been participating in since 1938—became available for operations against Germany. A mere 219 heavy bombers—B-17s and B-24s combined, all of which flew in Kuter's 1st Bomb Wing formations—had existed in Europe when he handed his command to Possum Hansell in January 1943. They had 256 P-38s and P-47s to protect them. By the end of the year, American heavy bombers alone would exceed 1,600 planes and the number of first-line fighters (which would soon include the iconic P-51 Mustang) would grow to over 1,800 aircraft. ¹⁴⁹ Andrews would be buttressed by the "Casablanca Directive" that flowed out of the conference, which called for Allied bomber commanders to "take every opportunity to attack Germany by day, to destroy objectives that are unsuitable for night attack, to sustain continuous pressure on German morale, to impose heavy losses on the German day-fighter force, and to contain German fighter strength away from the Russian and Mediterranean theaters of war."150 As the Allied European commander, Andrews would not only manage the strategic bombing campaign in Europe, but he might eventually play a major role in the Allied invasion of Festung Europa. ¹⁵¹ Airmen were taking positions of substantial joint

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¹⁴⁸ Ibid., 155.

¹⁴⁹ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 157–158.

Davis, Carl A. Spaatz and the Air War in Europe, 164.

¹⁵¹ Copp, *Frank M. Andrews: Marshall's Airman*, 26. Although it is impossible to know, Copp suggests it was possible that Andrews could have led the Allied invasion forces, had he not been killed in an aircraft accident in May 1943. Multiple oral histories with senior American airmen underscore this same notion. It is doubtful that Andrews would have gotten the overall allied leadership role, but his joint and combined leadership record and Marshall's high regard for him indicate that Andrews would likely have occupied

and combined leadership. If the Second World War did not yield service independence, then they were at a minimum postured to occupy very senior positions in the postwar U.S. Army.

Within the Mediterranean theater, the Casablanca conferees approved the layered theater command concept. This construct was particularly valuable for airmen, since the AAF was desperately short of senior, experienced air leaders and staff officers to support them. One of Spaatz's greatest challenges—and a primary reason he was lukewarm on the theater air command concept—was the lack of staff officers. The Royal Air Force had existed as an independent service since 1918, and its officers had been fighting the European Axis forces for years longer than the AAF. The British would thus bring not only combat-experienced aviators and their aircraft, but the depth of experience and history of coequality that the AAF sorely lacked. While Americans overall came away from the Casablanca Conference feeling as if they had been outmaneuvered by their British counterparts (the British got their way by convincing Roosevelt to support their Mediterranean strategy), the outcomes with regard to American airpower could not have been much better. 152

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influential posts throughout the war. Given Andrews' airpower advocacy, this would have been of great benefit to the AAF cause. His loss was a major blow to airmen's influence within the U.S. military.

152 Wedemeyer, *Wedemeyer Reports!*; Lacey, *Keep From All Thoughtful Men*. Wedemeyer, in his memoir, indicates that the U.S. Joint Chiefs felt outmaneuvered by their British counterparts. Specifically, they wanted to launch a cross-channel invasion in 1943, but the British statesmen and senior leaders managed to get their way and postpone the invasion to at least 1944. Lacey makes it clear in his narrative that not only was a cross-channel invasion logistically impossible, but American senior leaders knew that this was the case. While the British might not have outmaneuvered their American allies, it does seem clear that the British arrived to the conference much better prepared, and they presented a more united front in discussions, than the American participants. This is unsurprising, considering the makeup of the WDGS and Air Staff: "passé" Great War-era officers, competent but inexperienced officers like Kuter, and civilians with minimal (if any) military backgrounds, who were given direct commissions to serve on staffs.

The air commands created as a result of the Casablanca Conference, and the individuals picked to command them, are worth noting. Eisenhower would be the Commander-in-Chief, Allied Force. Under him, British Air Chief Marshall Tedder would command the Mediterranean Air Command (MAC), with all British and American air forces—in Northwest Africa, Malta and the Middle East—under him. Tedder would be coequal with the Mediterranean Allied Naval Forces and Allied Ground Forces commanders. Under Tedder, Lieutenant General Spaatz would command the Northwest African Air Forces (NAAF), which controlled all the RAF and AAF units in that subtheater. Spaatz's NAAF in a number of ways prefigured the way the postwar independent Air Force would later be organized. He split his command into the North African Strategic Air Forces (NASAF), Tactical Air Forces (NATAF), Coastal Air Forces (NACAF), Troop Carrier Command, Air Service Command, Training Command and Photographic Reconnaissance Wing (NAPRW). ¹⁵³ The biggest of Spaatz's commands was NATAF. Accordingly, the militarily senior and combat-proven air marshal (threestar equivalent) Arthur "Mary" Coningham was designated to lead the Allies' force of fighters and light and medium bombers. Coningham got his unusual moniker because he grew up in New Zealand; Mary was a bastardization of Maori, New Zealand's indigenous tribe. Kuter found the name "ludicrous," since Coningham was a tall, robust Caucasian World War I fighter ace. 154

Spaatz picked Larry Kuter to be Coningham's deputy. Kuter was a unique choice to serve as deputy for Northwest Africa's fighter-centric command. Fighter pilot John K.

Ehlers, *The Mediterranean Air War*, 266–270.
 Kuter, "Growth of Air Power," 271.

"Joe" Cannon, who had almost a decade more military experience than Kuter, was in theater and—until shortly before Kuter's arrival—had commanded the 12th Air Support Command (12 ASC, which would fall under NATAF). Even more ironically, Cannon had left the 12 ASC to take command of the 12th Bomber Command. While Kuter outranked Cannon by virtue of date of rank, this role reversal was remarkable. 155 Fighter pilot Hoyt Vandenberg, who like Cannon had substantially more time in service than Kuter (but was also militarily inferior, by date of rank), was relegated to chief of staff for NASAF—the theater's bomber command, which was a much smaller operation. 156 Fighter pilot Pete Quesada was made deputy commander of the Northwest African Coastal, rather than Tactical, Air Forces. 157 Fighter pilot Lauris Norstad was also in theater, but he was significantly junior to Kuter. He was made Spaatz's assistant chief of staff, finally pinning on his first star at the same time. 158 Given that he had others who were apparently better qualified, why Spaatz chose Kuter is not entirely clear. The context within which NATAF was formed suggests an answer.

NATAF was the most important command in the Northwest African sub-theater, and Kuter was the man best positioned to ensure its success. Air support to ground forces was vital, not only to ultimate Allied victory, but also for airmen to make their vision for military airpower a reality. If the Allies failed in their first major test against the Axis in

^{155 &}quot;General John Kenneth Cannon," Official Website of the United States Air Force, Biographies, accessed August 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107492/general-john-kenneth-

¹⁵⁶ U.S. Air Force, "General Hoyt S. Vandenberg."

¹⁵⁷ U.S. Air Force, "Lieutenant General Elwood R. Quesada," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106101/lieutenant-general-elwood-rquesada.aspx.
¹⁵⁸ "General Lauris Norstad."

Africa, the success of the entire war effort would be in doubt. If airmen failed to provide the best possible support to the Allied combined arms team, then the U.S. Army leaders would have reason to keep air forces subordinate to ground forces. Kuter was well known to and trusted by senior British air leaders (as evidenced by his early access to Ultra intelligence). He had displayed an unusual blend of assertiveness and diplomacy throughout his career. He could and did press hard for issues of vital importance, but he also had the common sense to throttle his rhetoric back when discussing issues of relatively minor importance. He had superior organizational skills, which complemented Coningham's competence and credibility. Kuter had the trust of generals Arnold and Marshall, and had proven well versed in articulating airpower doctrine. NATAF, designed according to British airpower concepts, led by Coningham (who brought competence and credibility and aided by Kuter (who added administrative and diplomatic skill), would yield combat success, which would allow Hap Arnold to import British notions of airpower co-equality with ground power into U.S. Army doctrines and structures (again, with Kuter's help). The effort would ultimately lead, after Kuter returned to Washington, to the publication of Field Manual (FM) 100-20: airpower's "declaration of independence." ¹⁵⁹

Kuter took command of the Allied Air Support Command, the interim command which existed until Coningham arrived and formally took command of NATAF, on 22 January. Under Kuter were the British 242 Group (commanded by Air Commodore Kenneth Cross) and the American 12th Air Support Command (led by Brigadier General

¹⁵⁹ David E. Johnson, *Fast Tanks and Heavy Bombers: Innovation in the U.S. Army, 1917-1945* (Ithaca: Cornell University Press, 2003), 214.

Paul L. Williams who, like Cannon, was a Great War-era fighter pilot). The Western Desert Air Force would eventually also fall under NATAF, once Coningham took charge. ¹⁶⁰ In his AASC commander role, 37 year old AAF Brigadier General Larry Kuter was unable to prevail upon the substantially older and higher-ranking ground generals that maintaining "air umbrellas" over ground forces was a fool's errand. British Army General Anderson (for an operation that fortunately got canceled) demanded that the entire NATAF effort be directed against ground targets—even though doing so would have made for easy pickings by defending Luftwaffe fighters. U.S. Army General Lloyd Fredendall had ordered the use of British Beaufighter night fighters to patrol over Axis airspace during the day. The aircraft were not only ill-suited to dogfighting, and hence sitting ducks for day fighters, but if they were shot down, the Axis might exploit the highly-secret radars the aircraft carried. ¹⁶¹

When Kuter was not (unsuccessfully) trying to convince ground commanders that they would be better served by having Allied forces gain air superiority, to be followed by interdicting enemy ground forces beyond the front lines, he got to know his subordinate commanders. He got reacquainted with Colonel P. L. Williams, who had been one of his students in the ACTS '37 class. ¹⁶² During this period, Kuter also got acquainted with a number of first-rate junior officers who would find themselves serving under Kuter later in their careers. These included Colonel Frederick Terrell and Lieutenant Colonels Fred Dean and William "Spike" Momyer. Terrell was just seven

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¹⁶⁰ Orange, *Coningham*, 136; U.S. Air Force, "Major General Paul L. Williams," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105266/majorgeneral-paul-l-williams.aspx.

Davis, Carl A. Spaatz and the Air War in Europe, 176–177.

¹⁶² Finney, History of the Air Corps Tactical School, 1920-1940, 128.

years out of West Point and commanded the 47th Bomb Group, which operated A-20 attack aircraft. Terrell would retire as a major general, serving under Kuter at NORAD. 163
Dean, who was just five years out of West Point, commanded a fighter squadron and would work with Kuter again sooner than he expected. Dean, who would eventually wear three stars, would join Arnold's advisory council in July 1943, shortly after Kuter returned to Washington. 164 Momyer would eventually—like Kuter—earn four stars.

Momyer, who graduated flying training and pinned on second lieutenant in February 1939, had taken three and a half years to advance four pay grades. When Kuter met him, Momyer was already a fighter group commander; he pinned on full colonel on 28
February 1943—shortly after Kuters' arrival and just five years into his flying career. In 1944, Momyer would join the Air Staff as chief of combined operations for the Army Air Forces Board—responsible for air-ground coordination. 165

Kuter also took the opportunity to visit with senior British airmen and ground officers. The relative calm during this period was fortunate, because Kuter had to completely reorient himself toward fighter and tactical bomber operations. While Kuter had proven himself competent in flying fighter aircraft, fighter tactics—air-to-air combat, ground strafing and the like—had never been part of his professional repertoire. Kuter's

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¹⁶³ U.S. Air Force, "Major General Frederick R. Terrell," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105400/major-general-frederick-retrrell.aspx.

¹⁶⁴ U.S. Air Force, "Lieutenant General Fred M. Dean," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107269/lieutenant-general-fred-m-dean.aspx.

¹⁶⁵ Official Army Register, January 1, 1943, 628; Boyne, Walter J, "Momyer," Air Force Magazine, August 2013. Historian Walter J. Boyne, in writing of Momyer, stated, "He had an unusual career; in retirement, he guessed some of his superiors might have been grooming him for promotion without his knowledge." Considering the way Kuter wrote of him in his unpublished autobiography and the senior positions Kuter later held, Momyer's career likely benefited from Kuter's support.

operational education was immensely aided by the fact that the NATAF headquarters was collocated with the ground force commander's headquarters—a pattern which would continue through the rest of his tenure in Northwest Africa. While air and ground leaders would exercise independent command over their respective forces, they would nonetheless be joined at the hip. 166

Kuter got his first major trial by fire as a tactical theater commander right as Coningham arrived to take command. On 14 February, German Field Marshall Erwin Rommel's forces attacked the town of Sidi Bou Zid, which led to a disorderly retreat by American ground forces. In withdrawing from Gafsa, Fredendall's forces abandoned substantial stores and ammunition, and left Momyer's P-40 fighter aircraft at Thelepte vulnerable to be overrun. 167 The U.S. Army's airmen were not the only ones who were new to combat. The ground soldiers were facing a steep learning curve, too, even though the ground Army had grown at a relatively sedate pace (albeit still a brutal one) compared to the AAF. It was a valuable lesson in air-ground interdependence; if airpower could have at least significantly disrupted Rommel's advance, then the ground forces could have repelled the attack, and in doing so would have allowed the Momyer's P-40s to do even more damage to the German enemy.

On 16 February, Coningham (just recently promoted to temporary air marshal three star rank) was in Tripoli. He had returned to Africa after a brief leave period in the

Kuter, "Goddamm It, Georgie!"Rebecca Grant, "Up From Kasserine Pass," September 2007.

U.K., and was meeting with senior British and American ground commanders. ¹⁶⁸ In a speech, he asserted that:

The Army fights on a front that may be divided into sectors, such as Brigade, Division, Corps or an Army front. The Air front is indivisible. An Army has one battle to fight, the land battle. The Air has two. It has first of all to beat the enemy air, so that it may go into battle against the enemy land forces with the maximum hitting power. ¹⁶⁹

Coningham then went on to say that airpower needed to be centrally controlled by a single air commander. ¹⁷⁰ He was preaching not only to the Americans, but even to the British, since his recent visit to London had made it clear that air force coequality was still not even fully supported in his own country. ¹⁷¹ The next morning, Thelepte was evacuated, with the last P-39s taking off at 10:30 am. Less than 24 hours later, Coningham arrived at the NATAF headquarters and took command. He arrived just in time, with his experienced British staff showing up with him. The Northwest African tactical air effort went from being led by a 37 year old American one-star general with three weeks' experience as a fighter/light bomber commander, to being helmed by a 48 year old British three-star, Great War veteran fighter pilot with 19 aerial victories to his credit, who had been fighting the Germans in Africa for over a year and a half. The effect on operations was immediate. ¹⁷²

The day after Coningham arrived, Rommel personally led the German armored attack against American lines. The Luftwaffe supported the effort, but due to poor

¹⁶⁸ Orange, Coningham, 131–133.

¹⁶⁹ Coningham, Sir Arthur, "Talk by Air Vice Marshall Sir A. Coningham, to Assembled British and American General and Senior Officers," February 16, 1943, Spaatz Collection, Library of Congress. ¹⁷⁰ Ibid.

¹⁷¹ Orange, Coningham, 134.

¹⁷² Kuter, "Growth of Air Power," 279.

weather NATAF aircraft were unable to respond. Fortunately, the German thrust failed that day. The next day, the Germans did successfully break through Allied lines. NATAF was again hampered by weather; Fred Dean got four P-39s—excellent ground attack aircraft—airborne. Two were shot down by American ground forces. 173 By dawn of the 21st, the Germans held both sides of the pass. The tide began to turn in favor of the Allies on the 22nd, in no small part due to the fact that the weather cleared, Allied commanders massed artillery to bolster defensive positions, and Allied airpower attacked the enemy rather than providing defensive umbrellas. During this period, many of Doolittle's NASAF aircraft came under Coningham's control. ¹⁷⁴ Importantly, the Allied airmen not only attacked German ground forces, but also fought for air supremacy—a key part of which was attacking German-held airfields. This led to a horrific mistake during the Allied counteroffensive on the 23rd. On that day, the 97th Bomb Wing—the same one that caused Kuter so much concern on the flight to Gibraltar—inadvertently attacked Souk-el-Arba, home of NATAF's British fighter unit, the 242nd, with fragmentation and antipersonnel bombs. 175 Kuter, the senior American in NATAF, along with Cannon (from NASAF, whose bombers had blundered), immediately went to Coningham and his British ground counterpart Alexander, to express their regrets. The Brits graciously accepted the apology, noting that such mistakes happened in war. ¹⁷⁶ The event was not the last one where Kuter would find himself in the middle of inter-allied conflict.

¹⁷³ Ibid., 280.

¹⁷⁴ Ehlers, *The Mediterranean Air War*, 279.

Spaatz, Carl A., "Spaatz Command Diary, 23 February 1943," February 23, 1943, Spaatz Collection, Library of Congress.

¹⁷⁶ Kuter, "Growth of Air Power," 282.

The month of March saw continued success, in no small part due to increasing numbers of available aircraft, particularly fighters. In the month of March alone, the Americans increased their combat air fleet by thirty percent, from 1,855 to 2,418 planes. The bulk of that growth was in fighters and light bombers. Rommel left Africa on 9 March, at right around the time Patton replaced Fredendall as U.S. II Corps commander. The fact that airpower—through attacks on airfields, seaports and surface—was systematically gutting Axis fighting capability did not keep Patton from claiming that he was not getting adequate air support. On April Fool's Day, Patton's daily situation report (SITREP) led to a major blowup between the mercurial commander and Coningham. The fallout from that SITREP would be mischaracterized in the movie "Patton" decades later, and Kuter would subsequently seek to set the record straight in an *Air Force* magazine article titled, "Goddammit, Georgie!" 179

Patton's 1April Situation Report (SITREP) read, "Forward troops have been continuously bombed all morning. Total lack of air power for our units has allowed German air force to operate almost at will. Enemy air has bombed all division [command posts] and concentrated on units supporting the main effort." Patton was upset by an attack by eight Luftwaffe light bombers that day, which had killed his aide and also wounded Omar Bradley's aide. While Patton's emotions might have been real, his accusations were largely baseless. First, he failed to acknowledge that the command post was unconcealed, consisted of dozen large vehicles (tanks and halftracks), was out in the

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¹⁷⁷ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 160.

¹⁷⁸ Orange, Coningham, 142.

¹⁷⁹ Kuter, "Goddamm It, Georgie!"

¹⁸⁰ II Corps SITREP, Spaatz Diary, IMG 2393.JPG

open (on a "treeless terrain") and the antiaircraft gunners dove for cover, never firing their guns at the bombers (even though they could been seen coming from far away—the skies were cloudless). 181

The facts Coningham included in his reply, which he sent to every recipient of Patton's SITREP, were damning. Unfortunately, Kuter's boss went beyond refuting Patton's assertions and included a stinging rebuke:

Facts are as follows: Total enemy effort over 2 Corps GUETTAR Front. 0730 unspecified number of fighters. 0950 12 JU. 87s [Stuka dive bombers]. 1000 5 JU. 88s [twin engine bombers] and 12 ME 109s [fighters] of which some bombed. Total casualties four killed, very small number wounded. Our effort up to 1200 hours 92 fighters over 2 Corps Front. 96 fighters and bombers on enemy airdromes concerned. On SFAX 90 bombers at 0900. For full day 362 fighters of which 260 over 2 Corps. On receipt of SITREP it was first assumed to be a seasonal 1st April joke. 182

Coningham further wrote,

It is to be assumed that intention was not to stampede local American air command into purely defensive action. It is also assumed that there was no intention to adopt discredited practice of using air force as an alibi for lack of success on ground. If SITREP is in earnest and balanced against . . . facts it can only be assumed that II Corps personnel concerned are not battleworthy in terms of present operations . . . Twelve Air Support Command have been instructed not to allow their brilliant and conscientious air support of II Corps to be affected by this false cry of wolf. 183

After reading the above on the morning of the 2nd, Kuter rushed to Thelepte. Tooey Spaatz and Air Marshal Tedder arrived shortly after Kuter did, and after gathering up Williams, the four drove to Gafsa to meet with Patton and Bradley. ¹⁸⁴

¹⁸¹ Kuter, "Goddamm It, Georgie!," 52.

¹⁸² Ibid., 53.

¹⁸³ Ibid

¹⁸⁴ Orange, Coningham, 147.

One element of the Patton movie was accurate. German fighter-bombers did attack Gafsa during that meeting and Tedder asked Patton how he'd arranged the attack. Patton did in fact famously respond to the attack (which killed no one), with something along the lines of, "I'll be damned if I know, but if I could find the sonofabitches who flew those planes, I'd mail each of them a medal." Not depicted in the movie was that Coningham went the next day to Gafsa to personally mend fences with Patton. Neither of the three-stars, both of whom relished a good fight, admitted fault to the other. After much desk-pounding and shouting, though, they "shook hands and had lunch together, all smiles." ¹⁸⁶ In the final analysis, the American airmen under Coningham and the soldiers under Patton were inexperienced, ill-equipped, and had much to learn. Americans' historical memory of the Tunisia campaign might be very different, had Coningham's response—via cable and in person—been accurately depicted.

April through early May, when Allied forces ejected Axis forces from the African continent, demonstrated the value of the centrally-controlled airpower model the Americans had adopted from the British. The fact that many of the AAF's brightest minds were deployed to that theater, and had well-established personal and working relationships with each other, certainly helped, too. British Ultra intelligence cued Allied air forces into lucrative opportunities. The photo reconnaissance unit, in keeping with its theater mission, alerted forces from all the air commands to valuable targets. The Coastal Air Command, with Pete Quesada as its deputy, both directly interdicted Axis shipping and cued the NATAF and NASAF into targets which exceeded its capabilities. NASAF,

¹⁸⁵ Kuter, "Goddamm It, Georgie!," 54. ¹⁸⁶ Orange, *Coningham*, 148.

European air and seaports, which in turn helped preclude the need to interdict air transports and ships by the other air commands. Coningham and Kuter's NATAF carried much of the workload. Coordinated airpower, within the context of the Allies' multidomain effort, directly attacked German ground forces, protected Allied ground forces from air attack, and helped cut off the supply lines that allowed the Axis forces to keep fighting on the continent. By the end of April 1943, the AAF's Mediterranean air fleet alone had grown to 2,900 aircraft (from 1,400 in late-January, when Kuter arrived). Over two-thirds of those aircraft were fighters and light, medium or heavy bombers, the bulk of which belonged to NATAF. 187

Operation Flax, as the interdiction campaign came to be known, began on 5 April. Kuter, who had led the planning for the operation, watched the fight on radar that day and listened on a headset, as NASAF-assigned P-38s started the operation by shooting down almost a dozen German transports and five fighters escorting them. The operations continued on subsequent days, with Allied bombers destroying Axis aircraft on the ground, followed by Allied fighters destroying the German aircraft that got airborne. The most dramatic day of the operation came almost two weeks later, in what was termed the Palm Sunday Massacre. ¹⁸⁸ Kuter later recalled:

I watched the flight over Tunis on our radar scope and heard it through my head set. All was excitement. All conversations were in the clear. Code names and targets of units were forgotten. Colloquialisms and profanities over the air identified New Zealand, Australian, English and American pilots as they

¹⁸⁷ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 160.

¹⁸⁸ Kuter. "Growth of Air Power," 289.

demanded room in "the bloody air space" to get in on the kill. From my electronic view the scene resembled the feeding frenzy of our Atlantic coast bluefish. 189

In the end, the operation destroyed 432 aircraft. Over 400 of them were transports, meaning that not only were Axis forces essentially cut off from their supply lines, but the Luftwaffe's air transportation fleet was broken for the rest of the war. Simultaneously, air attacks on 5 and 6 April by NATAF airmen supporting the British 8th Army enabled a major ground victory at Wadi Akarit. With air superiority secured by that time, Axis ground targets were easy pickings. The Germans' few remaining dive bombers departed in April, since they could not survive without air cover. The Germans lost substantial numbers of troops to strafing and bombing attacks, as NASAF bombers—unconcerned with enemy air attacks—struck ground forces at will. 190

In the end, Allied combined airpower was a major contributor to the ultimate victory in Northwest Africa. The Axis, owing significantly (but certainly not exclusively) to attacks by Allied airpower, could not support its forces by sea. The ships, located in advance by Ultra intelligence, were too easily identified and sunk. The Luftwaffe attempted resupply by air, but that effort proved fruitless, again due to Allied air forces that were growing in size, experience, and availability. Despite the rapidly-improving air situation, and the freedom from air attack the ground forces consequently enjoyed, Patton continued to assert that he should command the air forces that supported him (until Omar Bradley replaced him as II Corps commander). The Allies ultimately secured a victory that rivaled Stalingrad in terms of prisoners taken and Axis equipment lost. The Axis lost

¹⁸⁹ Ibid

¹⁹⁰ Ehlers, The Mediterranean Air War, 283.

about a quarter million troops and over 2,300 aircraft in Tunisia, as well as 46 percent of its total merchant ships in the Mediterranean. While airpower certainly did not cause all those enemy losses, those statistics would have been impossible without effective air operations.¹⁹¹

Throughout this fighting, Spaatz fought vainly to keep Kuter overseas. On 12 March, Stratemeyer—replying to a request that Kuter be allowed to at least stay until 1 June—wrote, "Kuter is just plain smart as hell, and if he can occupy one of your key positions and can get a promotion I urgently recommend that you keep him." Arnold nixed Stratemeyer's plan. On 24 April, Arnold cabled Spaatz, directing him to send Kuter back to Washington as soon as possible, but not later than 5 May. Kuter was notified of the message and was understandably disappointed, but he knew that fighting Arnold was pointless. On 28 April, he sent a message to Spaatz: "Heavy thinking during most of the night convinces me that it would be wrong for you to buck Arnold... While I deeply appreciate your attitude and should love to be in at the kill I cannot support a statement that my staying on is essential... Also the chief was quite sporting in letting me get this service in the first place precisely on my [estimated time of arrival]." That same day, Spaatz cabled Arnold, requesting he be allowed to keep Kuter through the end of the Tunisian campaign, at which time he figured Brigadier General Ralph Royce—the

¹⁹¹ Ibid., 286–287.

George E. Stratemeyer, "Letter from Major General Stratemeyer to Lieutenant General Spaatz," March 12, 1943, Spaatz Collection, Box I-10, Personal, March 1943, Library of Congress.

Arnold, General Henry H., "Cable from General Arnold to General Spaatz," April 24, 1943, Spaatz Collection, Box I-11, Personal, April 1943, Library of Congress.

¹⁹⁴ Laurence S. Kuter, "Memo to Mediterranean Air Command," April 28, 1943, Spaatz Collection, Box I-11, Personal, April 1943, Library of Congress.

commander of the AAF's Southeastern Training Command—would backfill him. ¹⁹⁵
Fortunately, General Marshall went to bat for Kuter. Also on the 28th, Marshall cabled Eisenhower, telling him he could keep Kuter until completion of the Tunisian operation. ¹⁹⁶

Kuter almost got to see the Tunisia campaign through to its finish, but he had to do most of his celebrating while making his way back to Washington. Kuter departed Tunisia on 12 May. The last of the Axis forces—the Italian First Army—surrendered a day later. On the 14th, Ethel got word her husband would be home soon. Larry Kuter arrived back in Washington at 11:00 PM on the 18th. There, he found Ethel and Roxanne waiting for him, but there was little time for a reunion. Santy Fairchild and Gordon Saville were waiting at the airport, too. Instead of going home, the Kuters went to the Fairchild's home, where Santy quizzed Larry on latest news from the African theater and then caught the recent returnee up on recent events in Washington. Kuter was at the Fairchild's until about 2:00 am that morning, and then reported into Arnold's office early. Shortly after his return, Kuter learned he would replace O. A. Anderson as the AAF plans chief. Kuter would have a busy next two years in that job. Ethel would later write, "I feel that the word immediately could be used for everything that touched his life from then on." 197

¹⁹⁵ Spaatz, Carl A., "Cable from General Spaatz to General Arnold," April 28, 1943, Spaatz Collection, Box I-11, Personal, April 1943, Library of Congress; Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume IX, 1940-1950*, 186.

¹⁹⁶ Marshall, George C, "Cable from General Marshall to General Eisenhower," April 28, 1943, Spaatz Collection, Box I-11, Personal, April 1943, Library of Congress.

¹⁹⁷ Kuter, "Along with Larry," Plans and Operations in the Pentagon, 1–2.

Kuter's first order of business was to finish writing his provocative after-action report, titled "Organization of American Air Forces." In it, he cited multiple examples of ground commanders, clueless as to proper employment of airpower, creating nonsensical policies and giving orders that were antithetical to effective air operations (maintaining "air umbrellas" over ground forces, failing to adequately defend airfields from enemy attack—which then precluded air support from those fields, etc.), and directing the use of particular aircraft for which they were wholly unsuited. In his conclusion, Kuter argued strongly that operations to gain air superiority had to be given preference over direct support to ground units: "If the air battle has been won the surface forces are freed from effective hostile air attack and the offensive power of the free air force can be applied directly in support of the surface forces." 198 Kuter then argued for coequality between air, ground and naval forces: "This conception [of air, ground and naval forces working toward a common goal] cannot be applied if one force is subordinated to another." ¹⁹⁹ He also supported the notion of theater air command, while cautioning against strict delineations between tactical and strategic airpower: "A rigid functional organization of air forces is unsound as air operations cannot be divided into exclusive functions."²⁰⁰ To use airpower most effectively, a single airman had to control all theater assets; Spaatz had used NASAF bombers (notionally "strategic" assets) to gain air superiority through airfield attacks (a "tactical" mission), and NATAF fighters for coastal interdiction (a NACAF mission). The theme of coequality between air and ground commanders, the

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Laurence S. Kuter, "Organization of American Air Forces" (Northwest African Tactical Air Force Headquarters, 1943), 6, Spaatz Collection, Box I-12, Personal, May 1943, Library of Congress.
 Ibid.

²⁰⁰ Ibid

value of centrally-controlled airpower, and the importance of close coordination between air and ground units would be repeated in Kuter's speeches, and soon would be codified in Army doctrine.

Kuter had been home in Washington just four nights when he gave a speech about his overseas experience. Given on 22 May at the Pentagon, his themes were consistent with those in his report, namely that the Army needed to adopt British air-ground coordination methods and associated command structures. He also used the opportunity to feed the military public relations machine. First, he highlighted the way Spaatz had used the multiple, functionally-delineated Allied air commands under him to help General Eisenhower secure an Allied victory. He then extolled the British airmen's particularly Coningham's—successes, with the subtext that Americans should consider adopting their doctrines and structures as their own. Next, to help drive a shift in American thinking, he pushed for new terminology: "The word 'support' always makes people think of air power used as an ancillary weapon of the Army or Navy . . . It is much better to speak of collaboration between the Army and the Tactical Air Force." Kuter also identified another key ingredient: physical collocation. "The importance of [Air Marshal Coningham and General Alexander living side by side in the same camp, eating in the same mess and planning and operating on equal terms in close collaboration, cannot be overstressed." Kuter was making a clear and compelling case for the wisdom of

replicating this pattern in other theaters and incorporating British methods into American commands.²⁰¹

Unfortunately, Kuter then participated in some linguistic sleight of hand of his own, after having just expressed his concern over rhetorical rectitude. He asserted that Coningham's air effort had two *phases*: to "reduce the enemy air to practical impotence and after that to throw the full weight of his air force against the enemy army." This implied that gaining air superiority and attacking ground forces had happened in sequence, when in actuality NATAF had pursued both lines of effort simultaneously. Kuter tacitly admitted this in his speech, when he gave examples of times when Coningham had foregone attacking the Luftwaffe in order to support ground commanders' schemes of maneuver. Coningham had clearly placed greater emphasis on gaining air superiority, though, in order to allow freedom of action for Allied bomber and attack aircraft. This was not the only inaccuracy in his speech. He also said that, "This close teamwork by allies was not only in the air effort but in all operations of General Eisenhower's allied command." Kuter was well aware that this statement was untrue, as the Coningham/Patton conflict had amply demonstrated. Kuter's statements nonetheless generally reflected his lived experience and had been written for consumption by a mass audience. Coningham had placed greater emphasis on destroying the Luftwaffe than strafing trucks and tanks. All things considered, the Allies had cooperated remarkably well in achieving a victory that rivaled Stalingrad for its impact on the Axis war machine.

²⁰¹ Laurence S. Kuter, "Statement by Brigadier General Laurence S. Kuter at Press Conference in the Pentagon, May 22, 1943," May 22, 1943, Kuter Collection, Volume 3, Part 2, Page 47, USAF Academy Library Special Collections.

Arnold would use the Allied victory and Kuter's celebrity to drive doctrinal changes that helped secure both Allied combat success and Air Force independence.²⁰²

Kuter's speech garnered a lot of positive press. John McCullough, a Washington bureau reporter for the *Philadelphia Inquirer*, wrote, "There is a strong feeling here that the critique delivered this morning . . . is one of the most significant statements of the new air-ground offensive yet annunciated by any high-ranking Allied air officer." The reporter also noted another unique quality of Kuter's: "During the press conference, he did not once use the personal pronoun. If he had no other, that is an adequate claim to distinction." A week after the speech, Spaatz forwarded Kuter's NATAF report to Eisenhower, stating, "I believe that this communication states the case fully, and I recommend that it be forwarded to the Commanding General, Army Air Forces." 205

Hap Arnold was already well aware of Kuter's thoughts regarding tactical airpower, and the month of June 1943 saw major developments on both sides of the Atlantic regarding air-ground doctrine. The British Air Ministry published "Air Power in the Land Battle," which directly quoted Montgomery's "Notes on High Command in War" and Coningham's 16 February speech in Tripoli. Kuter was deeply familiar with Coningham's thinking with regard to the application of airpower in support of ground

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²⁰² Ibid

John McCullough, "Brig. Gen. 'Larry' Kuter Is a Man Going Places," *Philadelphia Inquirer*, May 29, 1943, Kuter Collection, Volume 3, Part 2, Page 58, USAF Academy Library Special Collections.
 John McCullough, "Brig. Gen. 'Larry' Kuter Is a Man Going Places," *Philadelphia Inquirer*, May 29, 1943, Kuter Collection, Volume 3, Part 2, Page 58, USAF Academy Library Special Collections.

²⁰⁵ Spaatz, Carl A., "Memo from General Spaatz to General Eisenhower," May 29, 1943, Spaatz Collection, Box I-11, Personal, April 1943, Library of Congress.

forces, and he had included Montgomery's pamphlet as attachment six in his report.²⁰⁶
Arnold heartily endorsed the British document.

On 28 May, Kuter's 38th birthday, Barney Giles formally tasked Kuter with writing the new FM 100-20, Command and Employment of Air Power. Three days later, General McNarney—Kuter's boss during the War Department reorganization, who was by then Marshall's deputy chief of staff—directed the WDGS G-3 to adjust training manuals to reflect the new field manual, which was still in coordination. Kuter did not personally write FM 100-20—he was too busy giving speeches, interviews and writing articles—but his fingerprints were all over it. Kuter, on Arnold's behalf, had been pushing the idea of establishing an overall theater air commander since at least mid-1942. That concept would come through loud and clear in the doctrine document. As Coningham's NATAF deputy, Kuter had helped prove the value of centrally-controlled airpower's value in a combat theater—with coequality between air and ground forces being centrally important in the new doctrine. His personal relationships helped, too. One of FM 100-20's three authors, Colonel Morton H. McKinnon, Commandant of the Air Support Detachment of the School of Applied Tactics (the wartime successor to ACTS), had gotten Kuter's insights secondhand via Santy Fairchild while the battle for Tunisia was still being fought. The other full colonel on the writing team was Ralph Stearley, Kuter's classmate and later fellow instructor at ACTS. Of course, when time came for

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²⁰⁶ Kuter, "Organization of American Air Forces."

General Marshall to sign off on FM 100-20, the Army chief's well-established relationship with and respect for Kuter could not have hurt.²⁰⁷

Securing approval of FM 100-20 required not only selling it, but also defending it against detractors. A key part of this effort was attacking a competing document: FM 31-35, Aviation in Support of Ground Forces. Kuter had been fighting against FM 31-35 since before he even returned from Africa, since it included such statements as, "The ground force commander, in collaboration with the air support commander, decides the air support required." This kind of verbiage—and the thinking it engendered—had led to Patton to dictate the establishment of air umbrellas over his ground forces, even though doing so was a gross misuse of limited air assets. On 28 April, Colonel Rosenham Beam, a prewar bomber pilot who at the time headed the 5th Army's air section, had sent a memo to Kuter. Beam's memo, which he meant to use as a training tool for the 5th Army, had spoken positively of FM 31-35. 209 Coningham's Senior Air Staff Officer, Air Commodore George Beamish, eviscerated it. He began with, "To the uninitiated the paper is well prepared and reads in a convincing manner... to the uninitiated who are aware of the practical details the memo has weaknesses which should not appear in a substantial document of this kind."210 The rest of Beamish's critique was even more pointed. Kuter was thus springloaded to shut down any further positive mentions of FM

²⁰⁷ Mortensen, "The Legend of Laurence Kuter: Agent for Airpower Doctrine," 119, 128; Finney, *History of the Air Corps Tactical School, 1920-1940*, 108–110, 125.

War Department, "FM 31-35: Aviation in Support of Ground Forces," April 9, 1942, 6, http://cgsc.contentdm.oclc.org/cdm/singleitem/collection/p4013coll9/id/932/rec/1.

Rosenham Beam, "Memo from Colonel Beam to Brigadier General Kuter," April 28, 1943, Kuter Collection, Series II, Correspondence, 1943, USAF Academy Library Special Collections.

²¹⁰ George Beamish, "Memo from Senior Air Staff Officer to General Kuter," May 6, 1943, Kuter Collection, Series II, Correspondence, 1943, USAF Academy Library Special Collections.

31-35 when he got to Washington. In July, as FM 100-20 was at the printers, P. L. Williams' 12th ASC Report on Operations, written in April 1943, arrived on his desk. Like Beam's memo, Williams' report treated FM 31-35 somewhat positively. The report got buried, but not without reason. Kuter noted its problematic endorsement of FM 31-35, that Williams used terms the forthcoming FM 100-20 would render obsolete, and—perhaps most significantly—it clearly had not been vetted through Coningham or Spaatz. Kuter's objection was valid; the report had indeed not been properly staffed.²¹¹ Kuter, always bureaucratically savvy, had also helped limit the ammunition that those opposed to FM 100-20 concepts might otherwise use.

On 21 July 1943, the War Department released Field Manual (FM) 100-20, *Command and Employment of Air Power*, signed by George C. Marshall. It superseded FM 1-5, *Employment of Aviation of the Army*, which had been published just six months prior. Critically, FM 100-20 also took precedence over any other War Department publications affected by it (like FM 31-35). One does not have to read far into FM 1-5 to discover why airmen so urgently wanted this doctrine document to be replaced. It read in part, The air support commander is charged with the responsibility for the *maximum support of the plan of the supported ground commander*. In order to accomplish this efficiently, he must have sufficient control to dispose his units *in conformity with the*

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²¹³ War Department, FM 100-20: Command and Employment of Air Power.

²¹¹ Kuter, Laurence S, "Memo Regarding Remarks of Brigadier General Paul Williams, Commanding XII Support Command," July 6, 1943, Kuter Collection, Series II, Correspondence, 1943, USAF Academy Library Special Collections.

²¹² War Department, "FM 1-5: Employment of Aviation of the Army" (Government Printing Office, January 18, 1943), 1–5, http://cgsc.contentdm.oclc.org/cdm/ref/collection/p4013coll9/id/931.

requirements established by the ground commander."²¹⁴ [emphasis added] The above notions directly contradicted the AAF experience in Northwest Africa, wherein Coningham and Kuter had explicitly not subordinated themselves to the ground commanders' schemes of maneuver, but instead had employed airpower where it could be used to greatest effect for the combined force. The fact that Kuter sought to supplant FM 1-5 in particular was especially ironic, since he had helped draft a previous version of the manual in 1940, when working in the WDGS G-3 staff.²¹⁵

The first three paragraphs of FM 100-20, read:

- 1. Relationship of land forces—LAND POWER AND AIRPOWER ARE CO-EQUAL AND INTERDEPENDENT; NEITHER IS AN AUXILIARY OF THE OTHER.
- 2. DOCTRINE OF EMPLOYMENT—THE GAINING OF AIR SUPERIORITY IS THE FIRST REQUIREMENT FOR THE SUCCESS OF ANY MAJOR LAND OPERATION. AIR FORCES MAY BE PROPERLY AND PROFITABLY EMPLOYED AGAINST ENEMY SEA POWER, LAND POWER, AND AIR POWER. HOWEVER, LAND FORCES OPERATING WITHOUT AIR SUPERIORITY MUST TAKE SUCH EXTENSIVE SECURITY MEASURES AGAINST HOSTILE AIR ATTACK THAT THEIR MOBILITY AND ABILITY TO DEFEAT THE ENEMY LAND FORCES ARE GREATLY REDUCED . . .
- 3. Command of Air Power—THE INHERENT FLEXIBILITY OF AIR POWER IS ITS GREATEST ASSET . . . CONTROL OF AVAILABLE AIR POWER MUST BE CENTRALIZED AND COMMAND MUST BE EXERCISED THROUGH THE AIR FORCE COMMANDER IF THIS INHERENT FLEXIBILITY AND ABILITY TO DELIVER A DECISIVE BLOW ARE TO BE FULLY EXPLOITED. THEREFORE, THE COMMAND OF THE AIR AND GROUND FORCES IN A THEATER OF OPERATIONS WILL BE VESTED IN THE SUPERIOR COMMANDER CHARGED WITH THE ACTUAL CONDUCT OF OPERATIONS IN THE THEATER, WHO WILL EXERCISE COMMAND OF AIR FORCES THROUGH THE AIR FORCE COMMANDER AND COMMAND OF THE GROUND FORCES THROUGH THE GROUND FORCE COMMANDER. 216

²¹⁴ War Department, "FM 1-5," 5.

²¹⁵ Copp, Forged in Fire, 26.

²¹⁶ War Department, FM 100-20: Command and Employment of Air Power.

The text was capitalized in the original, as well.

Larry Kuter celebrated the final publication of FM 100-20 when it came out, and ensured that his many friends and acquaintances from Northwest Africa—particularly Mary Coningham—got copies. 217 Shortly afterward, he had another public victory, when Forrest Davis' two-part article "How to Conquer the Continent" was printed in the 24 and 31 July editions of the *Saturday Evening Post*. Featured prominently in the article was Larry Kuter: "Studious, matter-of-fact, a bear on tactics and organization, Kuter is likewise tall, of soldierly bearing, far handsomer than a soldier has any need for, and companionable . . . Fortunately for the definitive story of the tactical force, he scrupulously assembled day-to-day records . . . Much of this narrative is taken from these official records which were made available to me." 219

In keeping with his wartime career, though, he had little time to dwell on the victory. Kuter was busy serving as Arnold's point man for the Walt Disney movie *Victory Through Airpower*, based on a similarly-named book by Alexander P. "Sasha" de Seversky. While the Arnold/de Seversky relationship was a rocky one, Larry and Sasha were good friends.²²⁰ Kuter, the photogenic, articulate, combat-credible friend of the

²¹⁷ Laurence S. Kuter, "Letter from Brigadier General Laurence Kuter to Air Marshall Sir A. Coningham," June 26, 1943, Kuter Collection, USAF Academy Library Special Collections.

²¹⁸ Forrest Davis, "How to Conquer the Continent: Part I," *Saturday Evening Post*, July 24, 1943; Forrest Davis, "How to Conquer the Continent: Part II," *Saturday Evening Post*, July 31, 1943.

²¹⁹ Davis, "How to Conquer the Continent: Part I"; Kuter, "Letter from Brigadier General Laurence Kuter to Air Marshall Sir A. Coningham."

²²⁰ Coffey, *Hap*, 251–252. Earlier in the war, Arnold had to essentially force de Seversky to fire himself as president of his own company. The P-47 de Seversky's Republic aircraft company had designed was excellent, but not enough were rolling off assembly lines. Arnold dictated that the AAF would not do business with Republic, unless someone Arnold had picked was installed as president. The durable and power-packed P-47 went on to be the most mass-produced fighter aircraft of the war, serving as both a long-range bomber escort and ground attack aircraft.

author, was the ideal AAF point man for a film that proved to show American airpower in a very positive light. More important than public relations, however, Kuter was the AAF plans chief and was settling back into his prior role as a CCS/JCS air planner, with the first Quebec Conference only a month away. It had been an eventful first year and a half of the war. Kuter had helped write and sell Marshall's War Department reorganization (with its creation of the AAF); implement prewar AAF mobilization plans (which he co-wrote, most notably AWPD-1); fought innumerable bureaucratic battles as Arnold sought to establish the establish the AAF as a functionally-independent arm within the U.S. Army; learned how to fly three advanced, multiengine bombers in record time; commanded the only fully-functional bomber wing in all of Europe (albeit for just a month); helped command the largest air command within Spaatz's Northwest African Air Forces (which led to an Axis defeat that rivaled Stalingrad in its impact); helped secure the publication of FM 100-20 (which many would refer to as airpower's "Declaration of Independence"); and became the AAF's poster boy for the American air war. It was an auspicious start, but the next two-plus years would be equally eventful.

Chapter 8: Graduation Exercise—Managing a Fully Grown Air Force, Making Allied Strategy, Planning for Peace and Ending the War in the Pacific (1943-1945)

In a way, there was a remarkable symmetry between the first and second halves of the war for Larry Kuter. From July 1943 to May 1945, he once again worked directly for General Arnold. Then, he got paroled from Washington to take a combat command, only to see it cut short—again, in large part due to his conflicted relationship with Ira Eaker (although Kuter got to keep his job for a full two months this time). Aside from the intensity of working for General Arnold and the way wartime mobilization directly impacted Kuter throughout, the latter half of the war was dramatically different from the first.

Whereas the first half of the war might be boiled down to mobilization—
organizing, training, equipping and initially deploying the AAF—the second half of the
war can be characterized by two words: prosecution and formulation. Kuter was at the
center of the AAF's shift in focus when he returned to Washington in mid-1943. While
the AAF's combat operations to that point were important to the war effort, the air arm's
major weight of effort had largely been building the force so that it could expand combat
operations, rather than prosecuting the war at hand. That dynamic changed from mid1943 onward, when the AAF started sending its forces overseas in ever-increasing

numbers.¹ Kuter, first as the AAF plans chief in Washington from July 1943 through just after V-E Day in May 1945, then as a deployed leader in the Pacific through the formal end of the war in September of that year, played a critical role in leading the air arm throughout the second half of the war. Throughout the period, he also consistently worked with an eye toward eventual air force independence.

This chapter has three main parts. First is a review of the state of AAF as a whole, and Kuter's directorate in particular, when he took over as General Arnold's Assistant Chief of Air Staff, Plans (ACS/P). Next is the longest section, which outlines Kuter's experience in the ACS/P role, from July 1943 to May 1945, just after V-E Day. Last is Kuter's service in the Pacific, first as the deputy air commander in the Pacific Ocean Area (Nimitz's portion of the Pacific) for two months, then as commander for the first airlift of troops into Japan following that nation's formal surrender. It is during the second half of the war that one sees how direct a role Kuter played in helping make an independent United States Air Force a reality. His experience also shows how dramatically wartime mobilization reshaped the AAF, and indicates how the AAF's wartime growth impacted it for decades to come. It must be noted that this chapter, like others in this study, necessarily glosses over numerous major operational issues during the period, in order to better examine the personnel and interpersonal relationships that shaped the AAF, and by extension the USAF that eventually grew from it.

¹ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 33. From 30 April 1942 thorough 30 April 1943, the AAF's overseas strength increased by an average of approximately 21,000 per month. In the following 12 months, the average increase in AAF personnel overseas was approximately 51,000 per month.

On 8 July 1943, Larry Kuter formally took over as the Assistant Chief of Staff, Plans (ACS/P), from O. A. Anderson.² The AAF's most notable characteristic at the time was how much it had grown while he was away. In just the eight months prior to Kuter taking over as ACS/P—from 31 October 1942, just before he departed for England, to 30 June 1943, just before O.A. Anderson handed him the reins in plans—the AAF had grown from 1.3 million to 2.2 million people—this from just 20,000 in 1938. The air arm was well over one hundred times its 1938 size, but more dramatically, the officer corps had exploded to 160 times its original size in just six years.³ On the whole, this expansion was a good news story; wartime requirements meant the AAF needed to grow exponentially. As ever-more people were trained and equipment was built, the forces amassed stateside could be sent overseas to help secure Allied victory.

As Kuter had seen as an overseas commander, though, rapid mobilization had a come at a cost in education, training and experience for the green crews rushed into the fight against battle-hardened Axis adversaries. Thankfully, by mid-1943 the AAF's proportional growth was slowing substantially, which provided more breathing room for properly training and equipping crews stateside before they deployed overseas. Likewise, overseas commanders—having been in place for some time by then—were increasingly

² Stratemeyer, George E., "General Orders, Number 3," July 8, 1943, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

³ Office of Statistical Control, "Army Air Forces Statistical Digest: World War II," 15–16.

able to direct their focus toward operational matters. Issues like basing, logistics and operational procedures remained substantial ongoing concerns, but not on the same level as that experienced by the likes of Longfellow, Kuter and Hansell in the earliest months of the European air war. The AAF enlisted force, which had almost tripled in size in the past year—from 710,000 in June 1942 to just shy of 2 million in June 1943—would average just over one percent monthly growth until it peaked seven months later at a little over 2.1 million. The officer corps was growing more substantially—the AAF would average over 10,000 new officers (3 to 5 percent increases) per month until well past D-Day in 1944. The officer ranks would consequently more than double again in size before the end of the war, but the proportional growth was slowing there, too. Gone were the days of 1942, when the AAF officer corps more than quadrupled in size (averaging 15 percent growth per month).⁴

While the nation's mobilization machinery was finally in place, overseas commanders were still waiting for it to produce adequate numbers of aircraft and trained units. Much of the nation's airpower capability remained stateside. This problem was well-known and had been anticipated in 1941 when the AWPD-1 team had formulated its plan; building the requisite equipment, infrastructure and experience base to build a global air force essentially from scratch would take years. Even when the AWPD-1 planners had simply assumed a requirement to defeat the European Axis enemies, air planners had figured on not starting the air campaign in earnest until 1944. This was little consolation, however, to theater air commanders. Of the AAF's 2.2 million people when

⁴ Ibid., 16.

Kuter took over as ACS/P (206,000 officers and two million enlisted airmen), just 432,000 (49,000 officers and 382,000 enlisted airmen)—just shy of 20 percent—were actually overseas.⁵ Some of the stateside forces were, of course, filling vital combat roles by providing homeland air defense, antisubmarine patrols and the like. Airmen could ill prove their own or their service's worth, however, if they were not actively engaged in the fight overseas.

Staff officers in Washington like Kuter, though, had to determine where best to allocate global AAF resources. The compound problem was one of raw numbers, organizational structures and a dearth of experienced, competent individuals. While the raw numbers of people and equipment the AAF possessed would seem to suggest there were enough airmen to spread around, the AAF was fighting a global air war, which was being fought by multiple, disparate commands. The U.S. Army's combat airpower was split between one global air command (Air Transport Command--ATC), two European theaters (European and Mediterranean theaters of operation—ETO and MTO), and four Pacific theaters (Southwest Pacific Area, , Pacific Oceans Area—POA, China/Burma/India—CBI, and Alaskan Command). As recently as April 1943, air forces in both the MTO and FEAF had outnumbered those in the ETO (which included Eaker's "Mighty" 8th Air Force). Eaker could hardly prosecute an effective strategic air campaign if his command remained low on the AAF's list of manning priorities.

⁵ Ibid.

⁶ Ibid., 33. The AAF Statistical Digest actually breaks overseas forces into 9 "theaters"—ETO, MTO, POA, FEAF, CBI, Alaska, Other and 20th Air Force. The 20th had yet to be created as of mid-1943.

The increasing flow of forces overseas would necessitate organizational changes. While establishing an overall European theater air command might have been premature in November 1942, when European and Mediterranean operations could be considered functionally and geographically distinct, the delineations between the two air operations were becoming ever-harder to discern. This was already true in terms of long-range bombing operations, and would become increasing true in terms of long-range fighter missions. The ability to choose between European- and Mediterranean-based air forces when attacking continental targets would provide ever-greater justification for a single to command to coordinate those forces' efforts. The same would be true in the Pacific. While air forces in the Southwest Pacific (supporting MacArthur), POA (supporting Nimitz) and CBI (Stilwell) occupied separate areas of the Pacific battlespace, those distinctions would also start to fade—particularly with the introduction of the Very Long Range (VLR) B-29 bomber. Simple numerical growth would further support the establishment of new organizational structures. There were only 38,000 airmen in the ETO and 72,000 in the MTO (110,000 total) when Kuter deployed to Northwest Africa in January 1943. The two combined theaters would total almost 600,000 (423,000 in the ETO and 174,000 in the MTO) on the eve of D-Day less than a year and a half later. Commands had to be created and/or upgraded in stature, simply to effectively lead and manage such forces.

Of course, leading and managing the AAF's still-growing forces required competent, trained military leaders, who were in desperately short supply. Kuter's staff

⁷ Ibid

was indicative of the broader dilution of experience and civilianization the wider AAF was seeing across the board. By July 1943, the AAF's growth was such that almost none (substantially less than 1 percent) of the officers were ACTS graduates, even fewer were CGSS graduates, 99 percent of the officer corps had been civilians five years prior, and three-quarters of AAF officers had been commissioned for less than a year. Few of the officers had college educations, much less professional military ones, beyond the minimum required for selection and training as officer candidates.

Because of Kuter's position as chief of plans and combat operations, he had more talent on his staff than most. Even then, his team was thin on training and experience. What professional officers Kuter did have were highly competent and had more professional education than the average, but they, too, were young. Kuter's team included such men as Colonels Hank Everest (who would later become a full general), Dick Lindsay (later to be a lieutenant general), Curt Low (a future major general), and Joe Loutzenheiser (a future brigadier general, who might have climbed higher, had he not died in an aircraft accident). Kuter had worked with all of them previously: Everest had served at Maxwell Field and had been Kuter's ACTS student; Lindsay was a graduate of the 3-month ACTS short course and had been working on the Air Staff since late 1941, when he had joined the AWPD; Low had recently served under Kuter in NATAF; and Loutzenheiser had been Kuter's ACTS student (and Everest's classmate). Loutzenheiser, who had graduated from West Point four years ahead of Kuter, was the only CGSS graduate among the four. None of the four could be considered hardcore strategic

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⁸ Ibid., 16. With the total number of ACTS graduates fixed at just over nine hundred, the percentage of ACTS graduates within the officer corps can be interpolated.

bombing advocates: Everest, Loutzenheiser and Lindsay were all fighter pilots; and Low was a light bomber pilot. Likely the only reason Low had not attended ACTS was that he did not graduate from West Point until 1937 and receive his wings until October 1938.

ACTS shut down before he got the opportunity to go. These were the kind of men Kuter might have expected to have on his plans staff; they were professional military airmen, who had received at least received some prewar professional education, and who had combat and/or senior-level staff experience. Men like these were few and far between, however ⁹

Kuter's Air Staff experience in particular underscored just how civilianized the air arm had become, largely as a result of the massive expansion he had helped initiate. The dearth of military professionals was mitigated in the plans directorate by the service of New York socialites. One subordinate Kuter got to know well was Cornelius Vanderbilt "C.V." Whitney, a Groton School and Yale graduate and heir to the Whitney and Vanderbilt fortunes, who would later serve as the Assistant Secretary of the Air Force and the Undersecretary of Commerce. Another was a Princeton alumnus and President Roosevelt's son-in-law, Curtis Dall. Earl E. T. Smith, another Yale graduate, worked for Kuter during the war and later served as the U.S. Ambassador to Cuba. It seems these men were likely recruited into Kuter's section by F. Trubee Davison, another Groton

⁹ U.S. Air Force, "General Frank Fort Everest," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107132/general-frank-fort-everest.aspx; Cullum, *Biographical Register of the Officers and Graduates of the U.S. Military Academy at West Point, New York Since Its Establishment in 1802, Supplement, Volume VIII, 1930-1940, 585; U.S. Air Force, "Lieutenant General Richard Clark Lindsay," text, <i>Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106392/lieutenant-general-richard-clark-lindsay.aspx; U.S. Air Force, "Major General Curtis R. Low," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106347/major-general-curtis-rlow.aspx.

School and Yale graduate, and former Assistant Secretary of War for Air, who headed Arnold's Special Projects Division. Another subordinate Ethel surely appreciated was Kuter's aide, Captain Humphrey Doulens. A talent agent for the likes of Lily Pons and Gladys Swarthout, Doulens would rise to be the vice president of Columbia Artists Management after the war. These men added to the other aforementioned academics and captains of industry who did not work directly for Kuter, but who frequently worked with him.¹⁰

Given that Kuter's people felt unconstrained by military convention, it is not surprising that unique ideas came out of Kuter's office, such as the shuttle-bombing of Japan from China. The plan would be to use two B-29s to ferry fuel for another B-29, which—once loaded with fuel from the other two aircraft—would bomb the Japanese mainland. The idea came from New York socialites and Kuter subordinates Fred Wildman, Bradley Gaylord and George Carey. Given the connections Kuter made with these individuals, not to mention longstanding friendships with the Sweets and other prominent friends, Larry Kuter's postwar service as a diplomat and ability to even shut down American airspace for hours at a time when he was NORAD commander seems

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¹⁰ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 348–351; "Cornelius Vanderbilt Whitney | American Businessman," *Encyclopedia Britannica*, accessed May 30, 2016, http://www.britannica.com/biography/Cornelius-Vanderbilt-Whitney; Glenn Fowler, "Curtis B. DAll, Wed To F.D.R. Daughter In 20's, Is Dead at 95," *The New York Times*, July 2, 1991, sec. Obituaries, http://www.nytimes.com/1991/07/02/obituaries/curtis-b-dall-wed-to-fdr-daughter-in-20-s-is-dead-at-95.html; Marvine Howe, "Earl Smith, 87, Ambassador to Cuba in the 1950's," *The New York Times*, February 17, 1991, sec. Obituaries, http://www.nytimes.com/1991/02/17/obituaries/earl-smith-87-ambassador-to-cuba-in-the-1950-s.html; Special To The New York Times, "F. Trubee Davison Dies at 78; Natural History Museum," *The New York Times*, November 16, 1974, http://www.nytimes.com/1974/11/16/archives/f-trubee-davison-dies-at-78-led-natural-history-museum-aviation.html; "Humphrey Doulens Dead at 56," *The New York Times*, January 1, 1964,

http://www.nytimes.com/1964/01/01/humphrey-doulens-dead-at-56.html.

¹¹ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 349.

less surprising. Kuter had a very full and enviable Rolodex by the end of the war.

Recruiting prewar playboys and gadflies was hardly a way to grow a professional staff organization dedicated to managing a global air war, however. The good news for Kuter was that he also had friendly faces in other Air Staff offices. Two months after Kuter returned to the United States and the same month he took over as plans chief, Colonel Fred Dean—another of Kuter's NATAF subordinates—arrived in Washington to serve on Arnold's Advisory Council. Whether Kuter had a hand in getting Dean assigned there is unclear, but the two would work closely together —Kuter in plans, Dean on Arnold's advisory council (of which Dean would eventually become chief)—for the remainder of the war. Dean would work for Kuter again in the Pacific, years after the war, when Dean wore two stars and Kuter wore four.

Assistant Chief of Air Staff, Plans

Between the diversity of issues that needed to be addressed between 1943 and 1945 and General Arnold's hard-driving leadership style, Kuter's two-year stint as plans chief defies description. Given Kuter's long-term and close working relationship with General Arnold, it is also difficult at times to discern where Arnold's ideas and actions end and Kuter's begin. The general theme for Kuter's service as ACS/P was winning the global war, while planning for postwar air force independence. The number and variety of actions in which he was involved in working toward these ends makes a

¹² U.S. Air Force, "Lieutenant General Fred M. Dean."

chronological arrangement problematic. Kuter's service as plans chief can best be described as the compilation of multiple, intersecting lines of effort: selling airpower to the public, serving as a joint and combined air planner, leading postwar air force planning, acting as Arnold's eyes and ears, designing centralized air command structures and putting out other fires along the way (all while working with smart men who for the most part were minimally qualified for their positions).

Selling Airpower

As indicated in the previous chapter, General Arnold wasted little time in getting Kuter in front of journalists and cameramen to tell the AAF story. In doing so, Arnold did much to fix the historical image of Kuter: he was a very good salesman. Before Kuter took over as plans chief, Arnold set to him to speaking on "Victory Through Air Power," to capitalize on the Disney film of the same name that featured Kuter's friend Alexander "Sasha" de Seversky (the film was based on de Seversky's book of the same name), which was released less than two weeks after Kuter took over his plans duties. On 23 May, Kuter spoke on the radio program "The Army Hour," with Jimmy Doolittle and others. He spoke in other venues on 24 and 30 May, as well as 2 and 20 June. While the words varied from one speech to the next, the Victory through Air Power theme, with a special emphasis on tactical aviation, remained his central message.¹³

¹³ Kuter, "Along with Larry."

Tactical airpower was not the only focus of Kuter's speaking engagements.

Following a speech he gave in September 1943, a *Washington Post* article noted something Kuter said, that could as easily have been spoken in 2003: "Kuter said the Army Air Forces has an economic analyst group with not only tells the bombing crews operating from England where Germany's industrial plants are located but also 'in what corner of what building the vital elements of many of these plants are established." In the midst of his ongoing advocacy efforts, Kuter did a good job ingratiating himself to the press. On 10 January 1944, Kuter was the guest of *Philadelphia Inquirer* journalist John McCullough at a stag party. On 22 April of that year, Kuter, along with fellow ACTS faculty alumni Hal George and Hungry Gates, spoke to 1,400 journalists at a major convention. On 16 October 1944, Charles J.V. Murphy's "The Unknown Battle" was published in *Life* magazine; Kuter featured prominently in the article, and overall it was very complementary to airpower and AAF airmen.

The public relations push led to some unique experiences; on 11 June 1943, the Kuters hosted actress Mitzi Mayfair and her manager for dinner. On 3 December of that year, the Kuters went to a dinner at the home of producer Hal Roach (producer for Laurel and Hardy, and of *The Little Rascals*); the only ones in attendance were Larry and Ethel Kuter, Hal and Lucille Roach, and Walt Disney. Later in the month, on New Year's Eve, the Kuters enjoyed dinner at the home of C.V. and Eleanor Whitney, who served some of

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¹⁴ John G. Norris, "German and Japanese Forces Bigger Now Than at War's Start, Army Warns," *Washington Post*, September 28, 1943.

¹⁵ "Letter to General Arnold," April 27, 1944, Kuter Collection, Volume 4, Part 2, 6, USAF Academy Library Special Collections.

¹⁶ Charles J.V. Murphy, "The Uknown Battle," *Life*, October 16, 1944.

their rare vintage wine from their cellars. While Ethel very much enjoyed the glamor that went with such events, her husband's day-to-day schedule was far from genteel. He, C.V. Whitney and the others in the plans shop were working fifteen-plus hour days.¹⁷

Joint and Combined Chiefs of Staff Planner

While Kuter's public relations work at General Arnold's behest was helpful to the AAF cause and Kuter's public profile, the thrust of his work was in leading his staff directorate. The most pressing mission was planning and overseeing global air combat operations. Craven and Cate, in their multivolume work on the AAF, specifically identified Kuter and the fundamental shift his staff section underwent in mid-1943:

AC/AS, Plans, under Brigadier General Laurence S. Kuter, who took command in the summer of 1943, became even more influential than it had been before . . . No organizational chart quite managed to convey a sufficiently strong impression of the central importance of AC/AS, Plans . . . it was well understood throughout Headquarters that Plans operated closer to the center of power than did any parallel office. Its theater sections, not to mention the special JCS section, which held custody of Arnold's records as a member of the Joint and Combined Chiefs of Staff, served to remind those who needed a reminder that Arnold's command was not restricted to the Zone of Interior. ¹⁸

Even the briefest review of Kuter's actions as a joint and combined planner indicate that he did not limit himself to just broad, strategic matters. Of course, neither did his boss, General Arnold. When Kuter did intrude on theater matters, even if at General Arnold's behest, it would frequently be taken as meddling by those overseas who actually executed the operations.

¹⁸ Craven and Cate, The Army Air Forces in World War II, Volume Six, 43-44.

¹⁷ Kuter, "Along with Larry," Plans and Operations in the Pentagon, 5–9.

Kuter took little time to start directly engaging his colleagues in his role as Arnold's representative to the Joint and Combined Chiefs of Staff. In his first day on the job, Kuter attended a JCS meeting. Having seen his bombers ravaged by German fighters during his brief stint as 1st Bomb Wing commander, and further convinced by his experiences in NATAF, He pushed for greater emphasis on destroying the Luftwaffe. He argued, in effect, that the eventual Allied invasion of the continent would be predicated upon first destroying the Axis air forces. 19 This idea, by itself, was nothing new; this was merely a restatement of the Pointblank Directive. What was interesting, though, was the way Kuter interpreted its meaning. Kuter "quite independently" (according to army strategist Albert Wedemeyer) argued against the planned invasion of mainland Italy, in favor of building up forces in the U.K. in preparation for a cross-channel invasion.²⁰ General Arnold held much the same view; the long, slow slog up the easily defensible Italian boot would drain more resources—particular strategic bombers—than the promised gains were worth. While Arnold and Kuter were going against the mainstream with their thinking, Kuter had taken little time to get back in sync with his boss and was more than willing to advocate on his behalf.

It was also around this July 1943 timeframe that General Arnold directed Ira

Eaker to fire both Newt Longfellow and Monk Hunter from their commands of 8th

Bomber Command and 8th Fighter command, respectively. 21 DeWitt Copp singles out

Emmett "Rosie" O'Donnell—one of Arnold's Advisory Council members--for pushing

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¹⁹ Craven and Cate, *The Army Air Forces in World War II, Volume Two: Europe: Torch to Pointblank, August 1942 to December 1943*, 714.

²⁰ Wedemeyer, *Wedemeyer Reports!*, Kindle Location 4156.

²¹ Murray Green interview with Harold McGinnis, 7.

for Hunter's removal.²² The timing of the move nonetheless seems remarkably coincidental. Kuter had made his concerns known in his end of tour report, and he doubtlessly had a negative opinion of Longfellow's leadership. Even if Kuter had nothing to do with the decision, Arnold's directive helped support a narrative of Washington meddling for Eaker. As Harold McGinnis, Eaker's inspector general, would later observe, "Eaker despised Larry Norstad and despised Larry Kuter because he thought they were spying on him."²³ That sentiment would come to bite Kuter professionally later.

From a strategic planning perspective, one bit of positive news was that

Longfellow's firing got Hansell back to Washington (albeit in a roundabout way).

Eaker's list of possible replacements for Longfellow was very short, and Hansell would have seemed to be the obvious choice, given his long experience in bomber advocacy and the fact that he was the longest-serving bomb wing commander in Eaker's command.

Eaker nonetheless found Hansell to be too "nervous and highly strung" for the job, even though he had been happy to keep Longfellow in the position long past the point when his nerves were shot. Laker instead chose Fred Anderson to take the 8th Bomber

Command. This meant Hansell had to go, too, since he was substantially junior to Anderson. Hansell would spend the next few months bouncing back and forth between the United States and Europe, notionally working for Air Marshall Leigh-Mallory in England, but in practice working special planning projects. In October he would go to

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²² Copp, Forged in Fire, 402.

²³ Murray Green interview with Harold McGinnis, 7.

²⁴ Copp. Forged in Fire, 403.

work full-time for Kuter as the chief of the Combined and Joint Staff Division within Kuter's directorate.²⁵

The first special project Hansell undertook was preparation for the Quadrant Conference in Quebec in August 1943. Kuter attended Quadrant, and every major conference thereafter, through May 1945. From an air planner perspective, there were two major outcomes from this conference. First, the eventual Allied cross-channel invasion was set for 1944—the year the AWPD-1 planners had presciently anticipated the operation commencing even before the United States was at war. Second, General Arnold was finally convinced of the virtues of invading Italy; Italian airfields, due to both physical proximity to targets in Europe and better weather, would allow for greater options for directly attacking Germany and other critical targets such as the Ploesti oil fields in Romania.

In the midst of the Quebec Conference, on 17 August—the one year anniversary of the AAF's entry into European air combat—Eaker's 8th Air Force launched its largest raid yet. Unfortunately, it was also the most disastrous to date. American bombers attacked the Schweinfurt ball bearing plants and the Regensberg Messerschmitt factory, targets that were well out of range of Allied fighter over, but which operations analysts had identified as lucrative targets. A full 16 percent of the bombers were shot down. While that percentage was unsustainable, a later raid on Schweinfurt on 14 October. Over two thirds—198 out of 291—of the unescorted bombers were damaged or shot down.

 $^{^{25}\} Griffith,\ The\ Quest:\ Haywood\ Hansell\ and\ American\ Strategic\ Bombing\ in\ World\ War\ II,\ 129-133.$

The disastrous October raid would provide the impetus for rushing long-range P-51 fighters to England.²⁶

A minor episode during this period provides insight into Kuter's working relationship with his boss. Arnold continued to pressure Eaker to conduct ever-more aggressive missions, even though resources from the United States were only just beginning to ramp up to meet the theater's ultimate requirements and long-range escort fighters remained a long way off. In late September, Kuter drafted the messages Arnold sent to Eaker to motivate him—after Longfellow and Hunter had been relieved of command. One tried to embarrass the fighter pilots into greater action: "When North African fighter groups escort bombers it is a matter of honor that hostile fighters shall not be permitted to attack the escorted bombers . . . do your fighters have that spirit?"

Another implied Eaker's ground and air crews were not motivated enough toward victory: "Your employment of 322 B-17s on one target is a step in the right direction . . . bigger steps taken more frequently may trample the German Air Force . . . for God's sake keep it up." ²⁷ If Eaker got word that it was Kuter writing these missives from the boss, it would have given even greater cause for conflict between the two.

The next source of interpersonal conflict would flow from the next major Allied conference: the Sextant Conference in Cairo in November 1943 would lead to the creation of a long-sought after overall theater air command. It would also result in the "Big Switch." As previously noted, the forces within both the ETO and MTO were

²⁶ Biddle, *Rhetoric and Reality in Air Warfare*, 224–227.

²⁷ Henry H. Arnold, "Outgoing Classified Message," September 28, 1943, Kuter Collection, Box 2, USAF Academy Library Special Collections.

growing in size and becoming ever-more capable of reaching the same targets, or at the very least mutually-complementary target sets. The time had come, in General Arnold's mind, to establish the Strategic Air Forces (USSTAF) to command the two theater's efforts. The process started a month before the conference, when on 9 October Arnold submitted a plan to the JCS to split the AAF in the Mediterranean into two numbered air forces. The pre-existing 12th would give up its heavy bombers and become a tactical air force, focused on supporting ground operations. The newly-formed 15th would be a strategic air force, focused on executing the Combined Bomber Offensive.²⁸

At the Cairo conference, General Arnold, Larry Kuter and others who viewed airpower comprehensively scored an important, albeit partial victory with the establishment of USSTAF. For airmen, the key was achieving functional unity of command (irrespective of geography). The Allied command construct for the European theater was bifurcated, split along geographical boundaries. While the combined forces in the ETO and MTO were working toward a common goal—defeating the European Axis—they were treated as distinctly separate entities, based on somewhat arbitrarily drawn lines on maps. This construct made perfect sense for land forces, since units in one theater could not be easily shifted to another. The construct worked (albeit less well) for naval forces, since they could only steam so fast from commander's region to another. For air forces, the situation was more complicated. While airpower in the 8th and 15th Air Forces could be used to directly or indirectly support land and naval forces within their respective geographical theaters (much as how NASAF bombers had struck airfields.

²⁸ Davis, Carl A. Spaatz and the Air War in Europe, 270–272.

which were more typically the responsibility of NATAF), they also had the range and speed to operate well outside arbitrary geographic confines, which suggested the need for a command that would lead the efforts of all air forces dedicated to the mission (largely irrespective of geography) of directly striking high-value targets, well beyond the front lines of Allied troops. USSTAF finally achieved the goal of creating a command to centrally direct the combined efforts of European- and Mediterranean-based bombers, which were working toward the common goal of destroying German war-making capability.

The new USSTAF construct was destined to create friction with theater commanders. Unfortunately, the reorganization frustrated senior air commanders, too, because they were happy where they were. Eaker, who had built the 8th Air Force from scratch and was finally seeing the numbers of aircraft he needed to prosecute his strategic bombing mission, did not want to surrender his command. Likewise, Spaatz was very comfortable in the Mediterranean. The problem was that Eisenhower was moving to England to lead preparations for D-Day, and Spaatz was his airman. Spaatz had to give up his command in the Mediterranean, follow his boss to England, and take command of the USSTAF—the most senior air command in Europe and the Mediterranean. The British demanded a high-ranking, respected air commander in the Mediterranean, so Eaker would go to the Mediterranean and become the Mediterranean Allied Air Forces Commander (hence the term the "Big Switch"—Spaatz and Eaker effectively swapped places, although both got bigger roles in the move). Jimmy Doolittle would move from the Mediterranean and take command of the 8th Air Force, which Eaker had so painfully

built from scratch. Nathan Twining would arrive from the Pacific and take command of the newly-formed 15th Air Force. Joe Cannon would stay in the Mediterranean, move up and take command of the 12th Air Force. Lewis Brereton would move to England and stand up the 9th Air Force—the dedicated tactical air force for the European Theater.

While the overall organizational construct was a good one, the personalities involved certainly were not. Spaatz and Eaker protested vigorously, but to no avail. Spaatz took command of USSTAF on 1 January 1944.²⁹ This might also have been when Cannon took umbrage with Kuter; while Doolittle moved to England for the main theater in the defeat of Germany, Cannon was left in the more minor Mediterranean theater. Of course, the orders were coming from General Arnold, not Kuter. Either the AAF chief was fully in agreement with the creation of the USSTAF and the requisite personnel moves, and there was thus no good reason to feel negatively toward Kuter, or Kuter exercised a degree of influence on the boss that no other subordinate had. Either way, Arnold was pleased with Kuter's work. In his first efficiency report as ACS/P, General Arnold termed Kuter, "An officer of superior and exceptional ability, forceful, with remarkably sound judgment . . . This officer is a potential Chief of the Air Staff and Commanding General of the Army Air Forces."

On 14 February 1944, Kuter reached the rank of permanent major, in accordance with his longevity in service. Less than a week later, on 20 February, Kuter pinned on the temporary rank of major general—three months after General Arnold had recommended

²⁹ Hansell, *The Air Plan That Defeated Hitler*, 174.

³⁰ Arnold, General Henry H., "Laurence Kuter Efficiency Report," January 17, 1944, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

his promotion. He pinned on his second star ahead of future fellow four-stars Tommy White, Ben Chidlaw, Hoyt Vandenberg, Orval Cook, Opie Weyland and Pat Partridge—all of whom had earned their commissions at least three years before Kuter.³¹ For all his youth, though, Kuter was far from the youngest general officer any more. In June of 1944, twenty-nine year old Richard Saunders would pin on his first star.

Throughout his stewardship of the plans division, Kuter clearly ran a very tight ship. The positive impact of Kuter's staff efficiency was acknowledged in a memo from the chief of the AAF Message and Cable Branch. The staffer noted that Kuter's division had no delinquent messages for a period of three and a half months in mid-1944—a major bureaucratic feat at any time, but especially in the period surrounding D-Day. The memo noted that "Approximately 80% of all Top Secret action messages are assigned to General Kuter."

The year 1944 was also when planning for and initial execution of B-29 operations against Japan began. This posed an even thornier problem, since there was a strong degree of cooperation and movement of personnel between the ETO and MTO. The same could not be said of the relationship between the South West Pacific Area (SWPA) under MacArthur and the Pacific Ocean Areas under Nimitz. There was thus no realistic possibility that either individual would subordinate himself to the other, so the notion of a single theater commander with coequal commanders for air, land and maritime operations was impractical. Possum Hansell would be the driving force behind

³¹ U.S. Air Force, "General Thomas Dresser White"; U.S. Air Force, "General Benjamin Wiley Chidlaw"; U.S. Air Force, "General Hoyt S. Vandenberg"; U.S. Air Force, "General Otto Paul Weyland."

³² R. C. Lewis, "Memo to Colonel M. A. Libby," August 28, 1944, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL. All six of these individuals would ultimately pin on their fourth stars ahead of Kuter.

the establishment of what became the 20^{th} Air Force, with a somewhat surprising assist from the Navy. Both Hansell and Kuter would end up in the Pacific in jobs associated with the 20^{th} Air Force by the end of the war.

The command relationships in the Pacific ultimately worked to the airmen's overall organizational advantage. When the JCS finally approved the command relationships on 4 April 1944, nobody objected when General Arnold repeated Admiral King's suggestion: "The most satisfactory solution would be to create an air force, known as the Joint Chiefs of Staff Air Force, to be commanded by the Commanding General, Army Air Force, who will be the executive agent of the Joint Chiefs of Staff." The kind of airpower centralization Kuter had seen work with Hal George in ATC, consolidating commands in Northwest Africa and Europe, and now in the Pacific, would be a pattern Kuter would follow later in his career, as well.

Postwar Planning

While winning the war and showing how AAF airpower had substantially helped secure Allied victory was the first and most critical way to secure eventual service independence, there would never be a separate U.S. Air Force without extensive forethought and deliberate planning. The AAF's planning for postwar independence got a major shot in the arm in July 1943—again, Kuter's first month in the job—when he established the Postwar Division (PWD) within his directorate. The problem Kuter faced,

³³ Grace Person Hayes, *The History of the Joint Chiefs of Staff in World War II: The War Against Japan* (Annapolis, MD: Naval Institute Press, 1982), 595.

as with so many of the challenges he faced within his division, was the lack of experienced staffers and the overriding concern of first winning the war that kept Kuter from explicitly focusing on detailed postwar planning. Nonetheless, Perry Smith, who studied postwar planning effort in depth, noted that, "Kuter, more than anyone in the AAF, was responsible for the large amount of postwar planning that was done."³⁴

Kuter's initial pick to head the PWD was Colonel Pierpoint Morgan Hamilton, who would have fit in very well with the rest of the Ivy League crowd working for Kuter. He was Progressive Era financier J. P. Morgan's nephew and Alexander Hamilton's great-great grandson. Hamilton had attended the prestigious Groton School for six years before matriculating to Harvard. He was a sophomore when the First World War broke out; he dropped out of school in April 1917, enlisted in aviation service four months later, earned his wings in May 1918, and served as a flying instructor for seven months before being honorably discharged from service a month after the armistice. Hamilton did not return to active service until February 1942, but since his return, he had earned the Medal of Honor in November 1942 during the initial Allied invasion of French Morocco. Hamilton had served under Kuter in the AASC and NATAF in early 1943 before returning to Washington. Hamilton only remained in the job until the fall, when he was pulled away to other duties.³⁵

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³⁴ Smith, *The Air Force Plans for Peace*, 9.

³⁵ U.S. Air Force, "Major General Pierpoint M. Hamilton," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106865/major-general-pierpoint-m-hamilton.aspx. Hamilton earned the Medal of Honor for his efforts on 8 November 1942, the initial assault on Port Lyautey, French Morocco. Hamilton accompanied Colonel Demas Craw on a mission to make contact with the French commander, in the hope that the French might surrender. Craw was killed when a French machine gun opened fire, but Morgan survived. After being captured by the French, Hamilton helped arrange the French surrender.

Colonel Reuben C. Moffat, a former ACTS student of Kuter's and also a CGSS graduate, led the PWD from the fall of 1943 through 1945. Moffat was an ideal candidate for the post given his credentials, but his major drawback was a lack of operational experience. He was no longer on flying status and did not come into the job with overseas combat experience. The staffers working under him lacked operational backgrounds as well. Considering the AAF's substantial personnel challenges, it should have been expected that combat-experienced individuals like Fred Dean would go to other, more prominent positions on the staff. Nonetheless, it is remarkable that the one staff division within the entire Air Staff dedicated to shaping the hoped-for future independent U.S. Air Force had no active aviators among its ranks.

Deployment to the Pacific

While Arnold was pleased with Kuter, other senior AAF leaders—notably Spaatz and Eaker—were not. The reasons are unsurprising: seemingly every Washington decision Spaatz and Eaker disliked could be tied to Kuter, whether the connection was real or not. As Eaker's 1st Bomb Wing commander in England, Kuter never flew on any combat missions. Kuter was Coningham's deputy in NATAF, when Spaatz had trouble managing the New Zealander, who (at least according to Spaatz) seemed to view NATAF as his own private air force. Kuter enjoyed a degree of celebrity status upon his return from Africa (after previously gaining nationwide notoriety with Marshall's decision to jump-promote him early in the war), while Spaatz, Eaker and so many others remained

Africa experience, Kuter extolled the British model of air-ground coequality and accentuated Coningham and Montgomery's successful partnership (rather than American air-ground coordination successes). Arnold forced Eaker to fire his longtime friend Longfellow as 8th Bomber Command commander shortly after Kuter returned from Africa. Kuter was not only a "spy," but had written the messages Arnold sent to Eaker to motivate him toward more aggressive bombing action. Kuter had been associated with the push for an overall European theater air command since mid-1942, so the establishment of U.S. Strategic Air Forces-Europe—which led to the "Big Switch," with Spaatz moving from the Mediterranean to England and Eaker from England to the Mediterranean—might be considered Kuter's doing. In these airmen's eyes, Kuter typified all that was wrong with Washingtonian interference in their operations.

The negative feelings Spaatz, Eaker and/or their subordinate commanders apparently felt toward Kuter were not entirely fair. His decision not to fly on any bombing missions while in command is questionable. His knowledge of Ultra intelligence, while valid, was a comparatively thin excuse not to go on combat missions where he conceivably could be captured. In fairness, though, Kuter still tried to go on an operational mission, which got scrubbed for weather. Furthermore, only four missions were successfully launched during Kuter's tenure in command, he had more than enough issues to occupy him on the ground, and he anticipated being in command for more than a month; it is not unreasonable to think Kuter might have accompanied a later mission in January, had he remained in England.

Accounts of Kuter's performance in Africa seem positive; message traffic between Spaatz and Stratemeyer indicate he provided valuable service. If there was conflict between Kuter and Spaatz's subordinates, however, it is possible the conflicts began in Africa. Kuter and Cannon, for instance, were both in Africa at the same time and clearly by 1945 they were not on friendly terms. It could not have helped their relationship that Kuter, commissioned in June 1927, was promoted ahead of Cannon, who was commissioned in November 1917. Spaatz's decision to install Kuter—a bomber pilot—as NATAF deputy instead of Cannon—a fighter pilot—would have been a further insult. Of course, Kuter's critique of air-ground coordination upon his return certainly would not have helped their relationship, given that Cannon led the 12th Air Support Command during the early stages of the Northwest Africa campaign.

Regardless of what exactly put Kuter at odds with Spaatz, Eaker and Cannon (at a minimum), General Arnold's health issues in early 1945 caused Kuter's career to veer in an unexpected direction. On 25 February, Lieutenant General Millard F. "Miff" Harmon's aircraft disappeared on a flight from Kwajalein to Johnston Atoll. An intensive air-sea search was launched, but Harmon and the rest of the crew were never found. Harmon, Kuter's old boss at ACTS, was serving as the dual-hatted Army Air Forces-Pacific Ocean Area (AAFPOA) commander and 20th Air Force deputy commander. Major General Willis H. Hale, Harmon's AAFPOA operations deputy, temporarily took over Harmon's duties, but given the Pacific theater's importance—both to the war effort and to the hoped-for future independent Air Force—a higher-ranking officer was needed.

In mid-March Marshall wrote Arnold, suggesting that Eaker be pulled back to Washington to take Giles' place as Arnold's deputy. It was a sensible plan; Marshall needed Arnold to have an authoritative, senior-ranking deputy who British senior leaders trusted to stand in for him in the event that Arnold was medically sidelined again. Pulling Spaatz back to the United States before V-E Day was not going to work; he was Eisenhower's airman, and the war had not yet been won in Europe. George C. Kenney was likewise working well with MacArthur in the Pacific, and thus could not be spared. Ira Eaker once again got the short straw. He had been forced to surrender command of the 8th Air Force just as the command was hitting its stride, and now he was being pulled out of his consolation prize—the Mediterranean Allied Air Forces—prior to V-E Day. Eaker, if he had to return to Washington, had one way to express his displeasure: he wanted Kuter reassigned, somewhere—anywhere—away from Washington.

Arnold came up with a scheme to reward his key lieutenants, while mitigating interpersonal conflicts. Giles would deploy to the Pacific to take command of AAFPOA in April, providing a viable replacement for Harmon and rewarding Giles with a combat leadership position, thus making room for Eaker in Washington. Kuter would follow Giles to the Pacific in May to be his deputy. Not only would Kuter get out from Eaker's crosshairs, but the deployment would be a veritable vacation after serving as Arnold's chief for two years. A combat assignment in the last major theater of the war was exactly what Kuter wanted. Furthermore, the detail-oriented Kuter, who was intimately familiar with 20th Air Force operations and plans for USSTAF-Pacific, would allow Giles to

attend to bigger-picture issues.³⁶ Additionally, Kuter and LeMay—who headed the 21st Bomber Command—had a good relationship that went at least as far back as the 1st Bomb Wing in England. Willis Hale would return stateside and take over 4th Air Force.³⁷

The plan to get Kuter out Washington hit its first snag on Thursday, 3 May, while Kuter was still getting his replacement, Louis Norstad, up to speed on AAF plans at the Pentagon. Kuter started having a facial disturbance. It was as if the whole right side of his face had fallen; he could not wrinkle his brow, his eyelid drooped and so did his mouth. Kuter had been struck by Bell's Palsy—the same condition that had given LeMay his dour countenance (although the cigar-chomping general had been struck with it on both sides of his face).³⁸ Kuter's overseas deployment was less than two weeks away. He desperately wanted to get to the Pacific before the war was over and he could no longer stay in the Pentagon, but at the same time medical support to help him remediate his condition was sure to be better in the United States than on Guam.

Kuter decided to deploy overseas as planned, despite his condition. He returned to work on Monday the 7th, the same day newspaper headlines screamed, "Germany Surrenders." The next day, V-E Day was officially at hand. Kuter was not in a celebratory mood, though; he handed the plans shop to Norstad and flew to Miami for facial rehabilitation. He was back home by the 13th, when the Kuters—Larry, Ethel and

³⁶ Henry H. Arnold, "Arnold to L/G Barney M. Giles," April 14, 1945, Murray Green Collection, USAF Academy Library Special Collections. Arnold put it more colorfully, albeit in the politically incorrect lingo of the times: "Kuter can look for, and probably find, the 'niggers in the wood pile' that you on your level may not be able to catch."

³⁷ "Major General Willis H. Hale," Official Website of the United States Air Force, *Biographies*, accessed August 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108101/majorgeneral-willis-h-hale.aspx. ³⁸ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL.

Roxanne—belatedly celebrated V-E Day together. The next day, General Arnold pinned Kuter's second Distinguished Service Medal on him. The official photographer was careful to shoot just his left profile during the ceremony. On the 15th, Larry Kuter—still suffering the ill effects of Bell's Palsy—departed for the Pacific. It helped that the Mayo Hospital had established a large facility on Guam, and its chief of physical therapy was working at the island hospital. Kuter would be able to rehabilitate his face while winning the war.³⁹

Kuter still looked terrible when he arrived on Guam. As Kuter later recalled, "When I showed up to join Barney Giles as his deputy, I looked like hell and had to give him a little lecture on Bells Palsy and that it was not supposed to affect the mind; it just affected the face. I tried to keep my face from bothering him." LeMay, all too familiar with the ill effects of Bell's Palsy, remarked upon Kuter's approach to the condition; "[Kuter] did the exact opposite of what I did. He absorbed every treatment in the book. Not just one treatment, he took them all—shock, massage, heat therapy—the works. Larry didn't make as good a recovery as I did." While LeMay's assessment of the treatments' success is debatable, it illustrates how substantially his condition affected not only Kuter, but those around him.

Kuter performed well as the Deputy Commander-in-Chief, Army Air Forces

Pacific Ocean Area (DCINCAAFPOA). While the 20th Air Force got its operational

direction from Washington, Guam and the other bases in the Marianas fell within

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³⁹ Ibid., 411.

⁴⁰ Ibid., 410.

⁴¹ LeMay and Kantor, Mission with LeMay, 223.

Nimitz's (Pacific Ocean Areas) geographical area of responsibility. This meant that Nimitz and his staff were responsible for keeping the AAF's operations supplied. One of Kuter's jobs was thus to attend Nimitz's daily operations conference, to coordinate fuel, bombs, spare parts and the like to keep the operation going. In Kuter's experience, the AAF's needs were always met.⁴²

The other key activity was laying the groundwork for the U.S. Army Strategic Air Force—the forerunner of Strategic Air Command. While the 20th Air Force was getting the support it needed within the AAFPOA construct, Kuter—the long-term thinker—saw the long-term value of creating a command that had control of its own administration and logistics. Kuter was also read-in on the atomic bomb, so he had some idea of how it might change operations. As it stood in June 1945, the 20th depended upon the Navy for its logistical support, and administrative matters went through MacArthur. As it was, too, the 20th's clout rested in the fact that the AAF Chief was dual-hatted as the 20th commander. What would be more ideal, yet still workable, would be to have an AAF general in the theater who worked on the same plane as MacArthur and Nimitz. The idea of the U.S. Army Strategic Air Force (USASTAF)—a four-star air command in the Pacific—was born.⁴³

Two months into Kuter's Pacific stint, though, he learned that the organization he had helped create was about to reject him. To ensure that B-29s were used where airmen thought they would be most useful—directly attacking high-value targets on the Japanese home islands—they needed a high-ranking airman in theater. MacArthur and Nimitz, left

⁴² Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL.

to their own devices and operating according to their respective army and navy training (and perhaps their service parochial interests) would want to use those bombers to meet their own immediate needs, rather than executing the strategic air campaign the airmen envisioned. The end of the war in Europe meant that Tooey Spaatz was available. Spaatz would take command of the soon-to-be-formed USASTAF, which would formally come into being at the end of July. Spaatz, like Eaker a few months before, requested that Kuter be reassigned—to anywhere other than the Pacific.⁴⁴

There was notionally a logical reason to send Kuter out of theater, but the decision was personal. Spaatz naturally wanted his combat-proven leaders from Europe to work alongside him in his new Pacific command. Barney Giles was senior ranking and already in place, though, so he would become Spaatz's deputy and LeMay would be the chief of staff. Twining was reassigned from the Mediterranean to take over the 20th Air Force. Doolittle kept command of the 8th Air Force, but his command transitioned to B-29s and was tasked to operate from Okinawa. The creation of the USSTAF headquarters made AAFPOA redundant, so Kuter was out of a job. If Kuter was as capable, experienced and trusted as his career to that point indicates, it would be foolhardy to keep him in the Pacific, when his talents could be put to better use elsewhere. But the timing of events makes it clear that Kuter's departure had nothing to do with greater needs of the AAF. On 11 July, Larry wrote an "eyes only" letter to Ethel:

A few days ago it became clear to me that I shall be ordered away from here—to any other place without regard to function as long as it is <u>away</u> from the Strategic Air Forces in the Pacific. Particularly since this last great air command

⁴⁴ Barney M. Giles and Murray Green, Interview with Lt Gen Barney Giles, n.d., 56, Murray Green Collection, USAF Academy Library Special Collections.

in this war was my conception and since its development has been my project for the last two years, I am deeply disappointed in being excluded from its fruition. Due also to my basic conviction that this one command is the overpowering force to defeat Japan, my ejection to a minor force or to a non-combatant position leads me toward an emotional instability.⁴⁵

Four days later, Kuter's professional future seemed no better, but his personal outlook had improved. In his next letter to Ethel, he wrote, "I am hoping to work for Hal George—Gordon [Saville—the ACTS pursuit instructor with whom Kuter frequently argued when he was a bombardment instructor] has recently joined him and a note from Possum only a day or two ago said that he too was going into the ATC. I hope that Hal will not be let down by his collection of youthful problem children." Kuter's plan was based on nothing more than hope at that point, though. Another week would pass before Kuter's next assignment was formally resolved.

In conversation on 21 July with the AAF personnel chief Major General Fred Anderson, Saville put forth a plan to help both ATC as a command and Kuter as an individual. Hal George intended to consolidate ATC's multiple Atlantic-area divisions by downgrading the divisions to wings and forming a single, robust Atlantic division. The reorganization was necessary, because the end of the war in Europe meant there was simply less demand for ATC's services and George was also losing many of his senior leaders to demobilization. The new position George envisioned and Saville pushed would require a "top-notch man" who was comfortable serving as a diplomat, because, "You see, the different social and political meetings which go on . . . that's where 90 percent of

⁴⁵ Kuter, Laurence S., "11 July Letter from Laurence Kuter to Ethel Kuter," July 11, 1945, Kuter Collection, USAF Academy Library Special Collections.

⁴⁶ Kuter, Laurence S., "15 July Letter from Laurence Kuter to Ethel Kuter," July 15, 1945, Kuter Collection, USAF Academy Library Special Collections.

your business is transacted there." Furthermore, whoever took on the role would have to be someone of great stature, since Saville intended to "build up the job to the size of the new guy we've got. And then the fellow would . . . be able to sit in these conferences and say, 'this is the way we're going to do it." In the end, Saville won Anderson's approval.⁴⁷ In Kuter's efficiency report, Giles ranked Kuter number one of eight generals under his command.⁴⁸ The citation to accompany the Bronze Star Giles awarded Kuter credited him with initiating and carrying to completion the creation of the USASTAF—the same command whose creation led to him being ejected from Guam.

Transition to ATC and Special Mission Number 75

On 24 July, Larry Kuter reported via radio to Hal George and officially became a member of ATC. The next day, he would depart (along with Rex Smith, Bill Hadley and Humphrey Doulens) on an extended site visit, wherein he would slowly make his way westward, visiting ATC stations in Asia, Europe and the Atlantic to familiarizing himself with the air transport mission. ⁴⁹ Much had changed since 1934, the last time he last led an air cargo outfit (during the Airmail Crisis). Kuter happily did just as instructed. While he was making his way west, the Enola Gay dropped the first atomic bomb on Hiroshima. Three days later, Bockscar dropped a second one on Nagasaki. In short order, the

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⁴⁷ "Transcript: Phone Conversation between Major General Frederick Anderson and Major General Gordon Saville," July 21, 1945, Laurence S. Kuter PEP Record, USAF Academy Library Special Collections. ⁴⁸ "PEP Record: Kuter, Laurence S.," Folder 1.

⁴⁹ Kuter, Laurence S., "24 July Letter from Laurence Kuter to Ethel Kuter," July 24, 1945, Kuter Collection, USAF Academy Library Special Collections.

Japanese signaled that they would surrender. The leisurely return was about to turn into another crisis planning exercise.

Kuter was somewhere around India when he got an urgent message saying that he needed to stop visiting and get to Paris as quickly as possible. Upon arrival, Gordon Saville met Kuter in Paris with two briefcases; one had papers, and the other contained scotch. They quickly proceeded to pore over the former, while pouring the latter. In the span of about 24 hours, Saville gave Kuter a rundown of ATC capabilities and his new mission. Kuter had been given the task of flying the first of MacArthur's troops directly into Tokyo, immediately following the formal Japanese surrender on 2 September. There was already a 2-star ATC general in theater—Major General Bill Ryan, a veteran of the Punitive Expedition and the First World War—but apparently MacArthur and his senior airman Kenney were concerned that the operation might not proceed as well as hoped. Kuter was given carte blanche to make the mission happen; he was given two sets of orders, one signed by General Arnold and the other by Hal George. They both said, in effect, that whatever authority they possessed had been delegated to Kuter. 50 The two bombs, in an odd way, were responsible for getting him back to the Pacific sooner than expected.

Kuter made his way back as quickly as possible, arriving in time to watch the Japanese arrive in Manila for the surrender conference. After hearing MacArthur and Kenney's concerns about ATC's ability to execute the mission, Kuter made his way to Okinawa, where he started working with the ATC team and Jimmy Doolittle, whose B-

⁵⁰ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 424–425.

29s were stationed on the island. Kuter had Doolittle move all of his B-29s elsewhere (save one—for Doolittle's use), to make room for the C-54s coming in. The operation would be known as Special Mission Number 75. The only other professional military officer in the ATC leadership team was prewar fighter pilot Ed Alexander, who had built up considerable air transport expertise during the war.

In the end, Kuter found that the ATC team had the operation so well in hand that he did not even need to bother seeing it executed. Special Mission Number 75 ultimately utilized 249 four-engined C-54 transports and 360 B-24 bombers used as transports in order to move 39,928 troops and 8,202 tons of materiel into Tokyo, while repatriating 7,589 Allied prisoners of war and internees from Tokyo, in 1,367 flights over the course of just 16 days. Major General Ryan, a bit hyperbolically (considering the wartime air transport operation over the "Hump" that preceded it), called it "the greatest single undertaking of its kind in the history of this Division and possibly of ATC." Kuter may have been wise to have remained to see the operation executed; it would not be long before he would be a major player in another major airlift on the other side of the world.⁵²

⁵¹ Military Airlift Command Office of History, *Anything, Anywhere, Anytime: An Illustrated History of the Military Airlift Command, 1941-1991* (Scott AFB, IL: Headquarters Military Airlift Command, 1991), 55. ⁵² Ibid.

Chapter 9: Epilogue—Implementing Hap Arnold's Vision from the End of World War II Through the Kennedy Administration (1945-1962)

Larry Kuter's career was far from over when the Japanese signed the instrument of surrender on 2 September 1945. At the end of the Second World War, he was among the top fifty highest-ranking officers in the AAF. He could reasonably claim to be an expert in both strategic and tactical airpower, and as the ATC Atlantic Division commander, he would soon claim air transport expertise, too. The extent of his formal professional military education (although it consisted of only a year at ACTS), his depth of Washington experience and the breadth of commands he had held were practically unmatched among those from his original 1927 commissioning year group. Compared to his two-star peers, he was young indeed. Kuter was thirty-nine years old and eighteen years into his officer career, while the rest were for the most part a decade or more older than he. The same army policies that kept so many Great War veterans on active duty

¹ Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*. A spreadsheet of AAF generals largely derived from this document, which includes generals' dates of promotion to major general, as well as their retirement dates, indicates that Kuter's temporary promotion to major general on 20 February 1944 made him the 49th–highest ranking officer in the AAF, by rank and date of temporary rank.

² Ibid., 445; Finney, *History of the Air Corps Tactical School, 1920-1940*, 141. Kuter's West Point classmate Charles B. Stone, III, was the only other army airman commissioned in 1927 who wore two stars by the end of the war. The only professional military education school Stone had attended was the abbreviated three-month ACTS program, and his wartime Washington experience was minimal.

³ Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*. There were a few commissioned later than Kuter who pinned on two stars before the end of the war: Frederick Anderson, Samuel Anderson, Truman Landon, Paul Wurtsmith, Curtis LeMay and Lauris Norstad. Of

and led to rank stagnation through the Interwar Period were still in effect. The mandatory retirement age was still 64, so he could anticipate having up to a 42-year military career, with 27 of those years spent as a general officer. Considering his wartime record, the high regard many military and senior civilian leaders had of him, and the process of elimination as those senior to him inevitably retired or died, the future looked bright. As Cadet Kuter had written Ethel Lyddon years before, "I may be Chief of Staff, yet!"

Kuter continued to shape the Air Force throughout his seventeen years of postwar military service, while other ACTS bomber mafiosos (those not already gone by the end of the war) retired or passed away. Bert Dargue, Bob Olds and Ken Walker all died well before the war was over. Hal George, Possum Hansell and Don Wilson would retire before the Air Force became an independent service in 1947. Santy Fairchild, the only other ACTS bomber mafioso who earned four stars, died in 1950, before the third air force anniversary. By 1954, Gene Eubank, Ralph Snavely and Bob Webster would retire, too, leaving Kuter as the sole remnant of the ACTS Bomber Mafia on active duty until his own retirement in July 1962. He would spend his last seven years as a four-star general, but he would act like anything but a bomber zealot. He would spend none of his

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those six, all but Wurtsmith and Frederick Anderson went on to earn four stars. Wurtsmith died in an aircraft crash in 1946. Anderson retired in 1947, and went on to have a successful civilian career.

⁴ Matthew Joseph Turpin, "The Origins and Significance of the Officer Grade Limitation Act of 1954" (University of North Carolina-Chapel Hill, 2004), 6.

⁵ Kuter, "Along with Larry." 68.

⁶ Ancell and Miller, *The Biographical Dictionary of World War II Generals and Flag Officers*, 380, 430, 454

⁷ U.S. Air Force, "Lieutenant General Harold L. George"; U.S. Air Force, "Major General Haywood S. Hansell, Jr."; U.S. Air Force, "Brigadier General Donald Wilson," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108688/brigadier-general-donald-wilson.aspx.

⁸ U.S. Air Force, "General Muir S. Fairchild."

⁹ U.S. Air Force, "Major General Eugene Lowry Eubank"; U.S. Air Force, "Brigadier General Ralph Adel Snavely"; U.S. Air Force, "Major General Robert M. Webster."

postwar years leading bomber-centric commands, and he displayed a consistent record of treating airpower comprehensively, as the sum total of the nation's air capabilities—military and civilian, conventional and nuclear.

While commanding the Atlantic Division from September 1945 through August 1946, Kuter led ATC's biggest division at a time when ATC had the busiest mission in the AAF. While doing so, he also helped secure the long-term health of both military and civil aviation through international agreements. On V-J Day, as the first troops arrived in Tokyo via the airlift Kuter helped to arrange, the AAF numbered 2,314,000 people. By 31 August 1946, when Kuter moved on to his next assignment, there were just 442,000 airmen remaining in the ranks; the AAF lost eighty percent of its strength in just one year. 10 Those troops, and the aircraft they flew, did not get back to the U.S. on their own: that job fell heavily on ATC. ATC's manning nonetheless dropped 60 percent in the same period, from 209,000 in August 1945 to 80,000 in July 1946. 11 Those under Kuter's command were a bitter lot, because they had to remain on active duty, while they brought everyone else home for outprocessing and return to civilian life. Complicating matters, many of Kuter's air transporters were people from bomber and other combat units, who were transferred into ATC when their original units were shuttered. A number of the forcibly transplanted crews had more overseas time than the people they were flying home. "To Hell with the ATC" was a popular ditty among ATC troops at the time, as

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¹⁰ Spaatz, Carl A., Report of the Chief of Staff, United States Air Force, to the Secretary of the Air Force, 30 June 1948 (Washington, D.C.: U.S. Government Printing Office, 1948), 10, http://hdl.handle.net/2027/uc1.b4246516.

¹¹ Military Airlift Command Office of History, Anything, Anywhere, Anytime: An Illustrated History of the Military Airlift Command, 1941-1991, 55.

disgruntled airmen directed their ire toward their new command, rather than seeing demobilization as a crisis that no command or service branch was handling well.¹²

Kuter hired bomber generals to lead his subordinate commands, because the wartime air transport leaders were abandoning ship. A substantial number of ATC's wartime leaders were airline executives, like C. R. Smith, the American Airlines CEO. Smith had been directly commissioned as a full colonel and during the war rose to major general while helping Hal George run the air transport system. While enormously beneficial during the war—those individuals had brought instantaneous expertise and order to the organization—their departures just as quickly left gaping holes. Because those uniformed civilians had occupied many senior ATC leadership positions, few regular officers had served as senior air transport commanders by the end of the war. Kuter knew the bomber generals; they were at least familiar with flying multiengine aircraft, and they were all well accustomed to leading large, complex organizations. The move also made it more difficult for combat crews serving in ATC to complain about their situation.

The leadership turmoil within the Atlantic Division is worth noting. In January 1946, Major General Howard M. "Slim" Turner, a former 1st Bomb Division commander, reported to the Atlantic Division as Kuter's deputy. Two months later, Kuter needed Turner to take over the Bermuda Base Command, but Turner was only there a month

¹² Wesley Frank Craven and James Lea Cate, eds., *The Army Air Forces in World War II, Volume Seven: Services Around the World* (Chicago: The University of Chicago Press, 1958).

¹³ Ancell and Miller, The Biographical Dictionary of World War II Generals and Flag Officers, 442.

before he got assigned to Air Defense Command, never to return to ATC. 14 Bomber generals Augie Kissner, Possum Hansell, and Caleb V. "C. V." Haynes led the Central Atlantic Wing, Caribbean Wing, and Newfoundland Base Command, respectively. 15 Like Turner, none of those men had any prior air transport experience. Even calling them bomber pilots was something of a misnomer, since they had all started their careers in fighters. They were, however, proven and decorated leaders who could operate independently. Those three generals stayed longer in their jobs, but Kuter's and their assignments further illustrate the difficulty of building air transport expertise. Kuter went to work for the State Department in September 1946. Kissner was reassigned out of the command a month later, never to return to air transport. Hansell lasted until December of that year, but he retired out of that position, taking his experience with him. During his time in command, Kuter did have one experienced air transporter, Colonel Tom Ferguson who, unlike the others, had started his career in bombers. Ferguson ran ATC operations in Brazil. 16 He would work for Kuter again a few years later, in ATC's successor command, the Military Air Transport Service (MATS). ¹⁷ C. V. Haynes would be there, too. Haynes would still be in Newfoundland in 1948, when ATC became MATS. 18 Kuter

¹⁴ U.S. Air Force, "Major General Howard M. Turner," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105385/major-general-howard-m-turner.aspx.

¹⁵ U.S. Air Force, "Major General Haywood S. Hansell, Jr."; U.S. Air Force, "Major General August W. Kissner," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106498/major-general-august-w-kissner.aspx; U.S. Air Force, "Major General Caleb Vance Haynes," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106819/major-general-caleb-vance-haynes.aspx.

¹⁶ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 432.

¹⁷ Military Airlift Command Office of History, *Anything, Anywhere, Anytime: An Illustrated History of the Military Airlift Command, 1941-1991*, 238.

¹⁸ U.S. Air Force, "Major General Caleb Vance Haynes."

would need his subordinate commanders to be independent, since he would spend substantial periods away from his command.

While working to prevent the collapse of his ATC division, Kuter helped to build the postwar global air transport system. In early 1946, Kuter was the military representative at the 1946 Bermuda Conference, in which the United States and the United Kingdom—the two most powerful players in civil aviation—set the international standard for bilateral international air transport agreements. The conference built the legal framework for the postwar international air transport system. White is presence was critical, because the allied militaries effectively owned the world's major airfields, and ensuring long-term access to bases around the world was central to postwar strategy. During this conference, he was credited with keeping the negotiations from falling apart. Shortly afterward, Kuter and Mr. Paul Culbertson negotiated U.S. access to Lajes Airfield in the Azores, earning him high praise from the Portuguese dictator, Dr. António de Oliveira Salazar. Salazar so admired Kuter's work that he granted him a knighthood—the Order of Christ of Portugal, with the rank of Knight Grand Officer.

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¹⁹ John C Cooper, "The Bermuda Plan: World Pattern for Air Transport," *Foreign Affairs* 25, no. 1 (1946): 59. In the British House of Lords, Lord Swinton called the agreement, "probably the most important civil aviation agreement that this country has entered into."

²⁰ George, Harold Lee, "Commendation," March 5, 1946, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL. Hal George, in writing one of many laudatory letters Kuter received regarding his participation in the Bermuda Conference, noted, "I am informed that at times the conference was on the verge of dissolution, but by the exercise of great tact, perseverance and sound judgment . . . you forestalled this possibility and joint efforts continued until the notable agreements were reached."

²¹ Foreign Relations of the United States 1946: Volume V, The British Commonwealth; Western and Central Europe (Washington, D.C.: U.S. Government Printing Office, 1969), 962–1022; Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 433–437.

²² The Adjutant General, War Department, "Memorandum: Subject-Report of Foreign Award," August 1, 1947, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

Kuter's work as a military representative to diplomatic negotiations led to him becoming a full-fledged diplomat. When the nations of the world sought to establish an organization to govern the global civil air transport system in September 1946, Kuter was appointed the U.S. representative to the Interim Council of the Provisional International Civil Aviation Organization (PICAO).²³ He did well in his role. When the organization ceased to be merely provisional and became the International Civil Aviation Organization (ICAO) in 1947, Kuter was appointed its first U.S. representative, in the rank of minister. Doing so took a special act of Congress, so that Kuter could retain his active duty military status while was working in the State, not Defense, Department (again for his old boss, George C. Marshall).²⁴

While Kuter was serving in a civilian diplomatic role, the Air Force became a separate service on 18 September 1947. Unfortunately, being outside the air force mainstream meant a missed promotion. Service independence meant that the ranks associated with multiple senior leadership positions instantly increased. Fighter pilot Hoyt Vandenberg (vice chief of staff) got a fourth star. Five men who Kuter had outranked throughout the Second World War—all of them also fighter pilots—Ben Chidlaw (Air Materiel Command deputy), Howard Craig (deputy chief of staff for materiel), Larry Norstad (deputy chief of staff for operations), Ed Rawlings (air force comptroller) and Pete Quesada (Tactical Air Command commander)—pinned on third

²³ President Harry S. Truman, "Memorandum for Major General Kuter," August 31, 1946, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

²⁴ 80th Congress, "Private Law 3-80th Congress, Chapter 40-1st Session, S. 875," April 18, 1947, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL.

²⁵ U.S. Air Force, "General Hoyt S. Vandenberg."

stars.²⁶ While his peers donned their new stars and blue air force uniforms, Kuter remained in his diplomatic gray suit. His air force uniform went in the closet, still adorned with the same two stars he had worn since February 1944.

Congressional politics led to Kuter's return to full-time military service and a vital role during the Berlin Airlift. In early 1948, when President Truman needed someone to fill another important civilian governmental position—this time chairman of the Civil Aeronautics Board (CAB)—he nominated Kuter. The Senate, concerned with the number of senior military officers Truman had previously installed in civilian jobs, denied the request. Kuter was in professional limbo, but the uncertainty did not last long. Spaatz was intimately familiar with Kuter's knack for building new organizations and smooth diplomacy. He also could not have missed that former ACTS bomber mafiosos—with the exception of Robert W. Harper from July 1947 through May 1948—had been efficiently running army and air force air transport since the beginning of the war. Leveraging Kuter's air transport experience and Defense Secretary Forrestal's effort to unify the armed services, Spaatz nominated Kuter to command the soon-to-be-formed Military Air

²⁶ U.S. Air Force, "General Benjamin Wiley Chidlaw"; U.S. Air Force, "Lieutenant General Howard Arnold Craig"; "General Lauris Norstad"; U.S. Air Force, "General Edwin William Rawlings," text, *Biographies*, accessed May 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105851/general-edwin-william-rawlings.aspx; U.S. Air Force, "Lieutenant General Elwood R. Quesada."

²⁷ Special to THE NEW YORK TIMES, "TRUMAN IS HUNTING FOR CAB CHAIRMAN: Ends Efforts for Kuter With Rebuke to Committee Over Pay Issue," *New York Times*, January 22, 1948.

Military Airlift Command Office of History, Anything, Anywhere, Anytime: An Illustrated History of the Military Airlift Command, 1941-1991, 228–230; Faber, "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower," 216. The Army's air transport system was run almost exclusively by bomber mafia members (at least as defined by Peter Faber) from May 1941 through November 1951. Robert Olds led the Air Corps Ferrying Command from May 1941to March 1942. Hal George then led Ferrying Command and its successor Air Transport Command (ATC—formed in June 1942) until September 1946. Bob Webster then led ATC until June 1947. Kuter took command of MATS on 1 June 1948, leading it until November 1951. The only non-bomber Mafioso who led ATC during that time was Robert W. Harper, a fighter pilot who headed ATC for less than a year, from July 1947 to 31 May 1948.

Transport Service (MATS): the first joint, functional global command in American military history. MATS was to be unique, in that it combined air force and navy air transport leadership and units into one organization that provided global air transport to all the military services. It was a test not only of organizational skill, but military diplomacy; the Air Force and Navy were at loggerheads over service roles and missions.

Through MATS, Kuter continued the pattern of airpower consolidation that he had established during the war—but this time he also involved the Navy. Kuter was formally made the commander-designee for MATS in March 1948.²⁹ During the planning, he noted that the air force air transport fleet was Balkanized at the time, with Strategic Air Command, Tactical Air Command, and theater commanders all having their own air cargo units. Worse still (at least from the air force perspective), the Navy had its own parallel strategic airlift fleet (Naval Air Transport Service—NATS), as well as transports assigned directly to navy fleets. Kuter tried to have all air force cargo aircraft assigned to MATS. It was a sensible plan, which also advanced air force service interests. Consolidation would allow for efficiencies that were impossible with the current setup. Furthermore, if the air force major commands were willing to give up their aircraft to MATS, then navy fleets would have less excuse to withhold their transports. Kuter could centralize not only air force, but navy airpower, as well. As Kuter put it in an oral history interview,

I argued with Tooey Spaatz that every air force transport should be assigned to MATS—every single one. I told Tooey if he would do that, I would guarantee that the United States Navy would be out of the air transport business

²⁹ Military Airlift Command Office of History, Anything, Anywhere, Anytime: An Illustrated History of the Military Airlift Command, 1941-1991, 230.

permanently, forever, completely. On the contrary, if he adhered to his statement that SAC had to have its strategic airlift squadrons and every other command had to have their special air missions, the Navy would do exactly the same thing and so would the Marine Corps.³⁰

Spaatz demurred. The Navy assigned one percent more of its four-engine airlift fleet to MATS than air force did of its heavy airlifters, so airlift inefficiency reigned across the services. Consolidation of air force heavy airlifters would not happen until years later. For reasons that are unclear, Spaatz forewent the opportunity to both achieve air transport efficiencies and get the Navy out of the strategic air transport business. On 1 June 1948, Kuter became the first commander of MATS—and by definition the first commander of a joint (in this case, air force/navy), functional (responsible for a particular mission—air transport), and global (responsible for missions around the globe, not a particular geographic region) military organization in American military history.

Kuter was still working to get MATS on its feet when its first major operation—the Berlin Airlift—began. On 24 June, barely three weeks into Kuter's command, the Soviets cut off western road and rail traffic into Berlin, which was well inside of the Soviet zone of occupation in East Germany. It was a clear demonstration of Soviet diplomatic and military muscle. The Soviets did not, however, prevent flights from operating into and out of Berlin (so long as they were operated along agreed-upon routes). Two days later, Curtis LeMay—who was the U.S. Air Forces in Europe (USAFE) commander—started flying supplies into the city with the transports under his command. Operation Vittles, as the military would come to call the Berlin Airlift, had

³¹ Ibid., 472.

³⁰ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 471.

begun. The Soviets did not give up easily on their blockade, and USAFE's air transport people and equipment were grossly inadequate for the task keeping a city resupplied. Soon, airlift assets from around the globe, but particularly from MATS air force and navy units, started flowing into Europe to support the operation.

Kuter and MATS played an unappreciated role in making the Berlin Airlift a success. The most visible leaders—Curtis LeMay, Joe Cannon and Bill Tunner (LeMay and Cannon were USAFE commanders, and Tunner ran the airlift for them)—got welldeserved credit for the operation's execution. Kuter's role was mischaracterized, not least because of Tunner's and LeMay's autobiographies, and other narratives that highlighted individuals' and groups involvement in the airlift. Tunner asserts that he pressed Kuter to get MATS involved in the airlift, yet, "Kuter blithely took off for an inspection tour of MATS operations in the Pacific, leaving me to mind the store and fret about Berlin."32 While Tunner perhaps accurately describes how he felt at the time, he elides the context within which Kuter made the Pacific trip. Larry Kuter, if historical descriptions of him as being hyper-ambitious are accurate, should have been fully on board with the idea of proving the command's worth. Kuter was, however, also well-acquainted with interservice rivalry. He had become intimately familiar with the Navy's approach to differing service opinions since the ACTS navy lesson debacle a decade before, and the Second World War had done little to alter his view of nation's sea service. If directed to support the airlift, Kuter would heartily do so, but in the meantime his joint command

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³² William H. Tunner, *Over the Hump* (Washington, D.C: Office of Air Force History, 1985), 160.

was a fragile one that navy leaders opposed. He made the Pacific trip to shore up support and resolve command relationships.³³

MATS did get tasked to support the airlift, but the extent of MATS support provided to Operation Vittles is typically forgotten. Kuter gave up not only Tunner, but substantial numbers of airlift experts to run the operation. The bulk of the airlift's aircraft and crews came from MATS. All crews—whether they belonged to MATS, other air force units or other navy units—were trained by MATS at its Great Falls Air Force Base, which was configured to replicate Berlin's Tempelhof Air Base. When airlift aircraft needed major overhauls, due to the high utilization rates Tunner was squeezing out of them, MATS did the stateside maintenance—again, regardless of which service or branch to which they belonged. The Berlin Airlift was a global operation, and Kuter's MATS was the command that orchestrated it. Also typically forgotten is that throughout the Berlin Airlift, MATS continued to provide global strategic air transport, military air traffic control, VIP transport, air rescue, weather forecasting, aerial charting and air force film production, and aeromedical transport services.³⁴

The Berlin Airlift demonstrated that cargo aircraft, whether from MATS or other commands, could be efficiently and effectively integrated under one command. The last flight of the airlift arrived at Templehof on 30 September 1949. The statistics were staggering for the time: more than 279,000 flights had brought in over 2.3 million tons of cargo. They also brought 83,000 tons back from Berlin in the form of manufactured

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³³ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 478.

³⁴ Military Airlift Command Office of History, *Anything, Anywhere, Anytime: An Illustrated History of the Military Airlift Command, 1941-1991*, 68.

goods, which helped spur the city's economy. MATS leaders, working for USAFE, had primarily led the operation. MATS' troop carrier and fleet support aircraft—not to mention others from the Royal Air Force—had been used interchangeably. This was a substantial departure from the practice in place since the Second World War, wherein troop carrier units were treated as functionally different from air transport units, even though both types of units might fly the exact same aircraft.³⁵

Less than a year after the operation was over, Kuter used a major exercise to underscore the notion of air transport/troop carrier interchangeability. From 24 April through 8 May 1950, Exercise Swarmer—which included 100 MATS air force and navy aircraft—demonstrated that MATS crews could perform troop carrier missions. On 28 April alone, MATS aircraft alone delivered more than 7,000 troops into the exercise area, with 4,000 of them being parachuted in. Just as significantly, Kuter got fellow air force intellectual leaders involved. Lieutenant General Larry Norstad served as the maneuver commander and Brigadier General Willard Wolfinbarger, an Air War Plans Division staffer during the war, was the air task force commander. At the end, Wolfinbarger noted: "It demonstrated to my complete satisfaction that Troop Carrier and Air Transport concepts are capable of successful combination and that the two elements, when jointly employed, logically and successfully complement each other in this type of an operation." 36

The Korean War once again demonstrated the value of having a central manager for military airlift. Kuter and MATS were still digesting lessons learned from Exercise

³⁵ Ibid., 71.

³⁶ Ibid., 74.

Swarmer when North Korean forces crossed the 38th Parallel on 25 June 1950. The airlift that rushed people and equipment to the combat theater was, again, primarily led by MATS people and equipment, and it dwarfed the Berlin Airlift that preceded it. While MATS is typically remembered as something of a glorified military airline, the first American aircraft lost in the war was a MATS C-54 cargo plane, and the first B-29 bombing mission against North Korea was led by a MATS Air Weather Service RB-29. During that war, the MATS Air Rescue Service conducted search and rescue missions in the combat theater and around the world.³⁷

In the midst of the war, MATS led the rebirth of the Air Force's special operations capability, when Kuter led the creation of another MATS subordinate unit, the Air Resupply and Communications Service (ARCS). Significantly, Kuter tried to do for the ARCS what he had attempted with conventional airlift. The initial ARCS deployment plans called for the ARCS headquarters to retain administrative control and provide logistical support to ARC units deployed overseas. Kuter was unsuccessful in his effort. The ARC units got parceled out to overseas commands, where they slowly shrunk out of existence due to a lack of central support or advocacy.³⁸

Kuter got his overdue third star in April 1951, while commanding MATS, but his days in military air transport were numbered. He had failed to achieve the airlift consolidation he envisioned, but through both real-world events and exercises, he had

³⁷ Dick J. Burkard, *Military Airlift Command: Historical Handbook, 1941-1984* (Scott AFB, IL: Military Airlift Command, 1984), 4, http://hdl.handle.net/2027/mdp.39015028448762.

³⁸ Joel E. Higley, "Larry Kuter, Functional Commands and AFSOF Thwarted: The Establishment of the Air Resupply and Communications Service in 1951," *Air Commando Journal*, February 2016, 22–30.

planted the seeds for eventual airlift centralization and had given the idea fertile ground in which to grow.

Building the Air Force took more than redrawing organization charts; the Air Force was useless without the right people to run it. Consequently, in November 1951, with the Korean War still raging, Hoyt Vandenberg (who took over as air force chief of staff from Spaatz in April 1948) brought Kuter—unwillingly—to the Pentagon.³⁹ The air force personnel chief, Lieutenant General Richard Nugent, had been medically retired in August. The all-too-young Air Force had substantial personnel woes, so Vandenberg needed someone with substantial rank, credibility and administrative skill to fill Nugent's shoes.⁴⁰ Rumor had it that the vice chief, Nate Twining, was critical in getting Kuter assigned to the position.⁴¹ During his year and a half in the job, Kuter dealt with the fear of flying epidemic, wherein rated officers refused to fly at substantially higher numbers than previously.⁴² During that period, the Air Force simultaneously struggled to recruit officers and aviation cadets into pilot training.⁴³

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³⁹ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 507.

⁴⁰ U.S. Air Force, "Lieutenant General Richard E. Nugent."

^{41 &}quot;Generals Shift...Big Bombers Lose Favor," Business Week, August 16, 1952, 35.

⁴² Vance O. Mitchell, *Air Force Officers Personnel Policy Development, 1944-1974* (Washington, DC: Air Force History and Museums Program, 1996), 93–98. The "fear of flying" episode was the product of air force personnel policies, an unpopular war and World War II-era officers whose outlooks toward combat had substantially changed, as they grew older, married and took more time to reflect on their wartime experience. During the Second World War, the AAF had implemented a policy where a commander could temporarily remove an aviator from flying status, to give them time to resolve flying-related fears or other personal issues. Over time, the policy morphed into one where officers could be grounded for merely claiming a number of problems, to include fear of flying. By effectively giving individuals the authority to declare themselves unfit to fly, the Air Force gave individuals a loophole for avoiding flying in combat. This issue surfaced in early 1952, shortly after Kuter took over as personnel chief. In January 1952, two months after Kuter moved to the Pentagon, there were 134 fear of flying cases. It was the worst month of the Korean War for such cases. The primary issue was not the raw number of cases, but rather the negative publicity they generated and the risk of contagion they presented to the overall force. Air Force leaders, Kuter among them, addressed the issue through revised policies and sanctions to distinguish between those who experienced debilitating fear and those who did not want to perform their assigned duties. With new

Personnel problems were not just limited to accessions, though. Kuter also had to contend with the ill effects of congressional actions, particularly the Van Zandt and Davis amendments. The Van Zandt amendment put a freeze on retirements for all but the oldest officers, which discouraged younger officers from committing to long-term service. The Davis amendment threatened to freeze the promotions of those on active duty by limiting the percentages of officers who could serve in field grade and senior officer ranks. The amendments, while well intentioned—limiting retirements meant retaining more experience on active duty and resisting rank inflation would save the services money were disastrous to morale and mission effectiveness. In 1947, the military had gone to an "up or out" promotion system in order to ensure the officer corps had the requisite youth and energy to fight the nation's wars. The Davis amendment threatened to keep people from moving up, while the Van Zandt amendment kept them from getting out. The 1947 postwar personnel reforms were being undone.⁴⁴

While working to attract more junior officers and doing his best to at least keep air force members informed of efforts to forestall the ill effects of congressional actions, Kuter also worked to thin out the senior officer ranks. The mass of World War I-era officers that had slowed promotions during the interwar period still had not fully retired. The glut of generals created during the Second World War only exacerbated the

policies in place, fear of flying cases dropped precipitously; fear of flying cases dropped to just 28 per month from February through November 1952.

 $^{^{43}}$ Ibid., 102–109. The shortage of applicants for flying training was due in part to the unpopularity of the war, but also the increased demand for trainees due to air force expansion. Under Kuter's watch, shortages in aviation cadets were addressed by reducing the amount of time enlisted men had to serve on active duty before applying for flight training, reducing the amount of time people had to serve on active duty if they were eliminated from training, reducing age and testing standards for flight training applicants, and increasing the number of recruiting teams on college campuses.

⁴⁴ Turpin, "The Origins and Significance of the Officer Grade Limitation Act of 1954," 14–17.

leadership logjam. Kuter started with setting and enforcing rules that limited officers' career lengths. While the personnel legislation had been passed in 1947, writing air force policies to implement the law fell to him. Most significantly for Kuter's longtime peers, two-star and more senior-ranking generals had to retire at 35 years of service, as long as they had held their terminal rank for at least five years. Kuter had to tell his longtime friend and mentor Gene Eubank that his time and service was up. Eubank was still more than capable of doing his job, but room had to be made for new talent. To ease the transition, Kuter tried to help connect senior officers with those in civilian industry and governmental positions. When his longtime friend Lieutenant General "Pre" Cabell was nominated to serve as the deputy CIA director, Kuter testified before the Senate. He recommended that Cabell be allowed to serve in the position while retaining his military rank (but not count against the Air Force's general officer billets), just as Kuter had done in the State Department. Between working with Congress and setting internal air force policies, the promotion bottleneck slowly started to clear out.

Because Kuter was the highest-ranking three-star on the Air Staff, he also served as acting vice chief of staff, and even acting chief, during absences by Generals Vandenberg and/or Twining. During a stint as vice chief, Kuter—along with Secretary of

⁴⁵ Kuter, Interview General Laurence Kuter. 30 September-3 October, 1974. Naples, FL., 508–515; Kuter, Laurence S., "Letter from General Kuter to Lieutenant General Timberlake," January 22, 1962, IRIS Number 01151750, Air Force Historical Research Agency [AFHRA], Maxwell AFB, AL. Nathan Twining was the primary author of the legislation that outlined retirement procedures. It fell to Kuter to write the policies that implemented that legislation. As personnel chief, Kuter had to notify longtime friends, like Lieutenant Generals Bill Kepner and George Stratemeyer, that their military careers were coming to an end. When the air force personnel chief formally notified Kuter that he would have to retire at 35 years of service in 1962, he recalled the challenges he had faced a decade prior and expressed the hope that the retirement policies he had helped implement were well accepted by then.

⁴⁶ Eighty-Third Congress, *Deputy Director of Central Intelligence* (Washington, DC: Government Printing Office, 1953).

the Air Force Thomas Finletter, Undersecretary of the Air Force Roswell Gilpatric and Air Force Chief of Staff Nathan Twining—helped write the Bar Harbor Memorandum in 1952, which laid out the Air Force's long-term strategy. One of the memo's goals—which is typically cited in strategic bombing narratives—was to keep strategic bombers on a wartime footing to deter a Soviet first strike. Less often acknowledged is that another goal was achieving the means to fight local wars.⁴⁷

Vandenberg's four-year tour as air force chief of staff was slated to end on 30 April 1952, and Kuter was one of those thought to be in the running for the job (along with eventual air force chiefs Twining, White and LeMay). Vandenberg was allowed to extend for two years, making the speculation moot, but rumors flew again when the chief fell ill and had to be hospitalized for cancer treatment. An August *Business Week* article asserted that Twining was the driver behind getting Kuter assigned as personnel chief. More significantly, the article stated, "Both Kuter and Twining are in favor of a larger role for tactical aviation, plus a bombing force composed of larger numbers of medium bombers instead of a few new superbombers. It was this kind of thinking that got Kuter in trouble with the top brass in the Pacific. Supposedly he disagreed on the importance of strategic bombing." While no serious historian has suggested that Kuter was not a strong bomber advocate, the article supports the notion that Kuter saw the air force mission as more encompassing than just long-range nuclear bombers. Regardless of perceptions, speculation about Kuter being in line for the chief of staff position was moot.

⁴⁷ George M. Watson Jr., *The Office of the Secretary of the Air Force, 1947-1965* (Washington, D.C: Center for Air Force History, 1993), 124.

^{48 &}quot;Generals Shift...Big Bombers Lose Favor."

The personnel job cured Larry Kuter of any desire to be chief of staff, if he had not been inoculated against that desire much earlier when working for General Arnold. When Kuter saw that his friend Id Edwards was retiring and the three-star Air University commander billet was coming available, he lobbied for the job.⁴⁹ Thus, in April 1953, the Kuters came somewhat full circle, as they returned to Maxwell Air Force Base.

In a long letter Larry Kuter wrote to family and close friends, he made it clear that any ambitions he might have had for serving as chief of staff were in the past:

The assignment as Commanding General of the Air University is appropriate to the rank of lieutenant general, and if I behave myself, I expect that I shall not be demoted from my temporary rank of lieutenant general . . . It is sure that I will not be promoted. A few of my well-meaning friends have expressed in flattering terms their disappointment that I was not staying here, possibly to be the new Vice Chief of Staff and take that four-star rank when General Twining retires in a few months. That view is pleasing to hear, of course, and is helpful to my ego, but would be helpful to nothing else.

Duty as Chief or Vice Chief is brutally punishing. During the past five years of open season on the Brass, the Chief and Vice Chief spend all their time on the defensive, while the work is done and the results are accomplished by the uniformed managers and commanders at lower levels. For the confident and personal information of my friends and my family, *I do not now or ever want to be the Chief of Staff or the Vice Chief of Staff, unless there is a radical reversal of the current public and Congressional attitude toward military leadership, judgment and management.* Consequently, I am accepting congratulations on my reassignment and any sympathy or condolences on failure of further promotion are based on emotion or misinformation and certainly contrary to the best interests of my desires and particularly my health. ⁵⁰ [emphasis added]

Kuter's letter is noteworthy for two things. First, it indicates that he was less ambitious, at least at that point in his career, than is commonly understood. Second, and more

⁴⁹ Kuter, Laurence S., "From Washington Back to Maxwell," 1953, Kuter Collection, Addendum 1, Box 4, Folder 1, USAF Academy Library Special Collections.

⁵⁰ Ibid.; U.S. Air Force, "General Nathan F. Twining," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105367/general-nathan-f-twining.aspx. Twining was a 1918 West Point graduate, so his thirty-five years were up in 1953. Vandenberg's illness would lead to Twining becoming the next chief of staff, which would subsequently lead to Twining's appointment as chairman of the Joint Chiefs of Staff.

significantly, it illustrates how the Air Force was dominated by fighter pilots at the time. In 1953, Kuter still had nine years left in his military career. As the air force personnel chief, he was well aware that the policies he had emplaced would lead to multiple four-star command billets opening up in that timeframe: Air Defense Command (Chidlaw), Tactical Air Command (Cannon), and Far East Air Forces (Weyland)—at a minimum. If the chief or vice chief position were filled by four-star generals LeMay (Strategic Air Command) or Norstad (U.S. Air Forces in Europe), then Kuter could be in the running for their jobs, too. What Kuter could not miss was that, but for LeMay, every one of the Air Force's four-star billets was filled by a fighter pilot. Among the Air Force's three-stars, Kuter was the only career bomber aviator. At the service's most senior levels, it was still a fighter pilot's air force.

Under Kuter's watch, Air University was anything but bomber-myopic. Theater air combat operations got special emphasis. This was perhaps unsurprising, since Kuter's AU deputy commander, Major General John DeF. Barker, had been his NATAF chief of staff in 1943 and Colonel (later four-star general) "Spike" Momyer—also of Northwest Africa fame—taught at Maxwell from 1950-53. Multiple doctrine documents that had nothing to do nuclear bombers were written and published during Kuter's tenure. Also during this period, Kuter supported "Project Control": an effort led by AU faculty member Colonel Raymond Sleeper that sought to determine if British interwar notions of

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⁵¹ U.S. Air Force, "General Benjamin Wiley Chidlaw"; "General John Kenneth Cannon"; U.S. Air Force, "General Otto Paul Weyland."

⁵² "General Curtis Emerson LeMay," Official Website of the United States Air Force, *Biographies*, accessed August 15, 2015,

http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106462/general-curtis-emerson-lemay.aspx; "General Lauris Norstad."

air control (wherein airpower was used in the place of ground forces to put down revolts in Iraq and Aden in the 1920s) could be applied to Cold War scenarios. While Sleeper found the British air control methods to be inapplicable, the initiative led to a much better understanding of how airpower could be employed across the spectrum of conflict to achieve national ends. In April 1955—two years into Kuter's tenure at AU—his command produced a revised version of Air Force Manual (AFM) 1-2, United States Air Force Basic Doctrine. The new version stressed the comprehensive nature of airpower, highlighting how it could be used in peace and war, throughout the entire span of international conflict. The vice chief of staff, Tommy White, heartily endorsed the new version. Air Force Magazine termed it "one of the most important books in the world."53 Although the partisan magazine could be expected to be positive, it was nonetheless an unusually strong endorsement. Although less heralded, Air University led the creation and publication of AFMs 1-3 through 1-11, which codified for the first time all manner of air force doctrine.

Kuter's fourth star came sooner than expected. In 1955, General Ben Chidlaw retired, leaving his commander-in-chief Continental Air Defense (CINCCONAD) billet open. General Pat Partidge was selected to take his place, creating a vacancy in the fourstar FEAF billet. Kuter was the most senior three-star in the Air Force, aside from Hubert R. "Doodles" Harmon (who was in his terminal military assignment as the Air Force Academy's first superintendent) and Howard Craig (who had to retire that year, due to time in service). Kuter's selection was a bit surprising though, since Lieutenant Generals

⁵³ Futrell, *Ideas, Concepts, Doctrine*, 400.

Frank F. "Hank" Everest and Glenn O. Barcus—both of them prior 5th Air Force commanders, and hence intimately familiar with the region—could have been picked instead. Given conditions in the Pacific, though, it would help to have a diplomat and organizer like Kuter in the job.

Somebody was in a hurry to get Kuter to the Pacific. His four-star pinning-on ceremony was not a major event, with speeches, pomp and circumstance. Rather, he pinned on his fourth star on 29 May 1955—while he was airborne and en route to his new command. The aircraft commander, a major, had the unique experience of administered the officer oath to an individual six pay grades above him. Of course, his arrival in Tokyo was something of a historic event in itself for Kuter, since his headquarters was in a city against which he had advocated using incendiary bombs about a decade prior. After a few days in country, Partridge formally handed FEAF over to Kuter on 4 June, in a traditional change-of-command ceremony. The next four years would be eventful ones.

Two things were immediately apparent when Kuter took command of FEAF.

First, the Pacific was still a major theater in the Cold War. The Korean War was over, but its result was far from settled; a substantial air force combat presence had to be maintained at a high state of readiness in Korea, Japan, Okinawa and the surrounding area (FEAF's area of operations) in order to dissuade North Korea from another invasion. The Korean Peninsula was not the only hotspot, though. The Taiwan Straits Crisis, in which mainland Chinese forces had captured an island previously held by the Taiwanese and FEAF fighters had been deployed to Taiwan to cover the Taiwanese withdrawal of forces from other islands, ended shortly before Kuter's arrival. Furthermore, the situation

in Vietnam and elsewhere in the region indicated that other local wars were possible, if not likely. The battle of Dien Bien Phu was barely a year in the past, and Kuter—who led the rebirth of the Air Force's special operations capability with the ARCS in 1951, and who sponsored Project Control as Air University commander—was well attuned to the application of airpower outside of major theater war.

The second, and closely related issue, was that American airpower in the Pacific was ill-suited to the tasks at hand—numerically and logistically, but especially organizationally. Kuter would use the region's urgent requirements (to maintain a strong defense of South Korea, protect Taiwanese territorial sovereignty and build partner nations' air forces' capacities to counteract communist incursions throughout the region) as a forcing function to make needed changes in theater command and control structures. In the end Kuter would achieve not only a goal he had been pursuing since the Second World War—establishing a single, overall theater air command for the Pacific—but he would see the establishment of a single unified command for the entire Pacific theater. Understanding the necessity for change starts with understanding how convoluted the Pacific command relationships were.

U.S. Pacific military power was bifurcated—a relic of the Second World War, when operations against Japan were split into two separate joint commands under MacArthur and Nimitz. Army General Lyman Lemnitzer's Far East Command (FECOM—descended from MacArthur's old command) had the bulk of the region's military *strength*. The Korean War had ended two years before, but the peace was still uneasy. Kuter's FEAF was the air force component of FECOM and airpower would play

a major role in repulsing the North Koreans if they invaded again, so the bulk of the airpower in the Pacific theater fell under Kuter's command, with most air force units belonging to FEAF's 5th Air Force. While the forces assigned to FECOM and its subordinate components (including FEAF) were substantial, the FECOM geographic area of operations was comparatively small. Lemnitzer (and hence Kuter) was essentially just responsible for military activity in and around Korea, Japan, Okinawa, and the seas near to those landmasses.

Admiral Felix Stump's Pacific Command (PACOM)—a descendant of Nimitz's wartime command—was the joint U.S. command responsible for most of the *geography* in the Pacific. Stump, as the Commander-in-Chief of PACOM (CINCPAC) was responsible for military operations in the Pacific theater, from the West Coast of the United States, all the way west to the Indian Ocean (but for FECOM's area of operations). At first blush, this would not seem to pose a grave problem; most of that geographic area was covered by ocean, and Stump also commanded his own navy component, as the dual-hatted commander-in-chief, Pacific Fleet (CINCPACFLT). The shortcomings of the existing theater command arrangements, however, became abundantly clear when the United States contemplated defending Taiwan against mainland Chinese aggression.

Through the first half of 1954, there was a 7th Air Force headquarters in Hawaii and a 13th Air Force headquarters in the Philippines, but neither of those commands had substantial forces assigned to them (because the bulk of the region's airpower was in the FEAF's area, under 5th Air Force). Worse still, even if one or both of those numbered

forces had substantial units assigned, there was no central air force headquarters to coordinate their activities. Thus, on 1 July of that year, Pacific Air Forces (PACAF—essentially a reanimation of AAFPOA, the organization in which Kuter served in the latter part of the Second World War) was established in Hawaii to serve as the senior air force headquarters in PACOM. It was a headquarters more in name than substance. While Stump operationally controlled PACAF and its subordinate units in the PACOM area or responsibility, Kuter's FEAF (part of a completely separate unified command) exercised administrative control over PACAF forces.

The situation got more confusing still when, in November 1954, the Joint Chiefs of Staff directed FEAF to be prepared to deploy a wing to defend Taiwan. FEAF (which was manned, equipped and postured to fight a second Korean war) had to be prepared to deploy its forces on a moment's notice to an air base outside of its region, where there would be no substantial air force presence in place to receive them. It took little time before this construct was tested. On 17 January, Ichiang—an island held by Republic of China (ROC) forces—fell to the mainland PRC forces. The whole of FEAF's 18th Fighter-Bomber Wing deployed from Okinawa to Taiwan, which required transferring that unit from FEAF to PACAF. An 5th Air Force task force (ATF-5) was established to operationally command the 18th's aircraft, as they provided defensive air cover for ROC forces being evacuated from the indefensible Tachen Islands. By the end of February, though, tensions eased a bit. The 18th fighter-bomb wing redeployed, and in their place, fighter squadrons started deploying to Taiwan, swapping out every two weeks. Tensions remained high, and the PRC periodically shelled ROC islands until May. This period of

high tension, which came to be known as the First Taiwan Straits Crisis—ended less than a month before Kuter arrived, but the convoluted command relationships were still very much in effect. The rapid deployment of the 18th had been a victory in terms of airpower responsiveness and cooperation between FEAF and PACAF, but from an organizational and operational perspective the situation was far from optimal.

Upon taking command, Kuter supported the establishment of ATF-13 in Taiwan. Brigadier General Benjamin O. "Bennie" Davis, Jr. (the Air Force's first African-American general) was still in FEAF when Kuter got to Tokyo. Davis had the idea to set up a standing air task force headquarters in Taiwan, rather than the ad hoc one that had been thrown together in the middle of the crisis. In short order, Davis soon found himself reassigned to Taiwan to make his plan a reality. He was tasked with creating and leading Air Task Force (ATF)-13: a combined U.S./Taiwanese air force organization that provided air defense for the island. Davis would not only command ATF-13 in Taiwan, but he would also serve as the 13th Air Force deputy commander.⁵⁴

Davis' operational chain of command was convoluted, and the early support he received was far from optimal, but the key requirement—establishing a long-term air force presence in Taiwan—was met. Davis built American capacity to command and control airpower in the country, while simultaneously training and equipping the ROC Air Force (ROCAF) and supporting U.S. Air Force fighter units that flowed in and out of the country. Even though ATF-13 was PACAF operation, FEAF provided substantial support. The airmen and their families who flowed into Taiwan were primarily people

⁵⁴ Davis, *Benjamin O. Davis, Jr.*, 216–218.

who got diverted from FEAF assignments. When airmen and their families complained about only having Chinese food to eat, the FEAF flight surgeon supported the move to get American food services personnel and equipment expedited to theater. The first FEAF fighters deployed to Taiwan in September 1955, and Davis led the first ATF-13 that same month. Kuter's FEAF had done, and was doing, a great deal to ensure the success of an operation that lay outside its area of responsibility.

Kuter's FEAF seemed to give ATF-13 better support than PACOM did. In Taiwan, the army-led Military Assistance Advisory Group (MAAG) had the biggest American military presence on the island, but they were of little assistance. When it came to basic issues like housing and food, Davis and his people were largely on their own. The MAAG had not been tasked to support ATF-13, and providing housing to airmen would have meant denying dwellings to soldiers. The multiple disconnects between lines of authority and lines of responsibility made it clear that there had to be a better way to organize theater airpower. Kuter's FEAF staffers took all the above concerns into account, as he and his command started building the case for not only theater air force consolidation, but also for the a single, unified command over all joint forces in the Pacific.

Kuter also leveraged civilian influence to push his case. In December 1955, O. K. Armstrong—a *Readers Digest* writer and editor, not exactly a national defense policy wonk—wrote an article for *Air Force Magazine* entitled, "Let's Unscramble Our

⁵⁵ Ibid., 221.

Unwieldy Pacific Command."⁵⁶ Armstrong's arguments could have been written by Kuter and his staffers. Given the article's recommendations, they probably were. Armstrong wrote that, "Not one single Air Force officer I talked to, whatever his rank, but agreed there should be some reorganization which would unshackle their branch of the service from its geographical split in the Pacific sector of the globe." In Armstrong's considered opinion, the Pacific and Far East commands needed to be combined into one unified command, and under that command, there should be three separate, coequal army, navy and air force components that commanded their services' respective forces for the entire theater. It was a theme Kuter had been pushing since 1942. Armstrong made a further recommendation; "Under this arrangement, *the office of the Commander-in-Chief, Pacific-Far East, might well rotate among the services.*"⁵⁷

The next month, at a January 1956 air force commanders' conference, Kuter directly laid out his case for Pacific theater airpower consolidation. A single, consolidated theater air command was needed in order to coordinate "the development of these many scattered indigenous air forces which by 1960 will represent about 65 percent of all of the democratic air power in this side of the Bamboo and Iron Curtains." Also during the speech, Kuter noted that SAC's nuclear capability meant that a major war was unlikely, but that this made smaller, more local conflicts more probable. He further opined that such local conflicts were most likely to erupt in Southeast Asia. That conclusion was inescapable, given recent events. Significantly, even though Kuter had only been in the

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⁵⁶ O.K. Armstrong, "Let's Unscramble Our Unwieldy Pacific Command," *Air Force Magazine*, December 1955, http://www.airforcemag.com/MagazineArchive/Pages/1955/December%201955/1255pacific.aspx.
⁵⁷ Ibid.

job for seven months, his push for a consolidated theater air command was already well-known. At the end of the speech, General O'Donnell quipped, "I heard General Weyland say it sounded like the same speech he gave last year." ⁵⁸

While Kuter pushed for theater air force consolidation, he proceeded as if it were already a fact. Although FEAF's area of responsibility was limited, the number of countries with whom he needed to coordinate was not limited to countries within his area of responsibility. Responding to North Korean or PRC aggression in the FECOM area would entail a multinational endeavor. Consequently, Kuter—well practiced in diplomacy—conducted Operation Roundup in May 1956: a three-day conference that assembled air force leaders from Australia, Cambodia, France, Korea, Pakistan, the Philippines, Taiwan, Thailand, the U.K, the U.S and Vietnam to explore their many areas of common interest. Davis noted in his autobiography that:

I personally developed cordial relationships with leaders in the air forces of Japan, Korea, Taiwan, the Philippines, and Thailand. General Kuter's concept of operation with host countries in the Far East, which differed from our previous practice of behaving as domineering representatives of a victorious power, pushing aside everything that got in our way, was to pay great dividends in our future efforts to achieve national objectives in the Pacific. ⁵⁹

While Kuter did not carry the title of theater air commander, in conducting meetings such as this he acted in that capacity, and thus strengthened the case for making theater air command a reality.

The year 1957 was an important one for Kuter and the air force he served. Kuter's efforts, along with the work of countless others, bore fruit. In 1956, the Unified

⁵⁸ AFCC Commander's conference, 15.

⁵⁹ Davis, Benjamin O. Davis, Jr., 232.

Command Plan was rewritten, such that on 1 July 1957—about a decade and a half after Kuter and many others had started working toward it—a single theater command for the Pacific was established. Admiral Stump remained CINCPAC and his headquarters stayed in Hawaii, but his authority expanded rapidly, as all the military forces in the Pacific (most notably FECOM) were amalgamated and placed under his command. Stump had to surrender his direct command of the Pacific Fleet, so Admiral Maurice Curts became CINCLANTFLT.

At the air force component level, Kuter and his FEAF staff essentially moved from Tokyo to Honolulu and took on the old PACAF name, but with augmented authority over airmen throughout the Pacific theater. Significantly, Kuter outranked both his navy and army counterparts, Admiral Curts and General Isaac D. White. It was helpful that Kuter had pinned on his fourth star when he did; General Isaac White pinned on his fourth star less than a month after Kuter did. When Admiral Stump retired, it would not be unreasonable to think that Kuter might move up and take command of PACOM. The Pacific was mostly covered by water, but it was completely covered by air.

There were a few other changes in the unified command plan in 1957 that would substantially impact Kuter and his air force. The same change to the unified command plan that established PACOM as the sole unified command for the Pacific also created the North American Air Defense Command (NORAD), a U.S.-Canadian combined command, responsible for the air and missile defense of both countries. Also that year, Nathan Twining—who had anticipated retiring in 1953—became the Air Force's first chairman of the Joint Chiefs of Staff. Tommy White moved from being the air force vice

chief up to chief of staff, and Curt LeMay moved up to vice chief. LeMay, a staunch bomber advocate who had been wearing four stars for almost six years, would be in the pole position to replace fighter pilot Tommy White in 1961 when his term as chief of staff was finished. Kuter, the advocate of more-balanced airpower forces, remained overseas, far from Washington decision-making. At least Kuter seemed to be in line to be a theater unified commander.

In February 1958, Kuter wrote the air force chief of staff, Tommy White, with a recommendation. Admiral Stump was approaching mandatory retirement (he turned 64 that year). Stump was going to be at a DoD reorganization conference, and Kuter made the same recommendation *Readers Digest* writer O.K. Anderson had over two years before: "At the same meeting you may be able to establish rotation among the services of assignment to the position of CINCPAC. Current circumstances would lead to the appointment of a General from the Air Force as CINCPAC." Kuter, who pinned on his fourth star in May 1955, outranked his army counterpart, General Isaac D. White (who had pinned on four-star rank a month after Kuter). Kuter also outranked his naval counterpart, Admiral Herbert G. Hopwood, Commander-in-Chief Pacific Fleet, who did not get his fourth star until February 1958, right before Kuter wrote his letter. Kuter had apparently not completely lost his sense of ambition. Whether White pushed for Kuter to fill the post is unknown, but on 31 July, Admiral Harry Felt got the job instead. Felt pinned on his fourth star at the same time he took command of PACOM. The fact that Kuter got passed over for the command is perhaps unsurprising; a navy admiral always had (and always would) command PACOM. Also, the military's senior ranks were full of air force officers. Twining was the CJCS, Norstad was the Supreme Allied Commander-Europe (SACEUR), Partridge was CINCNORAD, and CINCSAC was about to change hands from Lemay to Tommy Power. It likely would have been too much to have an airman heading up the Pacific, too.

The Second Taiwan Straits Crisis is a little-known Cold War event that by itself deserves greater historical attention, but importantly for this narrative it shows how Kuter approached the offensive use of airpower as a theater commander. In July 1958, PACAF Intelligence—responsible for the entire theater and manned accordingly—assessed that, after an ongoing crisis in Lebanon died down, the next global trouble spot would likely be in the Taiwan area. As if on cue, in early August Taiwanese reconnaissance aircraft detected a buildup of mainland Chinese fighters in the Fujian Province, right across from Taiwan. General "Tiger" Wang, the Taiwanese Chief of the General Staff, notified Major General Fred Dean (the fighter pilot who had served under Kuter in Northwest Africa and been on Arnold's Advisory Council from 1943-45, when Kuter was AAF plans chief), who then commanded ATF-13. The U.S. Air Force's in-country operation, and the ROCAF's capabilities, had come a long way since Kuter rushed Bennie Davis to the country four years prior. Dean passed word to Kuter's headquarters in Hawaii, and shortly thereafter, Radio Peiping (Bejing) announced that the Taiwanese-held islands of Quemoy and Matsu would soon be assaulted, in preparation for an invasion of Taiwan proper.

Mainland Chinese shelling of Quemoy began on 18 August after a four-year hiatus, when about 100 shells from the Chinese mainland struck the Taiwanese-held

island. On 23 August, artillery ravaged Quemoy—50,000 shells (300 artillery tubes, firing 165 rounds each) hit the island. Events started unfolding quickly from there. The next day, the total decreased to 40,000 shells, and the barrage subsided to 10,000 per day for the following five days. Meanwhile, naval forces started steaming toward the region, while PACAF units moved within the theater and more units flowed in from the United States. By the end of the crisis, six aircraft carriers and 53 total warships would deploy to the seas around Taiwan, while substantial land-based aircraft, including the Sidewinder missile-equipped F-100 and F-104 fighters, deployed to Taiwan and bases around the region. The very short summary of the result is that, by demonstrating national resolve with the deployment of these forces, and in particular having the Navy escort resupply ships to within 3 miles of the Taiwanese-held islands, the mainland Chinese eventually backed down.

Five aspects of PACAF's operations during the crisis are noteworthy. First,

PACAF was ready to receive the stateside forces, in Taiwan and at bases throughout the region, and was well-prepared to command and control them. Second, Kuter immediately requested additional stateside units, and TAC's Composite Air Strike Force (CASF)—a prepackaged force of fighters, bombers, transports and air refueling aircraft—was ready and waiting for his call. Third, the additional air force units were substantially employed to backfill emergency war plan requirements, due to naval units being displaced from their assigned positions. Next, the thirty-one Chinese MiGs shot down were all destroyed by Taiwanese fighter pilots. Finally, and perhaps most significantly, Kuter lamented the

administration's direction not to authorize the immediate use of nuclear weapons if war with mainland China ensued.

All the above aspects of the air operation reflect favorably upon PACAF's establishment as an overarching theater air command. Four years after the First Taiwan Straits Crisis, PACAF was better prepared for the defense of Taiwan than in 1954 because the responsibility, authority and capability to execute the operation were combined in one command. Rather than a hastily-assembled task force being deployed out of its own area and adversely impacting emergency war plans in the process, Major General Dean led a robust, standing operation in Taiwan to command and control American and Taiwanese air forces already in country, as well as to receive additional forces (many of them from the United States) as they arrived. Other bases throughout the theater were likewise better prepared to received the CASF and other stateside units, since PACAF and TAC had envisioned and been practicing this scenario for some time. Some elements of the CASF had deployed to Pacific the previous fall, in Exercise Mobile Zebra. Kuter and his staff well aware of war plan requirements, not only for the defense of Taiwan, but for South Korea also, and knew that the additional assets would be necessary.

The placement of air forces in the theater further demonstrated the virtues of having a single theater air commander, working for a single unified theater commander.

As naval forces deployed to support the defense of Taiwan, they left shortfalls in war plans for the defense of South Korea. Kuter thus used his assigned and attached airpower not only to build up forces on the island of Taiwan, but almost one hundred of the CASF

aircraft deployed to Okinawa or mainland Japan, as navy backfills. This kind of planning and coordination would have been substantially more challenging in the bifurcated days of Pacific command structures.

The Taiwanese record in air-to-air victories during this conflict—31 MiGs destroyed, for only two Taiwanese losses—was impressive. While it was very much a testament to the skill of the pilots themselves, it was unavoidably true that the ROCAF was very much the product of years of support and training from ATF 13. Kuter's efforts at building allies' and partner nations' air forces throughout the region paid off in a substantial way in that conflict. He would use the Taiwanese victories to push for further modernization of not only the Taiwanese air fleet, but that of South Korea, too. While the United States could not compete numerically with the mainland Chinese, if the Soviets and Chinese were ringed with American allies and friends, then the odds might be somewhat evened.

Although the Chinese backed down in the Second Taiwan Straits Crisis, Kuter's greatest concern was the sizes of the Soviet and Chinese air fleets and the U.S. Air Force's numerical ability to cope with them. In a commanders' conference after the crisis was over, Kuter told his fellow commanders that, "I must admit that I was somewhat surprised and dismayed on receiving guidance that we must initially use iron bombs to attempt to repel an enemy of such known potential as the Chinese Communists. Our US and particularly USAF planning for the last ten years has been predicated on nuclear warfare with high quality weapons systems to thwart the massive manpower and quantities of materiel available to the Communist Bloc." It would seem from this brief

passage that Kuter was somewhat nuke-obsessed, and thus little different from the bomber zealots who ran SAC at the time. Rather, what he was asserting was simpler: there simply were not enough bombs, bullets, planes, people and gas to fight a war with the Chinese, using just conventional weapons. A ten-to-one ratio between enemy and friendly air combatants could be overcome if the friendlies had nuclear weapons. That ratio was unlikely to be viable in a purely conventional fight.

The size of the Soviet air fleet, and its nuclear capability, would be at the front of Kuter's mind in his next job. Kuter's last military assignment was as Commander-in-Chief, North American Air Defense Command (CINCNORAD), from August 1959 to July 1962. Kuter led this multiservice Canadian-American homeland air defense command during a period of high tensions between the United States and Soviet Union: the Bay of Pigs Invasion occurred while he was CINCNORAD, and the Cuban Missile Crisis came a month and a half after he retired. While in command, Kuter led two major air defense exercises—Operations Sky Shield I and II—that entirely shut down U.S. and Canadian civil air traffic in order to test Canadian-American readiness to repel Soviet bombers. For six hours on 10 September 1960 (Sky Shield I) and twelve hours on 14 October 1961 (Sky Shield II), American and British bombers flew as simulated Soviet attackers. Sky Shield II, the largest air defense exercise in American history, was entirely planned and executed under Kuter's watch. Those two exercises clearly demonstrated the nation's vulnerability to attack. In February 1962, Kuter went directly to the president to argue for bolstering American air and defenses. His arguments fell on deaf ears, but Operation Sky Shield III (which was mostly planned under Kuter's watch, but executed

after he retired) went for five and a half hours on 2 September 1962. Despite failing to convince his civilian superiors to upgrade the nation's defenses, Kuter had at least given his people the opportunity to practice their skills—a month and a half before the Cuban Missile Crisis, when NORAD's interceptors were ordered to DEFCON 3.

Defense against air-breathing threats was not the only focus of Kuter's tenure as CINCNORAD. He also activated the Ballistic Missile Early Warning Sites (BMEWS), formed the nation's satellite tracking service and led the groundbreaking for the iconic Cheyenne Mountain control center, when the plunger he pushed blasted away the first rock from what would become a nuclear-hardened command center. Kuter retired from the Air Force in July 1962, but his aviation career did not end there.

He went on to be Pan Am's executive vice president immediately after retiring from active service. While at Pan Am, he played a central role in coordinating the Pan Am-Boeing project to design and build the iconic 747 jumbo jet between 1966 and 1970. Even after he retired from Pan Am, he continued to be an active advocate for air force concerns, penning multiple articles in *Air Force Magazine* and other publications. Despite his skill with a pen, he unfortunately did not start writing his memoirs until he was already ill with emphysema. He died on 30 November 1979, and was buried at the United States Air Force Academy cemetery. His longtime friend Possum Hansell and airpower historian I.B. Holley both wrote long articles eulogizing him in *Aerospace Historian* journal. In addition to the legacy that can be found in many air force policies and programs, he left an extensive collection at the Air Force Academy, which his wife Ethel continued to contribute to, until she passed away in 1993.

Chapter 10: Conclusion

What, then, can be said about General Laurence Sherman "Larry" Kuter and his impact on the air force he served? This study of Kuter's life and career yields five observations. First, individuals matter, and Larry Kuter had a greater role in shaping the United States Air Force and its antecedents than is commonly appreciated. Second, the impact that Air Corps Tactical School instructors—even members of the "Bomber Mafia"—had on their students was likely minimal, but the school's impact on its faculty—particularly its most junior members (notably Larry Kuter, Possum Hansell and Hoyt Vandenberg) was almost inestimable. Third, fighter, not bomber, pilots dominated the senior ranks of the air force and its antecedents from the Interwar Period through well into the 1950s. Fourth, the Army's interwar personnel policies had a disproportionately negative impact on the Air Corps (but in the end a very positive impact on Kuter's career). The effects of those policies (admittedly many of which were externally imposed by Congress and shaped by Depression-era funding), combined with the massive Army Air Corps/Army Air Forces expansion from 1939 through 1944 (that was largely necessitated by the Army Air Corps remaining a proportionally small part of the Army through the interwar period), provided a greater justification for service independence than strategic bombing did. The foregoing observations contribute to a fifth and final one: the First Gulf War in 1991 was the first major war that the air force fought, wherein it

had reasonably full control over the selection and professional development of its people, all the way up to its senior leaders.

Larry Kuter's career through the end of the Second World War alone should place him as one of the key builders of the U.S. Air Force. At the end of the 1934 Airmail Crisis, the EZAACMO organizational history he wrote help build support for the establishment of the GHQ-Air Force in 1935, which represented an early move toward eventual air force independence. At the Air Corps Tactical School from 1935 to 1939 when bomber doctrine grew in significance at the school—Kuter was the one who primarily authored the bombardment text and course materials and presented the lectures. In the War Department, his strategic mind and bureaucratic and rhetorical skill enabled him to coauthor and secure approval for multiple Army Air Corps/Army Air Forces expansions, most notably AWPD-1 in 1941, which drove wartime air strategy and production. He also coauthored and secured approval for the 1942 War Department reorganization, which helped put army air power and ground power on an equal footing. After helping successfully lead the Allied tactical air forces in Northwest Africa, he secured approval for FM 100-20, airpower's "Declaration of Independence" (even if he did not personally write the document).

Throughout much of the Second World War, Kuter helped build the intellectual and organizational infrastructure that enabled air force independence. His work as a key joint and combined air planner helped ensure global airpower was employed efficiently and effectively. In pushing for, and ultimately helping establish, an overall theater air command—U.S. Strategic Air Forces (USSTAF)—in Europe, he helped ensure airmen

had a greater degree of positional equality in the theater. In the Pacific, he built the organizational infrastructure—first 20th Air Force, then U.S. Army Strategic Air Forces (USASTAF) —for the strategic bombing campaign against Japan, which likewise gave airmen better positional authority, while simultaneously setting the pattern for what would become Strategic Air Command. Finally, Kuter headed the planning for postwar air force independence from 1943-1945 in Washington. His selection to represent General Arnold at the Malta and Yalta conferences seems remarkable, but it can be read as merely recognizing the obvious. The AAF buildup that Kuter and his fellow AWPD-1 coauthors had set in motion in 1941 and reworked since was essentially complete, and nobody was better-acquainted with Arnold's plans and policies than the thirty-nine year old major general. He, like Arnold, had come to see airpower as encompassing the whole of the nation's aviation capabilities, and Kuter was more than able to argue Arnold's points for him. The way he ended the war seems fitting. The prewar bomber advocate and wartime bomber and fighter commander completed the war by proving the value of airlift, with the first airlift of MacArthur's troops into Japan. While the push for service independence was the work of many hands, Kuter's actions substantially set the stage for an independent United States Air Force after the war.

Kuter's experiences during the Second World War, combined with army interwar and wartime policies, made him figuratively and almost literally peerless. This enabled him to have an outsized influence on his service. On V-J Day, Major General Kuter was just eighteen years into his military career and forty years old, so he had substantial time and opportunity to help implement plans he had made prior to Allied victory. He ensured

access to overseas basing and enabled the establishment of an effective postwar global air commerce system as a State Department diplomat. As MATS commander, he advocated for and proved the value of centrally controlled, functionally aligned airpower (in this case global air transport) by first organizing MATS, then leading the command during both the Berlin Airlift and the Korean War Pacific Airlift. As Air University commander, he made air force professional military education schools more rigorous, led doctrinal development for nonnuclear missions and encouraged out-of-the-box thinking through Project Control.

It is thus a bit ironic that Kuter is remembered as a bomber zealot, since he spent the last seven years of his career as a four-star commander of fighter-centric commands. As Far East Air Forces commander, he argued for, and ultimately succeeded in establishing, an overall theater air command for the Pacific, by establishing and becoming the first PACAF commander in 1957. As PACAF commander, he demonstrated the value of centrally-controlled airpower when he used theater conventional airpower (backed by the implied threat of nuclear weapon employment), in coordination with ground and naval units, to blunt mainland Chinese aggression in the Second Taiwan Straits Crisis in 1958. As CINCNORAD, he enhanced the nation's defenses against air and missile attack. He broke ground on the nuclear-hardened Cheyenne Mountain command complex, stood up the Ballistic Missile Early Warning System and led two of the three Cold War air defense exercises (Sky Shields I-III), wherein all air traffic in the United States and Canada was shut down—in one case for

twelve hours—to test the nation's air defenses. After Sky Shield III, the next time American airspace was shut down to civilian traffic was 11 September 2001.

During his career, Kuter led the establishment of what became the Air Force
Historical Research Agency, wrote two books, published a stack of magazine articles,
gave innumerable speeches, and left behind an archival collection that has informed
substantial numbers of scholarly and popular works. All of those works were directed
toward airpower topics. In sum, there are few other senior air force leaders who did more
to build the air force and spur the thinking of his fellow airmen throughout his career than
Larry Kuter.

Kuter's career success, and that of many of his fellow Air Corps Tactical School graduates, had little to do with his ACTS attendance. In fact, there is little evidence that the ACTS substantially altered the thinking of most of its graduates. Many of the AAF's (and early air force's) senior leaders graduated from the school, but correlation does not mean causation. Only 900 Air Corps officers graduated from the school, which would seem to indicate a degree of selectivity. There were fewer than 1,300 officers on active duty in 1938, though, so most professional prewar airmen were graduates from the school. Furthermore, preference was given to more-senior students (but some high-potential junior officers like Kuter also got to attend). That ACTS graduates—who comprised the bulk of the Air Corps' prewar senior officers and high-end junior officer talent—ended up in positions of substantial wartime authority should be no surprise.

If ACTS was a major force in changing airmen's minds regarding strategic bombardment, then Kuter would have to have been one of the most effective instructors

in air force history. Kuter either directly taught bombardment doctrine to the majority of officers who graduated from the school, or indirectly instructed them by virtue of the fact that those who attended during the 1939-40 academic year were taught from condensed versions of Kuter's bombardment course materials. Since Kuter's students were in large measure senior-ranking fighter pilots, Kuter would have had to be impressive indeed to turn them from natural skeptics to bomber advocates.

ACTS was nonetheless vitally important for Kuter and the Army Air Corps as a whole. First, many of the service's intellectual leaders taught there. Bomber advocates Fairchild, George, Hansell, Kuter, Walker, Webster and Wilson were among the leading lights of the Army Air Corps during that period. They never completely overlapped at the school—only two to four bomber mafiosos taught together at any given time and they were always outnumbered by fighter pilots on the faculty—but the school did provide a place where the ACTS bomber mafia could build upon one another's ideas. It likely helped that the bomber advocates were outnumbered, that the school's leadership encouraged intellectual competition, and the students were naturally skeptical (mostly Great War-era fighter pilots, but the classes also included officers from Army ground branches, the Navy and the Marine Corps). The close working relationships bomber advocates established at the school—particularly between Fairchild, George, Hansell, Kuter and Walker—enabled the rapid production of AWPD-1 in 1941 and contributed to smooth, coordinated strategy-making throughout the war.

For Kuter, ACTS gave him a special advantage. Graduating at the top of his class put a significant feather in his career cap, but being retained as an instructor was the true

key to his success. His experience has no parallel in the current professional military education system. He operated on an equal plane with instructors who were substantially older and higher-ranking, and a number of them had undergraduate and graduate degrees from Ivy League schools. Kuter taught officers who were almost universally older and more militarily experienced. He wrote and taught one of the school's premier courses, bombardment, for four straight years to a largely hostile audience. He learned to speak and write even more clearly, effectively and convincingly, while simultaneously developing a very thick skin. He learned that he could put forward bold ideas—10,000-plane air forces and using land-based airpower to destroy naval fleets—and get away with it, so long as he had logic and evidence to back up his assertions. In giving, then professionally surviving, the Navy lesson and its aftermath, Kuter concurrently learned to be skeptical of both Navy and ground Army officers. All these lessons would prepare him well for duty in Washington.

A poorly understood contributor to Kuter's career success is how well officers lived at Maxwell Field in the 1930s, and how this contributed to his professional development. Pilots enjoyed high social prestige during the period, which certainly helped retain talent across the service. The economic situation in Depression-era Alabama made instructor duty at Maxwell Field especially attractive, though. The direct and indirect compensation the Kuters and their more-senior instructor peers received was certainly a factor in making Maxwell Field the intellectual center that it was. The Kuters lived in large, comfortable quarters (Captain Kuter's housing is now Colonels' quarters). The junior-ranking Kuters could afford (certainly with the help of Jim Crow) a maid,

laundress and handyman. Their social position and salary enabled them to maintain a friendship with and host their multimillionaire friends, the Sweets. These factors made it easier for other talented individuals to want to remain as instructors at the school. While the entirety of Kuter's formal military education consisted of just one year at ACTS, the informal one he received for four years as an instructor—among military and societal elites—contributed substantially to his ability to serve as a general officer and diplomat not too many years after he left Alabama.

Studying Kuter's interactions with his superiors and peers indicates that fighter generals led the early air force for longer than is appreciated, and that fighter pilots' dominance of the early air force is poorly understood. The common historical understanding is best encapsulated in the work of a non-historian: Mike Worden's 1998 work *Rise of the Fighter Generals*, which does an excellent job illustrating how fighter pilots came to dominate the air force senior leadership ranks starting in 1978. From the Interwar Period until the late 1970s, the story goes that bomber generals dominated the senior leader ranks. The problem with this line of thinking is that many of those Worden characterizes as bomber generals spent one and even two decades (even more in some cases) of their prewar careers as fighter pilots. Worden characterizes Kuter as a bomber general, even though Kuter spent more time commanding fighters than bombers during the war, he ended the war in air transport and never led a bomber command after the war.

The fact that fighter pilots led the Air Force and its antecedents from the interwar years through 1961 raises interesting questions: Why did the numerically superior fighter

¹ Worden, Rise of the Fighter Generals.

pilots fail to make a strong case for fighter aviation before the Second World War? If Kuter, not to mention his boss General Arnold, was so bomber-myopic, why was it he who helped secure approval of FM 100-20—a tactical airpower doctrine manual? When did the transition from fighter to bomber pilot leadership actually happen?

Kuter's selection to head the ACTS bombardment section as a junior lieutenant, fresh out of ACTS himself, indicates that he was a gifted individual. Even more so, the fact that so many fighter pilots bought into the notion of strategic bombardment indicates that the available evidence prior to the war and lived experience during the Second World War so favored strategic bombing that experienced fighter pilots could help but become bomber advocates. The evidence throughout this narrative indicates that Kuter saw airpower as much more than simply strategic bombardment: he was as much a tactical airpower and airlift advocate as he was a strategic bombing spokesman, because the various missions airmen could perform were part of a unitary whole. Airmen needed at least functional independence during the war, as encapsulated in FM 100-20, in order to best utilize airpower for the overall war effort, rather than seeing it penny-packeted to individual ground commanders.

Kuter's experience indicates that bomber pilots dominated the Air Force's senior officer ranks for a comparatively short period in its history, and that dominance can be ascribed to the work of a few individuals. Those individuals' outsized influence was due to personnel dynamics that stretched back to the interwar years. The key turning point was in 1957, when the vice chief of staff position came open. That year, fighter pilot Nate Twining moved up to become chairman of the joint chiefs and fighter pilot Tommy

White moved from vice chief to chief of staff. There were three four-star generals who had risen through the ranks so quickly that they could serve a full four years as vice chief, then still be able (with a waiver) to serve a full four-year term as Air Force chief: a pair of broad minded intellectuals with wide-ranging experience—Norstad and Kuter—and LeMay, a brilliant tactician and combat leader, who was not well-known for his breadth of vision or assignments. Air force leaders chose the bomber tactician, with significant ramifications for the future of the service.

In retrospect, Kuter's non-selection to be vice chief in 1957 appears to be as inevitable as it was damaging to the intellectual and experiential diversity of the Air Force. Norstad, a broadly-experienced fighter pilot, was already NATO's highest-ranking general (Supreme Allied Commander-Europe—SACEUR). Making him vice chief would not only have been a demotion, but would have meant that a non-airman would move into the SACEUR billet. The Norstad option was thus untenable. Kuter was a non-option for much the same reason. Due in large part to Kuter's efforts, PACAF and FEAF were to be merged that same year, and Kuter was the ideal candidate to lead that new, consolidated command. Not only did Kuter have two years of four-star command experience in the theater, but he would also be the highest-ranking of the three component commanders in the Pacific. This could conceivably lead, starting in 1958, to airmen serving as the CJCS, three unified combatant commanders (SACEUR, CINCNORAD and CINCPAC—all of which reported directly to the JCS); and a specified commander (CINCSAC, who also reported directly to the JCS). Making Kuter the vice chief, then, would be seem to be foolhardy, and besides, Kuter had made it clear years before that he had no desire to

return to Washington. LeMay, the most senior of three primary options, went to the Pentagon and the intellectuals remained overseas, far from the center of Air Force power.

Between LeMay, who had taken command of SAC nine years earlier and had worn four stars since 1951, and his philosophical twin Tommy Power, who got a fourth star and took LeMay's place as SAC commander, bomber leader dominance from 1957 forward was all but inevitable. LeMay would remain in Washington for the better part of the next eight years, serving as vice chief until 1961, and then chief until 1965. Power would lead SAC for over seven years, retaining command until 1964. The combination of the prototypical bomber zealot LeMay in Washington, who spent twenty-one years of his thirty-five year active-duty career as a general (with *thirteen* of those years as a four-star), and his philosophical twin Power, who spent thirteen years in SAC (six years as vice commander and seven as four-star commander) likely did more to alter the long-term leadership mix at the Air Force's senior levels than ACTS before the war or generational dynamics afterward. It is impossible to say if or how the Air Force might have been different, had a more broad-minded individual been made vice chief in 1957.

Larry Kuter's career provides a clear illustration of how and why service independence was so necessary for the comprehensive application of airpower, even as it explains the extraordinarily rapid rise Kuter and others experienced during and after the Second World War. LeMay and Norstad reached four-star rank in just 22 years (well before current-day airmen can even think of pinning on their first stars) and Kuter and Power earned theirs 28 years into their careers because Air Force independence created the four-star billets and there were so few other viable alternatives. Their extraordinary

individual accomplishments are best understood, then, as indicative of organizational failures. Kuter's career provides a useful lens for understanding this dynamic.

In 1923, Kuter and his West Point classmates were neither recruited for nor selected to attend the military academy based on their physical qualification for, or even interest in, aviation service. This weakened the pool of potential air leaders from the start. At West Point, those like Kuter who happened to be physically qualified were not encouraged to choose the Air Corps, which hobbled the service's future even further. Within the Air Corps, the combination of airmen being commissioned later during the Great War than their ground army counterparts, limited growth of the Air Service/Air Corps as a whole, and Congressional demands that the Air Corps produce more pilots than the Air Corps could absorb, incentivized reserve officer instructors to wash regular officers out of flying training, which further thinned the pool of future senior air leaders. The flying units thus ended up, for the most part, being collections of increasingly longin-the-tooth Great War airmen and young reserve officer pilots, who had been winged aviators for two years or less and thus required substantial training to establish and maintain their competency. This was an inefficient way to build a competent, professional military air arm, but it did make the very few regular officers who made it through pilot training—especially those like Kuter who possessed a modicum of skill and ambition—highly prized.

Kuter's Air Corps Tactical School education, with its emphasis on air strategy and general staff work, was ill-suited to an officer who had yet to formally command even a squadron. This was, again, due to the Air Corps lacking the personnel and funding to

create separate company grade and field grade oriented courses for airmen to attend. The good news for Kuter was that the gross imbalance between rank and responsibility within the Air Corps (due to promotion policies and stagnation in growth) meant that Kuter got to attend a course that was as much geared toward war college students as it was toward company grade officers. Consequently, he was exposed to concepts he never would have heard if the Air Corps had a more normalized sequence of instruction. Unfortunately, in building their syllabi, Kuter's ACTS instructors did not have ready access to the latest reports from overseas. Air attaches did not exist, and what reports military attaches did file were not freely shared with the Chief of the Air Corps. Kuter got a great airpower education, but little about the program made pedagogical sense.

Kuter's selection to serve as the sole bombardment instructor at ACTS immediately upon graduating from the school, and his selection for duty in the War Department General Staff four years later, was a further indictment of the service's personnel management practices. Even if Kuter was a superior individual, it is still difficult to see how it could be that no one better could be found to teach the school's premier course of instruction. Likewise, General Marshall assessed in 1939 that a thirty-four year old captain, a non-CGSS graduate to boot, would do a better job on the Army's most senior headquarters staff than the notionally better-trained individuals coming out of Fort Leavenworth. Kuter's selection to serve in the WDGS secretariat and Marshall's decision to jump-promote Kuter to brigadier general were further indicative an ill-begotten system for identifying, training, educating and otherwise professionally equipping interwar airmen for the duties they would be called upon to perform.

The clearest evidence, though, to support service independence can be seen in the massive Air Corps/AAF prewar and wartime expansion. The aforementioned challenges senior Air Corps leaders faced throughout the interwar years did little to help build a balanced approach to the combat application of airpower. The urgency of creating a wartime strategy and mobilization plan combined with the necessity to greatly expand the army air arm to meet wartime requirements served to amplify every mistake the planners made—not least of which was the failure to recognize that long-range fighters could not only be designed and built, but that they would be vitally necessary in air warfare over Europe. Such shortfalls were inevitable, though, when manning was so low that the AAF's officer leadership had to grow three-hundredfold (nine times faster than the rate of the ground Army) in seven years. The wastage in time, money, materiel, and human lives as the Army Air Forces grew to meet its wartime requirements is difficult comprehend. The cost of expansion did not just hurt the army's air arm, though. In order to meet its growth and attrition requirements, the AAF absorbed substantial numbers of high-quality recruits. While the AAF actually got less than its appropriate share of talent relative to its growth, the effect was undeniable: the AGF was robbed of the high-quality men it needed to lead troops in combat.

In 1944, the year the AWPD-1 team predicted the AAF would be equipped to prosecute its air campaign against Germany, the Allied air campaign against the Axis hit its full stride. The Big Week air campaign to break the Luftwaffe's back began on 20 February of that year. On that same day, Kuter pinned on his second star. Two days later, USSTAF stood up under Tooey Spaatz in Europe. A month later, the AAF hit its peak

wartime strength. The war would continue for another year and a half, but from then until the war's end, the army's air arm would prove quite effective. Theater airpower had largely been consolidated in Europe, and Hal George was operating a global air transport system from Washington. Twentieth Air Force would stand up two months later and start directly attacking Japan. Atomic bombs dropped on Hiroshima and Nagasaki would effectively end the Second World War, and MacArthur's first ground troops into Tokyo would arrive via an airlift Kuter arranged.

From a professional development perspective, though, the AAF was in shambles. In addition to its "hump" of Great War-era officers, it had an even larger mass of personnel who joined between 1939 and 1945. Those individuals, while they were war veterans, had for the most part little in the way of undergraduate studies, much less professional military education.² Kuter, with his West Point diploma and one year at ACTS, had gotten more PME instruction than over 99 percent of the officers on active duty. Of course, the AAF was still part of the Army, so the Air Force would not have complete control over its accession and training programs until service independence in 1947. Even then, the Air Force Academy would not graduate its first cohort of officers until 1959. Kuter and his senior Air Force peers did what they could, in the midst of the Berlin Airlift, Korean War and numerous smaller contingencies like the Second Taiwan Straits Crisis, to professionally develop their service. The Vietnam-era group of senior

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² Cameron, *Training To Fly*, 384; U.S. Air Force, "General John Paul McConnell." Until 1940, pilot candidates had to be at least twenty years old and have at least two years college. That year, the Air Corps dropped the college requirement and lowered the enlistment age to eighteen. Even those who entered the service well before the war got little professional education. General John P. McConnell, who graduated from West Point in 1932 and served as chief of staff from 1964 to 1969, never attended a single professional military education course in the entirety of his officer career.

air force officers was, unavoidably, still very much the product of the interwar period and the Second World War.

The first air war in which professional U.S. Air Force airmen had reasonably full ownership of their people and mission was fought in 1991 (which was, incidentally, the first year an Air Force Academy graduate became the school's superintendent, after an endless string of West Point grads). Operation Desert Storm was the first war fought wherein all of the air force's officers and enlisted personnel—all the way up to the service's most senior ranks—had been recruited, educated, trained, organized, equipped and led by professional airmen. Consequently, the Air Force had a deep bench of talent from which to select its senior leaders, and the operation's execution reflected the product of decades of personnel and technology acquisitions and development.

The Desert Storm air campaign demonstrated that the Air Force had come a long way. Air force General Chuck Horner led the coalition theater air campaign, on a coequal basis with theater land and maritime commanders. Air Force units arrived in the Middle East trained and equipped to execute their respective missions, owing substantially to the Air Force's functionally-aligned commands: Strategic Air Command, Tactical Air Command and Military Airlift Command. All airmen, officers and enlisted, had been recruited, selected and trained according to Air Force requirements. The officers had all gotten adequate Air Force pre-commissioning educations, either through Air Force ROTC, the U.S. Air Force Academy, or Air Force Officer Training School. A

³ U.S. Air Force, "Lieutenant General Bradley C. Hosmer," text, *Biographies*, accessed May 15, 2015, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/106697/lieutenant-general-bradley-c-hosmer.aspx.

rationalized PME system—Squadron Officers' School, Air Command and Staff College, and Air War College had trained appropriate numbers of officers at their respective levels in matters relevant to their ranks and duties. At those schools, Air Force doctrine, written without fear of blowback from ground and naval faculty and students, was taught. In other words, much of what Kuter and his peers had worked toward had finally been fulfilled.

Airpower application during the Gulf War would have been encouraging, but perhaps surprising, to Second World War airmen. The Americans led the British, rather than the other way around. The Air Force had adequate people and a robust intelligence collection, analysis and distribution system from the outset of the campaign (rather than having to build such a capability from scratch). The strategic bombers were actually fighters (F-117s), which not only could and did strike their targets accurately, but struck two targets per aircraft (rather than needing fleets of aircraft to take out a single target). Those bombers did in fact consistently get through the enemy's defenses because of their stealth characteristics without need for fighter escort, and the amount of destruction needed to eliminate targets was comparatively minimal. Fighters had no problems protecting non-stealthy bombers, due to adequate numbers of drop tanks and airborne refueling capability. Most remarkably, the air-ground relationship went reasonably smoothly, and the ground war itself famously lasted just 100 hours.

There was plenty that was familiar, though. The KC-135 tankers and B-52 bombers used in the operation were the same ones (albeit with some upgrades) rolling off the assembly lines when Kuter retired in 1962. Interservice rivalry was very much alive

and well, although it was more muted than in Kuter's day. Fighter pilots were again mostly running the Air Force, much as they had for most of Kuter's career, and just as at ACTS, they were staunch precision bombing advocates.

Ethel Kuter was alive during Desert Storm, and thus got to see the results of her husband's work. When she finally passed away in 1993, she was buried next to Larry, her high school sweetheart, in Section 3, Row B, Plot 75 at the Air Force Academy cemetery. George Stratemeyer is just six plots away (Row B, Plot 67). Possum Hansell and Hal George are just one row over from Stratemeyer (Row A, Plots 68 and 69, respectively). Others in the section include fellow four stars Sammy Anderson, Ben Chidlaw, Truman Landon, Curt LeMay, Rosie O'Donnell, J.P. McConnell and Tooey Spaatz. If somehow resurrected, they might be impressed at how the service they built has turned out.

On the other hand, Kuter and company would likely have much to criticize, particularly regarding professional military education. The Air Force has lost its appreciation and understanding of history, to the extent that few airmen would even know who Larry Kuter was, or his impact on the service. Air Force PME attendance and instructor selection seem far too rigid. During the Interwar Period, highly talented young officers like Larry Kuter and Possum Hansell could attend professional military schools on an equal basis with officers who possessed a decade or more experience than they. Very high-quality junior officers like Kuter, despite having little in the way of professional education, could even teach far more senior-ranking officers. There is no modern-day parallel to Kuter's ACTS experience. No modern-day officer with seven years in service (a captain), no matter how good he or she is, would ever be selected to

attend a PME school alongside officers with ten to fifteen years more experience (lieutenant colonels and colonels). While having a more normalized progression of schooling and operational assignments for officers is likely a good thing overall, the environment that enabled Kuter's rapid growth as a strategist and diplomat no longer exists. Worse still, instruction at PME schools today is likely more dogmatic today than it was at ACTS, since many major doctrinal disputes have largely been settled (or at least they are perceived to be).

The up-or-out promotion policies Kuter helped implement, which were appropriate for the time, have outlived their usefulness. When he was personnel chief, the problem was having too many older, experienced individuals (the World War I and II personnel "humps"), such that they needed to be pushed out to make room for new blood. Presently, the service has the opposite problem: too few high-quality individuals wanting to remain on active duty, particularly in the pilot force. While the problems have changed, the available solutions have not. Even if the existing officer education and promotion system were producing Kuter-esque strategists, current compensation and retention policies would do little to keep them in active military service.

Perhaps the greatest source of dismay for Kuter, though, would be the disconnect between air force size and national strategy. In 1958, during the Second Taiwan Straits Crisis, the Air Force's overall size, and certainly in PACAF, was predicated upon the assumption that nuclear weapons could and would be used when necessary to defend Taiwan. When air force contingency plans were invalidated by the directive not to use nuclear weapons, so were the service's force structure assumptions. The island was

indefensible without at least the implied threat of nuclear weapons employment by the Americans. The mission could be accomplished without nukes, but the numbers of fighters, bombers, bombs, fuel, spare parts and the like would have to be dramatically increased in order to do so.

The United States Air Force is entering into a budgetary interwar period, largely saddled with equipment left over from the First Gulf War and personnel policies dating back to the Korean War. It is unlikely that another Kuter-esque individual will emerge from the circumstances and system currently in place. Unlike the first decade and a half of Kuter's career, the Air Force cannot compete with the civil sector with regard to monetary compensation. The social prestige associated with military service, particularly aviation service, is likewise a thing of the past; modern-day equivalents of the multimillionaire Sweets do not go out of their way to get to know Air Force officers, especially junior ones. The Air Force promotion and professional military education system, while a net positive for the service overall, naturally limits the impact individual leaders can have on their service. There will likely never again be airmen who spend over twenty years of their careers as general officers (seven or more of them as 4-star generals).

Unfortunately for the U.S. Air Force, the economic situation today makes remaining on active duty less economically favorable than transitioning to the civilian sector, especially for pilots. Perhaps studying Kuter's and his peers' experiences will help illuminate the best path for leading and shaping the Air Force forward into the future.

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Appendix A: Eastern Zone Air Corps Deficiencies on 10 February 1934¹

- (1) No organization, headquarters or staff trained and prepared to meet the emergency.
- (2) Lack of airplanes.
- (3) Lack of equipment, funds and supplies for adequate training.
- (4) Lack of adequate flying time to carry on proper training.
- (5) Lack of training of unit and detachment commanders in administrative matters.
- (6) Lack of training in field exercises under dispersed conditions (especially to meet a situation in which units were distributed among 41 different stations over an area of 756,418 square miles.)
- (7) Lack of airplanes properly equipped for instrument flying.
- (8) Lack of bombing planes of proper performance characteristics, or suitable for instrument and night flying under adverse weather conditions.
- (9) Lack of observation planes of sufficiently high cruising speeds.
- (10) Lack of adequate radio equipment (ground net and airplane).
- (11) Lack of sufficient experienced pilots beyond those required for administration.
- (12) Lack of trained communications and instrument mechanics.
- (13) Lack of a knowledge of the requirements for and proper use of small, mobile sets of equipment and supplies for field service.
- (14) Lack of transport planes.

(15) Lack of training in meteorology and radio aids to [navigation].

¹ Jones, "Report of the Eastern Zone, Army Air Corps Mail Operations: February 10-May 25, 1934," 12.

Appendix B: ACTS 1934-35 Academic Year Subject Breakdown

Air Force 85:10 Air Navigation 15:00 Antiaircraft 19:40 Attack Aviation 39:30 Balloons and Airships 7:30 Bombardment Aviation 49:20 Cavalry 16:20 Chemical Warfare Service 14:00 Coast Artillery 0:50 Combat Orders 23:00 Combined Arms 34:30 Engineer Corps 0:50 Equitation 86:00 Extension Courses 1:40 Field Artillery 20:30 Infantry 26:20 International Aerial Regulations 0:50 Logistics, Air 50:30 Logistics, Ground 9:50 Maps and Photographs 12:30 Medical Corps 0:50 Military Geography & Strategy 9:10 Military Organization 5:00 Mobilization 0:50 Naval Operations 4:10 Observation Aviation 29:30 Practical Flying 273:00 <th>Subject</th> <th>Hours of Instruction</th>	Subject	Hours of Instruction
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Table 4. ACTS 1934-35 Academic Year Subject Breakdown¹

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 $^{^{\}rm 1}$ Air Corps Tactical School, "Course Completion Certificate."

Given the above distribution of coursework, bombardment aviation comprised only 5% of the overall instruction. Fighter (attack, pursuit and observation) aviation instruction totaled 101 hours—more than twice the time was given to fighters than bombers. Given the pedagogical approach the air tactics chief Major Hal George took, that each section was expected to advocate for its own respective mission, rather than heeling to a particular doctrine. This indicates that bombardment instruction at ACTS was less prominent than historiography suggests. If attendance at ACTS substantially changed students' opinions regarding the value and capability of bombardment aviation, the bombardment instructors (notably Kuter) must have been highly gifted.

Appendix C: ACTS Class of 1934-35, Arranged by Birth Year

Name	Rank in Sep 1934	Birth Year	Branch	
McCulloch, John M.	Captain	1887	Air Corps	
Burge, Vernon L.	Major	1888	Air Corps	
Kilner, Walter G.	Major	1888	Air Corps	
Glasgow, Lawrence B.	Major	1889	Infantry	
Murphy, William H.	Captain	1889	Signal Corps	
Propst, Rudolph W.	Captain	1889	Air Corps	
Robbins, Oliver K.	Captain	1890	Air Corps	
Upston, John E.	Captain	1890	Air Corps	
Owens, Ray L.	Captain	1891	Air Corps	
Richter, John P.	Captain	1891	Air Corps	
Wheeler, Walter L.	1st Lieutenant	1891	Air Corps	
Wright, William B.	Major	1892	Air Corps	
Giles, Barney K.	Captain	1892	Air Corps	
Giles, Benjamin F.	Captain	1892	Air Corps	
Kincaid, Alvan C.	Captain	1892	Air Corps	
Skemp, Samuel C.	Captain	1892	Air Corps	
Vanaman, Arthur W.	Captain	1892	Air Corps	
Crumrine, Clarence E.	Captain	1893	Air Corps	
Douglas, Charles	Captain	1893	Air Corps	
Harmon, Benjamin F.	Captain	1893	Coastal Artillery	
Kenyon, Horace S., Jr.	Captain	1893	Air Corps	
McCune, Milo	Captain	1893	Air Corps	
Skanse, Peter E.	Captain	1893	Air Corps	
Weddington, Harry	Captain	1893	Air Corps	
Brown, Raymond R.	Captain	1894	Air Corps	
Fairchild, Muir S.	Captain	1894	Air Corps	
Hewitt, Leland R.	Captain	1894	Air Corps	
Abbey, Evers	Captain	1895	Air Corps	
Branshaw, Charles E.	Captain	1895	Air Corps	
Chapman, Thomas H.	Captain	1895	Air Corps	
Flood, William J.	Captain	1895	Air Corps	
Gates, Byron E.	Captain	1895	Air Corps	
Kimble, Frederick von H.	Captain	1895	Air Corps	

Table 5. ACTS Class of 1934-35, Arranged by Birth Year¹

Table Continues

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¹ Finney, History of the Air Corps Tactical School, 1920-1940; Official Army Register, January 1, 1934.

Table 5. Continued

Sanderson, Lawson H. M.	Captain	1895	U.S. Marine Corps
Umstead, Stanley M.	Captain	1895	Air Corps
Wallace, William J.	Captain	1895	U.S. Marine Corps
Amis, William N.	Captain	1896	Air Corps
Glenn, Edgar E.	Captain	1896	Air Corps
Kennedy, Emile T.	Captain	1896	Air Corps
Schramm, Ned	Captain	1896	Air Corps
Talbot, Clarence P.	Captain	1897	Air Corps
Guymon, Vernon N.	Captain	1898	U.S. Marine Corps
Maitland, Lester J.	Captain	1898	Air Corps
Stearley, Ralph F.	1st Lieutenant	1898	Air Corps
Weikert, John M.	1st Lieutenant	1898	Air Corps
Vandenberg, Hoyt S.	1st Lieutenant	1899	Air Corps
Douglass, Robert W., Jr.	1st Lieutenant	1900	Air Corps
Edwards, Sheffield	1st Lieutenant	1902	Field Artillery
Oliver, Robert C.	1st Lieutenant	1902	Air Corps
Rodieck, Leonard H.	1st Lieutenant	1902	Air Corps
Matheny, William A.	2 nd Lieutenant	1902	Air Corps
Stroh, Claire	1st Lieutenant	1903	Air Corps
Hansell, Haywood S., Jr.	2 nd Lieutenant	1903	Air Corps
Vance, Reginald F. C.	2 nd Lieutenant	1903	Air Corps
Kuter, Laurence S.	1st Lieutenant	<u>1905</u>	Air Corps
Hood, Reuben C., Jr.	2 nd Lieutenant	1907	Air Corps
Tevfik, Mohmet	Captain	Unknown	Turkish Army
Ziya, Mustafa	Captain	Unknown	Turkish Army
Gonzalez, Javier G.	1st Lieutenant	Unknown	Mexican Army

Table 5. ACTS Class of 1934-35, Arranged by Birth Year

Kuter was noteworthy throughout much of his career for his relative youth. Of the 49 Air Corps officers in his class, he was not only the second-youngest, but was at least a decade younger than two-thirds of his classmates. In terms of military seniority, he was the fifth-most junior officer in the class. The above list also indicates the effects of seniority-based promotions and largely seniority-based PME attendance. Despite this

being the fifteenth ASFOS/ASTS/ACTS class, the Air Corps was still working through its backlog of Great War-era airmen. Ralph Stearley, even though he had been commissioned just before the Armistice in 1918, was still just a first lieutenant and ACTS was the first PME school he attended, despite having been commissioned almost sixteen years prior. The very young and junior lieutenants had to be both uniquely qualified and lucky to be selected. The nine Air Corps lieutenants in Kuter's class born in 1900 or later ultimately earned twelve stars between them, with two of them (Kuter and Douglass) reaching major general rank during the Second World War.

Appendix D: Early Four-Star Air Force Generals's PME Attendance

		Schools Attended:*									
Name	Com m Yr	ACE S	ACTS	CGSS	War Coll	Indu s Coll	Other	Yrs in PME Schools**	Yrs as Genera l		
Pioneer Generation											
Arnold, Henry H.	1907			X			X	2	11		
Spaatz, Carl	1914		X	X				2	8		
McNarney, Joseph T.	1915		X	X	X			7	11		
Cannon, John K.	1917		X	X				2	12		
Kenney, George C.	1917	X	X	X	X			9	11		
Fairchild, Muir S.	1918	X	X		X	X		9	9		
Twining, Nathan F.	1918		X	X			X	3	18		
White, Thomas D.	1920		X	X			X	4	19		
Chidlaw, Benjamin W.	1922	X	X	X				3	13		
Cook, Orval R.	1922	X	X	X				3	13		
Vandenberg, Hoyt S.	1923		X	X	X			6	11		
Weyland, Otto P.	1923		X	X				2	16		
Partridge, Earle E.	1924			X				3	17		
Cabell, Charles P.	1925		X	X				_ 2	17		
						Ave	erage:	4.1	13.3		
			Senior W	W II Gene	eration						
Johnson, Leon W.	1926		1/4					1/4	18		
Kuter, Laurence S.	1927		X					<u>5</u>	21		
Anderson, Samuel E.	1928						X	1	20		
Everest, Frank F.	1928	X	X					2	17		
Landon, Truman H.	1928		1/4					1/4	20		
O'Donnell, Emmett, Jr.	1928		1/4					1/4	19		
Gerhart, John K.	1929	X	1/4					11/4	20		
LeMay, Curtis E.	1929		1/4					1/4	21		
McKee, William F.	1929						X	1	20		
Power, Thomas S.	1929		1/4				X	11/4	20		
Smith, Frederic H., Jr.	1929							0	19		
Bradley, Mark E.	1930	X	1/4				X	21/4	16		
Norstad, Lauris	1930		1/4					1/4	21		
Rawlings, Edwin W.	1930							0	14		
Sweeney, Walter C., Jr.	1930							0	17		
Lee, Robert M.	1931		1/4					1/4	21		
Schriever, Bernard A.	1931	X						1	13		
Smart, Jacob E.	1931							0	16		
Strother, Dean C.	1931							0	23		
Hobson, Kenneth B.	1932							0	16		
Kelly, Joe W.	1932					X		1	13		
McConnell, John P.	1932						•	0	25		
						Ave	erage:	0.8	18.6		

Table 6. Early Four-Star Air Force Generals's PME Attendance

^{* &}quot;X" = attended yearlong school; ½ = attended ACTS when it was three months long
** Years in PME schools = total years spent in PME schools, either as a student or instructor

The Air Force's Pioneer Generation generals spent, on average, five times longer in prewar PME schools than the Senior World War II generals. If Kuter were removed, the Senior World War II generation's prewar school average would decrease to six months (or one-eighth that of the Pioneer Generation). Some Senior World War II generals attended professional schools during or after the war, but given the intensity of wartime experience, it seems unlikely these schools had much effect on the thinking of those combat leaders.

Appendix E: AAF vs. Ground Army Personnel Statistics: June 1930 to August 1945

			Overall Army			Air Corps/AAF			Grou	Sources		
		Month	Officers	Enlisted	Total	Officers	Enlisted	Total	Officers	Enlisted	Total	
Stasis	sis	Jun-30	12,160	125,485	137,645	1,271	12,034	13,305	10,889	113,451	124,340	ф Т
	Jun-31	12,232	126,585	138,817	1,291	13,194	14,485	10,941	113,391	124,332		
	sc sc	Jun-32	12,230	120,970	133,200	1,281	13,369	14,650	10,949	107,601	118,550	ig
ics	Annual Statistics Interwar Air Corps Stasis	Jun-33	12,231	122,784	135,015	1,320	13,497	14,817	10,911	109,287	120,198	Reports of the Secretary War
tisti		Jun-34	12,217	124,748	136,965	1,320	14,314	15,621	10,911	110,434	121,344	Se
Stal	ır A	Jun-35	11,985	125,981	137,966	1,226	14,719	15,945	10,759	111,262	122,021	ᆙᇍᆡ
a	.wa									138,406	149,258	of tl War
nu	ter	Jun-36	12,075	154,046	166,121	1,223	15,640	16,863	10,852			l ξ / l
Ā	드	Jun-37	12,275	165,833	178,108	1,273	17,299	18,572	11,002	148,534	159,536	e l
		Jun-38	12,479	170,976	183,455	1,287	18,909	20,196	11,192	152,067	163,259	8
	Prewar Growth	Jun-39	13,814	174,079	187,893	1,549	20,838	22,387	12,265	153,241	165,506	Annual
	re, ro,	Jun-40	14,677	249,441	264,118	3,361	47,804	51,165	11,316	201,637	212,953	E
	Р	Jun-41	94,103	1,361,462	1,455,565	10,611	141,514	152,125	83,492	1,219,948	1,303,440	٩
		Dec-41	116,058	1,562,256	1,686,403	24,521	329,640	354,161	91,537	1,232,616	1,332,242	
		Jan-42	121,735	1,759,672	1,889,943	30,040	387,486	417,526	91,695	1,372,186	1,472,417	
		Feb-42	130,048	2,004,972	2,144,601	32,917	449,816	482,733	97,131	1,555,156	1,661,868	
		Mar-42	140,548	2,236,547	2,387,746	35,987	511,766	547,753	104,561	1,724,781	1,839,993	
		Apr-42	152,052	2,498,108	2,661,237	41,207	558,754	599,961	110,845	1,939,354	2,061,276	
		May-42	166,879	2,654,395	2,834,610	47,352	612,394	659,746	119,527	2,042,001	2,174,864	
		Jun-42	190,662	2,867,762	3,074,184	55,956	708,459	764,415	134,706	2,159,303	2,309,769	
		Jul-42	216,060	3,039,894	3,272,803	68,894	771,743	840,637	147,166	2,268,151	2,432,166	1
		Aug-42	244,037	3,320,524	3,585,120	82,130	904,208	986,338	161,907	2,416,316	2,598,782	1
		Sep-42	276,003	3,670,954	3,971,016	88,918	1,001,012	1,089,930	187,085	2,669,942	2,881,086	
		Oct-42	305,645	4,078,928	4,413,816		1,156,083		200,556	2,922,845	3,152,644	≥
		Nov-42	330,502	4,566,442	4,932,469			1,511,323	218,775	3,166,846	3,421,146	Ş.
		Dec-42	366,859	4,989,053	5,397,674		1,469,782		239,592	3,519,271	3,800,625	- Re
		Jan-43	397,443	5,370,755	5,824,517			1,696,866	257,467	3,813,865	4,127,651	- G
		Feb-43	423,114	5,643,652	6,139,362			1,859,569	270,037	3,937,160	4,279,793	isti
		Mar-43	452,769	5,968,003	6,508,854		1,872,436		279,556	4,095,567	4,463,205	tat
		Apr-43	474,585		6,719,827		1,952,168		292,828			SS
	<u>_</u>	May-43	495,035	6,147,248 6,257,813	6,858,591		1,986,522		297,516	4,195,080 4,271,291	4,585,902 4,674,550	<u> 2</u>
	ctic											유
	trac	Jun-43	521,435	6,358,200	6,993,102			2,197,114	315,561	4,366,960	4,795,988	<u>ë</u>
cs	oni	Jul-43	542,463	6,467,436	7,126,818			2,238,802	325,302	4,445,795	4,888,016	e l
tisti	N N	Aug-43	564,447	6,541,554	7,214,595			2,305,320		4,469,156	4,909,275	%
Monthly Statistics	no 8	Sep-43	585,757	6,577,113	7,273,784		2,075,529		339,428	4,501,584	4,951,926	
<u>></u>	ısic	Oct-43	593,579	6,625,157	7,333,474		2,102,371		339,783	4,522,786	4,977,307	ģ
달	par	Nov-43	609,836	6,676,669	7,405,665		2,117,740		344,206	4,558,929	5,022,295	a l
ΙŌ	Ë	Dec-43	621,035	6,738,879	7,482,434		2,099,535		346,688	4,639,344	5,108,552	est
-	me	Jan-44	634,395	6,792,871	7,556,157		2,112,857		347,101	4,680,014	5,156,006	👸
	Wartime Expansion & Contraction	Feb-44	645,086	6,874,195	7,653,036		2,106,938		348,525	4,767,257	5,249,537	rces Statistical Digest and Army Service Forces Statistical Review
	×	Mar-44	658,075	6,960,388	7,757,629		2,104,405		351,186	4,855,983	5,346,335	stic
		Apr-44	664,076	7,042,116	7,848,172	313,874	2,042,630	2,356,504	350,202	4,999,486	5,491,668	ta I
		May-44	674,665	7,086,708	7,910,496	322,350	2,050,097	2,372,447	352,315	5,036,611	5,538,049	s S
		Jun-44	692,351	7,144,601	7,992,868	333,401	2,038,891	2,372,292	358,950	5,105,710	5,620,576	rce
		Jul-44	697,401	7,191,703	8,049,770	342,914	2,060,892	2,403,806	354,487	5,130,811	5,645,964	Army Air Fo
		Aug-44	707,933	7,225,946	8,102,545			2,403,056	357,873	5,172,950	5,699,489	ļ ģ l
		Sep-44	719,671	7,213,079	8,108,129		2,033,357		361,747	5,179,722	5,716,848	<u> </u>
		Oct-44	718,092	7,204,580	8,103,376			2,382,410	357,249	5,183,013	5,720,966	4
		Nov-44	727,100	7,190,512	8,102,061		2,014,649		358,296	5,175,863	5,718,608	1 1
		Dec-44	737,192	7,127,897	8,052,693			2,359,456	361,219	5,144,414	5,693,237	
		Jan-45	741,307	7,139,700	8,070,929		1,967,642		363,881	5,172,058	5,725,861	1
		Feb-45	751,781	7,182,526	8,129,890		1,939,266		366,670	5,243,260	5,805,513	1
		Mar-45	756,588	7,182,320	8,157,386			2,325,842	370,672	5,257,329	5,831,544	1
								2,325,842				
		Apr-45	763,505	7,274,779	8,248,780				375,227	5,333,523	5,919,246	
		May-45	772,863	7,305,854	8,291,336			2,310,436	384,568	5,383,713	5,980,900	∤
		Jun-45	772,583	7,283,930	8,266,373			2,282,259	391,129	5,383,125	5,984,114	
		Jul-45	776,790	7,200,220	8,186,444		1,890,823		405,521	5,309,397	5,924,352	
		Aug-45	776,287	7,040,446	8,023,304	368,344	1,884,838	2,253,182	407,943	5,155,608	5,770,122	

Table 7. AAF vs. Ground Army Personnel Statistics: June 1930 to August 1945 520

The above chart is a compilation and comparison of multiple documents. The statistics through June 1941 are from the Annual Reports of the Secretary of War, which provide personnel numbers as of 30 June of their respective years. The statistics from December 1941 onward are from the Army Air Forces Statistical Digest and the Army Service Forces Statistical Review, and likewise reflect manning numbers at the ends of their respective months. Since these documents provide AAC/AAF statistics and overall Army statistics, respectively, the numbers of Ground Army personnel can be interpolated.

It might be significant that the AAF Statistical Digest only breaks personnel numbers into officers and enlisted, while the ASF Statistical Review breaks personnel numbers into officers, enlisted men, nurses, dieticians, physical therapists, warrant officers, flight officers and total WAC (Women's Army Corps). The discrepancy between how the two documents account for personnel might be significant; if the AAF document counts warrant and flight officers in the total officer count, while the ASF document does not, this could skew much the AAF proportionally grew, as compared to the Ground Army.

Even with this possible discrepancy taken into account, the AAF officer corps would still have grown—proportionally—about eight times faster than the Ground Army's officer corps. "Ground Army" connotes personnel other than those in the Air Corps (AAC) or Army Air Forces (AAF). Three aspects of the above chart are noteworthy. First, it appears both the AAC and Ground Army used the interwar enlisted force as a poor man's way of building its officer corps, as indicated by the enlisted pilots

with whom Kuter flew. The AAC was able to expand its pilot force on the cheap, without exceeding statutory limits on officer numbers. While the AAC officer corps remained the same size from 1930 to 1938, its enlisted force grew 57%. During the same time period, the Ground Army's officer corps similarly remained unchanged, while its enlisted force grew 34%. While the additional personnel in the air and ground arms would provide a ready source of officer candidates, who were essentially performing officers' duties while enlisted, it also meant the enlisted force was robbed of senior noncommissioned officers when wartime expansion came right when they were most needed. Second, the AAC/AAF overall—but particularly its officer corps—experienced explosive growth, particularly from mid-1939 to mid-1944. Third, the AAF enlisted force started shrinking well before the war was over. From a peak of 2.12 million in November 1943, it started dropping steadily, as enlisted troops were shifted toward the ground arms in preparation for the invasion of Europe. The AAF's enlisted force shrunk by over 10,000 men a month in the six months between November 1943 and May 1944 (just before the D-Day invasion).