

# Air & Space Reflections

THE JOURNAL OF THE AIR FORCE HISTORICAL RESEARCH AGENCY



AGILE  
COMBAT  
EMPLOYMENT  
IN WORLD  
WAR II

SECRET  
BALLOONS

ORIGINS OF AIR  
UNIVERSITY AT  
MAXWELL

THE  
INSTITUTIONAL  
MEMORY OF THE  
SPACE FORCE



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## About *Air & Space Reflections*

*Air & Space Reflections* is a Department of the Air Force (DAF) journal highlighting the history of the United States Air Force (USAF) and United States Space Force (USSF) as seen through the documents, artifacts, imagery, and other ephemera preserved in the repository of the Air Force Historical Research Agency (AFHRA). The views expressed within this journal are those of the contributing author(s) and do not necessarily represent the official views of DAF, USAF, USSF, the Department of Defense, or any other United States government agency. Unless noted otherwise, all images and documents displayed within the pages of *Air & Space Reflections* come from AFHRA's repository. To contact the editors of the journal, email AFHRA. [asr.1@us.af.mil](mailto:asr.1@us.af.mil).

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**Cover Image:** Documents and images in AFHRA's repository pertaining to Operation THURSDAY, a March 5, 1944 air-centric special operations mission in North Burma.





## Director's Corner

The Air Force Historical Research Agency (AFHRA) proudly serves as the institutional memory of both the United States Air Force (USAF) and the United States Space Force (USSF). As the hub of the Department of the Air Force's (DAF) history program, within this Agency's walls are more than 100 million historical primary source documents, pictures, maps, imagery, and other ephemera pertaining to air and space power from the early twentieth century to the present. AFHRA's repository stands as the largest archival collection of air and space power in the world and is primarily the result of the longstanding collaboration between USAF and USSF unit leaders and their embedded history offices.

In addition to preserving USAF and USSF documents, images, and artifacts for historical posterity, AFHRA's chief mission is to provide the USAF and USSF with timely historical information and analyses. It is with this mission in mind that AFHRA is proud to launch the publication of our new journal titled *Air & Space Reflections*. The term "reflections" was chosen because the journal seeks to *reflect* on the history, information, and stories contained within AFHRA's archival collection by publishing timely articles relevant to air and space power, and in the process showcase AFHRA's repository.

For this inaugural issue, the editors of *Air & Space Reflections* and I have selected articles that have relevancy today. In an article titled "Secret Balloons," E. Paige Vaughn examines an instance of World War II censorship in the small town of Bly, Oregon. While reading this article, readers will likely draw parallels to the ongoing threat that foreign balloons operating in American air

space pose to national security. The seemingly innocuous World War II balloon incident in Bly provides a timely analysis on the benefits and burdens of government secrecy on enemy strike capabilities.

The article "The Institutional Memory of the Space Force," written by William M. Clifton, details the Agency's ongoing efforts in collating, accessioning, and digitizing the USSF's archival collections dating back as far as the 1930s. Meanwhile, in an article titled "Agile Combat Employment in World War II," Patrick J. Charles focuses on the earliest implementors of Agile Combat Employment (ACE) in northern Burma. While today's Airmen relish in having a codified Air Force Doctrine Note 1-21, in 1944, a small, dynamic, and multi-capable force, known as Project 9, was the first to implement the hub and spoke command and control with overwhelming success. The article offers readers the cautionary evidence that sustaining and replicating innovative operational concepts requires both bold leadership and joint alliances.

In addition to these articles, this inaugural issue of *Air & Space Reflections* contains an article highlighting the origins and evolution of USAF reading lists, an article examining the politics of how Maxwell Air Force Base was chosen as the home of Air University, and a piece highlighting AFHRA's archival images of the Allied D-Day invasion of Pointe Du Hoc near Omaha Beach, France.





# Secret Balloons

## The WWII Balloon Bomb Incident Near Bly, Oregon

*E. Paige Vaughn*



Near the end of 1944, the Allies were handily defeating Japan on all fronts, and, in a last-ditch effort, Japan wanted to bring the war directly to the American people. Japan tried accomplishing this objective by devising a balloon bomb apparatus—a rudimentary unmanned aerial vehicle (UAV) of sorts loaded with explosives. In November 1944, Japan began launching hundreds of these bombs towards the United States in the hopes that they would ignite several wildfires along the West Coast, causing both mass destruction and panic.<sup>1</sup> Although most of these bombs either landed in the ocean or far away from any population centers, one happened to achieve its objective—a balloon bomb device near the small town of Bly, Oregon. This single device produced the only enemy-inflicted civilian casualties in the contiguous United States during World War II (WWII).<sup>2</sup>

It remains unknown exactly when the balloon bomb near Bly landed. Contemporary reporting on the incident varies. What is known, however, is that it landed undetonated sometime during the 1944-1945 winter season, and remained undiscovered for several months.<sup>3</sup> Then on May 5, 1945, a picnic group of five children led by two adults—Archie and Elsie Mitchell—encountered the balloon bomb.<sup>4</sup> The story goes that as Archie parked

and unloaded the car, Elsie accompanied the five children into the forest.<sup>5</sup> Suddenly, Archie heard someone shout they found something, and not long thereafter came an explosion. By the time Archie reached the group, the children had all passed away from their injuries, and Elsie soon followed.<sup>6</sup> Nearby, a small forest crew also heard the explosion.<sup>7</sup> Forest crew members Richard Barnhouse and George Donathan rushed to the scene, assisted a shocked Archie, and immediately drove into Bly to retrieve help.<sup>8</sup>

The United States Forest Service, upon receiving notice of the explosion, immediately responded to the scene and promptly called Western Defense Command (WDC) for military assistance in defusing any remaining explosives.<sup>9</sup> This was not the first time that WDC encountered one of these balloon bombs. The command had retrieved several such bombs prior to the Bly incident, and therefore had a general understanding of the components.<sup>10</sup>

Naturally, the incident shocked the Bly community. As news spread, people increasingly gathered outside the local phone operator building, hoping to learn whatever they could as federal, state, and local authorities alike rushed in and out.<sup>11</sup> But for days, the people of Bly would learn very little about the incident. All they knew is what the local press had thus far

reported; this being that six individuals had died in an explosion.<sup>12</sup> Even the obituaries and funerary services for the six deceased lacked any new or relevant details.<sup>13</sup> And the reason for the absence of details was the joint secrecy efforts of the military and a federal regulatory body known as the Office of Censorship. This article seeks to tell the story of the Bly incident, particularly the *how* and *why* the federal government kept the details of the incident secret from the American public for several weeks.

Our story begins with the military's response. Again, it was in November 1944 that Japan began launching hundreds of balloon bombs towards the contiguous United States. Sometimes referred to by military officials as “free balloons,” Japan's balloon bombs principally relied upon air currents to reach their objective.<sup>14</sup> Of course, the unmanned nature of the balloon bombs prevented the Japanese from targeting specific locations. Thus, naturally, when Japan released and directed these bombs towards the contiguous United States, they were later spotted and located all across the West Coast.<sup>15</sup> The first known reported sighting occurred on November 4, 1944, when a U.S. Naval vessel found a balloon bomb traveling 66 miles off the coast of San Pedro, California.<sup>16</sup> A month later the first reported detonation occurred near the town of Thermopolis,





Photograph of a fully inflated Japanese balloon bomb, complete with the rigging and suspended apparatus. This particular balloon was recovered near Alturas, California on January 10, 1945.

Wyoming.<sup>17</sup> And in the week that followed, the military received several more balloon bomb reports.<sup>18</sup>

Initially, military officials could not determine what exactly Japan was targeting. However, Japan's strategic intent was soon apparent. What remained less clear was the lethality and threat that the balloon bombs posed to the public.<sup>19</sup> Yet despite this uncertainty, the WDC alerted all West Coast military personnel to be on the lookout for any unmanned aerial balloons.

In one of the earliest sightings following the WDC's alert, a pilot stationed at the Marine Corps base in Klamath Falls, Oregon encountered a balloon bomb at an altitude of roughly 28,000 feet.<sup>20</sup> The pilot, flying an unspecified Grumman fighter, was unable to shoot down the balloon bomb due to the fighter's guns freezing. However, the pilot was able to photograph and subsequently drive it to a lower altitude via a diving maneuver.<sup>21</sup> The pilot was then assisted by another aircraft in grounding the balloon bomb over Alturas, California, all without detonating the explosives on board.<sup>22</sup> This resulted in the first recovery of an entire Japanese balloon bomb envelope, rigging, and attached bomb apparatus (see image on this page).<sup>23</sup> Several more fully intact balloon bombs were found in the weeks that followed.

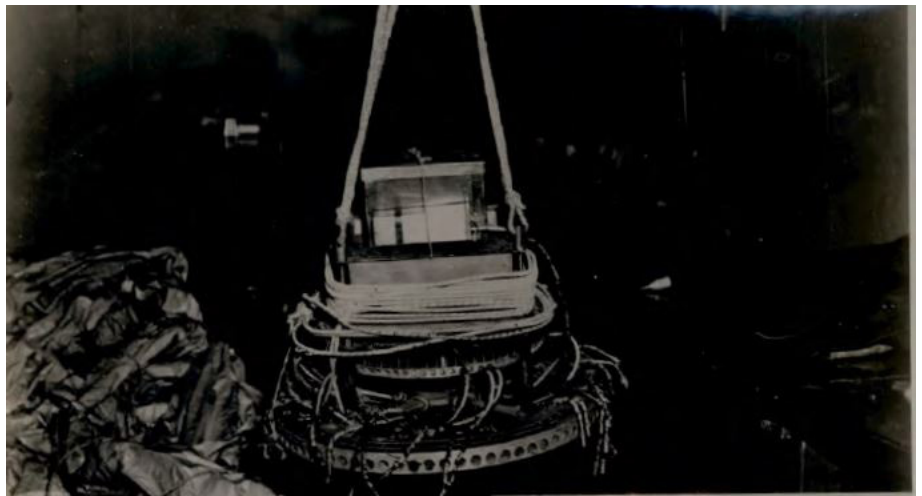
Once the WDC was able to examine several recovered balloon bombs, it became readily apparent that their design allowed them to complete the long journey across the Pacific Ocean—but only so long as they traveled at an altitude between 20,000 and 35,000 feet.<sup>24</sup> The most visible part of each balloon bomb was its paper envelope. Each contained five layers of "thin...fiber paper cemented together using hydrocellulose," and could be as large as 100 feet in circumference and weigh nearly 150 pounds.<sup>25</sup> Attached to each envelope was a relief valve and a flash bomb, intended to



destroy the envelope after the payload had dropped.<sup>26</sup> Suspended from each envelope were shroud lines connected to a rubber shock cord at the bottom, and then to a metal frame that contained the “Automatic Altitude Control Device,” bombs, and sandbags.<sup>27</sup> The metal frame had a large ring at the bottom, from which the sandbags and bombs were attached.<sup>28</sup> Of all the various balloon bombs recovered, the military identified that two different types of bombs could be attached: 1) an anti-personnel type explosive and 2) an incendiary type explosive.<sup>29</sup>

With this information in hand, WDC implemented several initiatives and countermeasures. One was readying the 555th (or Triple Nickles) Parachute Infantry Company to deploy alongside the U.S. Forest Service should any balloon bomb start a wildfire along the West Coast.<sup>30</sup> Another initiative involved convening a conference for all “interested commands and agencies” to discuss the overall balloon bomb threat.<sup>31</sup> From this conference, several lines of effort emerged.<sup>32</sup> The most notable was the Sunset Project, which involved the installation of new radar equipment at six different sites along the Washington state coast to detect any balloon bombs for either interception or recovery. However, before the radar sites could ever be fully utilized for their intended purpose, the number of balloon bombs reaching the west coast significantly decreased.<sup>33</sup> And although no military action ever materialized from the Sunset Project, the military’s overall mobilization effort demonstrates how seriously the federal government perceived the threat. In addition to launching the Sunset Project, the WDC periodically distributed “confidential instructions” to military and civilian authorities alike.<sup>34</sup> To support this endeavor, the WDC began including an annex in their weekly G-2 Periodic Report titled “Air Information.”<sup>35</sup>

The reason that the WDC kept this



**Top:** Photograph of a recovered Japanese balloon bomb apparatus with attached sandbags and incendiary bombs. **Bottom:** Photograph of a Japanese balloon bomb apparatus recovered near Alturas, California.

information secret was the fear that public knowledge of the threat would create mass panic, which in turn would aid Japan in achieving its objective.<sup>36</sup> And to attain the necessary secrecy required, the WDC made sure to instruct every federal, state, and local official made privy to the balloon bomb threat not to share the information with anyone, especially the press.<sup>37</sup>

What allowed the WDC to achieve this high level of secrecy was the Office of

Censorship. Established shortly after the attack on Pearl Harbor through Executive Order 8985, the Office of Censorship was a WWII era federal regulatory body responsible for controlling the public dissemination of any sensitive wartime information via mail, radio broadcast, or newspaper.<sup>38</sup> Of course, given the geographic vastness of the United States, it was virtually impossible for Office of Censorship staff to monitor each and



every individual communication.<sup>39</sup> Thus, to assist with this monumental task, the Office of Censorship released regulations, partnered with various government agencies, and established stations of dedicated employees and volunteers who monitored communications.<sup>40</sup>

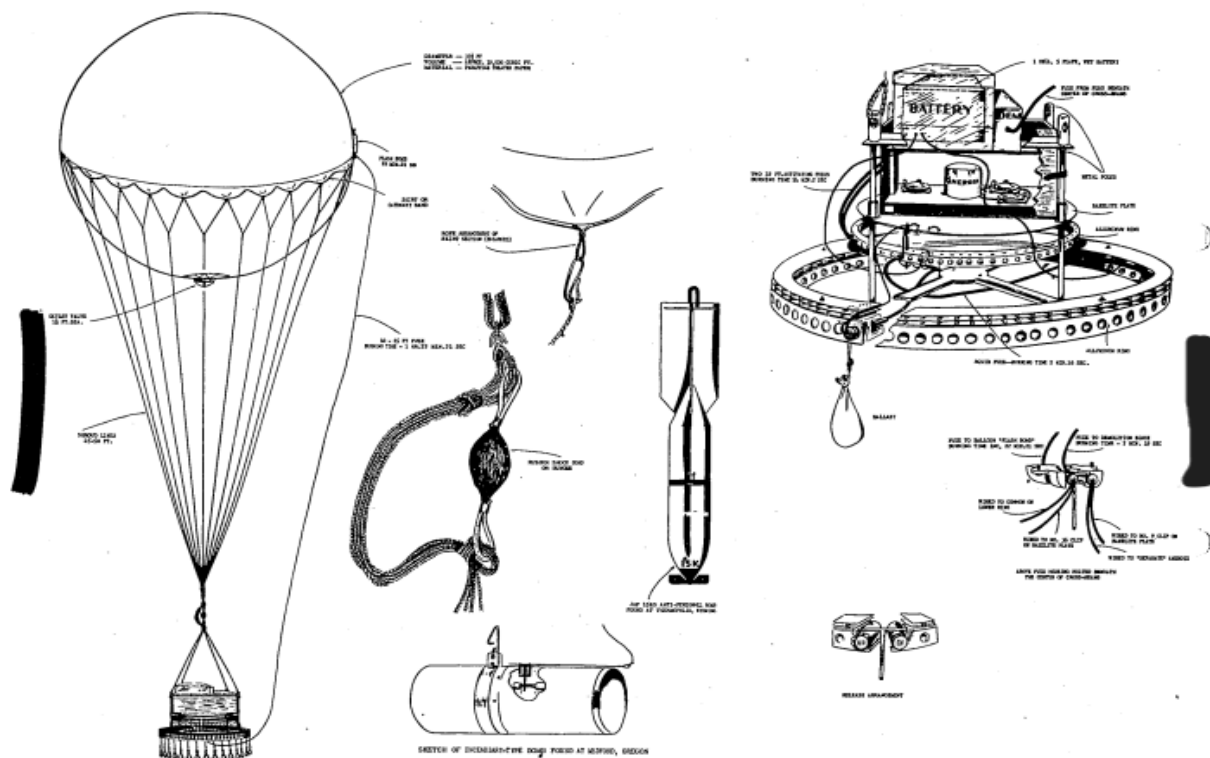
However, as it pertained to the press, with little in the way of precedent for lawful press censorship, the Office of Censorship faced the difficult challenge of navigating the tensions between the constitutional protections afforded by the First Amendment with the need for wartime censorship. To circumvent the constitutional issue, the Office of Censorship principally relied on voluntary adherence to its guidelines and

regulations. And to achieve this, the Office of Censorship successfully enlisted the aid of many well-respected journalists, editors, and publishers to act as "informal liaisons,"<sup>41</sup> who essentially served as advocates for self-censorship and actively monitored the newsrooms of thousands of U.S. publications.<sup>42</sup> These strategically selected liaisons proved crucial to the Office of Censorship achieving its censorship goal, all without overextending manpower or money.<sup>43</sup>

For the most part, members of the press embraced this wartime censorship, with some even going so far as to censor information that the Office of Censorship had not specifically identified as a national security risk. For instance, as information

concerning war atrocities committed by military service members made its way to press newsrooms, members of the press took it upon themselves to keep those stories out of the public eye.<sup>44</sup> Even when a story of a war atrocity committed by military service members was eventually made public, members of the press were receptive to any edits and suggestions from the Office of Censorship.<sup>45</sup>

And it was not just stories involving war atrocities that members of the press willingly censored. So too were stories related to the development and strategic use of atomic weapons.<sup>46</sup> Indeed, the newspapers ran several stories about the development of atomic weapons at Los Alamos, New Mexico. In such cases,



**Figure 1.** Overall sketch of balloon and sketches of equipment carried.  
(Prepared by WDC)

Japanese balloon bomb diagram prepared by the WDC.

## AIR &amp; SPACE REFLECTIONS



Map prepared by the Fourth Air Force showing 285 of the Japanese balloon bomb incidents that took place in North America from November 4, 1944, to August 8, 1945.



however, members of the press voluntarily chose to comply with the Office of Censorship's guidelines and regulations by submitting their atomic bomb articles for review prior to publication.<sup>47</sup>

The same was true for any stories related to the Japanese balloon bomb threat. Members of the press willingly complied with the Office of Censorship's request to afford "no publicity" to any reports of "balloon incidents."<sup>48</sup> In fact, members of the press adhered with this request so readily that the lack of publicly available information about the balloon bombs was initially viewed as "one of the outstanding achievements of voluntary censorship" during the war.<sup>49</sup> Although the success of this censorship may have influenced Japan's decision to cease sending the balloon bombs, it also limited awareness of the threat to the public.<sup>50</sup> In doing so, the Office of Censorship placed itself in the moral dilemma of trying to delicately balance denying the enemy from gaining a psychological upper hand and protecting the public from the physical threat that the balloon bombs posed.

It was near the end of May 1945 that the War Department, Department of the Navy, and the Office of Censorship agreed to lift the ban on publishing anything about the balloon bomb threat.<sup>51</sup> However, the event in Bly remained confidential until Robert P. Patterson, the Undersecretary of War, released a May 31st statement acknowledging that the deaths in Bly were from a Japanese balloon bomb.<sup>52</sup> With the "secrecy ban" now absolved, newspapers quickly began publishing full accounts of what really happened in Bly.<sup>53</sup>

Initially, the Office of Censorship's decision to withhold the information on the balloon bombs received praise in the press.<sup>54</sup> However, this support quickly waned once the family members of the

Bly victims weighed in. From the families' viewpoint, the Office of Censorship and military were in the wrong for withholding the balloon bomb information.<sup>55</sup> Perhaps if the parents of the children killed had known of the balloon bomb threat, then they would have never let their children go out into the woods.<sup>56</sup> At the very least, the parents could have warned their children to stay away from any balloons or suspicious devices.

Very quickly members of the press echoed this reasoning and expressed dissatisfaction with how the Office of Censorship and the military handled the release of information about the balloon bomb threat. One Oregon newspaper called it an "incredibly mismanaged instance of Army censorship and public relations," while another noted that officials "failed to use the common sense it would take to run a fifth-rate dog kennel," and voiced concern over the lack of information provided to civilians.<sup>57</sup>

It was only because of this public backlash that federal officials began educating citizens about the balloon bomb threat. As a result, newspapers across the country started publishing informative articles warning people to "stay away from strange objects," and report anything suspicious to police.<sup>58</sup> Especially along the West Coast, efforts were doubled to assure citizens of their safety as the summer approached and school ended. To help ease concerns Jack A. Hayes, the Oregon State Defense Administrator, gave an all-clear for summer camps to continue.<sup>59</sup> Additionally, the military released intricate details about the balloon bombs, including information about reported their landings, estimates on how many had drifted over the Pacific Ocean, and the federal government's recovery efforts.<sup>60</sup> The release of this information

helped rebuild the American public's trust with their press and government. It also informed the public of how the government had worked diligently to keep them safe, and that these balloon bombs were really nothing more than a last-ditch effort by Japan to change the outcome of the war.<sup>61</sup>

Four years after the incident in Oregon, the Senate Judiciary Committee approved a compensation package of \$20,000, or roughly \$333,000 in today's dollars, for the families of the victims.<sup>62</sup> Although no blame was directly placed on the military or federal government for the Bly balloon bomb deaths, the committee did concede that adequate steps to properly warn civilians were not taken.<sup>63</sup> The bill passed the Senate, and on June 7, 1949, President Harry S. Truman signed the bill into law.<sup>64</sup> In addition to monetary compensation for the families, efforts to memorialize the victims at the site of the explosion began in 1947.<sup>65</sup> At that time, the Weyerhaeuser Timber Company (WTC) owned the land where the explosion occurred. And in 1949, WTC approved the construction of a public recreation site in honor of the six victims, which included a memorial monument.<sup>66</sup> Opened to the public in 1950, the recreation site sat on 16.5 acres of land.<sup>67</sup> In 2003, the Mitchell Monument was added to the National Register of Historic Places.<sup>68</sup> Today, the site includes a stone monument and plaque with information about Elsie Mitchell, Dick Patzke, Joan Patzke, Edward "Eddie" Engen, Jay Gifford, and Sherman Shoemaker, and is surrounded by a maintained recreation area.

Although the Bly incident is a relatively small chapter in WWII history, it provides important insight into concerns about the aerial defense of the United States and the role of voluntary censorship during



**Top:** Military and civilian personnel inspecting a Japanese balloon envelope near Burns, Oregon. **Bottom:** Two officers inspecting sections of a Japanese balloon bomb.



war. Especially with the recent events involving balloons used for surveillance over the United States, looking into the past use of balloons, even if used for the purpose of delivering bombs rather than conducting surveillance, and the reaction of the government could help inform decisions and subsequent responses moving forward.<sup>69</sup>

## Notes

1. David Elliott, "When WWII Bombs Fell on Iowa," *Ames Daily Tribune* (Ames, IA), October 19, 1974, 11; National Museum of the United States Air Force, "Balloon Bombs: Japan's Answer to Doolittle," <https://www.nationalmuseum.af.mil/Visit/Museum-Exhibits/Fact-Sheets/Display/Article/196210/balloon-bombs-japans-answer-to-doolittle/>.

2. "Jap Balloon Sighted Here in January Gave U.S. First Complete Story Of Wafted Weapon," *Herald and News* (Klamath Falls, OR), August 17, 1945, 1; "Six Deaths in Oregon Due to Balloon Bomb," *News-Review* (Roseburg, OR), May 31, 1945, 1; "Death of Six From Jap Balloon Bomb at Lakeview Told," *La Grande Observer*, (La Grande, OR), May 31, 1945, 1. Note that some newspaper articles reference Lakeview, Oregon instead of Bly. The towns are a 44-minute drive from one another, and the explosion occurred in what is now known as Fremont National Forest near Gearhart Mountain, which is about 20 minutes outside of Bly. For a sense of the geographical location of the incident, Bly is located about 300 miles inland from the Oregon coast and is about a one hour and 20-minute eastwards drive from Crater Lake, National Park.

3. Lieutenant Colonel Harry G. Albright, "Air Information, Annex No. 3 to G-2 Periodic Report No. 176," May 12, 1945, 2, contained in HQ, Western Defense Command G-2 Periodic Reports, (Maxwell



AFB, AL: AFHRA, 1946) (hereafter HQ, Western Defense Command G-2 Periodic Reports). The initial assessment from investigators indicated that the “balloon had been in the area for at least 30 days” seeing that “[u]nderneath the balloon envelope there was six inches of snow.” It last snowed in the area 30 days prior.

4. “Minister Tells of Blast That Took Lives of Six Near Bly, in Oregon,” *Bulletin* (Bend, OR), June 1, 1945, 1. The Mitchells moved to Bly so that Archie could assume leadership of the Christian Missionary Alliance Church. For further details, see “Bly Scene of Only Deaths in U.S. Caused by Enemy,” *Herald and News* (Klamath Falls, OR), June 1, 1945, 1.

5. “Jap Balloon Sighted Here in January Gave U.S. First Complete Story of Wafted Weapon,” *Herald and News* (Klamath Falls, OR), August 17, 1945, 1. The children were all under the age of 15. Dick Patzke was 14, his sister Joan Patzke and their friend Edward “Eddie” Engen were both 13, Jay Gifford was 12, and Sherman Shoemaker was 11. For more information, see “Mass Funeral Held for Four Blast Victims,” *Herald and News* (Klamath Falls, OR), May 10, 1945, 2; “Obituaries,” *Herald and News* (Klamath Falls, OR), May 8, 1945, 1. There are some inconsistencies with newspapers incorrectly reporting the ages of each victim. In a preliminary report to Western Defense Command HQ, several deviations appear as well. Some ages are incorrect, and Dick Patzke was misidentified as “Mickey Patzke.” For more information, see Lieutenant Colonel Harry G. Albright, “Air Information, Annex No. 3 to G-2 Periodic Report No. 176,” May 12, 1945, 1, *contained in* HQ, Western Defense Command G-2 Periodic Reports.

6. “Blast Kills 6: Five Children, Pastor’s Wife in Explosion,” *Herald and News* (Klamath Falls, OR), May 7, 1945, 1. According to some reports, Elsie Mitchell

was five months pregnant when she died. For more information, see “Bly Scene of Only Deaths in U.S. Caused by Enemy,” *Herald and News*, (Klamath Falls, OR), June 1, 1945, 1; Lisa Murphy, “One Small Moment,” *American History* 30, no. 2 (June 1995): 66.

7. Lieutenant Colonel Harry G. Albright, “Air Information, Annex No. 3 to G-2 Periodic Report No. 176,” May 12, 1945, 2, *contained in* HQ, Western Defense Command G-2 Periodic Reports.

8. “Minister Tells of Blast That Took Lives of Six Near Bly, in Oregon,” *Bulletin* (Bend, OR), June 1, 1945, 1. Two years after the explosion, Archie Mitchell remarried. His second wife, Betty Patzke, was the older sister of Dick and Joan Patzke (two of the victims). While working at a leprosarium in South Vietnam, the Viet Cong abducted Archie Mitchell, Dr. Eleanor Ardel Vietti, and Daniel Gerber. Betty Mitchell and the Mitchell children were left unharmed, but they never heard from Archie again. Various reports indicate that Archie and the other captives were kept alive for some time, although nothing could be confirmed. For further information, see Department of State, “Viet Cong Detainee Archie E. Mitchell,” October 16, 1967, [https://www.loc.gov/item/powmia/pwmaster\\_99255/](https://www.loc.gov/item/powmia/pwmaster_99255/); U.S. Department of State, “American Held by NLF: Archie Emerson Mitchell,” August 25, 1970, <https://tile.loc.gov/storage-services/service/frd/pwmia/PDS82/128384.pdf>; Colonel Joseph A. Schlatter, “Transmittal of Documents Pertaining to Archie E. Mitchell (Refno 11),” *Defense Intelligence Agency*, February 2, 1989, <https://tile.loc.gov/storage-services/service/frd/pwmia/128/38689.pdf>.

9. Letter from L. K. Mays, Forest Supervisor, to F. H. Armstrong, et al., “[Untitled Letter],” May 19, 1945, *contained in* Japanese Fire Balloons File (Durham,

NC: U.S. Forest Service History Collection).

10. Colonel William H. Hammond, Assistant Chief of Staff G-2, Headquarters Western Defense Command, “A Study of Japanese Free Balloons and Related Incidents,” undated 1945, 9, *contained in* Western Defense Command Intelligence Study No. 1 (Maxwell AFB, AL: AFHRA, 1945) (hereafter Western Defense Command Intelligence Study No. 1). For an example of an earlier report to WDC about the balloons, see Colonel William H. Hammond, “Air Information, Annex No. 3 to G-2 Period Report No. 158,” January 6, 1945, *contained in* HQ, Western Defense Command G-2 Periodic Reports. One of the first reports to WDC regarding the incident “identified” the explosive as a “15 Kg anti-personnel HE type bomb,” and noted that, fortunately, the accompanying incendiary bombs did not go off. For more information, see Lieutenant Colonel Harry G. Albright, “Air Information, Annex No. 3 to G-2 Periodic Report No. 176,” May 12, 1945, 1-2, *contained in* HQ, Western Defense Command G-2 Periodic Reports.

11. “After 45 Years, Woman Talks of Japanese Bomb—Balloon Device Killed Classmates,” *Seattle Times* (WA), December 16, 1990, <https://archive.seattletimes.com/archive/?date=19901216&slug=1109731>; Letter by John Yuzuru Takeshita, “A Rendezvous in Bly: A Report on the Visit of the Japanese, June 23-24, 1996,” *contained in* Oregon Balloon Bombing Incident in WWII and Their Heartfelt Attempt to Reconcile That Time in History (Ann Arbor, MI: Park University Library).

12. “Explosion is Fatal to Six,” *Daily Chronicle* (Centralia, OR), May 7, 1945, 7.

13. “Obituaries,” *Herald and News* (Klamath Falls, OR), May 8, 1945, 1; “Mass Funeral Held for Four Blast Victims,” *Herald and News* (Klamath Falls, OR), May 10, 1945, 2.

14. Colonel William H. Hammond,

Assistant Chief of Staff G-2, Headquarters Western Defense Command, "A Study of Japanese Free Balloons and Related Incidents," undated 1945, 38-45, *contained in* Western Defense Command Intelligence Study No. 1.

15. For information on multiple balloon recoveries in Canada and Alaska, see Lieutenant Colonel Harry G. Albright, "Air Information, Annex No. 3 to G-2 Periodic Report No. 176," May 12, 1945, 2-6, *contained in* HQ, Western Defense Command G-2 Periodic Reports. One balloon was brought down but not recovered near Laguna Salada, Mexico. For more information, see Lieutenant Colonel Harry G. Albright, "Balloons Down But Not Recovered, Situation Maps to Accompany Air Annex to G-2 Period Report No. 188," August 4, 1945, 9, *contained in* HQ, Western Defense Command G-2 Periodic Reports. Although Washington, Oregon, and California took the brunt of the landings, some balloon bombs made their way as far east as Michigan. Some of the farthest eastwards reported balloons were recovered in North Dorr, Michigan on February 23, 1945, and Farmington, Michigan on March 25, 1945. For further information, see Colonel William H. Hammond, "Air Information, Annex No. 3 to G-2 Periodic Report No. 166," March 3, 1945, 1, *contained in* HQ, Western Defense Command G-2 Periodic Reports; Colonel William H. Hammond, "Situation Map to Accompany Air Annex to G-2 Periodic Report No. 138," June 30, 1945, *contained in* HQ, Western Defense Command G-2 Periodic Reports.

16. Fourth Air Force, *Fourth Air Force Historical Study No III-2: Defense Plans and Operations in the Fourth Air Force, 1942-1945*, vol. 2: Narrative (Continued), undated 1945, 501, *contained in* Fourth Air Force Historical Series No. III (Maxwell AFB, AL: AFHRA, 1945) (hereafter Fourth Air Force Historical Series No. III);

Colonel William H. Hammond, "A Study of Japanese Free Balloons and Related Incidents," undated 1945, 3, *contained in* Western Defense Command Intelligence Study No. 1.

17. Colonel William H. Hammond, "A Study of Japanese Free Balloons and Related Incidents," undated 1945, 6, *contained in* Western Defense Command Intelligence Study No. 1. This explosion, which occurred on December 6, 1944, was the first one observed from a balloon bomb. However, no one was injured.

18. Ibid. Some balloon bombs were found with bombs, while others were not. There is no information given as to why some balloons successfully carried the bombs across the Pacific, while others failed to do so.

19. Ibid., 503. The War Department came up with the following possibilities: "a) Bacteriological and/or chemical warfare, b) Transportation of incendiary and anti-personnel bombs, c) Experiments for unknown purpose, d) Psychological efforts to inspire terror and diversion of forces, e) Transportation of agents, and f) Antiaircraft devices." By January 1945, President Franklin D. Roosevelt was informed that there was no "evidence that enemy agents landed" using the balloons and further investigation was being conducted. See Correspondence to Harry L. Hopkins, Special Assistant to the President, "[Various Untitled Federal Bureau of Investigation Reports on Japan and World War II]," January 5, 1945, *contained in* FBI Reports of the Franklin D. Roosevelt White House, Harry Hopkins Papers, box 150, (Hyde Park, NY: Franklin D. Roosevelt Presidential Library).

20. Memorandum from Jack A. Hayes to Governor Earl Snell, "Memorandum to Governor Snell," January 13, 1945, *contained in* Defense Council Records, box 12, folder 14 (Salem, OR: Oregon State Archives)

(hereafter Defense Council Records).

21. Ibid.

22. Ibid.

23. Colonel William H. Hammond, "A Study of Japanese Free Balloons and Related Incidents," undated 1945, 4, *contained in* Western Defense Command Intelligence Study No. 1.

24. Ibid.

25. Stan Grossfeld, "An Air of Reconciliation: Over 51 years, Japanese Balloon Bombing in Oregon Changed Lives," *Boston Sunday Globe*, December 8, 1996, 1-4.

26. Colonel William H. Hammond, "A Study of Japanese Free Balloons and Related Incidents," undated 1945, 18, *contained in* Western Defense Command Intelligence Study No. 1.

27. Ibid., 14. The Automatic Altitude Control Device was basically the brain of these balloon bombs, as it controlled the "lower altitude limit" of the balloon bombs, released the objects (bombs and sandbags) carried by the balloon, and stored the control mechanism that would destroy the balloon.

28. Ibid., 21-22.

29. Ibid., 26.

30. The 555th Parachute Infantry Company was activated in December 1943 and was the first all-African American paratroop unit. The unit was redesignated as Company A of the 555th Parachute Infantry Battalion in 1944. Even though the balloons did not start any large fires, the 555th still assisted with other forest fires. During this time the 555th earned another nickname: the Smoke Jumpers. For more information see Forest Service, U.S. Department of Agriculture, "Operation Firefly & the 555th," <https://www.fs.usda.gov/science-technology/fire/people-working-fire/smokejumpers/smokejumper-base-contact-information/missoula-smokejumpers/history/>



operation; Todd Crumley and Aaron Arthur, "The Triple Nickles and Operation Firefly," *Unwritten Record*, U.S. National Archives, February 5, 2020, <https://unwritten-record.blogs.archives.gov/2020/02/05/the-triple-nickles-and-operation-firefly/>; Tom Banse, "Triple Nickles: Honored for their work during WWII," *Observer*, (La Grande, OR), September 9, 2019; Greg Bradsher and Sylvia Naylor, "Firefly Project and the 555th Parachute Infantry Battalion ('Smoke Jumpers')," *U.S. National Archives*, February 12, 2015, <https://text-message.blogs.archives.gov/2015/02/12/firefly-project-and-the-555th-parachute-infantry-battalion-smoke-jumpers/>; and U.S. Army Center of Military history, "555th Parachute Infantry Battalion," May 16, 1996, <https://history.army.mil/topics/afam/555PIB.htm>.

31. Fourth Air Force, *Fourth Air Force Historical Study No III-2: Defense Plans and Operations in the Fourth Air Force, 1942-1945*, vol. 2: Narrative (Continued), undated 1945, 510, contained in Fourth Air Force Historical Series No. III.

32. *Ibid.*, 512. The assignments included: "1) to direct all its installations to observe and report all unidentified free balloons, or similar airborne objects, as well as any suspicious objects on the ground, 2) to establish such measures as may be necessary to intercept unidentified balloons or similar airborne objects, as to make ground recovery possible, 3) to prepare plans and initiate action for the detection, visual or electronic, of unidentified objects in the Western Air Defense Zone, 4) to coordinate with the Western Sea Frontier to secure and study meteorological data affecting the free balloon flights in the North Pacific area, 5) to request that the Pacific and Alaskan Wings of the Air Transport Command and the Western Flying Training Command instruct their personnel to report balloon sightings, 6) to

request the Civil Aeronautics Authority to instruct personnel of commercial airlines and pilots of private planes to report balloon sightings." *Ibid.*

33. Fourth Air Force, "Consolidated Report on 'Sunset Project'" undated 1945, Document 222, contained in Fourth Air Force, Fourth Air Force Historical Study No III-2: Defense Plans and Operations in the Fourth Air Force, 1942-1945, vol. V. On August 1, 1945, WDC officially terminated the Sunset Project, although by mid-July 1945, talk about terminating the project had already begun.

34. Memorandum from Jack A. Hayes to Governor Earl Snell, "Confidential Memorandum to Governor Snell," January 8, 1945, contained in Defense Council Records, box 12, folder 14.

35. This section provided information about the balloon bombs, sightings and discoveries from that week, details about the balloon bomb incidents, and sometimes photographs. For an example, see Colonel William H. Hammond, "Air Information, Annex No. 3 to G-2 Periodic Report No. 158," January 6, 1945, contained in HQ, Western Defense Command G-2 Periodic Reports.

36. In early 1945, U.S. intelligence reports suggested that Japanese government sponsored propaganda was already touting the balloon bombs as a huge success, saying that the bombs had successfully started "innumerable fires in western and central United States" and caused "more than 10,000 casualties." For more details, see Colonel William H. Hammond, "A Study of Japanese Free Balloons and Related Incidents," undated 1945, 45, contained in Western Defense Command Intelligence Study No. 1. Furthermore, the concern that public panic might ensue after learning of the balloons was not unfounded, as a few newspaper articles demonstrate the misguided promotion of false information

about the balloon bombs. For an example, see "Japanese Balloons," *New York Times*, June 6, 1945, 20.

37. Memorandum from Jack A. Hayes to Governor Earl Snell, "Confidential Memorandum to Governor Snell," March 28, 1945, contained in Defense Council Records, box 12, folder 14.

38. Here, it is useful to outline the connections between the different government agencies and departments during WWII. Under the supervision of the President of the United States, there is the Executive Office of the President, along with multiple departments including the Department of State, the Department of the Navy, and the War Department. The War Department, which was established August 7, 1789, managed the Army. Along with these departments, the President also created several emergency agencies. The Office of Censorship fell into this category. In 1945, under the Executive Office of the President, there was the Office for Emergency Management which oversaw multiple wartime related agencies including: 1) Office of War Information, 2) Office of Scientific Research and Development, 3) Office of Civilian Defense, 4) and more. The Office of War Information, established June 13, 1942, served as the foreign and domestic information services branch of the U.S. government during WWII. For more information, see Office of War Information, *American Handbook*, (Washington, D.C.: Public Affairs Press, 1945), 17, 59-60, 65-66.

39. The Office of Censorship maintained legal authorization to censor any form of communication leaving or entering the United States, but did not have solid legal ground to restrict the freedom of the press. As a result, it became illegal to send any form of communication to an enemy controlled territory with a few exceptions: 1) "communications of

a restricted character can be sent under certain conditions to prisoners of war,” and 2) employees of the American Red Cross may “transmit short messages of a personal nature to relatives or friends in occupied lands.” For more information, see Byron Price, “Governmental Censorship in War-Time,” *American Political Science Review* 36, no. 11 (October 1942): 837, 842.

40. *Ibid.*, 843-44.

41. Michael S. Sweeney, “Censorship Missionaries of World War II,” *Journalism History* 27, no. 1 (Spring 2001): 4. These liaisons came to be known as “Censorship Missionaries,” because they spread the “faith” of self-censorship.

42. *Ibid.*, 4-5.

43. *Ibid.*, 10-11.

44. Karen Slattery & Mark Doremus, “Suppressing Allied Atrocity Stories: The Unwritten Clause of the World War II Censorship Code,” *Journalism and Mass Communication Quarterly* 89, no. 4 (2012): 629-33.

45. *Ibid.*, 634.

46. Patrick S. Washburn, “The Office of Censorship’s Attempt to Control Press Coverage of the Atomic Bomb During World War II,” Speech, History Division of the Association for Education in Journalism and Mass Communication, Portland, Oregon July 2-5, 1988, <https://files.eric.ed.gov/fulltext/ED295201.pdf>.

47. *Ibid.*, 39; Janet Farrell Brodie, “Radiation Secrecy and Censorship after Hiroshima and Nagasaki,” *Journal of Social History* 48, no. 4 (2015): 842-864. Even after the Office of Censorship disbanded in August 1945, the military continued to censor information regarding the atomic bombs, specifically the effects of radiation, etc.

48. Fourth Air Force, *Fourth Air Force Historical Study No III-2: Defense Plans and Operations in the Fourth Air Force, 1942-1945*, vol. 2: Narrative (Continued),

undated 1945, 508, contained in Fourth Air Force Historical Series No. III.

49. Note from Byron Price, Director of the Office of Censorship, “Strictly Confidential Note to Editors and Broadcasters,” March 28, 1945, contained in Fourth Air Force, *Fourth Air Force Historical Study No III-2: Defense Plans and Operations in the Fourth Air Force, 1942-1945*, vol. 2: Narrative (Continued), undated 1945, 508.

50. “Balloon-Bombs Hit West Coast in War,” *New York Times*, May 29, 1947, 9.

51. “Wind Blown Jap Balloon Bombs Land West Mainland,” *Medford Mail Tribune* (OR), May 22, 1945, 1; “Don’t Tamper with Jap Balloon Bombs,” *News-Review* (Roseburg, OR), May 25, 1945, 2. Immediately after the release of information by the War Department, Department of the Navy, and Censorship Office, WDC began tracking public response in both the U.S. and Japan through newspaper articles and radio channels. For more information, see Colonel William H. Hammond, “Psychological, Annex No.1 to G-2 Report No. 178,” May 26, 1945, 1, contained in HQ, Western Defense Command G-2 Periodic Reports; Colonel William H. Hammond, “Psychological, Annex No.1 to G-2 Report No. 179,” June 2, 1945, 1-4, contained in HQ, Western Defense Command G-2 Periodic Reports.

52. “Deaths of Six from Jap Balloon Bomb at Lakeview Told,” *La Grande Observer* (OR), May 31, 1945, 1; “Six Deaths in Oregon Due to Balloon Bomb,” *News-Review* (Roseburg, OR), May 31, 1945, 1; “Lakeview Deaths Due to Japanese Balloon Bomb,” *Medford Mail Tribune* (OR), May 31, 1945, 1.

53. “Six Killed When Balloon Bomb Explodes,” *Corvallis Gazette-Times* (OR), May 31, 1945, 8.

54. The mixed legacy about the success of the balloon bomb censorship continued

after the end of WWII. For support of the censorship effort, see “Balloon-bombs Hit West Coast in War,” *New York Times*, May 29, 1947, 9; “The Japanese Balloons,” *New York Times*, October 04, 1945, 22; “Don’t Tamper with Jap Balloon Bombs,” *News-Review* (Roseburg, OR), May 25, 1945, 2; “[Untitled Article],” *San Diego Sun-Tribune* (CA), undated June 1945, contained in Colonel William H. Hammond, “Psychological, Annex No.1 to G-2 Report No. 179,” June 2, 1945, 1; [Untitled Article], *Salt Lake Tribune* (UT), undated June 1945, contained in Colonel William H. Hammond, “Psychological, Annex No.1 to G-2 Report No. 179,” June 2, 1945, 1.

55. “Bly Scene of Only Deaths in U.S. Caused by Enemy,” *Herald and News* (Klamath Falls, OR), June 1, 1945, 2.

56. *Ibid.*

57. “[Untitled Article],” *Portland Oregonian* (OR), undated June 1945, contained in Colonel William H. Hammond, “Psychological, Annex No.1 to G-2 Report No. 181,” June 16, 1945, 1; “[Untitled Article],” *Salem Statesman* (OR), undated 1945, contained in Colonel William H. Hammond, “Psychological, Annex No.1 to G-2 Report No. 181,” June 16, 1945; “[Untitled Article],” *Tacoma News-Tribune* (WA), undated June 1945, contained in Colonel William H. Hammond, “Psychological, Annex No.1 to G-2 Report No. 181,” June 16, 1945, 1. Other papers pointed out that when the War Department and Department of the Navy released their first press statement in May 1945, they only stated that the balloon bombs had not caused any significant property damage and failed to acknowledge that deaths had occurred from the balloon bombs. This demonstrated an apparent disregard about the victims and highlighted the failure of officials to fully release all information during the first press release.



58. "If You Find a Balloon or Bomb, Here's What to do," *News-Review* (Roseburg, OR), June 4, 1945, 1; "Summer Camps Okay Despite Bombs, Report," *Herald and News* (Klamath Falls, OR), June 4, 1945, 1.

59. "Summer Camps Okay Despite Bombs, Report," *Herald and News* (Klamath Falls, OR), June 4, 1945, 1. The article also reminded individuals of the four steps to take if they ever encountered a balloon bomb: "1. Do not touch it. 2. Stay at least 100 yards away, and keep others that distance away. 3. Leave a guard to keep people away. 4. Report the location to the nearest sheriff or police officer." Even after WWII ended, newspapers in Oregon continued to run warnings for outdoor explorers. These warnings certainly were necessary, as individuals continued to find and report Japanese balloon bombs to law enforcement. For more information, see Malcom Epley, "Today's Roundup," *Herald and News* (Klamath Falls, OR), September 28, 1945, 1; "Medford Deer Hunters Find Jap Balloon-Bomb," *News-Review* (Roseburg, OR), October 6, 1945, 1; "Balloon Bomb Believed Found," *Herald and News* (Klamath Falls, OR), March 5, 1949, 1.

60. "Oregonians Only Balloon Bomb Victims," *Corvallis Gazette-Times* (OR), August 15, 1945, 2; "Nobody Got So Excited Over Jap's V-1 Weapon—So They Dropped It," *Eugene Guard* (OR), October 12, 1945, 3. Although some information, such as the number of balloon bombs originally launched by Japan, was not yet known in 1945, the continued coverage reveals the emphasis on education efforts. Later, some articles referenced that of the alleged 9,000 balloons launched by the Japanese, U.S. officials believed around 900 successfully made it across the Pacific Ocean. The estimate of 9,000 launched balloon bombs supposedly comes from Japanese military

officers familiar with the operation after Japan surrendered in 1945. This statistic and other information served to reassure the public about the failure of the Japanese balloon bombs as weapons. For further information, see "Few Bomb-Carrying Balloons Reached American Continent," *Medford Mail Tribune* (OR), January 15, 1946, 1; Sidney Shalett, "9,000 Balloons Set on Raids By Japan," *New York Times*, February 9, 1946, 6.

61. Fourth Air Force, *Fourth Air Force Historical Study No III-2: Defense Plans and Operations in the Fourth Air Force, 1942-1945*, vol. 2: Narrative (Continued), undated 1945, 516, contained in Fourth Air Force Historical Series No. III; "Japanese Bomb-Laden Balloons Proved Fizzle as War Weapon," *New York Times*, August 16, 1945, 20.

62. "Senate Group Approves \$20,000 for Kin of 6 Victims of Japanese Balloon Bomb," *New York Times*, May 10, 1949, 3. Despite opposition by the Army, which argued that Japan should take responsibility for the compensation, the committee found that the Bly deaths were a "unique case" in which the victims "were completely unaware of any danger from enemy activity."

63. Ibid.

64. "Senate Votes Bomb Aid: White House gets Bill for Six Killed by Japanese Missile," *New York Times*, May 24, 1949, 22. The first iteration of the bill passed the House in April 1948. See "Claims Awarded for Balloon-Bomb Deaths," *Corvallis Gazette-Times* (OR), April 21, 1948, 1. However, the final bill that successfully became private law was not introduced until 1949. That bill originated in the House of Representatives under H.R. 1299 as "an act for the relief of Frank J. Patzke, Archie Mitchell, J. L. Shoemaker, Einar Engen, and N. L. Gifford." The Senate passed the bill through a roll call vote on May 23, 1949.

On June 7, 1949, H.R. 1299 was approved and became Private Law 92. The Patzke's were allotted \$6,000 for the death of their two children, Archie Mitchell received \$5,000 for the death of his wife, and the remaining families each received \$3,000 for the deaths of their children. For more information, see H.R. 1299, 81st Senate (1949); H.R. 1299, 81st House (1949); 15 U.S. Stat. 1111, 1949.

65. Malcolm Epley, "Today's Roundup," *Herald and News* (Klamath Falls, OR), May 5, 1947, 4.

66. "National Register of Historic Places Registration Form (NPS Form 10-900)," undated 2022.

67. Ibid.

68. United States Department of Agriculture, "Mitchell Monument Brochure," [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5374039.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5374039.pdf); "National Register of Historic Places Registration Form (NPS Form 10-900)," undated 2022.

69. Jim Garamone, "F-22 safely shoots down Chinese spy balloon of South Carolina coast," *Department of Defense News*, February 4, 2023, <https://www.af.mil/News/Article-Display/Article/3288579/f-22-safely-shoots-down-chinese-spy-balloon-off-south-carolina-coast/>.

# The Story of How Air University Came to Maxwell



*Patrick J. Charles*

On September 3, 1946, before a large Maxwell Field audience consisting of military members, federal and state lawmakers, and reporters, General Carl Spaatz explained why Air University was crucial to the post-World War II (WWII) military establishment. “There must be an unceasing quest for perfection of the technical instrument, which is the Air Force,” stated Spaatz, adding, “That involves furtherance of the tasks of which we have long been engaged—of mastery over new techniques; of research and development; of reorganization to meet changing conditions—in order that the Air Force shall be alert to all contingencies, and [be] in a position to be decisive.”<sup>1</sup> Three months earlier, in an *Air Force Journal* article titled “Air University,” Major General David M. Schlatter, expressed similar sentiments.<sup>2</sup> To Schlatter, it was “readily apparent” that Air University was desperately needed in the post-World War II establishment to foster a “continuous study in the skills and techniques of the military art.”<sup>3</sup>

That Maxwell Field would be the home of Air University was pretty much a foregone conclusion for what was then the Army Air Forces (AAF).<sup>4</sup> Three factors weighed into the AAF’s decision. First, Maxwell Field was already serving as the headquarters for a regional AAF training command—Eastern Flying Training Command.<sup>5</sup> Second, at that time, it was well known that the amount of space to grow and expand Air University



1929 aerial photograph of Maxwell Field that was used by AAF to plan the for the expansion of the Air Corps Tactical School.

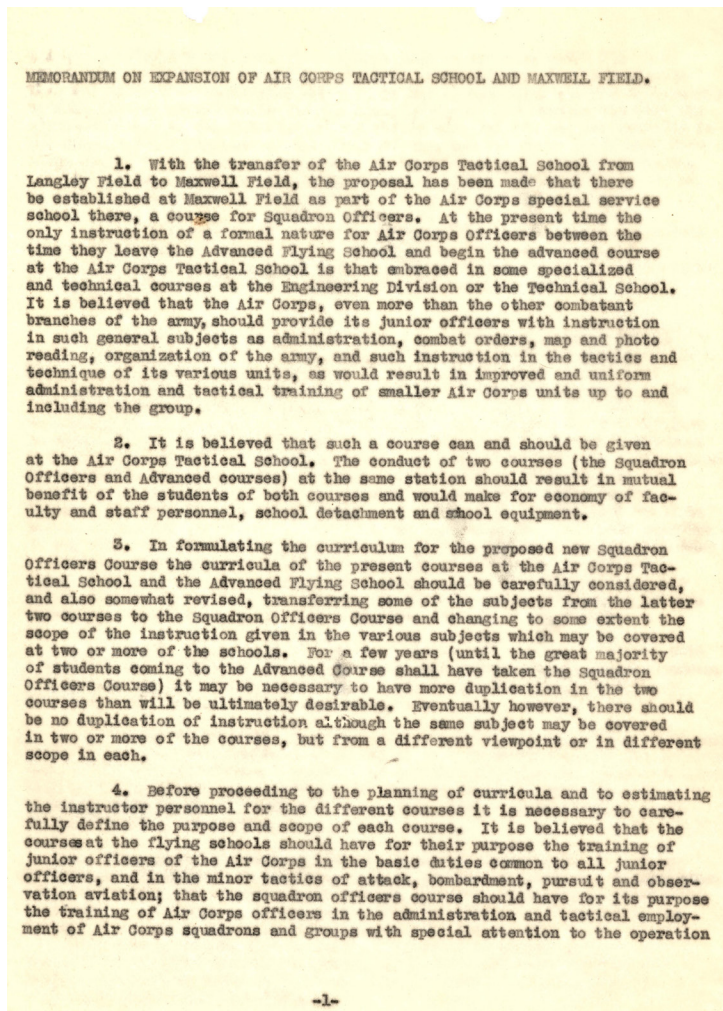


The story behind the move begins with the aforementioned enactment of Air Corps Act of 1926, which included a provision requiring the Army Air Corps (AAC), the AAF's organizational predecessor, to develop and implement a five-year program that would result in the AAC acquiring and maintaining 1,800 "serviceable airplanes...together with spare parts, equipment, supplies, hangars, and installations necessary for the operation and maintenance thereof."<sup>16</sup> The first draft of the AAC's five-year program stipulated that the 1st Air Brigade, as well as a bombardment group and several flying and support squadrons, would be stationed at Langley Field by the close of 1931.<sup>17</sup> Additionally, by no later than July 15, 1929, the same first draft stipulated that the Air Corps Tactical School would be moved to Miller Field, near Long Island, New York.<sup>18</sup>



However, it was not long after the public release of the AAC's five-year program that the Air Corps Tactical School's commandant, Lieutenant Colonel C.C. Culver, raised an objection to the move to Miller Field. Culver's objection was "carefully considered" by the Office of the Chief of the Air Corps, but summarily "not concurred."<sup>19</sup> Undeterred, on January 26, 1928, Culver raised a second, more substantive objection regarding the move to Miller Field. Therein, Culver listed several concerns regarding Miller Field, including: a) the existence of "fog" for "more than half the winter," which made "flying...impossible there"; b) new and increasing "real estate developments, which made "flying...hazardous, especially in case of forced landings"; c) the lack of "available sites in the immediate vicinity" to conduct "gunnery and bombing practice"; d) the lack of nearby "tactical units" for Air Corp Tactical School students to train alongside; and e) the need for nearly \$500,000 in congressional appropriations for suitable facilities.<sup>20</sup> Culver then proceeded to offer the Chief of the Air Corps an alternative solution—that the AAC sell Miller Field and subsequently use the proceeds to pay for the construction of a new Air Corps Tactical School at a different location. Ideally, Culver preferred Richmond, Virginia.<sup>21</sup> And if not Richmond, Culver's second choice was for Congress to approve the purchase of additional land surrounding Bolling Field, District of Columbia. And if that choice was off the table, Culver proffered three other locations—1) the Air Corps Training Center at San Antonio, Texas; 2) Fort Riley, Kansas; and 3) Maxwell Field.<sup>22</sup> Out of these three locations, Culver listed Maxwell Field dead last given the amount of "construction [that] would be necessary to accommodate the school."<sup>23</sup> And Culver was not wrong. For, at that time, Maxwell Field was sufficiently lagging behind other AAC airfields in terms of providing suitable housing and facilities, meaning that it would take a substantial congressional appropriation to make Maxwell Field a suitable location for the Air Corps Tactical School.<sup>24</sup>

Fortunately for Culver, this time the Chief of the Air Corps did not summarily dismiss his objection. Rather, it was sent to Major Thomas Dewitt Milling, Chief of AAC's War Plans Section who had previously served as the Air Corps Tactical School's first officer from 1920 to 1926, to fully weigh and consider. Ultimately, what Milling concluded is that all five of Culver's proposed locations



First page of a July 1, 1929 memorandum outlining the expansion of the Air Corps Tactical School.

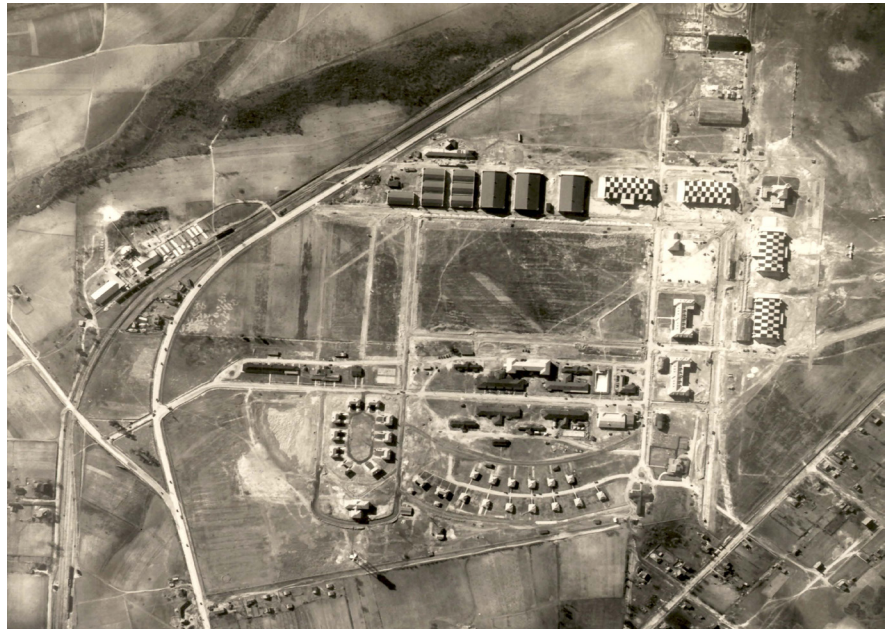
for the Air Corps Tactical School were impracticable. Milling rejected Richmond on the grounds that the AAC would not only have to "purchase a suitable site," but also construct the "building of a complete establishment."<sup>25</sup> Additionally, according to Milling, the vicinity of Richmond, like that of Miller Field, posed the problem of potential hazards from forced landings.<sup>26</sup> Milling rejected Bolling Field on the grounds that it would be difficult, if not impossible, to secure enough land in the District of Columbia for suitable training.<sup>27</sup> The Air Corps Training Center at San Antonio was rejected on the grounds that the location would lead to both physical and training "congestion."<sup>28</sup> Fort Riley was rejected on the grounds

the location posed “no advantage” and would “necessitate the building of a complete Air Corps post.”<sup>29</sup> And lastly, Maxwell Field was rejected because the location afforded the school no “real advantage” in saving taxpayer money on military construction in contrast to other locations. Moreover, according to Milling, Maxwell Field’s climate was “not particularly pleasant...”<sup>30</sup>

Yet despite Milling rejecting all five of Culver’s proposed locations, he did offer a solution—that the Air Corps Tactical School stay at Langley Field until an “exhaustive study and recommendations” for a suitable site was completed.<sup>31</sup> The Chief of the AAC’s Training and Operations Division, Brigadier General B.D. Foulois accepted Milling’s recommendation, and subsequently created a board of officers to submit “complete recommendations” on a suitable location for the Air Corps Tactical School.<sup>32</sup> Foulois, however, was against pausing the move to Miller Field for the time being until the recommendations were received, vetted, and voted upon.

Tasked with leading the Air Corps Tactical School relocation board was none other than Culver, who immediately instructed his staff to analyze the problem from two perspectives. The first was to provide an answer to the question: what “buildings and other construction, improvements, and facilities...would be required” to move the Air Corps Tactical School from Langley Field to “an unimproved site”?<sup>33</sup> The second perspective was to answer the same question under the assumption that the Air Corps Tactical School would stay put Langley Field.<sup>34</sup> Ultimately, on February 20, 1928, Culver’s staff determined that wherever the Air Corps Tactical School was located, it would require at least 24 different types of buildings, including 70 separate living quarters for married personnel and at least four 22,000 square foot hangars.<sup>35</sup>

In the months that followed, neither the War Department nor AAC ever formally changed its decision to transfer the Air Corps Tactical School to Miller Field. In fact, as late as November 30, 1928, according to a document titled “Distribution of Additional Grades and Ratings to Air Corps Units,” the War Department and

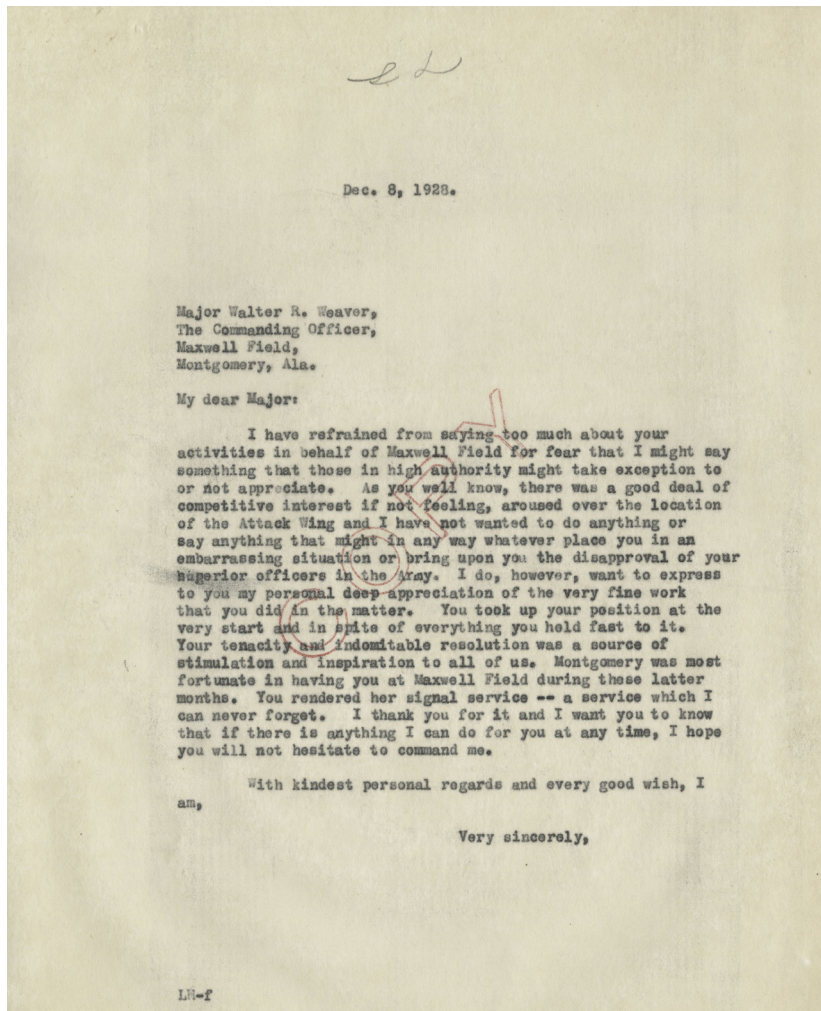


**1931 aerial picture of Maxwell Field following the relocation of the Air Corps Tactical School. Notice the growth and expansion compared to the 1929 picture on pages 16-17.**

AAC were still planning for the school to be transferred to Miller Field.<sup>36</sup> Yet, four days later, the War Department and AAC decidedly reversed course by publicly announcing that Maxwell Field would be the new home of the Air Corps Tactical School. In a letter to Alabama representative Lister Hill, who chaired the House Military Affairs Committee, Assistant Secretary of War F. Trubee Davison wrote: “The Tactical School...is a very important branch of the Army Air Corps and is unique in that it is the only one of its kind in the world...The War Department is deeply appreciative of the general and cooperative spirit that has been shown by the citizens of Montgomery, and I am confident that the officers and men of the Tactical School will find a very happy home in your city.”<sup>37</sup>

Trubee’s letter is remarkable in two respects. First, until the December 4th announcement, there is nothing in War Department records—either within internal memoranda or news releases—to suggest that Maxwell Field would be chosen as the home of the Air Corps Tactical School. In fact, the exact opposite was true, i.e., that Maxwell Field was every decision maker’s last choice. Second, until mid-May 1928, representative Hill was completely unaware that Maxwell Field could be a





**Letter from Congressman J. Lister Hill to Major Walter Weaver, dated December 8, 1928. The letter is from the J. Lister Hill Papers, which is housed at the University of Alabama Library Special Collections (UALSC). This letter was reprinted with the express permission of UALSC.**

possible location for the Air Corps Tactical School, and therefore was sufficiently behind the lobbying curve in terms of securing the school for Montgomery.<sup>38</sup>

However, the War Department, in its political wisdom, knew it could leverage representative Hill's position as chairman of the House Military Affairs to make Maxwell Field a suitable location for the school. This became apparent when, on February 19, 1928, Hill's surrogates made their pitch to the War Department on transferring the 3rd Attack Group, located at Fort Crockett, Texas, to Maxwell Field. Hill knew that the War Department

was looking at several airfields for the attack group, including Shreveport, Louisiana and Houston, Texas. Knowing this, Hill lobbied the War Department to take a close look at Maxwell Field and succeeded in securing a site visit.<sup>39</sup> Hill provided the War Department with several reasons why Maxwell Field was the ideal location for the 3rd Attack Group. For one, Maxwell Field was perfectly situated in between the Texas southern border, the Gulf Coast, and the Atlantic Coast. Additionally, Hill felt that Maxwell Field's proximity to Fort Benning not only provided the group with a nearby training base from which to drop ordinance, but also enough soldiers for the group to practice air-to-ground coordination.<sup>40</sup>

Over the next several months, with the assistance of Maxwell Field commanding officer Major Walter Weaver, Hill continued to press the War Department on selecting Maxwell Field for the 3rd Attack Group.<sup>41</sup> Hill well knew that the selection of Maxwell Field would result in a net increase of roughly 1,350 military members in Montgomery—from 150 to 1,500 military members—and an annual payroll of roughly \$2,500,000.<sup>42</sup> For these reasons, Hill was willing to do whatever it took to secure the necessary million dollar plus congressional appropriation to make the move a reality.<sup>43</sup> Yet by mid-

May 1928, in a letter from Weaver, Hill learned that the War Department was not keen on transferring the 3rd Attack Group to Maxwell Field.<sup>44</sup> There was some good news, however, in the Weaver's letter. The news being that Foulois was now "desirous of placing the Tactical School in Montgomery."<sup>45</sup> In light of this information, Weaver urged Hill to start lobbying the War Department for the transfer of the Air Corps Tactical School to Maxwell Field. "I believe...that the Tactical School, from a point of view of future development, means more to Montgomery than even a Wing," wrote Weaver to Lister, adding, "If I can look into the future correctly, the Air Corps is bound to expand and the Tactical School must, of necessity, expand with it."<sup>46</sup> Hill replied to Weaver, "[R]est assured that I am letting no grass grow under my feet in the matter [of the Air Corps Tactical School]."<sup>47</sup>





1942 aerial picture of Maxwell Field. Notice the growth and expansion compared to the 1931 picture on page 19.

Today, of course, we know that Hill was successful in his War Department lobbying effort. We also know that it was Hill who secured the necessary appropriation to fund and support the move of the Air Corps Tactical School to Maxwell Field, including obtaining \$200,000 for the purchase of 750 acres adjoining the field and roughly \$800,000 for the construction of new barracks and buildings—the first such new construction commissioned on Maxwell Field in over a decade.<sup>48</sup> What remains unknown is when exactly Hill knew that Maxwell Field would be the future site of the Air Corps Tactical School. Certainly, based on Hill's personal correspondence from May through November 1928, we know that several behind-the-scenes discussions were had between Hill and War Department officials on the matter. Again, it is wor-

th noting the official War Department records over the same period in no way suggest that Maxwell Field would be chosen as the future site of the school. The December 4th news release by the War Department was seemingly the first public announcement. What is for certain is that Hill's advocacy on behalf of Maxwell Field proved economically beneficial for Montgomery and the surrounding area in the decades that followed, particularly with the expansion of air power learning and education through the standup of Air University, just as Weaver foretold.

## Notes

1. General Carl Spaatz, "Speech: The Air University—Thinking into the Future," September 3, 1946, contained in George N. Dubina, *Air University History: Dedication*

and Significant Events, 1946-1971 (Maxwell AFB, AL: AFHRA, 1971), 12-13.

2. Major General David M. Schlatter, "Air University," *Air Force Journal* 29 (July 1946): 9, 9.

3. Ibid.

4. Memorandum from Major General C.C. Chauncey to Major General David M. Schlatter, "Directive Re Army Air Forces School," November 9, 1945. See also War Department, "Assignment and Establishment of Army Air Forces Schools," November 19, 1945; Headquarters Army Air Forces School, General Order No. 1, "Reopening of Army Air Forces School, Maxwell Field, Alabama," November 29, 1945; Headquarters Army Air Forces, AAF Regulation No. 20-61, "Organization AAF School," January 4, 1946; Headquarters Army Air Forces, AAF Regulation No. 20-61, "Organization AAF School," June 3, 1946 (superseded January 4, 1946, regulation).

5. "Maxwell Gets New-Units of Aerial Forces," *Selma-Times Journal* (AL), May 29, 1945, 1.

6. As late as January 17, 1946, it had been determined that Maxwell, Craig, and Gunter Fields contained ample space to house all the various schools and accompanying students. See Memorandum from Brigadier General Joseph Smith to Commanding General, "[Untitled]," January 17, 1945, contained in *Air University, Office Memoranda, January 1946 through January 1948* (Maxwell AFB, AL: AFHRA, 1948). Three months later, however, Air University determined "the numbers [of proposed students are too large," and therefore the Air Tactical School would need to be located elsewhere. See Memorandum from Headquarters Air University to General Muir Fairchild, "[Untitled]," March 21, 1946, contained in *Air University, Office Memoranda, January 1946 through January 1948*. As a result, the Air Tactical School was relocated to Tyndall Field, Florida. See "Tyndall Slated for New Role," *Pensacola News Journal* (FL), May 18, 1946, 1; Headquarters Air University, General Order No. 21, "Assumption of Jurisdiction of Tyndall Field, Panama City, Florida, May 15, 1946; Headquarters Air University, General Order No. 22, "Transfer of the Air Tactical School to Tyndall Field, Florida, May 21, 1946.

7. See Robert T. Finney, *History of the Air Corps Tactical School, 1920-1940* (Maxwell AFB, AL: Air Force Historical Research Agency, 1955), 16-25.

8. *Air University History Report, November 29, 1945-*

7. See Robert T. Finney, *History of the Air Corps Tactical School, 1920-1940* (Maxwell AFB, AL: AFHRA, 1955), 16-25.

8. *Air University History Report, November 29, 1945-30 June 1947*, Vol. 1 (Maxwell AFB, AL: AFHRA, 1947), 1.

9. See "Eglin Field Chosen as Air Force Center in Peacetime Plans," *Pensacola News Journal* (FL), October 11, 1945, 1, 8.

10. *Air University Predecessor Organizations, 1920-1946* (Maxwell AFB, AL: AFHRA), 1.

11. Ibid.

12. Ibid.

13. Headquarters Air University, Office of Information, *Fifty Years of Aviation History at Maxwell Air Force Base, 1910-1960* (Maxwell AFB, AL: AFHRA, 1960), 35.

14. Ibid.

15. *Air University Predecessor Organizations, 1920-1946*, 2.

16. An Act to Provide More Effectively for the National Defense by Increasing the Efficiency of the Air Corps of the Army of the United States, and for Other Purposes, H.R. 10827, July 2, 1926, U.S. Stat.44 (Washington, DC: 1927), 780, 783-84.

17. Air Corp Five-Year Program [Implementation Tables], July 14, 1927, contained in *Air Corps Plans Division, Five Year Program File, 1926-1930* (Maxwell AFB, AL: AFHRA, 1930).

18. Ibid.

19. Memorandum from Major W.G. Kilner to Commandant Air Corps Tactical School, "Personnel and Equipment Requirements," August 15, 1927, contained in *Correspondence on Movement, Construction, Equipment, and Instruction at Maxwell Field, 1927-1931* (Maxwell AFB, AL: AFHRA, 1931).

20. Lieutenant Colonel C.C. Culver, "Air Corps Tactical School," January 26, 1928, contained in *Correspondence on Movement, Construction, Equipment, and Instruction at Maxwell Field, 1927-1931*.

21. Ibid.

22. Ibid.

23. Ibid. As Lieutenant Colonel Culver waited for a formal AAC response to his objections, he ordered a study be done listing the "buildings and other construction, improvements, and facilities that would be required" should the Air Corps Tactical School be "located to an unimproved site." See Memorandum from Major W.H.



Frank to Lieutenant Colonel C.C. Culver, "[Untitled]," February 20, 1928, *contained in Correspondence on Movement, Construction, Equipment, and Instruction at Maxwell Field, 1927-1931*.

24. Memorandum from Assistant Secretary of War F. Trubee Davison to the Honorable W. Frank James, Chairman of the Sub-Committee on Real Estate and Army Housing of the Committee on Military Affairs, March 7, 1928, *contained in Five Year Program Miscellaneous Documents, 1925-1940* (Maxwell AFB, AL: AFHRA, 1940).

25. Memorandum from Major T.D. Milling to Chief, Training & Operations Division, "Air Corps Five-Year Program," February 1, 1928, *contained in Five Year Program Miscellaneous Documents, 1925-1940*.

26. Ibid.

27. Ibid.

28. Ibid.

29. Ibid.

30. Ibid.

31. Ibid.

32. Memorandum from Brigadier General B.D. Foulois to Chief of the Air Corps, "Air Corps Five-Year Program," February 3, 1928, *contained in Five Year Program Miscellaneous Documents, 1925-1940*.

33. Memorandum from Major W.H. Frank to Lieutenant Colonel C.C. Culver, "[Untitled]," February 20, 1928, *contained in Correspondence on Movement, Construction, Equipment, and Instruction at Maxwell Field, 1927-1931*.

34. Ibid.

35. Ibid.

36. Adjutant General, "Distribution of Additional Grades and Ratings to Air Corps Units," November 30, 1928, *contained in Five Year Program Miscellaneous Documents, 1925-1940*.

37. Russell Kent, "Montgomery to be New Home of Army Corps Tactical School," *Montgomery Advertiser* (AL), December 5, 1928, 1.

38. Russell Kent, "House Passes Aviation Bill: Maxwell Field to Benefit by Appropriation," *Montgomery Advertiser* (AL), January 17, 1928, 1; "Air Attack Unit for Maxwell Field," *Nashville Banner* (TN), January 16, 1928, 11; "Maxwell Field Considered for Air Corps Attack Base," *Montgomery Advertiser* (AL), January 11, 1928, 1.

39. "Group Will Leave for Shreveport," *Montgomery*

*Advertiser* (AL), February 19, 1928, 1; "Military Body Will Inspect Maxwell Field," *Montgomery Advertiser* (AL), February 12, 1928, 1.

40. Letter from J. Lister Hill to General James E. Fechet, October 34, 1927, *contained in* J. Lister Hill Papers, box 670.037, folders Maxwell Field, 1923-1947 (Tuscaloosa, AL: University of Alabama Special Collections).

41. See, e.g., Letter from J. Lister Hill to Major Walter Weaver, December 8, 1928, *contained in* J. Lister Hill Papers, box 670.037, folders Maxwell Field, 1923-1947 (noting how Hill intentionally "refrained from saying too much about" Weaver's "activities in behalf of Maxwell" in trying to secure the "Attack Wing" for "fear that... those in high authority might take exception to or not appreciate.").

42. "Weaver Warns City May Lose Aviation Depot," *Montgomery Advertiser* (AL), February 28, 1928, 1.

43. Letter from J. Lister Hill to C.M. Stanley, *Alabama Journal*, January 21, 1928, *contained in* J. Lister Hill Papers, box 670.037, folders Maxwell Field, 1923-1947.

44. Letter from J. Lister Hill to Major Walter Weaver, May 21, 1928, *contained in* J. Lister Hill Papers, box 670.037, folders Maxwell Field, 1923-1947. See also Letter from Major Walter Weaver to J. Lister Hill, May 17, 1928, *contained in* J. Lister Hill Papers, box 670.037, folders Maxwell Field, 1923-1947.

45. Letter from Major Walter Weaver to J. Lister Hill, May 17, 1928, *contained in* J. Lister Hill Papers, box 670.037, folders Maxwell Field, 1923-1947.

46. Ibid.

47. Letter from J. Lister Hill to Major Walter Weaver, May 21, 1928, *contained in* J. Lister Hill Papers, box 670.037, folders Maxwell Field, 1923-1947.

48. Finney, *History of the Air Corps Tactical School, 1920-1940*, 14.



To honor the 80th anniversary of D-Day and the commencement of Operation OVERLORD, this “Picture Highlight” focuses on several photographs and documents regarding the aerial effort to destroy fortified German defenses at Pointe du Hoc along France’s Normandy coast.<sup>1</sup> The Allies’ focus on Pointe du Hoc stemmed from evidence and reports that indicated the Germans had six 155-mm howitzers embedded in coastal defense bunkers.<sup>2</sup> Each of the howitzers could easily deliver artillery fire on any nearby military force, a major concern for the Allies in light of the upcoming invasion on D-Day. Moreover, given the sheer cliffs of Pointe du Hoc, the Germans had effectively selected a natural shield that protected the howitzers against a direct Allied amphibious assault.<sup>3</sup> These concerns resulted in the Ninth Air Force carrying out the heavy bombardment of Pointe du Hoc in preparation for



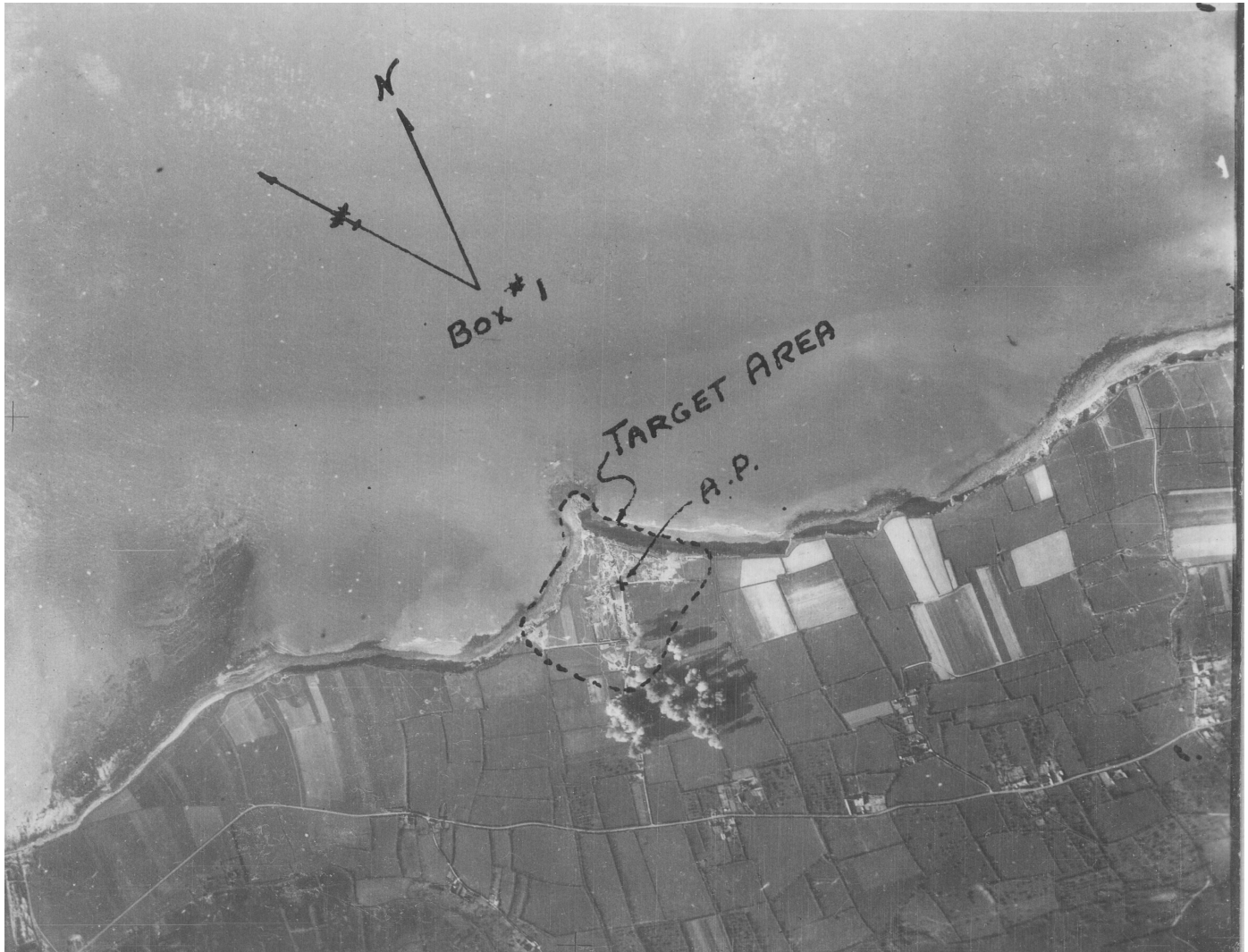
# Pointe Du Hoc



*E. Paige Vaughn*

the Allied invasion on June 6, 1944.

The aerial bombardment plan was essentially two-fold. First, United States Strategic Air Forces Europe tasked the Ninth Air Force with eliminating Germany’s Pointe du Hoc coastal defenses through heavy bombardment. Second, the Ninth Air Force had to execute the bombardment campaign in a manner that did not reveal the Allies’ overall strategy to the Axis Powers.<sup>4</sup> Especially considering the Army 2nd Ranger Battalion’s plan to conduct a special operations assault on Pointe du



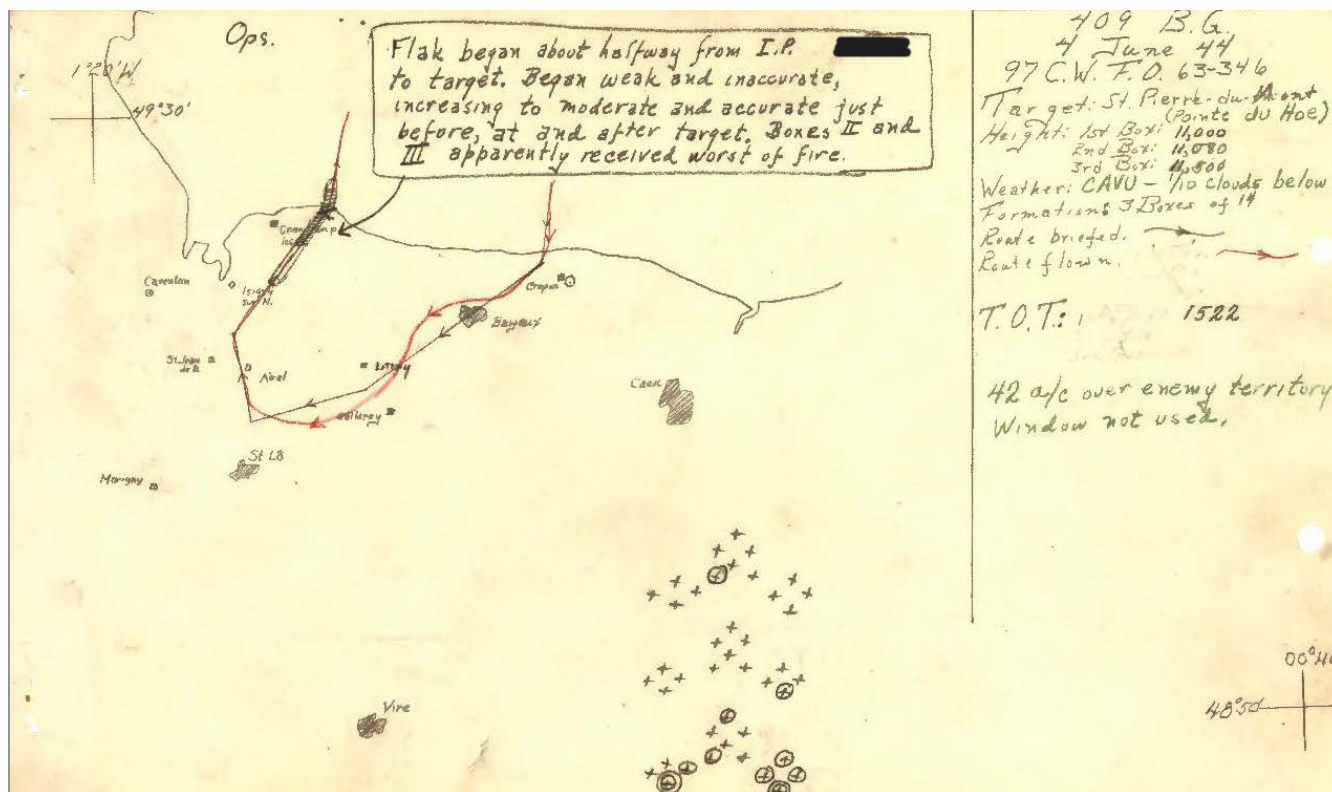
Hoc just prior to the full amphibious invasion on D-Day, the Ninth Air Force had to successfully meet both planned objectives to support the broader invasion goals.

From mid-spring to hours before the amphibious invasion on D-Day, the Ninth Air Force carried out multiple missions targeting Pointe du Hoc, and the nearby area of St. Pierre du Mont. These two photographs (see images on page 24), taken by the 416th Bombardment Group (416 BG) on April 25, 1944, offer clear aerial views of craters from previous bombing runs as smoke billows up from the bombs just delivered. The 416 BG, along with the 409th Bombardment Group (409 BG), carried out this

afternoon mission to hit the target identified as the “St. Pierre du Mont C/D Battery” with 49.75 tons of bombs.<sup>5</sup> The 416 BG and 409 BG reported “no losses, no casualties, [and] no battle damage” and on this particular mission scored “very good to excellent results” against the enemy fortified batteries.<sup>6</sup>

Another photo (see image above) highlights a suggested approach and the intended target area of the April 25, 1944, mission flown by the 416 BG and 409 BG. Here, the craters from previous bombing missions are noticeably visible. Although this mission took place weeks in advance of D-Day, it offers a glimpse into the massive number of





bombs dropped on Pointe du Hoc as a whole.

Just two days before D-Day, the 416 BG and 409 BG flew another mission to bomb Point du Hoc. The map (see image above) shows both the route briefed to the pilots and the route flown, as well as a note about the flak encountered by the aircrews. The flak helped reveal the continued presence of German anti-aircraft weapons at Pointe du Hoc, thus informing the Allies that the Germans were preparing to defend against an aerial assault. The map also includes useful details about the formation flown by aircrews, the altitude each box of aircraft flew, and a rating of the weather. The accompanying Form No. 106-b provides further information about the individual aircraft, the bombs dropped, and overall success of the mission. Again, these documents offer a snapshot of the number of bombs dropped on Pointe du Hoc and highlight the factors that impacted the ability of aircrews to accurately identify and fix a target.

All the way up to the invasion of Normandy, the Ninth Air Force continued its efforts to eliminate the threat of

IX B.C. 5-2 Form No. 106-b Prepare separate sheet for each target bombed

FORMER UNIT: 416 B.C.	TARGET: 409 B.G.	IX PC: 409	WING: 409
DATE: 4 June 1944	ATTACKING UNIT: 3 Boxes	GROUP: Point-du-Hoc	TARGET DIV: 409
FIRST PHASE INTERPRETATION			
A. TARGET BELIEVED Point-du-Hoc PRIMARY			
SECONDARY			
CASUAL			
N.P.I. Cross road at center of target area.			
A.P. Same as N.P.I.			
B. TARGET ATTACKED Point-du-Hoc WILDS FROM THE PRIMARY			
DIRECTION FROM PRIMARY			
C. COORDINATES (IF non-descript PINPOINT) ON 1:50,000 MAP NO.			
D. NO. AND TYPE OF A/C DISPATCHED 42 A-20's NO. OF A/C ATTACKING 42			
E. BOMBING BY 3's, 6's, 12's, 18's 14's IN FOLLOWING ORDER BOXES 1, 2 & 3			
F. NO. AND TYPE OF BOMBS DROPPED 204 x 500 PUSING UP 1/10 DOWN 1/10 TAIL			
GUSING			
H. HEADING OF A/C WHEN BOMBS DROPPED Box I - 33° Box II - 33° Box III - 40°			
I. TIME BOMBS DROPPED Box I - 1522 Box II - 1521 Box III - 1522			
J. ACTIVITY AT TARGET			
None observed.			
K. RESULTS OF BOMBING			
BOX I - FOUR: Bombs fell in 2000 concentration 1200' S.E. of desired N.P.I. in open fields and into the ocean.			
BOX II - FOUR: Bombs fell in 2000 concentration 800' N. of desired N.P.I. in water.			
BOX III - GROUP: Bombs straddled Nonville La Cambe highway 4.96 miles S.E. of desired N.P.I. at grid coordinates 562855 map 62/6 GDS 4250 with no damage to road.			

James E. Lowely 1st Lt.  
P.T. Officer

**Top:** After action map from the 409 BG depicting their June 4, 1944 mission. The “+” on the map indicates group aircraft. The “+” circled indicates group aircraft damaged during the mission.

**Bottom Right:** Form No. 106-b completed by 1st Lt. James E. Lowely for said mission.

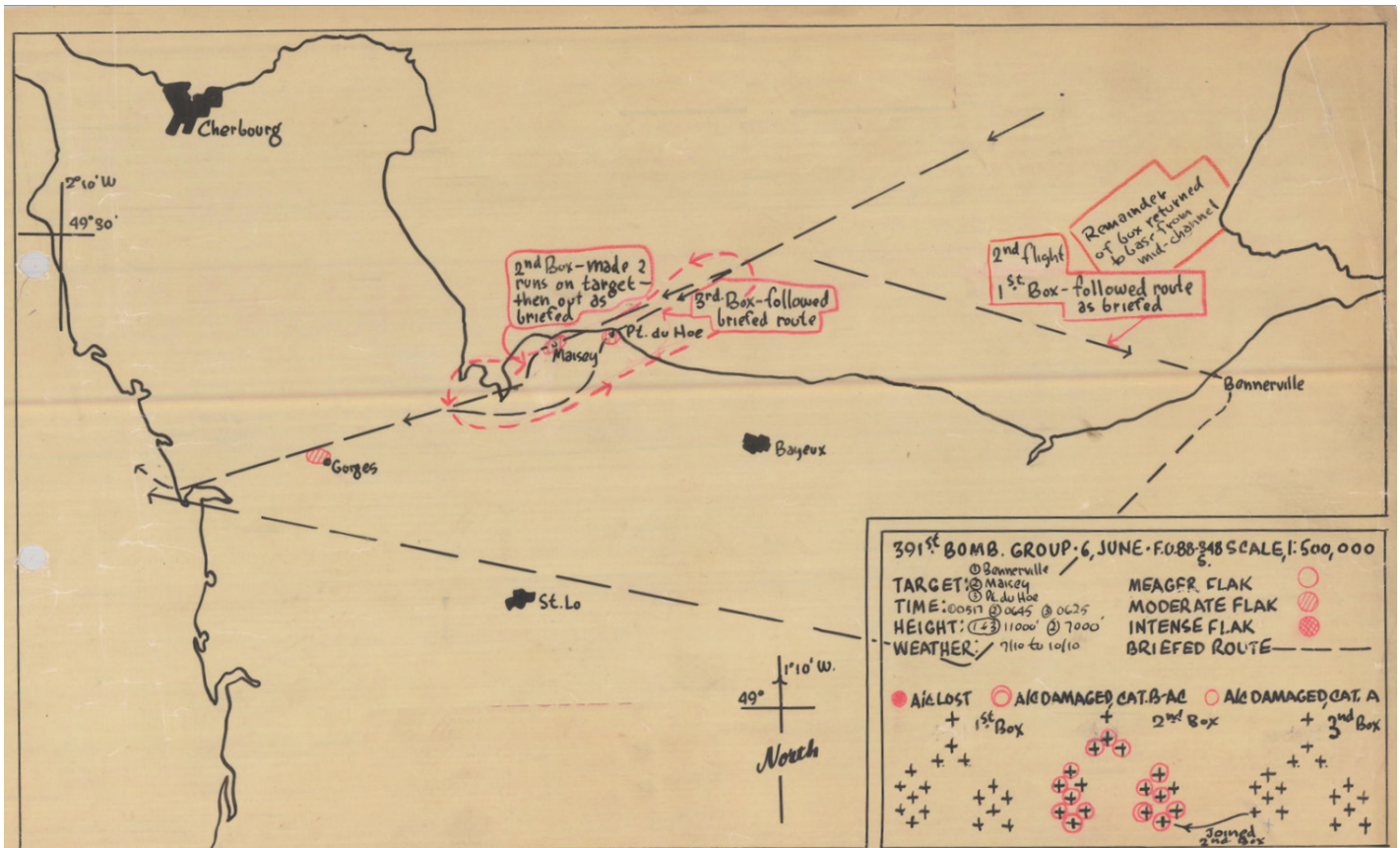


the coastal defense batteries. This map traces the different routes taken by the 391st Bombardment Group (391 BG) on the early morning of June 6, 1944. Included on the map are the three intended targets: 1) Bonnaville, 2) Maisy, and 3) Pointe du Hoc (Hoc). The 391 BG hit Pointe du Hoc at 6:25 AM and encountered moderate flak which damaged several aircraft. The inclusion of Pointe du Hoc on D-Day bombing missions again highlights the strategic importance of the location.

Overall, the Ninth Air Force bombing missions on Pointe du Hoc proved effective. These missions ultimately forced the Germans to abandon their coastal emplacements containing the 155-mm howitzers at Pointe du Hoc prior to the D-Day invasion. Moreover, a close inspection of these bombing missions offer the opportunity to better understand the experiences of the air crews from the 391 BG, 409 BG, and 416 BG.

## Notes

1. Pointe du Hoc is also referred to as Pointe du Hoe or referenced in connection to the nearby town of St. Pierre du Mont in various documents.
2. Historical Division, U.S. War Department, "Pointe du Hoe, 2nd Ranger Battalion," April 4, 1946, 1, *contained in Small Unit Actions* (Maxwell AFB, AL: AFHRA, 1946).
3. Ibid, 1.
4. W. F. Craven and J. L. Cate Wilfred, ed., *The Army Air Forces in World War II, Volume III: Europe - Argument to V-E Day* (Chicago, IL: University of Chicago Press, 1951), 168.
5. Ninth Bomber Command, "Mission Summary," April 25, 1944, 1, *contained in Bomber Command Field Order No. 285* (Maxwell AFB, AL: AFHRA, 1944).
6. Ibid.



# Air University's First Reading Guide



*E. Paige Vaughn*

Today, Air University Library (AUL) publishes professional reading guides with suggestions from the Chairman of the Joint Chiefs of Staff (CJCS), the Secretary of the Air Force (SECAF), the Chief of Staff of the Air Force (CSAF), the Chief of Space Operations (CSO), and the Chief Master Sergeant of the Air Force (CMSAF) that offer Airmen and Guardians the opportunity to explore books and other media on topics that our top leaders see as important matters.<sup>1</sup> Here at the Air Force Historical Research Agency (AFHRA), as far as we can surmise, Air University (AU) released its first *Guide for Professional Reading by Air Force Officers* in June 1947 to align with the goals established in 1946 by Major General Muir S. Fairchild.<sup>2</sup> In a letter addressed to incoming officers, General Fairchild stated that AU would foster an environment where thinking would be “fresh, original, and oriented on the future.”<sup>3</sup> By looking into the earlier versions of AU reading guides, as well as some guides prior to the conception of AU, we have the opportunity to trace the development and understand the purpose of these reading guides.

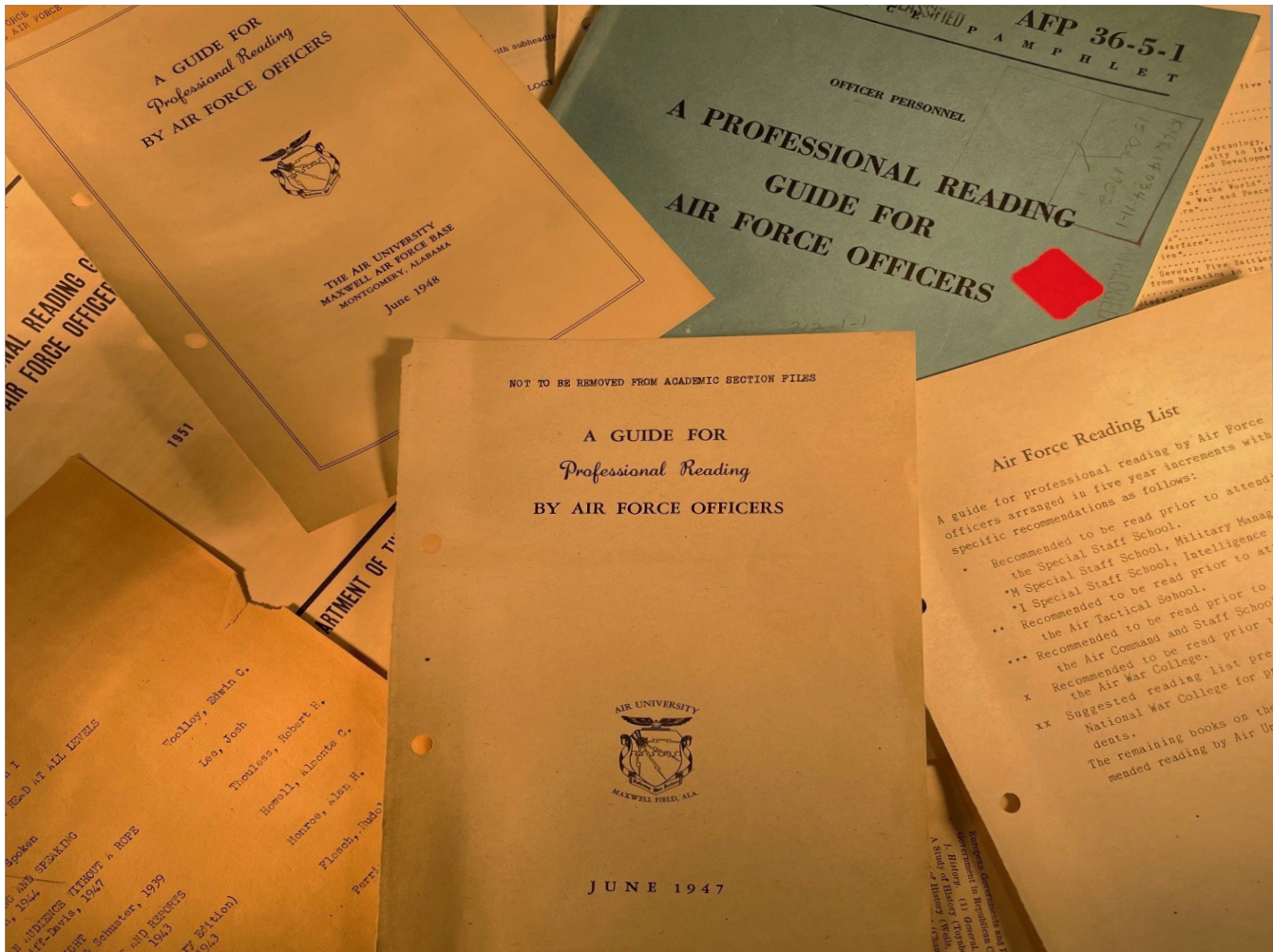
AU was by no means the first United States military organization to publish a reading guide. For instance, in the early 1920s, the Office of the Chief of Air Service made a push to establish a professional reading guide for officers.<sup>4</sup> The purpose of this guide was to offer officers encouragement to read outside of their normal duties so that they might further develop both personally and professionally.<sup>5</sup> Prior to the establishment of AU in 1946, the Air Corps Tactical School (ACTS) was the training facility located at Maxwell Air Force Base (AFB), Alabama.<sup>6</sup> As a

Special Service School, ACTS issued the recommended reading guides from the Office of the Chief of Air Service to the attending officers. These guides included both course reading material and suggested titles for professional development, as well as advice on the books that officers should read at different intervals in their careers.<sup>7</sup>

Not only was the Office of the Chief of Air Service producing reading guides, but it was also exploring different methods of organization for each guide. In one 1924 memorandum dealing with the formation of a department wide reading course for the Air Service, one reading guide was recommended to lieutenants and captains, while another was curated for field grade officers.<sup>8</sup> The reading guide for lieutenants and captains included many works considered to be literary classics, such as several of William Shakespeare’s plays, Victor Hugo’s *Les Misérables*, works by Lewis Carroll, H. G. Wells, and more.<sup>9</sup> A striking difference is apparent when compared to the reading guide for field officers, as it contained older suggestions including Dante’s *Divine Comedy* and Cicero’s *Letters*.<sup>10</sup> However, both guides placed emphasis on literary classics, and appear less concerned with specific military texts or with providing contemporary reading options. These choices perhaps reflect the popular educational reading of the time, but also demonstrate some of the lessons and values that Air Service leaders wished to impart on service members.

Beginning in the 1930s, building off the foundation provided by previous reading guides, ACTS began issuing guides with titles used in courses taught at the school. These guides included the





Collage of various reading guides from 1947 through 1955. The *Guide for Professional Reading by Air Force Officers* was the first reading guide published by Air University.

course name, publication year, and in some cases the publisher or author.<sup>11</sup> In the 1936-1937 guide, ACTS offered readers the chance to explore five different categories including: 1) Air, 2) War, Strategy, History, International Relations, and Policies, Geography, 3) Leaders, 4) Naval, and 5) Psychology, Leadership, and Propaganda.<sup>12</sup> Unsurprisingly, given the amount of topics that were grouped together, the second category dominated the reading guide. Under this category, ACTS recommended Carl von Clausewitz's *On War* and it marks the beginning of the book's long, prominent presence in future reading guides.<sup>13</sup> Compared to earlier reading guides, while several literary classics continued to be present, the 1936-1937 guide favored books which solely focused on military related topics and paid close attention to events and lessons from World War I (WWI).<sup>14</sup> The 1936-1937 guide also

initiated a shift towards trying to ensure that officers were being informed about recent events and learning information relevant to their career fields.<sup>15</sup>

Upon the establishment of AU, the first reading guide noticeably differed from previous guides given that it focused more squarely on military related topics, and less on literary classics.<sup>16</sup> Additionally, what made the first AU reading guide unique was that the recommendations were broken down into career development increments. The first section, titled "Division I," included books under topics ranging from English to Management and Government, Politics, and History.<sup>17</sup> The next three sections included similar topics, but contained various alterations, such as the addition of books on Economics and the Arctic. Although concise, AU's first reading guide featured extensive suggestions

of recent works on relevant topics and some military literature essentials, such as Sir Edward S. Creasy's *Fifteen Decisive Battles of the World* and Ferdinand Foch's *The Principles of War*.<sup>18</sup> In comparison, the Army published a reading guide similar to AU's within a manual titled *Essentials of Military Training* in 1949. This manual contained suggestions on relevant training literature and books on specific subject matter such as history.<sup>19</sup> Unlike the AU guide, several of the reading suggestions were merely manuals or regulations produced by the War Department, although some non-governmental books were included.<sup>20</sup> This emphasis on military texts over different genres of literature aligns with that of AU's reading guides and highlights a major shift towards including more military specific and contemporary material in post-World War II (WWII) guides.

After the first AU reading guide was published, over the course of the next three years, an additional guide was released each June. The 1948 guide was substantially longer than its predecessor and primarily consisted of contemporary reading suggestions in various categories broken down into career development increments.<sup>21</sup> AU's June 1949 reading guide received notice from the Department of the Air Force (DAF), when the CSAF ordered a memorandum sent to all commanding officers recommending engagement with the guide.<sup>22</sup> The same recommendation from the CSAF occurred again in 1950.<sup>23</sup> The involvement of the CSAF in these early reading guides emphasizes that DAF leadership recognized the importance of these guides and perhaps reveals the foundation for AUL's current CSAF professional reading guide.

In 1951, just four years after AU published its first reading

THE CONSTITUTION OF THE UNITED STATES WITH THE DECLARATION OF INDEPENDENCE .....	Barnes, William R. N. Y., Barnes & Noble, 1940 (reprinted 1947)
THE FOREIGN AFFAIRS READER .....	Armstrong, Hamilton Fish (Ed.) N. Y., Harper, 1947
THE FUTURE IN PERSPECTIVE .....	Newmann, Sigmund N. Y., Putnam's Sons, 1946
THE MAKING OF MODERN CHINA; A SHORT HISTORY ....	Lattimore, Owen & Eleanor N. Y., Norton, 1944
THE NEW EUROPE .....	Fitzgerald, Walter N. Y., Harper, 1946
THE RED DECADE .....	Lyons, Eugene Indianapolis, Bobbs-Merrill, 1941
THE REVOLT OF ASIA .....	Payne, Pierre R. N. Y., John Day, 1947
THE STRANGE ALLIANCE .....	Deane, John R. N. Y., Viking, 1947
THE UNITED STATES IN WORLD AFFAIRS, 1945-1947 ..	Campbell, John C., and the Research Council on Foreign Relations N. Y., Harper, 1947
U. S. FOREIGN POLICY .....	Lippman, Walter Boston, Little, Brown, 1943
UNITED WE STAND! DEFENSE OF THE WESTERN HEMISPHERE .....	Baldwin, Hanson W. N. Y., McGraw-Hill, 1941
USSR, A CONCISE HANDBOOK .....	Simmons, Ernest J. Ithaca, N.Y., Cornell University Press, 1947
WORLD COMMUNISM TODAY .....	Ebon, Martin N. Y., McGraw-Hill, 1948

Portion of Division III from the 1948 Air University reading guide suggesting texts related to history for officers with five to ten years of service.



guide, several changes occurred. For one, although still developed by AU, for the first time, the 1951 guide was issued by the SECAF in conjunction with the CSAF as Air Force Pamphlet (AFP) 212-1-1.<sup>24</sup> The involvement of the SECAF marked an important moment in the development of the DAF's professional reading guides. It signaled the beginning of DAF's direct involvement in the overall education of the force. This suggests that engagement by senior DAF leadership in the 1950s set up the expectation of commitment to AU's reading guides that continues to this day. Additionally, this guide was much longer than previous guides.<sup>25</sup> Yet, despite these landmark changes in the 1951 reading guide, it continued to offer books by subjects and had recommendations broken down into career development increments.

The 1952 *Professional Reading Guide for Air Force Officers*, followed a similar path as the 1951 guide.<sup>26</sup> However, a significant development occurred, which marks a major milestone in the development of AU's reading guides. Instead of offering recommendations in career development increments, the 1952 guide included the addition of specific divisions that separated books based on factors such as length, complexity, and depth. Not only did this guide have new instructions for readers, but it also included a small blurb about the text and the publication year, along with the standard inclusion of the author and title.<sup>27</sup> Later that same year, AU released a *Selected Professional Reading List* for the Air Command and Staff School (ACSS).<sup>28</sup> This guide also contained recommendations and instructions for students based on specific divisions. The inclusion of these methods highlights an example of the efforts by AU to provide students with the tools they need to succeed and grow professionally.

In summary, since its formal standup in 1946, AU has assembled reading guides to encourage the professional and personal growth of Airmen.<sup>29</sup> Today, through the combination of professional readings guides offered by the CJCS, the SECAF, the CSAF, the CSO, and the CMSAF, the strong emphasis on continual personal and professional growth for all Airmen and Guardians is still present in AUL's reading guides.<sup>30</sup> By upholding this legacy, AU encourages leadership development and continues General Fairchild's goal of producing a future oriented organization.

## Notes

1. Air University Library, "Professional Reading Lists for Air and Space Forces," May 2023, <https://fairchild-mil.libguides.com/c.php?g=1186035&p=9704254>; Air University Library, "USAF Professional Reading in Air University Library: CSAF Reading Lists," May 2023, <https://fairchild-mil.libguides.com/c.php?g=1186035&p=8674822>. The reading guides continue to

develop, as seen with Gen. Charles Q. Brown Jr.'s revision of the reading guide program in 2021. The decision to include podcasts, documentaries, and other forms of media in the AUL guides reflects the tradition of innovation embedded in the reading guides by offering diverse and modern options for service members to use.

2. Air University, *A Guide for Professional Reading by Air Force Officers* (June 1947)

3. Maj. Gen. Muir S. Fairchild, "[To Incoming Officers]," circa 1946.

4. H. R. Harmon, "[Untitled Memorandum for all officers on duty in the Office, Chief of Air Services]," May 21, 1924. For some examples of other groups that published reading guides prior to AU's first guide in 1947, see Charles E. Rush, *Reading List for the Boy Scouts of America* (Minneapolis, MN: H. W. Wilson Company, 1912); Herman H. B. Meyer, *Brief Reading List on Government and Politics* (Cleveland, OH: National League of Women Voters, 1921).

5. Adjutant General, *Reading Course for Officers* (January 1923).

6. Patrick J. Charles, "The Story of How Air University Came to Maxwell," *Air & Space Reflections*, vol. 1 (2024): 16-23.

7. Adjutant General, *Reading Course for Officers* (January 1923). In the early versions of these reading guides, only the title and last name of the author are included, with no further identification or synopsis offered.

8. H. R. Harmon, "[Memorandum for all officers on duty in the Office, Chief of Air Services]," May, 21, 1924. Additionally, in this reading guide, some titles were suggested for all officers regardless of service branch.

9. Ibid.

10. Ibid.

11. Air Corps Tactical School, *Texts Used During 1936-1937 Course* (1936).

12. Ibid.

13. Ibid. After this reading guide, von Clausewitz's *On War* appears frequently, often without fail, on other reading guides pulled for this study.

14. Ibid. For example, some titles include Neumann's *German Air Force in the Great War*, Morris' *German Air Raids on Great Britain*, Pershing's *My Experiences in the World War*, Jellico's *The Grand Fleet, 1914-1916*, and Harbord's *American Army in France*.

15. Ibid. Several works included on the guide that referenced recent events include Etherton and Tiltman's *Japan: Mistress of the Pacific?* and Douglas's *Elements of Air Tactics*.

16. Air University, *A Guide for Professional Reading by Air Force Officers* (June 1947).

17. Ibid.

18. Ibid.
19. *Essentials of Military Training, For Use by Units of the Regular Army, the National Guard and the Organized Reserve Corps* (Harrisburg, PA: Military Service Publishing Company, 1949).
20. Ibid.
21. Air University, *A Guide for Professional Reading by Air Force Officers* (June 1948). The oldest book included in this guide was *Great Captains* written by Theodore Ayrault Dodge in 1889, followed by G. M. Yorck von Wartenburg's 1902 book *Napoleon as a General*. These two works, along with a handful of others, were outliers on the extensive guide of recently published books (mainly late 1930s to 1948).
22. Air University, *A Guide for Professional Reading by Air Force Officers* (June 1949); Colonel L. L. Judge, Air Adjunct General, AFPM 350.01, September 21, 1949.
23. Air University, *A Guide for Professional Reading by Air Force Officers* (June 1950). Also, both the 1949 and 1950 guides followed the structure and layout of previous AU reading guides (see the 1948 guide for example).
24. Department of the Air Force, *A Professional Reading Guide for Air Force Officers*, AFP 212-1-1 (1951).
25. Ibid. The 1951 AU reading guide was significantly longer than previous versions, having roughly 26 pages of recommendations.
26. Department of the Air Force, *A Professional Reading Guide for Air Force Officers*, AFP 36-5-1 (1952).
27. Ibid. An entry in this reading guide follows the same format of title, author, publisher, year, and synopsis. For example: "*Peace Can Be Won*, Hoffman, Paul G., New York: Doubleday, 1951. The former administrator of the Marshall Plan and present head of the Ford Foundation gives his views on foreign policy. Worth reading."
28. Air University, *A Selected Professional Reading List* (December 1952). This was not the only guide to offer recommendations based on specific divisions. In 1953, AU issued *Study No. 4: Military Theory Background Reading Guide* to students attending Air War College (AWC). See Air University and Mr. Martin Goldman, *Study No. 4: Military Theory Background Reading Guide* (1953-1954). Divided into three sections, this guide offered well-rounded recommendations on a single broad course topic. As part of a course, the reading guide was intended to assist students in their education and offered important details on each suggestion, including: 1) the author, 2) title, 3) publication information and year, 4) call numbers (for students pulling the books from the AU collection), and 5) a brief comment about the work.
29. One example can be found in the *Air University Quarterly Review*, a periodical journal intended to inform readers about relevant topics and opinions, which was established by General Fairchild in 1947. See Maj. Gen. Muir S. Fairchild, "[Untitled Memorandum Establishing Air University Quarterly Review]," February 27, 1947, contained in Lt. Col. Kenneth F. Gantz, "The Air University Quarterly Review: An Essay in Intellectualism," *Air University Quarterly Review* 7, no. 4 (Fall 1956): 110; Air University, *Air University Quarterly Review* 1, no. 1 (Spring 1947). This first *Air University Quarterly Review* was published before, or around the same time as AU's first reading guide in June 1947, and included a brief section titled "Airman's Readings." This section is like the later "Books and Ideas" portion as it offers a few titles for Airmen to read. The section titled "Books and Ideas" was dedicated to either a miniature review of a single book that dealt with a specific concept, a guide of suggested readings, or multiple brief reviews of different books. For examples of the different guides, see Dr. Eugene M. Emme, "Lessons from the Luftwaffe," *Air University Quarterly Review* 7, no. 3 (Winter 1954-1955): 89-95; Col. Royal H. Roussel, "The Air Force Doctrinal Manuals," *Air University Quarterly Review* 7, no. 1 (Spring 1954): 126-131; Dr. Raymond Estep, "A Reading List of Books on Astronautics," *Air University Quarterly Review* 10, no. 4 (Winter 1958-1959): 104-110. The books suggested in the "Books and Ideas" section were recently published and connected to relevant military themes and innovative subjects that AU leadership wished to highlight. Furthermore, efforts to expand the reading guide program began in 1997, when the Office of the Air Force Chief of Staff announced a specific reading guide for enlisted service members, with the goal of offering a selection of books that would help grow leaders and foster professional development. For more information, see "Enlisted List Added to CSAF Professional Reading Program," *Airman* 40, no. 12 (December 1997): 14.
30. Air University Library, "Professional Reading Lists for Air and Space Forces," May 2023, <https://fairchild-mil.libguides.com/c.php?g=1186035&p=9704254>.



# Agile Combat Employment (ACE) in World War II

## The Rise and Demise of Project 9



*Patrick J. Charles*

For several years now, the United States Air Force (USAF) has been honing an operational concept known as Agile Combat Employment (ACE). Doctrinally, ACE is defined as a proactive and reactive operational scheme of maneuver intended to be executed within threat timelines to increase survivability while generating combat power. In layman's terms, ACE is an operational concept that seeks to employ the joint force in a way that is more lean, agile, and fluid. This in turn increases joint force survivability in any peer-to-peer or near-peer conflict. ACE accomplishes this by relying less on large, traditional overseas bases as hubs for projecting combat power, and more on generating and maintaining smaller, collapsible bases.

Although ACE is relatively new in our everyday vernacular, it is a rather old military concept. One can find facets of ACE throughout air power history dating all the way back to World War II (WWII). In fact, it is fair to say that ACE was born out of said war, which was the last, no-kidding, peer-to-peer conflict that the United States was formally engaged in. There are indeed several historical examples that one can point to. However, one example, at least

in this historian's humble opinion, stands out more than the others—the Allied air campaign in northern Burma that took place from early-to-mid 1944. It serves as a quintessential example of ACE's hub and spoke operational scheme of maneuver. And this year marks said campaign's 80th anniversary. But before delving into the details of this campaign, it is important to have a basic geographic understanding of Burma at the outbreak of WWII.

At that time, Burma was a British colony comprised of roughly 16 million people. Measuring north to south, Burma ran nearly 1,200 miles long, and from east to west ran nearly 575 miles at its widest point. Dense jungles made much of Burma difficult to traverse by land, and its border mountains and natural barriers were less than ideal logistically speaking. There was also the problem of Burma's tropical climate and the diseases that came with it, which even the most highly trained military force could easily succumb to. Nevertheless, the fact remained that Burma directly bordered China, and therefore was the Allies' best means to assist China's military in defeating Japan. No one knew this more than Chiang Kai-shek, and it

was at his request that the Allies agreed to utilize Burma as a military staging ground to take the fight directly to Japan.<sup>1</sup>

To accomplish this, in February 1942, the Allies agreed to construct what would come to be known as the Ledo Road—a supply route extending across northern Burma, from Ledo through Myitkyina to Lungling.<sup>2</sup> It would take several months, however, before the Allies were able to put their plan into action.<sup>3</sup> In the meantime, all across the China-Burma-India (CBI) Theater, the Allies fought ferociously for air supremacy against Japan.<sup>4</sup> A ground campaign was also being waged, albeit with mixed results. The principal problem that the Allies kept running into was the lack of consistent and reliable aerial resupply, as well as the ability to reliably evacuate the wounded.

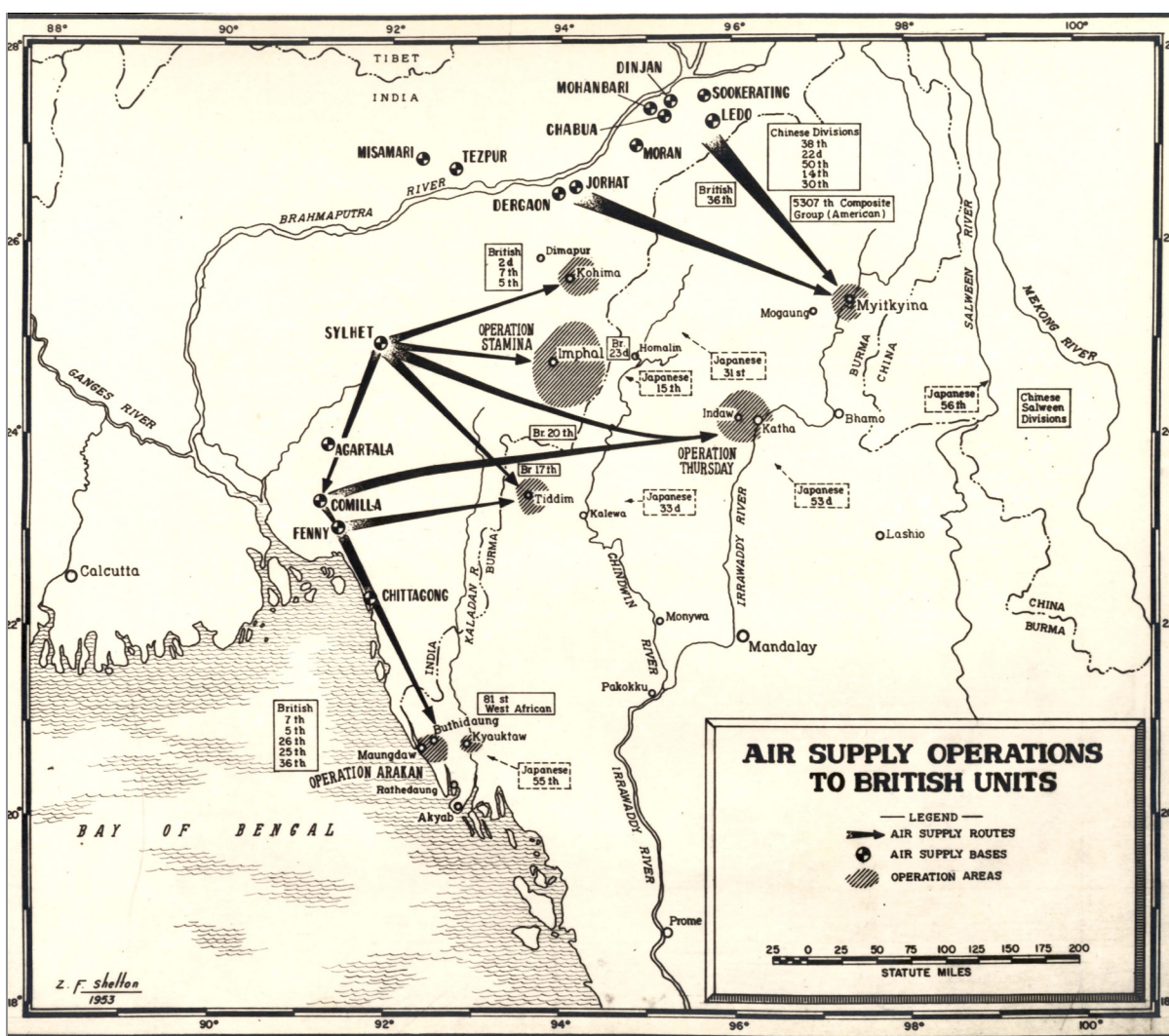
No one was more cognizant of these problems than British Major General Orde C. Wingate, who had been tasked with conducting irregular warfare against Japan's supply and communication lines. Wingate labeled his approach to irregular warfare as Long-Range Penetration (LRP). From February to March 1943, Wingate applied LRP across northern Burma, accomplishing

everything from destroying supply depots, to cutting railway lines, to misdirecting enemy ground forces. Yet despite achieving several mission successes, LRP was largely an operational failure given that Wingate's force was perpetually malnourished, in need of supplies, and diseased. Of the 3,000 men that Wingate marched out with in early 1943, only 2,200 returned—with many failing to return simply because the Allies were unable to reliably extract their sick and wounded. Moreover, Wingate's

military expedition was so tortuous on his men that only 600 of returning 2,200 would serve in another military operation. Thus, if LRP was going to work, Wingate knew it would require having specialized and sustained aerial support.<sup>5</sup>

Herein was the genesis of what was codenamed Project 9—the Army Air Forces (AAF) first air-centric special operations unit. Assembled and led by Colonels Philip G. Cochran and John R. Alison, Project 9's primary mission was to

provide Wingate with whatever air support was necessary to make LRP operationally viable. Contrary to some prominent British historical accounts,<sup>6</sup> the air-centric special operations concept that made up Project 9 was not Wingate's idea, not in the least bit.<sup>7</sup> Wingate's conception of air power for LRP was rather limited in imagination.<sup>8</sup> For instance, in an August 1943 memorandum titled "Forces of Long-Range Penetration," Wingate surmised that all that LRP would require to be



1953 illustration depicting how Allied Forces utilized a hub-and-spoke approach to supplying expeditionary aerodromes in Burma circa 1944.



operationally successful was “twelve to twenty DC-3s” for aerial resupply, and perhaps a handful of “small...transport plane[s] capable of effecting landings in restricted spaces, conveying vital personnel and documents...”<sup>9</sup>

The air-centric special operations concept that made up Project 9 was much more. It was originally devised from the forward-thinking mind of then Major General George C. Kenney, who in May 1942 wrote to then Lieutenant General Henry “Hap” Arnold on the AAF’s need to develop an “Air Blitz Unit”—an air attack unit principally comprised of fighters, air transports, and bombers that Kenney hoped would flip air doctrine on its head.<sup>10</sup> Through Kenney’s “Air Blitz Unit” concept, military aircraft would no longer have to generate sorties entirely within their own occupied territory. Rather, military aircraft could operate “without being tied to the concrete and fixed installations of core or lead permanent bases, a condition which effectively limits [an air force’s] ability to take advantage of [its] characteristic mobility...”<sup>11</sup> But there was a major problem with Kenney’s overall concept—logistics. It was, in Arnold’s words, the “greatest problem” because air transport alone—at least as it was known to operate at that time—could not provide the “essential gasoline, ammunition and bombs” that forward-deployed military aircraft would need to be operationally effective.<sup>12</sup> It was here that Arnold proposed that Kenney consider gliders as a logistics solution.<sup>13</sup> Gliders were capable of landing in smaller, austere locations that larger air transports could not. Moreover, the financial and operational cost of losing a glider in combat was miniscule to that of losing a larger, much more expensive air transport.

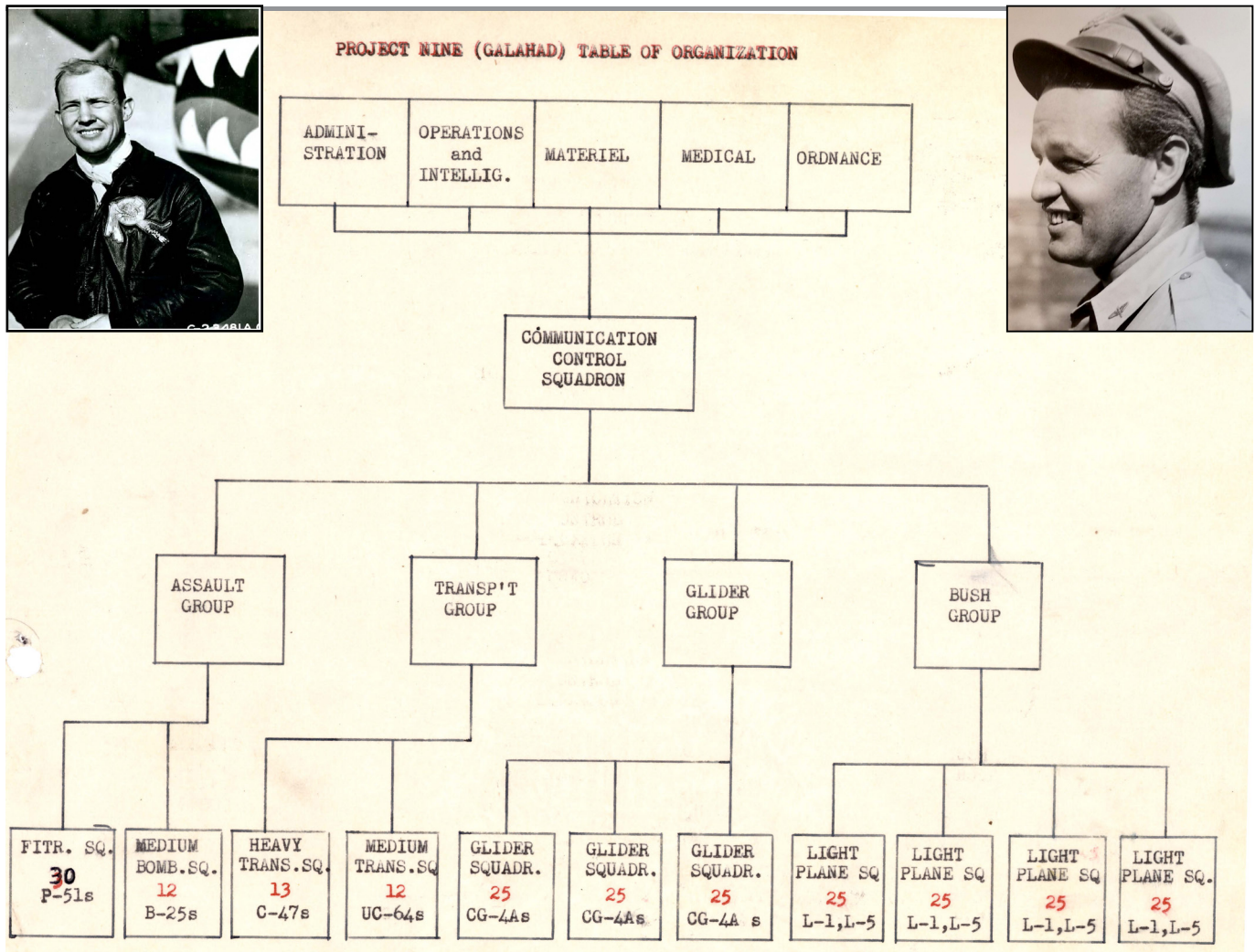
Within two months, Arnold greenlighted Kenney’s “Air Blitz Unit”

concept upon announcing the standup of 1st Troop Carrier Command (1 TCC).<sup>14</sup> Although Arnold purposefully left out “many details” concerning the 1 TCC’s “exact size, composition, tactics, objectives, and when and where it will strike,” what he could state publicly was that his new “air-borne attack force” would “exceed anything the world has yet seen.”<sup>15</sup> It was not long after Arnold’s announcement that the 1 TCC began developing Kenney’s air-centric special operations concept, particularly as it pertained to gliders.<sup>16</sup> Initially, the 1 TCC surmised several military uses for gliders.<sup>17</sup> Yet after numerous trial and error, it was decided that the two best military uses were 1) for “transport operations free from enemy action” and 2) establishing “air-heads where enemy action would be encountered.”<sup>18</sup> Both of these military uses would prove crucial to making Kenney’s “Air Blitz Unit” an operational reality. Yet at the time Kenney’s concept was being developed, no one quite knew what to do with it, or what theater, if any, it would be employed in, not even Arnold.

The Quadrant Conference, held in mid-August 1943 between all the major Allied leaders, provided Arnold with the answer—northern Burma. For it was at the Quadrant Conference that Wingate briefed everyone on the tactical benefits of his LRP concept, and how a well-supported, aerial resupplied LRP force could assist the Allies in seizing northern Burma and opening the Ledo Road.<sup>19</sup> Arnold, who was attending the conference, immediately saw LRP as an opportunity to test Kenney’s “Air Blitz Unit” concept, and therefore agreed to provide Wingate with the necessary air support to see it through. Arnold just needed to find the right officers with the right amount of gumption. And in Arnold’s mind, those officers were none

other than Colonels Cochran and Alison. Cochran, a two-time Distinguished Flying Cross recipient, was known among fighter squadrons as a tactical innovator. He was also the inspiration for well-known cartoonist Milton Caniff’s comic strip *Terry and the Pirates*. Meanwhile, Alison, who knew Cochran from their aviation cadet days, was a gritty combat veteran in his own right. Alison had earned coveted ace status while flying for General Claire Lee Chennault’s Fourteenth Air Force in China and was, at the time, commander of the famed 1st American Volunteer Group Flying Tigers.<sup>20</sup>

The story of how Arnold recruited Cochran and Alison is one of historical lore. According to several accounts, the story is that Arnold basically voluntold Cochran and Alison that they would assist Wingate in northern Burma, were given carte blanche authority to make it happen by any means possible, and Cochran and Alison subsequently conceptualized Project 9 virtually out of thin air.<sup>21</sup> While these accounts certainly made for a great public relations story,<sup>22</sup> it is a story built on fiction more so than fact, save for the voluntold part.<sup>23</sup> What the public relations version of the story conveniently omits is the fact that Arnold had already put into motion what would become Project 9 months earlier.<sup>24</sup> This is not to say that Cochran’s and Alison’s leadership approach and operational fortitude were not crucial in carrying out Project 9. They were. This is also not to say that Cochran and Alison did not tactically improve upon tactical use for light planes and helicopters. They did. For while Kenney’s “Air Blitz Unit” concept envisioned the utilization of gliders, fighters, air transports, and bombers to establish forward aerodromes behind enemy lines, it did not propose any tactical use for light planes and helicopters.



Original organizational table for Project 9. The table, however, does not accurately reflect Project 9's structure at the time of activation. In the upper lefthand corner is a picture of Colonel John R. Alison. In the upper righthand corner is a picture of Colonel Philip G. Cochran.

Cochran's and Alison's final conception of Project 9, however, did; meaning that at some point along the way, from the conclusion of their meeting with Arnold, in August 1943, to their deployment to the CBI Theater, in December 1943, Cochran and Alison made several improvements to Kenney's concept.<sup>25</sup>

When all the components that made up Project 9 were finalized by Cochran

and Alison, it was arguably—at least on paper—the most agile and adaptive, self-contained unit in the AAF at that point in time.<sup>26</sup> In its final form, Project 9 consisted of two fighter squadrons, utilizing P-51 and B-25 aircraft, capable of attacking any target on the ground or in the air. It also consisted of three liaison squadrons, utilizing L-1 and L-5 aircraft, three glider squadrons, utilizing CG-4 gliders, and two

troop carrier squadrons, utilizing UC-64s and C-47s, each of which could perform a variety of mission sets, including aerial resupply, air transportation, and the evacuation of casualties.<sup>27</sup> Indeed, other contemporaneous AAF units maintained similar mission capable aircraft. However, what made Project 9 unique was its ability to execute a wide variety of mission sets, all the while being able to rapidly establish



HEADQUARTERS EASTERN AIR COMMAND (INDIA)  
New Delhi, India

OPERATIONAL DIRECTIVE NO. 2

TO: Air Commander, Third Tactical Air Force, Comilla  
Air Commander, Strategic Air Force, Calcutta  
Air Commander, Troop Carrier Command, Comilla

1. INFORMATION

To supplement and work in conjunction with the Long Range Penetration Groups a small Air Task Force, known as the 5318th Air Unit (Prov.) was organized:

- a. To facilitate the forward movement of L.R.P. columns.
- b. To facilitate the supply and evacuation of the L.R.P. Columns.
- c. To provide a small air covering and striking force.
- d. To acquire air experience under conditions expected to be encountered.

2. COMMAND

Colonel P. G. Cochran is the Commanding Officer of the 5318th Air Unit (Prov.) Lieutenant Colonel J. R. Alison is the Deputy Commander.

3. CONTROL

This force has been allotted to the Third Tactical Air Force for operational control:

- a. To accomplish the task for which formed it must be considered as a separate tactical air group and not subordinate to other tactical groups, but directly responsible to the Air Commander of the Third Tactical Air Force.
- b. The 5318th Air Unit (Prov.) has been primarily furnished to support the L.R.P.G. columns under Major General Wingate. Any support furnished by 5318th Air Unit (Prov.) to other L.R.P. columns must be coordinated with the primary L.R.P.G.'s Commander.



and collapse forward aerodromes in austere, enemy-occupied territory. What further made Project 9 unique is it was the first AAF unit to fully leverage the operational benefits of utilizing light planes and gliders, not just as small troop transports, but also to carry out covert operations.

In December 1943, when Cochran and Alison arrived in the CBI Theater, several general officers tried to “divert” Project 9 from its “original purpose.”<sup>28</sup> This prompted Arnold to write to Major General George E. Stratemeyer, who oversaw all AAF forces in the CBI Theater, on how Project 9 was not to be meddled or interfered with in any way, nor by any general officer regardless of rank.<sup>29</sup> Following Arnold’s order, Stratemeyer ensured that Project 9’s mission and quasi-independent status were codified in Operational Directive No. 2, dated January 17, 1944.<sup>30</sup> The directive stipulated that Project 9, otherwise designated in theater as the 5318th Air Unit (Provisional), was principally tasked with achieving four objectives: 1) facilitating the forward movement of Wingate’s LRP force; 2) facilitating the supply and evacuation of said force; 3) serving as a “small air covering and striking force”; and 4) acquiring “air experience under conditions expected to be encountered.”<sup>31</sup> As to whom Cochran and Alison were to directly report to, although Stratemeyer placed them under the “control” of the Third Tactical Air Force, Project 9, for all intents and purposes, was to be treated as a “separate tactical air group.”<sup>32</sup> This is not to say, of course, that the Third Tactical Air Force Commander, British Air Marshal Sir John E.A. Baldwin, could not leverage Project 9 in the CBI Theater for other missions. However, before to doing so, Stratemeyer’s directive required that Baldwin first

coordinate with Wingate. This ensured that Project 9 would never be “diverted from [its] primary mission...”<sup>33</sup>

It was not long after Stratemeyer issued Operational Directive No. 2 that the Third Tactical Air Force incorporated it into all its planning documents.<sup>34</sup> Still, despite this, several general officers remained cynical of Project 9 given that it flipped established air power doctrine on its head.<sup>35</sup> The contents of the AAF’s principal strategic document—Field Manual 100-20—weigh this out. Titled Command and Employment of Air Power, and authored by General Arnold himself, Field Manual 100-20 specified that all aerodromes should be placed at locations where a) air superiority had been achieved; b) aircraft and the accompanying aircrews were readily provided with the “necessary facilities...for security, rest, replacement, maintenance, and repair”; and c) there was a sufficient ground force to defend it from enemy ground attack.<sup>36</sup> Yet Project 9’s principal task was to achieve the exact opposite result—that is establish and maintain expeditionary aerodromes at locations where a) air superiority was being contested by enemy forces; b) aircraft and the accompanying aircrews did not maintain the necessary facilities; and c) there was only a small ground force to defend it, and behind enemy lines no less.

The quasi-independent command structure of Project 9 was also unnerving to several general officers.<sup>37</sup> While Field Manual 100-20 specified that “centralized” command and control of all “available” air power was a “battle winning factor of the first importance,”<sup>38</sup> Project 9, through the orders laid out in Operational Directive No. 2, was a clear exception to the rule.<sup>39</sup> No one was troubled by this more than the commander of all CBI Theater troop

carrier air forces, Brigadier General William D. Old.<sup>40</sup> Old could not stand the fact that Cochran and Alison, both of whom were junior in rank, were able to circumvent the CBI Theater command structure, including that of Old himself.<sup>41</sup> The proverbial tipping point for Old was the day he visited Cochran’s camp at Lalaghat. According to Old, Cochran’s men were a disheveled mob unworthy of their uniforms.<sup>42</sup> They were all unshaven, the officers and enlisted shared the same mess and latrines, and formal military salutes “were absolutely unknown.”<sup>43</sup> This prompted Old to berate Cochran publicly and order him to “cleanup” his force.<sup>44</sup> Cochran subsequently issued the following tongue-and-cheek memo:

Look, Sports, the beard and attempts at beards are not appreciated by visitors.

Since we can’t explain to all strangers that the fuzz is a gag or “something I always wanted to do” affair, we must avoid their reporting that we are unshaven (regulations say you must shave) by appearing like Saturday night in Jersey whenever possible.

Work comes before shaving. You will never be criticized for being unkempt if you are so damn busy you can’t take time to doll up. But be clean while you can.

Ain’t it awful?<sup>45</sup>

The reason Cochran’s men were so unkempt when Old visited was they were less than 12 hours away from establishing the AAF’s first-ever expeditionary aerodrome behind enemy lines. They were clearly more focused on executing this task, codenamed Operation THURSDAY, than their hygienic appearance. As

for the officers and enlisted sharing the same mess and latrines, what Old failed to appreciate is that Project 9 was purposefully setup differently from the AAF's other, more traditional flying units. Each man attached to Project 9 was not assigned one job or role, but many, which in turn required everyone—officers and enlisted alike—to work closely together.<sup>46</sup> In a way, Cochran's men were the AAF's first multi-capable Airmen before the phrase was ever coined.

And with Operation THURSDAY so close to initial execution, Cochran could have cared less about what Old thought of him, his men's hygienical appearance, or Project 9 as a whole. Rather, what

concerned Cochran was whether the two locations where he planned to establish expeditionary aerodromes that evening—codenamed Broadway and Piccadilly—were occupied by enemy forces. Equally concerning for Cochran was how just days earlier, Wingate, in order not to tip off the Japanese of their plans, had ordered that no aircraft were to fly anywhere near either Broadway or Piccadilly. But Cochran, operating on a hunch, willfully chose to ignore Wingate's order and request aerial reconnaissance photos, and thankfully so. For just hours before executing Operation THURSDAY, Cochran received several aerial photos showing Piccadilly was being obstructed by dozens of manually

positioned tree logs. This new intel caused such a fracas that the entire operation was called into question. Eventually cool heads prevailed and it was decided that THURSDAY would indeed move forward, albeit with the modification that the initial assault force would operate only out of Broadway.<sup>47</sup>

As with any operational first, THURSDAY was far from perfect. Cochran and Alison, of course, planned for a variety of contingencies. However, within just the first four hours of the operation, Cochran, Alison, and the entire Third Tactical Air Force had to overcome several unforeseen problems. The first occurred not long after the initial cadre of aircraft—consisting of



Photograph of the planning meeting that took place prior to the execution of Operation THURSDAY. To the immediate left of the pictured map is Colonel Alison, and to the immediate right is Colonel Philip G. Cochran.





Photograph of several crashed CG-4 gliders at Broadway on the morning of March 6, 1944.

26 C-47s double-towing 54 CG-4 gliders—departed Lalaghat for Broadway on the evening of March 5, 1944. The problem was that many of the gliders were severely overloaded with supplies and equipment, and some of the glider pilots were too inexperienced to make the necessary inflight adjustments.<sup>48</sup> The result was that roughly one-third of the initial cadre of gliders failed to reach Broadway. And the glider pilots that did reach Broadway were presented with another problem—a highly congested landing area. It did not matter that the glider pilots had staggered their landings. The roughness of Broadway and several unforeseen ditches caused the first group of gliders to break, crash and become stuck upon landing. This in turn

created a domino effect of subsequent landing gliders either crashing into the already grounded gliders or forcibly careening into nearby foliage. In total, 24 men were killed and another 30 injured from the initial cadre of gliders landings at Broadway. This prompted Alison, who was serving as Broadway's AAF commander, to radio for the cancellation of the second cadre of gliders.<sup>49</sup> Alison's radio died shortly thereafter, causing a great amount of confusion and consternation back at Lalaghat.<sup>50</sup>

When daylight broke on the morning of March 6th, Alison quickly assessed the damage. Indeed, the glider invasion did not go as planned. However, there was some good news. Three of the bulldozers

transported by the gliders were still operational, and therefore could clear away the damaged gliders and level Broadway's landing strip. Even better was the news that the landing strip would be operational that afternoon. And upon reestablishing communications, Alison relayed this information back to Cochran and Wingate at Lalaghat. Alison also relayed the urgent need for light planes to evacuate the dead and wounded. It was not long, however, before Alison's radio once more went silent, prompting Cochran and Wingate to make sure that the first planes to arrive at Broadway later that day contained new radio equipment.<sup>51</sup>

Once Broadway was fully up and running, Cochran and Wingate began

plotting for the establishment of a second expeditionary aerodrome, located 60 miles southeast of Broadway, codenamed Chowringhee. That night with just a dozen CG-4 gliders, Cochran and Wingate successfully secured Chowringhee.<sup>52</sup> And over the course of the next three days, 406 transport and light plane sorties carried an impressive 5,509 personnel, 924 mules and horses, and 340,385 pounds of supplies and equipment into both Broadway and Chowringhee.<sup>53</sup> Even more impressive was the rapidity in which Chowringhee was evacuated on March 9th. In just one day, all aircraft, personnel, and equipment at Chowringhee were safely evacuated to Broadway, and fortuitously so. For the very next morning, on March 10th, a sizeable Japanese ground force reached Chowringhee only to find it empty.<sup>54</sup>

All and all, Operation THURSDAY was a resounding success. For the first time in air power history, a flying unit, assisted by a specialized ground force, established, maintained, and defended multiple expeditionary aerodromes in enemy-occupied territory. Was THURSDAY executed to perfection? No.<sup>55</sup> However, for those who witnessed THURSDAY first-hand, the operation was a sight to see. Air Marshal Baldwin, for one, opined that "[n]obody has seen an [air] transport operation until he has stood at Broadway under the light of a Burma full moon and watched [C-47] Dakotas coming in and taking off in opposite directions on a single strip all night long at the rate of one landing and one takeoff every three minutes."<sup>56</sup> The official Royal Air Force (RAF) history of THURSDAY, compiled from contemporaneous reporting and eye-witness accounts, was even more glowing in its praise. "[THURSDAY] was

Air Force (Spl) Form 213-S

SECRET CY. HER. MESS

Priority:- *Urgent Immediate* Serial No:- *1638/8*

No. of Groups:- *283* T.O.O.:- *081500 081755*

System:- *X* T.O.R.:- *081900/082000*

Transmission:- *RT* T.O.D.:- *082150 (2 copies)*

Indicators:-

Most Secret.

*SECRET*

100(ACC 102(102 ((AGAG(AGAG MCS-C))) DATED 7/7 MARCH ((U) EASTERN AIR HQ ACSEA

COM. COMMAND SEA (SEA) FROM HQ THIRD TACTICAL AIR FORCE ACC(ACC 107(107 8/8 MAR

MOST SECRET FOR AIR CHIEF MAR. SHAW PEIRSE AND GENERAL STRATHEIMER FROM BALDWIN

. FURTHER TO MY ))) ON NIGHT OF 6/8 MARCH ABOUT NINETY DAKOTA

SORTIES FLOWN FROM HAILAKHUNDI (HAILAKHUNDI) AND RAJYESWARPUR (RAJYESWARPUR PLUS

THREE GLIDERS ~~THREE GLIDERS~~ . ALL AIR CRAFT TO BROADWAY (BROADWAY) EXCEPT

SIX WHICH LANDED CHOWRINGHEE (CHOWRINGHEE) . BULLDOZER TAKEN YESTERDAY EVENING

BY GLIDER FROM BROADWAY TO CHOWRINGHEE . CHOWRINGHEE STRIP WHICH WAS HOPED TO

BE READY AT 0100 (0100) HOURS WAS THEN TOO SHORT AND AIR CRAFT WITH EXCEPTION

OF SIX WERE RECALLED . CHOWRINGHEE FULLY SERVICEABLE FOR TONIGHT . ALL

DAKOTAS RETURNED LAST NIGHT WITH EXCEPTION OF TWO RAF (RAF) WHICH HAD SLIGHT

COLLISION AT BROADWAY ON NIGHT OF SIXTH . EXPECTED THAT SPARES WILL BE FLOWN

IN TONIGHT TO MAKE THEM FLYABLE PROGRAMME FOR 8/8 - 0049 XIMATELY EIGHTY

SORTIES EACH TO BROADWAY AND CHOWRINGHEE STRENGTH AT ADVANCED BASES NOW APPROX

3000 (3000) . ALLISON (ALLISON) RETURNED BASE REPORTED MORALE BROADWAY HIGH .

NO ENEMY INTERFERENCE YET LATEST INFORMATION INDICATES ENEMY CONCENTRATING

AIR STRENGTH SHWBO (SHWBO) AREA . OFFENSIVE ACTION ALREADY UNDER TAKEN BY US

*copy for Mr. V. Marshall Baker for Air Chief Marshal Sir Robert Peirce*

Decyphered by:- (Full Signature and rank).

Checked by:- *Thurmond* (Full Signature and rank).

Supervisor (T.D.S.) T.O.R.

Original Operation THURSDAY cypher message dated March 8, 1944.



an operation entirely without parallel in the war against Japan,” stated the official RAF history, adding, “and in view of the underlying factors, it was accomplished at remarkably small cost.”<sup>57</sup>

In a letter to General Arnold, Major General Stratemeyer also heaped large praise on the operation:

[T]he entire operation, air and ground, has served to provide a boost in morale...The future effect of this [new] airborne operation is unknown, but to date it has been successful beyond our expectations. Indications are that continued audacious and surprise attacks [like employed for THURSDAY] may be successful against the Jap[anese] who seem incapable of coping with the present operation. An additional discovery is the value of the light airplane. It has been a surprise to find that they have operated with freedom in daylight over enemy territory, flying at tree top level, landing in small areas, dropping food and supplies to isolated parties, evacuating wounding, and serving by their very presence as a boost to morale.<sup>58</sup>

Yet despite seemingly everyone agreeing that THURSDAY was indeed an operational success unlike any other, within just a week of its initial execution, CBI Theater leadership began to seek the disbandment of Project 9. Although the surviving evidentiary record is a bit murky as to whom was the chief architect of this effort, what is known is that Air Marshall Baldwin was at the forefront. Indeed, Baldwin was thoroughly impressed with Operation THURSDAY overall. However, as early as March 11th, Baldwin opined that the entire operation would have been

executed better if Cochran and Alison had not been given “semi-independent” status, and Baldwin himself had been fully in charge. Baldwin also believed that the initial glider landings into Broadway would have gone more smoothly had Brigadier General Old’s troop carrier air forces done them.<sup>59</sup> Unsurprisingly, Old, who was averse to Project 9 from the very get-go, agreed. In his diary, Old wrote that Project 9’s initial glider landings into Broadway were a “poor show” and the glider pilots themselves were “inadequate...in the fundamentals of formation flying, or even simple air traffic rules.”<sup>60</sup> And in his THURSDAY after-action report, Old took a direct swipe at both Cochran’s and Alison’s leadership. “It is interesting to note that the entire operation was carried out from the planning stages through the execution with no one individual actually directing the operation,” wrote Old.<sup>61</sup>

By March 18th, unbeknownst to Cochran and Alison who were amid planning for Project 9’s expansion, Stratemeyer, at the request of Baldwin,<sup>62</sup> ordered Project 9 disbanded and its assets absorbed into the Tenth Air Force.<sup>63</sup> When Stratemeyer informed Cochran of his decision, both agreed that Cochran would be given time to determine the proper “disposition of [Project 9] personnel.”<sup>64</sup> Cochran then used that time to apprise General Arnold of the situation. Arnold, who was both a chief architect and proponent of Project 9, of course took issue with Stratemeyer’s disbandment decision. So much so in fact that Arnold immediately enlisted and gained the support Army Chief of Staff General George C. Marshall, who not only agreed with Arnold on retaining Project 9 as is, but also agreed to its expansion via the standup of additional “Air Commando units.”<sup>65</sup> Arnold then made sure to relay this information directly in a letter to the

commander of all Allied air operations in the CBI Theater, Admiral Lord Louis Mountbatten.<sup>66</sup> Therein, Arnold made it unequivocally clear that Project 9, as well as any future air commando units, were to only take orders through the “U.S. chain of command.”<sup>67</sup> The letter also made it clear that the “integrity of the units [would] be maintained.”<sup>68</sup> In other words, any future attempts made by general officers in the CBI Theater to disband Project 9 and its progeny were off the table, and therefore would not be countenanced by Arnold moving forward.

Yet despite Arnold directing that Project 9 be sustained in northern Burma for the foreseeable future, CBI Theater leadership, especially that of Baldwin, Stratemeyer, and Mountbatten, continued to seek its dissolution.<sup>69</sup> To these Project 9 skeptics, it did not matter that Cochran and Alison had once more proved the operational concept viable at both Aberdeen and White City.<sup>70</sup> The CBI Theater leadership simply viewed it differently—that is they did not see the long-term tactical advantages of sustaining Project 9 like that of Arnold, Cochran, and Alison. This naturally created a divisive wedge between what Arnold, Cochran, and Alison wanted to tactically achieve in northern Burma with that of the CBI Theater leadership.

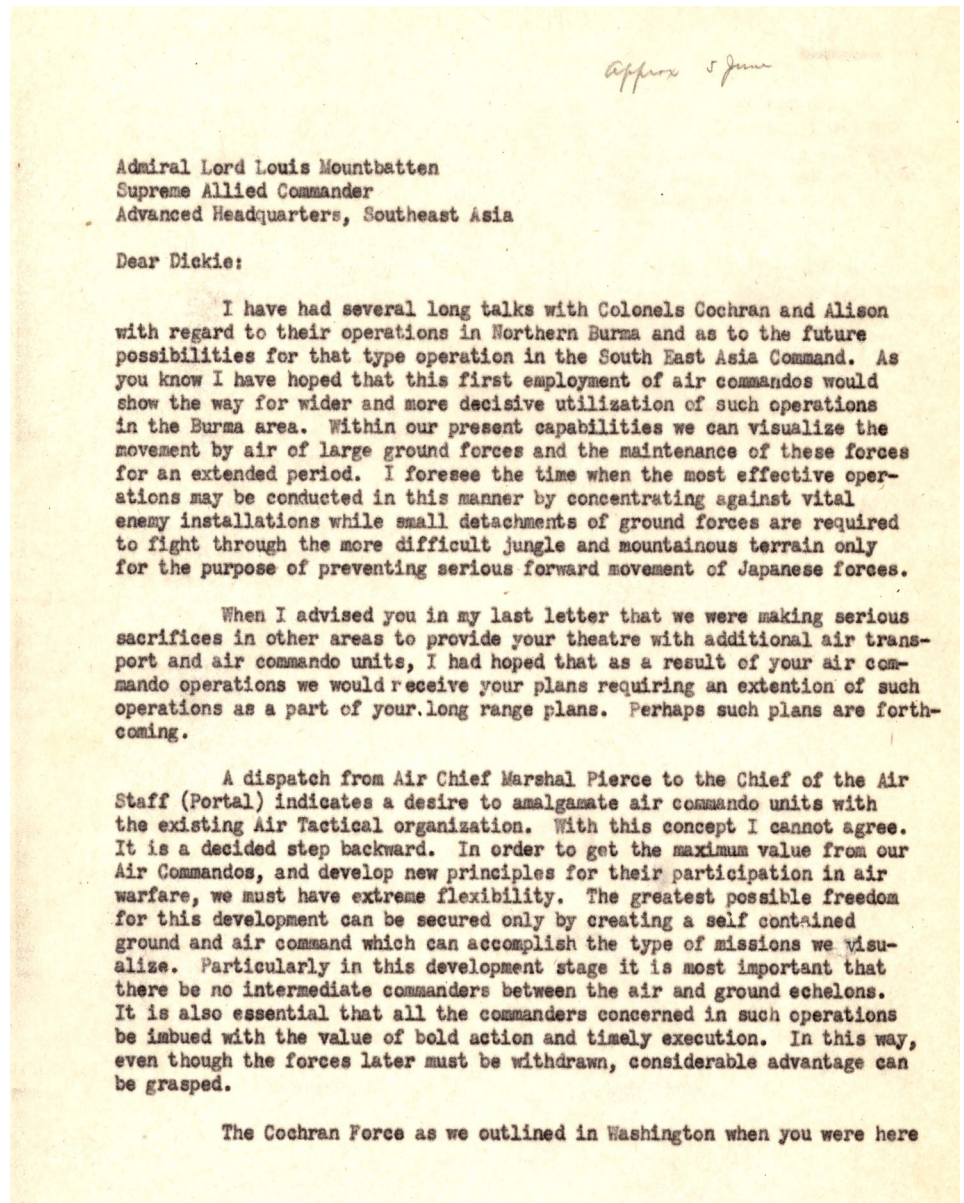
Over the next three months, from April through June, Arnold, Cochran, and Alison fought feverishly to sustain Project 9 in northern Burma. Ultimately, their efforts failed. There are two reasons for this. The first was the tragic death of Major General Wingate, who on March 22nd perished in a B-25 crash while enroute to India.<sup>71</sup> And without Wingate, Project 9 lost its most vocal proponent in theater. Indeed, Wingate’s command successor, Brigadier General Michael Calvert, was a highly capable military

Otherwise known as the Dear Dickie Letter, this March 24, 1944 letter from General Henry Arnold firmly outlined how Project 9 was to be employed in the CBI Theater of operations.

officer, who was experienced and well-versed in LRP. However, Calvert did not have Wingate's bullish persona, and therefore he could not shape and influence theater operations like Wingate.<sup>72</sup>

The second reason why Project 9 eventually fell by the wayside is that CBI Theater leadership simply chose not to support it. And it was a coordinated effort no less.<sup>73</sup> This is not to say that CBI Theater leadership outright ignored Arnold's March 24th directive on sustaining Project 9.<sup>74</sup> Rather, they simply chose not to prioritize Project 9 in their mission planning. "It is evident [from Arnold's directive] that for the present we must continue to maintain Cochran's force as it is organized, by giving him additional replacement equipment and replacement personnel," wrote Stratemyer to Baldwin on March 29th, adding, "[However, Cochran's] operations will, of necessity, be less intense since he does not have the supporting units necessary to maintain [them] at an accelerated operational rate."<sup>75</sup> That same day, Stratemyer wrote to Arnold on why he felt the Project 9 concept of operations, at least as envisioned and executed during THURSDAY, was something that the CBI Theater chain-of-command would no longer support:

[I]t is our considered opinion that



[the] Air Commando function, as such, is not a special branch of aviation and should not be exploited as such. We felt that with some specialized training and some special equipment, elements of regularly constituted units could perform the function just as well. This is particularly true in view of the fact that the Air Commando

Force only forms the spear head of the invasion, after which it is not so organized as to be able to continue...

...The operations of the Air Commando Force No. 1 under Colonel Cochran have been spectacularly successful even though the task has outgrown that for which the force was organized. Therefore, of necessity,



was nothing more than an idea - an idea which visualized putting down by air considerable ground forces far behind the enemy's lines and at places where he could offer no serious opposition. Possibly the means to accomplish this purpose have been available in other theatres, but apparently the idea or the desire to use such resources in a bold and decisive manner has been lacking.

While I am confident that our concept has practically unlimited possibilities for development in Burma, enthusiastic support from the theatre is most essential to determine the eventual capabilities of such operations. Since the more extensive use contemplated for the Burma sector has not been indicated, I now wonder if I can justify the dispatch of the additional forces. The aggressive demands of other theatres, notably the Pacific, make this a live question. I believe that you personally are as much concerned with this turn of events as I am. Despite the demand for all such personnel and equipment, the Cochran unit will remain in India.

One of the combat cargo units comprising 100 C-47 aircraft is en-route to India. I am sure that this group will be of great assistance in relieving the present burden on your LOC. As for the other groups, it may be essential that these be deployed elsewhere.

Again expressing to you my keen regret that conditions may require a change in our plans and assuring you of every best wish for continued success, I am

Very sincerely yours,

H. H. ARNOLD  
General, U. S. Army  
Commanding General, Army Air Forces

many of the functions which it was intended that they perform, have been taken over by units of the Tactical Air Force and Troop Carrier Command. At present [Cochran's] commitments are greater than the capacity of his force and I am taking action to provide additional personnel and equipment to enable him to carry on

as presently organized until decision as to disposition can be reached.<sup>76</sup>

Stratemeyer's letter did little to dissuade Arnold, Cochran, and Alison from proceeding forward with Project 9 as is. For in the weeks that followed, Arnold leveraged every available resource to transform his idea for additional

The second page of General Arnold's Dear Dickie Letter, dated March 24, 1944, outlining how Project 9 was to be employed in the CBI Theater of operations.

air commando units into a reality.<sup>77</sup> As Arnold's Chief of the Air Staff, Major General Barney M. Giles wrote to Stratemeyer on April 12th: "We are scraping the bottom of the pot to make this project possible...If we...mount this project without any diversion from other Theater projects we would definitely be attempting to satisfy a champagne appetite with a beer income."<sup>78</sup> Giles concluded his letter to Stratemeyer by noting the importance of continuing a "rapid and positive further use of this new method of warfare, and that the results promised more than justify the changes in plan which must be accomplished."<sup>79</sup>

Arnold also made sure to periodically remind CBI Theater leadership that Project 9's aircraft, equipment, and personnel were to remain independent.<sup>80</sup> Arnold was especially frank with Mountbatten on the matter. In a letter dated June 6th, Arnold criticized CBI Theater leadership's attempts to "amalgamate" Project 9 with "the existing Air Tactical organization."<sup>81</sup> Arnold then reminded Mountbatten why Project 9 was ever created in the first place—this being to assist Wingate and "show the way for wider and more decisive utilization of such [air-centric special] operations in the Burma area."<sup>82</sup> Moreover, Arnold made sure to remind Mountbatten of the several favors he had pulled to redirect air assets to the CBI Theater, and that this had been done in part so that Project 9 would be allowed to operationally flourish. "In order to get the maximum value from

our Air Commandos, and develop new principles for their participation in air warfare, we must have extreme flexibility,” wrote Arnold to Mountbatten, adding, “The greatest possible freedom for this development can be secured only by creating a self-contained ground and air command which can accomplish the type of mission we visualize.”<sup>83</sup> Arnold closed his letter by noting that he was not going to permit CBI Theater leadership to disband and absorb Project 9’s aircraft, equipment, and assets however they saw fit.<sup>84</sup>

Yet despite Arnold’s persistence, Project 9 was never again utilized in northern Burma as designed. Arnold even went so far as to individually pitch Project 9 to several general officers in the CBI Theater,<sup>85</sup> as well as advocate for its utilization following the Allied seizure of Myitkyna. It was all to no avail. No one would agree to take up Arnold on his offer.<sup>86</sup> Where Arnold did succeed, however, was in the formal establishment of three Project 9-based, air commando units—the 1st Air Commando Group, 2nd Air Commando Group, and 3rd Air Commando Group respectively.

The rise and demise of Project 9 during World War II is truly an inspirational tale. It is the story of how an innovative idea went from the proverbial drawing board to the battlefield. Until the success of Operation THURSDAY, Project 9’s hub and spoke approach to warfighting was unfathomable to many contemporary general officers. They simply could not look past the logistics problem. However, the forward-thinking minds of Arnold, Kenney, Cochran, and Alison could, and it was through their collective efforts that air power doctrine was transformed. No longer were battlefield logistics intimately tied to land routes. The Allied seizure of Myitkyna cemented this fact. For on May 15, 1944, utilizing the same aerodrome

seizure tactics employed by Cochran and Alison during Operation THURSDAY, the Allied CBI Theater air forces, this time led by Old,<sup>87</sup> seized a landing strip just west of the town of Myitkyna. Unfortunately, the accompanying Allied ground campaign did not employ the requisite LRP tactics this time around, which in turn allowed Japanese ground forces to contest the aerodrome seizure for nearly four months. The Allies principal saving grace was what they had come to learn through the success of Project 9; this being that aerial logistics could be just as effective in supplying ground forces as land-based logistics. From the time the aerodrome was seized (May 17th) until the time the nearby town was liberated (August 3rd), an impressive 14,000 aircraft sorties transported over 30,000 tons of supplies, personnel, and ammunition into Myitkyna.<sup>88</sup>

Although the story of Project 9 is indeed an inspirational tale, it is equally a cautionary one. It is fitting example of the difficulties involved when trying to invoke change in an ideologically entrenched military. The fact of the matter is that most of general officers that witnessed the success of Project 9 and Operation THURSDAY chose not to see Arnold’s, Cochran’s, and Alison’s air-centric special operations concept flourish and grow. For a variety of reasons, whether it be skepticism, jealousy, hubris, or simply a lack of operational vision, these general officers outright opposed Project 9. The military leaders of today and tomorrow will hopefully learn from these World War II era general officers’ visionary reluctance—that is be open to embracing visionary operational change, not vehemently opposing it.

## Notes

1. Joe G. Taylor, *Air Supply in the Burma*

*Campaign* (Maxwell AFB, AL: AFHRA, 1957): 1-4.

2. *Ibid.*, 4.

3. *Ibid.*, 5-6.

4. *The Army Air Forces in World War II*, Vol. 4, Wesley Frank Craven et al. eds. (Chicago, IL: University of Chicago Press, 1950): 409-34.

5. For some historical accounts of Wingate’s expedition, see Simon Anglim, *Orde Wingate and the British Army, 1922-1944* (London, UK: Pickering & Chatto, 2010): 175-77; William T. Y’Blood, *Air Commandos Against Japan* (Annapolis, MD: Naval Institute Press, 2008): 5-6; David Rooney, *Wingate and the Chindits: Redressing the Balance* (London, UK: Arms and Armour Press, 1994): 76-101; Peter Mead, *Orde Wingate and the Historians* (Wiltshire, UK: Merlin Books, 1987): 27-33; Charles J. Rolo, *Wingate’s Raiders* (New York, NY: Viking Press, 1944): 7-197.

6. See, e.g., Anglim, *Orde Wingate and the British Army*, 175-80; Christopher Sykes, *Orde Wingate* (London, UK: Collins, 1959), 449-63; Rooney, *Wingate and the Chindits*, 111.

7. See generally Patrick J. Charles, “Dissecting the Origins of Air-Centric Special Operations Theory,” *Journal of Military History* 81 (July 2017): 803-28.

8. Memorandum, “Employment of 3d Indian Division,” May 18, 1944, contained in Second Wingate Expedition 1944, Operation ‘Thursday’ 3d Indian Division, vol. 2, AIR 23-1946 (London, UK: British National Archives, 1944) (outlining LRP operational principles and how maintaining forward airfields contradict them); Lieutenant General Walter Lentaigne, Interview Transcript, undated 1944, contained in Operation Thursday, WO 203-4620 (London, UK: British National Archives, 1944) (noting that until meeting with Cochran, Wingate only



visualized utilizing air power to transport forces and provide aerial resupply).

9. Brigadier General Orde Wingate "Forces of Long-Range Penetration: Future Development and Employment in Burma," August 10, 1943, *contained in* Major Cortez F. Enloe Papers, box 4, folder 1 (Colorado Springs, CO: USAF Academy Library, 1943) (hereafter cited as Enloe Papers).

10. Letter from Major General George C. Kenney to Lieutenant General Henry H. Arnold, May 18, 1942, *contained in* General Henry H. Arnold Papers, reel number 84 (Washington, DC: National Archives and Record Administration) (hereafter cited as Arnold Papers); Memorandum, "Air Force Offensive-Defensive Basic Unit," May 17, 1942, *contained in* Arnold Papers, reel number 84.

11. Letter from Lieutenant General Henry H. Arnold to Major General George C. Kenney, June 10, 1942, *contained in* Arnold Papers, reel number 84.

12. *Ibid.*

13. *Ibid.*

14. The newly formed 1 TCC was a reorganization of what had been Air Transport Command—a command that just one month prior had been reorganized out of what was previously known as Ferrying Command. *See Brief History of the I Troop Carrier Command from April 30, 1942 to April 20, 1943* (Maxwell AFB, AL: AFHRA, 1943), 1. Where the 1 TCC operationally distinguished itself from its organizational predecessors was the 1 TCC's additional mission of creating an Air Commando force—a force that would "provide for the air movement of air-landing troops, glider-borne troops, parachute troops and their equipment, evacuation of the wounded, and the resupplying of ground units when required." *See* "Brief Outline of Facts and Functions of I Troop Carrier Command," December 7, 1942, *Brief History of the*

*I Troop Carrier Command*, Exhibit B. *See also Historical Data: I Troop Carrier Command from Activation to June 30, 1942* (Maxwell AFB, AL: AFHRA, 1942), 1.

15. This press release appeared in newspapers across the country. *See, e.g.,* "U.S. Air Commandos Prepare for New Offensive Actions," *Lock Haven Express* (PA), July 21, 1942, 3; "Air Commandos Set to Strike Enemy Where Least Prepared," *Oakland Times* (CA), July 18, 1942, 3; United Press, "Army Forms Corps of Air Commandos," *New York Times*, July 18, 1942, 6.

16. *See, e.g.,* Fred S. Borum, "Here Come the Airborne Troops!" *Air Force Magazine*, February 1943, 8-9; "Air Commandos and Pilots for Air Borne Command to be Trained at Local Base," *Alliance Times and Herald* (NE), November 3, 1942, 1; Donald E. Keyhoe, "This Week: Commandos on Wings," *Indianapolis Star* (IN), November 1, 1942, 10; "Ships for Our Air Commandos," *Popular Science*, October 1942, 70-72; "Army Glider Pilot Training Program," *US Air Services Magazine*, July 1942, 15, 46; "Glider 'Commandos of Air' Training at U. of Detroit," *Detroit Free Press* (MI), August 23, 1942, 5; "39 Texans in Glider Group," *Fort Worth Star-Telegram* (TX), August 10, 1942, 7; Frank L. Nelson, "U.S. Winged Army, Once a Dream, Now a Reality," *U.S. Air Services Magazine*, August 1942, 11-12, 38; "New Glider-Pickup May Be Used by Air Commandos," *Alton Evening Telegraph* (IL), July 29, 1942, 2.

17. *See generally* Army Air Forces, *I Troop Carrier Command Glider Program*, vol. 1 (Maxwell AFB, AL: AFHRA, 1945).

18. *Ibid.*, 3.

19. *Quadrant Conference, August 1943: Papers and Minutes of Meetings* (1943), 449-50; Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft): The Campaigns in the Far East*, vol. 4 (London, UK: n.p., 1952), 23.

20. Y'Blood, *Air Commandos Against Japan*, 14-40.

21. *Ibid.*, 11, 25-26; Memorandum, "Summary of Operations of First Commando Group," April 10, 1944, *contained in* Arnold Papers, reel number 106.

22. *See, e.g.,* Henry H. Arnold, "The Aerial Invasion of Burma," *National Geographic* 86 (August 1944): 129-30; John R. Alison "Glider Invasion—A Jungle Epic," *New York Times*, May 1, 1944, SM12.

23. Colonel Philip G. Cochran, Oral History Interview by Dr. James C. Hasdorff (Maxwell AFB, AL: AFHRA, 1975), 149. *See also* Letter from General Henry H. Arnold to Lord Louis Mountbatten, September 1943, *contained in* Enloe Papers, box 4, folder 1 ("I have two fine young Air Officers selected—one of which will see you in India quite soon. They have initiative and imagination and can handle your special air job.").

24. Charles, "Dissecting the Origins of Air-Centric Special Operations Theory," 817.

25. *Ibid.*, 817-18.

26. *See, e.g.,* Letter from General Henry H. Arnold to Major General George E. Stratemeyer, September 17, 1943, *contained in* Enloe Papers, box 7, folder 7 ("The Force has been kept extremely small in personnel in order to preserve the greatest degree of mobility. The personnel are being selected with a view to each man performing several jobs."). For a useful timeline detailing the development of Project 9, *see* "Chronological History of Project 9," May 19, 1944, *contained in* Assistant Chief of Air Staff, Intelligence, Cochran Project File (Maxwell AFB, AL: AFHRA, 1944).

27. *See* "Project 9 (Galahad) Table of Organization," January 17, 1944, *contained in* Assistant Chief of Air Staff, Plans, *Airborne Study: Long Range Penetration Groups* (Maxwell AFB, AL: AFHRA, 1944).

(hereafter Assistant Chief of Air Staff, Plans, *Airborne Study*).

28. Memorandum from Colonel Philip G. Cochran to General Henry H. Arnold, "History, Status and Immediate Requirements of First Air Commando Force," January 21, 1944, *contained in* Third Tactical Air Force Collected Reports: 1st Air Commando Group and Operation "Thursday" 1944 (Maxwell AFB, AL: AFHRA, 1944) (hereafter cited as Third Tactical Air Force Collected Reports); Letter from Major General George E. Stratemeyer to General Henry H. Arnold, February 22, 1944, *contained in* Assistant Chief of Air Staff, Plans, *Airborne Study*.

29. Letter from General Henry H. Arnold to Major General George E. Stratemeyer, September 17, 1943, *contained in* Enloe Papers, box 7, folder 7. This included any meddling or interference by the commander of Southeast Asia Command (SEAC), British Admiral Lord Louis Mountbatten, who was requested that all U.S. military forces in the CBI Theater to be placed under his direct command. Major General George E. Stratemeyer, *Personal Diary: July 26, 1943-December 31, 1943*, 46, 48-49, *contained in* Thomas and Margaret Overlander Collection, MS 28, box 1 (Colorado Springs, CO: USAF Academy Library, 1943) (hereafter cited as Overlander Collection); Letter from British Admiral Lord Louis Mountbatten to General Henry H. Arnold, December 9, 1943, *contained in* Enloe Papers, box 7, folder 7.

30. Memorandum from Commander, Headquarters Eastern Air Command to Air Commander, Third Tactical Air Force et al., "Operational Directive No. 2," January 17, 1944, *contained in* Eastern Air Command, Southeast Asia: Operational Directives (Maxwell AFB, AL: AFHRA, 1944).

31. *Ibid.*, 1.

32. *Ibid.*

33. *Ibid.*, 2.

34. Third Tactical Air Force, "Outline Plan Operation 'THURSDAY,'" January 22, 1944, *contained in* Enloe Papers, box 6, folder 10.

35. The prevailing view among general officers was that because the margin for air superiority over the Japanese was small, it was important that Allies "exercise careful control over the air forces available and... use them in strict conformity with accepted air forces doctrines." Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 1.

36. War Department, *Field Service Regulations: Command and Employment of Air Power*, FM-100-20, July 21, 1943, 4-9.

37. Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 136-37.

38. War Department, *Field Service Regulations*, FM-100-20, 2.

39. Memorandum from Commander, Headquarters Eastern Air Command to Air Commander, Third Tactical Air Force et al., "Operational Directive No. 2," January 17, 1944.

40. Captain Cortez F. Enloe Journal/ Diary, entry dated March 5, 194, 48-53, *contained in* Enloe Papers, box 3, folder 3. *See also* Y'Blood, *Air Commandos Against Japan*, 86.

41. Headquarters Troop Carrier Command, Eastern Air Command, *Diary of the Commanding General* (Maxwell AFB, AL: AFHRA, 1944), 67, 90.

42. *Ibid.*, 110.

43. *Ibid.*

44. *Ibid.*

45. Philip G. Cochran, "To All Personnel and Attached Organizations," March 13, 1944, Enloe Papers, box 7, folder 11.

46. *See, e.g.*, Major Leon S. Dure, Jr., *Air Conquest of Burma* (Maxwell AFB, AL: AFHRA, 1945), 14 ("Rank was permitted no consideration [for Cochran's men upon arriving in the CBI Theater] and it was a

grimy and bearded group of men that formed up in chow lines.").

47. Major General George E. Stratemeyer, *Personal Diary: January 1, 1944-December 31, 1944*, 27, *contained in* Overlander Collection, MS 28, box 1; Air Marshal John E.A. Baldwin, *Report by Air Commander, Third Tactical Air Force on Operation "THURSDAY"*, March 17, 1944 (Maxwell AFB, AL: AFHRA, 1944), 2; Memorandum from Major General George E. Stratemeyer to General Henry H. Arnold, "Resume of 'Thursday' Operations," March 22, 1944, *contained in* Third Tactical Air Force Collected Reports, 2; Memorandum from Brigadier General William D. Old to Major General George E. Stratemeyer, "Report of Troop Carrier Command Participation in 'Thursday Operation,'" March 16, 1944, *contained in* Third Tactical Air Force Collected Reports, 4-5; *Report on Operations Carried Out by Special Force, October 1944 to September 1944* (Maxwell AFB, AL: AFHRA, 1944), 7; Dure, *Air Conquest of Burma*, 18-19; Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 146.

48. Philip G. Cochran, "Report of Two Rope Failure Glider Lift for Operation 'Thursday,'" March 28, 1944, *contained in* Headquarters, Eastern Air Command, Flying Operations: Miscellaneous, January 1944 through June 1944 (Maxwell AFB, AL: AFHRA, 1944); Memorandum from Air Marshal John E.A. Baldwin to Colonel Luedecke, "Report of Air Marshall Baldwin on Operation 'Thursday,'" March 11, 1944, *contained in* Air Command, Southeast Asia, Air Commando Operations, "Thursday," March 1944 through April 1944 (Maxwell AFB, AL: AFHRA, 1944) (hereafter cited as Air Command, Southeast Asia, Air Commando Operations); Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 146-48.

49. Cypher Message from Headquarters



Air Command, Southeast Asia to Headquarters, quarters, Third Tactical Air Force, March 6, 1944, *contained in* Air Command, Southeast Asia, Air Commando Operations, "Thursday"; Memorandum from Brigadier General William D. Old to Major General George E. Stratemeyer, "Report of Troop Carrier Command Participation in 'Thursday Operation,'" March 16, 1944, 5; *Report on Operations Carried Out by Special Force, October 1944 to September 1944*, 7; Memorandum from Major General George E. Stratemeyer to General Henry H. Arnold, "Resume of 'Thursday' Operations," March 22, 1944, 2; Memorandum from Brigadier General William D. Old to Major General George E. Stratemeyer, "Report of Troop Carrier Command Participation in 'Thursday Operation,'" March 16, 1944, 5; Dure, *Air Conquest of Burma*, 19-23.

50. Y'Blood, *Air Commandos Against Japan*, 96; Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 149-50.

51. Y'Blood, *Air Commandos Against Japan*, 97-98.

52. *Report on Operations Carried Out by Special Force, October 1944 to September 1944*, 7; Baldwin, *Report by Air Commander, Third Tactical Air Force on Operation "THURSDAY"*, 3.

53. Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 152-53. For detailed transportation statistics, see Headquarters Air Command, Southeast Asia, *Air Transport Operations: Report of Tour to Forward Areas and Troop Carrier Operations* (Maxwell AFB, AL: AFHRA, 1944), appendix G-3.

54. *Report on Operations Carried Out by Special Force, October 1944 to September 1944*, 7; Baldwin, *Report by Air Commander, Third Tactical Air Force on Operation "THURSDAY"*, 4; Memorandum from Major General George E. Stratemeyer

to General Henry H. Arnold, "Resume of 'Thursday' Operations," March 22, 1944, 3; Memorandum from Brigadier General William D. Old to Major General George E. Stratemeyer, "Report of Troop Carrier Command Participation in 'Thursday Operation,'" March 16, 1944, 6; Dure, *Air Conquest of Burma*, 23-24; Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 78-79.

55. See, e.g., Memorandum from 1st Lieutenant William C. Lehecka to Commanding Officer, 1st Air Commando Group, "Partial Summarization of Operations of the Light Aircraft in Support of General Wingate's Chindits, the Upper and Lower Burma Campaigns," undated, *contained in* Eastern Air Command, Operations and Reports in India Burma Theater from December 1943 until November 30, 1944 (Maxwell AFB, AL: AFHRA, 1944); Philip G. Cochran, "Report of Two Rope Failure Glider Lift for Operation 'Thursday,'" March 28, 1944; Memorandum from Major General George E. Stratemeyer to General Henry H. Arnold, "Resume of 'Thursday' Operations," March 22, 1944, 1-4; Memorandum from Brigadier General William D. Old to Major General George E. Stratemeyer, "Report of Troop Carrier Command Participation in 'Thursday Operation,'" March 16, 1944, 5-8.

56. Dure, *Air Conquest of Burma*, 24.

57. Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 154.

58. Memorandum from Major General George E. Stratemeyer to General Henry H. Arnold, "Resume of 'Thursday' Operations," March 31, 1944, *contained in* Headquarters, Eastern Air Command, Major General George E. Stratemeyer Personal Files, December 1943 to May 1945 (Maxwell AFB, AL: AFHRA, 1945), 3 (hereafter Headquarters, Eastern Air Command, Stratemeyer Personal Files, December 1943 to May 1945).

59. Memorandum from Air Marshal John E.A. Baldwin to Colonel Luedecke, "Report of Air Marshall Baldwin on Operation 'Thursday,'" March 11, 1944, 2. See also Report of Air Marshal John E.A. Baldwin to Air Chief Marshall Richard Peirse, March 10, 1944, *contained in* Operation THURSDAY: Allied Landings in North East Burma, AIR 23-7655 (London, UK: British National Archives, 1944).

60. Headquarters Troop Carrier Command, Eastern Air Command, *Diary of the Commanding General*, 111, 112.

61. Memorandum from Brigadier General William D. Old to Major General George E. Stratemeyer, "Report of Troop Carrier Command Participation in 'Thursday Operation,'" March 16, 1944, 5.

62. Memorandum from Air Marshal John E.A. Baldwin to Major General George E. Stratemeyer, "Absorption of No. 1 Air Commando Force," March 24, 1944, *contained in* Air Command, Southeast Asia, Air Commando Operations.

63. In late February/early March, Arnold wrote to Stratemeyer how the latter was in a much better position to make the "right decisions" regarding Project 9's utilization. Stratemeyer likely interpreted this letter as giving him the authority to disband Project 9 altogether. See Letter from General Henry H. Arnold to Major General George E. Stratemeyer, undated February/March 1944, *contained in* contained in Assistant Chief of Air Staff, Plans, *Airborne Study*.

64. Stratemeyer, *Personal Diary: January 1, 1944-December 31, 1944*, 27. See also Memorandum from Lieutenant Colonel J.T. Kenny to Colonel Halversen, "CBI Activities—March 17 Thru 22, 1944," March 22, 1944, contained in Assistant Chief of Air Staff, Plans, Reading Files: China, Burma, India Theater, vol. 3 (Maxwell AFB, AL: AFHRA, 1944) (hereafter Assistant Chief of Air Staff, Plans, Reading Files, vol. 3).

65. Memorandum from General Henry

H. Arnold to General George C. Marshall, Air Commando and Re-Supply Troop Carrier Groups, undated March 1944, *contained in* Air Command, Southeast Asia, Air Commando Operations. *See also* Y'Blood, *Air Commandos Against Japan*, 150.

66. Colonel S.F. Giffen, "Memorandum for the Record: Air Commando Combat-Cargo Groups for CBI," April 2, 1944, *contained in* Air Command, Southeast Asia, Air Commando Operations.

67. Letter from General Henry H. Arnold to Admiral Louis Mountbatten, March 24, 1944, *contained in* Air Command, Southeast Asia, Air Commando Operations.

68. *Ibid.*

69. Letter from Major General George E. Stratemeyer to Air Marshal John E.A. Baldwin, March 29, 1944, *contained in* Air Command, Southeast Asia, Air Commando Operations.

70. Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 162-68.

71. Y'Blood, *Air Commandos Against Japan*, 104-5.

72. Shelford Bidwell, *The Chindit War: The Campaign in Burma, 1944* (London, UK: Book Club Associates, 1979), 58-59.

73. *See, e.g.*, Cable from Major General George E. Stratemeyer to General Henry H. Arnold, May 13, 1944, Overlander Collection, MS 1, box 1; Letter from Admiral Lord Louis Mountbatten to Major General George E. Stratemeyer, May 16, 1944, Overlander Collection, MS Ad 1, box 1; Letter from Admiral Lord Louis Mountbatten to Major General George E. Stratemeyer, May 13, 1944, *contained in* Overlander Collection, MS Ad 1, box 1.

74. *See, e.g.*, Stratemeyer, *Personal Diary: January 1, 1944-December 31, 1944*, 36.

75. Letter from Major General George E. Stratemeyer to Air Marshal John E.A. Baldwin, March 29, 1944, *contained in* Air

Command, Southeast Asia, Air Commando Operations

76. Memorandum from Major General George E. Stratemeyer to General Henry H. Arnold, "First Air Commando Group," March 29, 1944, *contained in* Air Command, Southeast Asia, Air Commando Operations.

77. *See* Memorandum from Major General L.S. Kuter to General Henry H. Arnold, "Comments on the Alison Plan for Burma," May 18, 1944, *contained in* Assistant Chief of Air Staff, Plans, *Airborne Study*; "Plan for the Employment of Three Air Commando Units and Four Combat Cargo Groups in the India Burma Theater," undated May 1944, *contained in* Assistant Chief of Air Staff, Plans, *Airborne Study*.

78. Letter from Major General Barney M. Giles to Major General George E. Stratemeyer, April 17, 1944, *contained in* Headquarters, Eastern Air Command, Stratemeyer Personal Files, December 1943 to May 1945.

79. *Ibid.*

80. *See, e.g.*, Cable from General Henry H. Arnold to Major General George E. Stratemeyer, May 20, 1944, *contained in* Overlander Collection, MS 1, box 1.

81. Letter from General Henry H. Arnold to Admiral Lord Louis Mountbatten, June 6, 1944, *contained in* Assistant Chief of Air Staff, Plans, *Airborne Study*.

82. *Ibid.*

83. *Ibid.*

84. *Ibid.*

85. *See* Letter from General Henry H. Arnold to Lieutenant General Joseph W. Stilwell, June 5, 1944, *contained in* Assistant Chief of Air Staff, Plans, *Airborne Study*.

86. *See* Letter from Lieutenant General Joseph W. Stilwell to General Henry H. Arnold, June 26, 1944, *contained in* Overlander Collection, MS Ad 1, box 1; Stratemeyer, *Personal Diary: January 1, 1944-December 31, 1944*, 74-75; Letter from

Major General George E. Stratemeyer to General Henry H. Arnold, June 25, 1944, *contained in* Overlander Collection, MS Ad 1, box 1.

87. Historically speaking, it is worth recalling how Brigadier General Old had severely criticized Cochran's and Alison's initial seizure of Broadway for Operation THURSDAY as rather "poor," and asserted that he and his troop carrier units would have fared much better. *See* Headquarters Troop Carrier Command, Eastern Air Command, *Diary of the Commanding General*, 111-12; Memorandum from Brigadier General William D. Old to Major General George E. Stratemeyer, "Report of Troop Carrier Command Participation in 'Thursday Operation,'" March 16, 1944, 5. Yet during the aerial seizure of the Myitkyina aerodrome—a landing strip that was already occupied by Allied ground forces and had been used by Allied air forces previously—Old's troop carrier units made several rudimentary mistakes. *See* Taylor, *Air Supply in the Burma Campaign*, 26; Letter from Brigadier General William D. Old to Major General George E. Stratemeyer, May 21, 1944 (Maxwell AFB, AL, AFHRA, 1944).

88. Taylor, *Air Supply in the Burma Campaign*, 25-30; Air Historical Branch, Air Ministry, *R.A.F. Narrative (First Draft)*, 191-92, 203; Memorandum from Major General George E. Stratemeyer to General Henry H. Arnold, "Report on Myitkyina Fly-In," June 22, 1944, *contained in* Assistant Chief of Air Staff, Plans, Reading Files, vol. 3; Memorandum from Lieutenant Colonel John C. Habecker to Commanding General, Eastern Air Command, "Results of Air Invasion of Myitkyina and Recommendations for Improvement," June 1, 1944 (Maxwell AFB, AL: AFHRA, 1944); Tenth Air Force, *Report of Effects of Air Support at Myitkyina* (Maxwell AFB, AL: AFHRA, 1944).



# The Institutional Memory of the Space Force



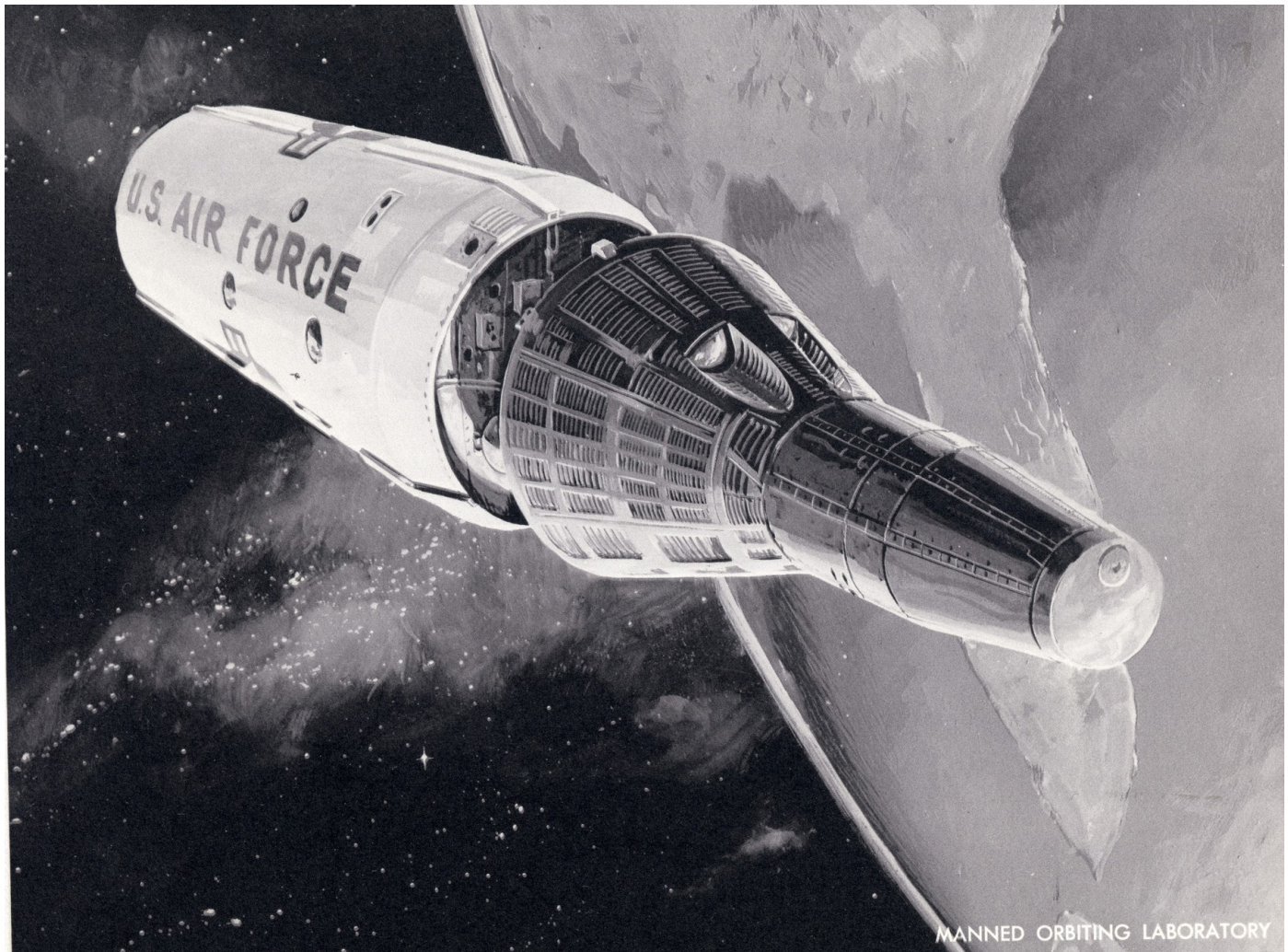
*William M. Clifton*

In 2001, Air University Press published *Introduction to the United States Air Force*. Although it was a short and concise book, it was packed full of facts about United States Air Force (USAF) aircraft, both past and present. It also featured sections on space launch vehicles and satellites. This is fitting, since one of the authors of the book was then Captain B. Chance Saltzman. Today he is General B. Chance Saltzman, Chief of Space Operations, United States Space Force (USSF). In the book's preface, Saltzman and his co-author, Thomas R.

Searle, open by reflecting on the necessity of historical knowledge: "To lead the [USAF] into the future, it is necessary to understand the past and present nature of the force."<sup>1</sup> Note they did not say it was important; they said it was *necessary*. This statement is true also for the USSF.

As with any large organization, the success of the USSF in part hinges on having a contextual understanding of the past, particularly how that past can inform and aid our space leaders in both present and future decision making.

To gain a contextual understanding of the past, though, requires there be an institutional USSF repository. This repository is continuously being formed and updated in real-time from the daily operations of the USSF, the actions of its personnel, and the events that occur which effect USSF operations and planning. It is organized and maintained by USSF unit historians, who observe operations, collect documents, interview personnel, and write annual unit history reports. These reports, along with various other USSF and space-



**Artist depiction of the Manned Orbiting Laboratory (MOL) orbiting around earth. The MOL is an evolution of the earlier “Blue Gemini” program, which was conceived to be an all-Air Force parallel of NASA’s Gemini efforts.**

related documents, are then collected, organized, and preserved at the USSF’s and USAF’s central historical repository located at Maxwell Air Force Base, Alabama, which is managed and preserved by the Air Force Historical Research Agency (AFHRA).

AFHRA in fact manages and preserves the history of every USSF unit, from beginning to end, through its archiving of official USSF and space-related documents. As with the USAF, every USSF unit is activated with a Department

of the Air Force (DAF) letter and special orders. These documents are circulated to AFHRA, where they are archived by the Agency’s Organization History Division (AFHRA/OH). The division relies on these documents to track the lineage and honors of each unit, which is then posted to AFHRA’s website for reference.

Whenever a USSF unit is officially activated, the unit submits a proposed emblem design through its Field Command (FLDCOM) history office to AFHRA/OH

for review. If the proposed design meets requirements of DAFI 84-105, the emblem is pushed forward to The Institute of Heraldry (TIOH), an organization within the Department of the Army that provides heraldic products and services for the entire federal government. Its only once TIOH processes and finalizes proposed emblem that AFHRA/OH forwards it to the unit. The unit can then order patches with the official emblem through approved vendors.





**A LGM-30 Minuteman III missile soars in the air after a test launch. The Minuteman is a strategic weapon system using a ballistic missile of inter-continental range.**

Of course, it is upon activation, that a USSF unit begins to conduct its mission. Operations ensue. A multitude of functions, even in the smallest units, work in concert to achieve the mission, from the many varieties of support functions to the “tip of the spear.” Events affect operational planning and decision-making. Personnel move in and out of the unit. Sometimes, the mission itself changes. This kaleidoscope of activities makes up

the history of each unit, which the unit historian captures in the annual history report. This report is the official record of the unit’s accomplishments during that annual reporting period.

Every one of these unit history reports eventually flows from the respective unit history office to AFHRA, which serves as the official archive for both the USSF and the USAF. AFHRA’s Accessions Division (AFHRA/AC) shepherds these unit history

reports, as well as many other historical documents, imagery, and materials as they enter the Agency. Every document that enters AFHRA’s repository goes through a detailed process to be indexed, accessioned, and digitized. The accumulation of unit history reports, from the headquarters staff level to the FIELDCOM level, and so forth, constitutes the *institutional memory* of the USSF. These unit history reports are collected and preserved in perpetuity for whenever they are needed.

How often are they needed? A lot more than many realize. Last year alone, AFHRA’s Research Division (AFHRA/RS) fielded nearly 7,000 research requests. This number encompasses both official and unofficial requests—covering everything from members of the public wishing to know more about a respective unit or mission, to Veterans Affairs’ (VA) requests seeking to verify aspects of a veteran’s service, to congressional inquiries involving time sensitive questions.

AFHRA holds more than 100 million documents and materials in its repository. While a large number of these documents and materials can be made available to the public upon request, most documents and materials are currently classified or privileged, and therefore can only be made available to authorized requesters on a need-to-know basis. It is these latter, classified and privileged records, though, that are most useful to USSF leaders, planners, and operators.

As a forward-leaning archival and research organization, AFHRA proactively preserves the institutional memory of the DAF on several fronts. The Agency’s Studies and Interviews Division (AFHRA/SI), for one, leads the charge in collecting personal experiences as well as in leveraging the archives to advance corporate knowledge of the past. AFHRA/SI actively seeks out

opportunities to conduct oral history interviews with Guardians and Airmen, whose special knowledge and experience often cast light upon lesser-known historical events. The division also produces studies on a variety of DAF-related topics to highlight the relevance of the information contained within AFHRA's repository for today's operational needs.

What kinds of space-related materials reside at AFHRA? Most, of course, were created before the USSF became a separate service on December 20, 2019. These materials form the historical foundation of the USSF's mission. Meanwhile today, USSF historians continue to document the service's mission to build the body of historical knowledge that will inform key decisions in the future.

AFHRA's space collections contain an astonishing array of USSF and space-related documents under a variety of subjects. These range from unit history reports to personal papers, staff studies, speeches, conference presentations, and oral history interviews, as well as multimedia documents, such as films and photographs. In peeking through documents on past space operations and the ideas that generated them, the researcher may gain special insights into the thoughts and actions of those that went before. One will find that menagerie of materials all too familiar to those with staff experience, such as memoranda, briefings, background papers—the stuff that decisions are made of.

As mentioned, unit history reports form a major component of the Agency's holdings. Not only do these reports provide details on operations, planning, and personnel, but they highlight general trends and themes that strike the reader from the distant present. For instance, now that “tech



**General James V. Hartinger circa 1983. At the time this photograph was taken, Hartinger served as the commander of Air Force Space Command.**

refresh” and software updates are standard components of our battle rhythm, one may appreciate and sympathize with the efforts of the 21st Space Wing (21 SW) to grapple with innovations in computer technology in a history from the mid-1990s. However, while information technology moves fast, we may be dazzled by the rapid progression in hardware from the 1940s

to the 1970s for units such as the 6555th Aerospace Test Wing (6555 ATW), the history of which describes the transition from testing B-17 drones to the Minuteman III ballistic missile. We also may experience the same thrill felt by personnel of the 30th Space Wing (30 SW) in the mid-1990s who sought to accomplish the first moonshot in decades, as we eagerly anticipate the



further conquest of space.

In addition to unit history reports, AFHRA's repository holds various program papers, such as the mosaic of memoranda that reveal Department of Defense efforts to pursue a Manned Orbital Laboratory in the 1960s. This sheaf of communications and instructions produced by USAF headquarters staff at that time outlines decisions to move away from the X-20 Dyna-Soar spaceplane project and to pursue a more stationary platform for research and development. Ideas and decisions play out in real-time as one reads through the crisp, onionskin pages.<sup>2</sup>

Various kinds of personal papers, correspondence, and speeches also appear in AFHRA's repository. There is "Lectures in Aerospace Medicine," collected from a conference in February 1964, at Brooks Air Force Base, TX, that opens with a poignant recollection about President John F. Kennedy. Just a few months prior, President Kennedy delivered a speech for a building dedication at the base in which he declared, "This nation has tossed its cap over the wall of space—and we have no choice to follow it."<sup>3</sup> This stirring call to conquer the space domain was among his last words. The next day, President Kennedy was assassinated in Dallas.

In another document, a 1961 report by the American Rocket Society reminds us of how innocent we were of true knowledge of space conditions, and how far we have come: "One of the questions concerning man's operation in space flight has been the effect of his weightless condition. Various schemes have been considered and proposed for simulating a weightless condition on earth, but they have met with little success. Therefore, the question of man's behavior under weightless conditions has continued to be a popular as well as a scientific question."<sup>4</sup>

As for space power, General James V. Hartinger set the tone when he took command of Air Force Space Command on September 1, 1982. In his assumption of command speech, General Hartinger declared the event a "crucial milestone in the evolution of military space operations."<sup>5</sup> Why was this command stood up? Why then? General Hartinger described it as a paradigm shift in military thinking: "Our perception of space has changed. It is now seen that space is a place—like the land—and the sea and air—another dimension. And it was just a matter of time until we started treating it as such."<sup>6</sup> As he explained, the Soviet military space program "launched four to five times as many satellites as we have."<sup>7</sup> As the United States grew increasingly dependent upon space capabilities, the stand-up of Air Force Space Command demonstrated that the United States recognized the threat and was determined to take the lead. A major piece in this effort was to "develop a space strategy for the first time."<sup>8</sup> General Hartinger marked the path forward clearly when he declared, "It is clear that space is the place for the future."<sup>9</sup>

Every year, as the USSF continues to develop, progress, and grow, so too will AFHRA's space power repository. Thus far, AFHRA is off to a great start in compiling the USSF's unit history reports from 2020 to 2022. The amount of USSF history covered even for this short period is rather impressive. It contains robust sets of documents from the likes of Major Generals Clinton E. Crosier and Robert D. Rego, who both played leading roles in standing up of the USSF, as well as other important founding documents. These documents are the historical seeds of future USSF decision making and operational outcomes. Much insight can be gleaned from them. The same will bode true for future USSF historical

documents, imagery, and materials as they enter the Agency.

## Notes

1. Captain B. Chance Saltzman & Thomas R. Searle, *Introduction to the United States Air Force* (Maxwell AFB, AL: Air University Press, 2001), v.

2. DCS/Research and Development, *Manned Orbiting Laboratory Reading File* (Maxwell AFB, AL: AFHRA, 1965).

3. Major General Theodore C. Bedwell, Jr., "A Year in Progress," contained in *Lectures in Aerospace Medicine* (Brooks AFB, TX: USAF School of Aerospace Medicine 1964), 5.

4. Jerome B. Hammack & Jack C. Heberlig, *The Mercury-Redstone Program* (New York, NY: American Rocket Society, 1961), 30.

5. General James V. Hartinger, "The New Space Command," *Signal* (March 1983): 23-26.

6. Ibid.

7. Ibid.

8. Ibid.

9. Ibid.

# AGENCY UPDATE



*Jessica P. Forsee*



The archivists and historians of the Air Force Historical Research Agency (AFHRA) are continually evolving and changing their practices to fit the needs of the force. This particularly applies today as the United States Air Force (USAF) and United States Space Force (USSF) have pivoted towards a Great Power Competition posture.

One important recent change within the Agency is an increased capacity to support historical information requests of all types. This includes historical information requests related to the history of GPC post-World War II. The topics of these historical information requests ranged from detailed organizational changes to crucial resource reallocation. AFHRA's rapid delivery of this information ensured an accurate and objective analysis of historical material so that USAF and USSF leaders can better inform, redirect, or altogether revise the current strategy.

To ensure the Agency can continue to provide USAF and USSF leaders with

relevant information, it is important that the Agency continues to receive not only timely unit history reports depicting the tactical and strategic plans, but also the personal papers, writings, and oral history interviews of our chief strategists and policy leaders.

Recently, the Agency acquired the personal papers of former Secretary of the Air Force Heather Wilson, totaling nearly 2,000 documents of varied length. Secretary Wilson joins six previous Secretaries who have donated the papers of their service to AFHRA. The Secretary Wilson collection, like many of the other personal papers housed at the Agency, provides researchers with unique perspectives on some of the most pivotal moments in USAF and USSF history from 2017 to 2019. The connective tissue between Secretary Wilson's policy efforts and today's force is seen most evident in her numerous discussions on counter-China posturing in the Pacific Theater and

the early foundation of the USSF—both of which began under her tenure.

In addition to continually growing its collections of air and space power history, AFHRA has revamped the way it conducts special studies and oral history interviews. The content within this journal constitutes one such line of effort. Another is to engage with key USAF and USSF leaders on timely issues through oral history interviews, which ensure that future USAF and USSF leaders are provided with a complete and lived accounting of the important events of the past for today.

Of course, AFHRA's efforts are a mere fraction of what USAF and USSF historians and archivists are doing each and every day to ensure that the Department of the Air Force sustains the historical consciousness necessary to win. Here at 600 Chennault Circle, the work continues as AFHRA provides a comprehensive and accurate depiction of the historic plans needed to win across the spectrum of conflict.



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