

Air Intelligence at the Edge

Lessons of Fourteenth Air Force in World War II

Lt Col Kyle Bressette, USAF

Disclaimer: The views and opinions expressed or implied in the Journal are those of the authors and should not be construed as carrying the official sanction of the Department of Defense, Air Force, Air Education and Training Command, Air University, or other agencies or departments of the US government. This article may be reproduced in whole or in part without permission. If it is reproduced, the Journal of Indo-Pacific Affairs requests a courtesy line.

I do not think that there is an A-2 section in our Air Forces more capable than the one with the Fourteenth Air Force.

—Maj Joseph McGee, 24 May 1943

At the beginning of World War II, the Army Air Corps found itself without practical, operational, or tactical level air intelligence capability. Each numbered Air Force was principally left to independently organize and develop methods to collect, analyze, and disseminate the intelligence necessary to conduct effective air operations. Among the different numbered air forces' efforts to organize intelligence activities during World War II, one of the most important occurred in the China, Burma, India (CBI) theater under the Fourteenth Air Force. Led by Gen Claire Chennault, Fourteenth Air Force intelligence developed as one of the most successful, original, and resourceful intelligence organizations during World War II. With a staff of less than ten Air Corps officers for most of the war, the Fourteenth Air Force intelligence developed a decentralized, forward-focused network which generated a level of effectiveness well above the sum of its parts. The Fourteenth Air Force model remains ingrained in the foundational concepts guiding the organization and execution of Air Force intelligence operations at flying wings in nearly every theater of operation. It is a blueprint for the necessity of integration, decentralized execution, and timeliness in air operations. The lessons developed by Gen Chennault and the intelligence Airmen of the Fourteenth Air Force remain as relevant to air operations in the Indo-Pacific today as they did over 70 years ago.



Figure 1. Maj Gen Claire L. Chennault (USAF photo)

History of the Fourteenth Air Force

On 11 March 1943, Tenth Air Force China Air Task Force (CATF) became Fourteenth Air Force.¹ The purpose of creating a new numbered Air Force was primarily political.² The relationship between Chiang Kai-shek and Gen Joseph Stilwell soured to the point that providing Chiang his own personal airman—in the form of the former leader of the 1st American Volunteer Group, Claire Chennault—was viewed as a way to appease the Chinese leader and demonstrate the US resolve in China.³ Free from the overwatch and restrictions imposed by Tenth Air Force Commander Clayton Bissell, Chennault directed his leaders to conduct the operations he deemed necessary to defeat Japan in China. Intelligence was immediately highlighted as an essential element in how the Fourteenth Air Force would fight.

As early as 1931, during his time at the Air Corps Tactical School, Chennault demonstrated an interest in integrating intelligence with air operations. Chennault believed intelligence in a continuous and timely manner was critical to the effectiveness of fighters to intercept bombers.⁴ This belief pushed Chennault to promote an “intelligence net” designed to get information immediately to fighters.

Chennault put his ideas to the test during an Air Corps exercise in 1933 in which he used a net of observation posts to identify and direct fighters to intercept ingress bombers.⁵ Between 1933 and 1934, *Coast Artillery Journal* published three articles authored by Chennault titled, “The Role of Defensive Pursuit.” Citing observations from the 1933 Air Corps exercise, Chennault listed “the provision of means for the timely collection and transmission of accurate, continuing information of the hostile force” as a principal factor in conducting successful air intercept of a bombardment force.⁶ Chennault also recommended “the establishment of an efficient ground information or intelligence net” as the first essential feature of an air defense system.⁷ Chennault’s experience and writings in the 1930s significantly shaped Fourteenth Air Force intelligence operations. After returning from retirement in 1941, Chennault rejoined the military as Tenth Air Force, CATF commander and communicated the establishment and maintenance of an air warning system in China as his top priority.⁸ The creation of the Fourteenth Air Force accelerated the concept of connecting radio intelligence to aircraft and expanded the speed at which intelligence reached the cockpit.

At the close of 1942, Chennault issued a memorandum to the US CBI theater commander, Gen Joseph “Vinegar Joe” Stilwell, and the CBI theater G-2 recommending three tasks for intelligence in China.⁹ The first task was expediting the flow of intelligence between Chinese sources and the CATF.¹⁰ Chennault sought target information to direct the limited combat sorties he had available.¹¹ Specifically, Chennault wanted a US officer attached with Chinese divisions to validate and promulgate target intelligence.¹² Chennault’s second recommendation was to increase coordination between ground and air intelligence activities.¹³ Chennault valued technical intelligence and was concerned that the looting of downed aircraft by Chinese troops was destroying valuable intelligence on Japanese aircraft performance.¹⁴ The third and final recommendation was the establishment of a liaison with Chinese guerrilla forces to support US operations.¹⁵ Each recommendation demonstrated the expansive role Chennault envisioned for intelligence and the building blocks of an air intelligence network in China. Timely intelligence was valuable and Chennault sought to seize it wherever available.

Chennault emphasized intelligence to the point that Gen Henry Arnold commented to Lt Gen George Stratemeyer that Chennault was his G-2 and G-3 (operations).¹⁶ While the statement was not entirely false, it missed the mark. Although Chennault took a personal role in shaping intelligence in the Fourteenth Air Force, he never ran the day-to-day intelligence operations of his organization.

Chennault's intelligence activities most often aimed at managing the tangled politics of intelligence collection in China. For many reasons, it was unlikely that an A-2 could have effectively conducted the negotiations and agreements necessary to establish reliable air intelligence collection in China.¹⁷ On an international level, Chinese fears regarding post-war interests of the French and British prevented the sharing of intelligence among allies.¹⁸ The political sensitivity associated with collecting information required Chennault to refuse British funding for intelligence operations to maintain the United States' image as an impartial ally.¹⁹ At the American level, Stilwell was against the establishment of US human intelligence collection operations in China, choosing instead to rely on the Chinese War Ministry for information on Japanese movements.²⁰ Stilwell went as far as expressly prohibiting the Fourteenth Air Force from conducting intelligence collection operations.²¹ Despite Stilwell's order, throughout the war, Chennault's personality and thirst for intelligence enabled the Fourteenth Air Force to artfully disobey the spirit of Stilwell's order to gain necessary intelligence to support air operations.²² More than Stilwell's A-2, Chennault was a leader who managed the political challenges necessary for others to improve air intelligence operations.

Building a Diverse Intelligence Team

The men Chennault selected to lead the daily activities of the Fourteenth Air Force intelligence reflect the leader's emphasis on integration and understanding of the operational environment. Intelligence officers were hand-picked for their knowledge of Chinese culture and language.²³ Local knowledge was important to all intelligence activities in the Fourteenth Air Force and essential to gathering intelligence from the field. Chennault's focus on local expertise resulted in the hiring of a unique blend of missionaries, oilmen, and even a cosmetic salesman. This diverse collection of men would come to lead air intelligence gathering in China.²⁴ The absence of intelligence experience was a problem pervasive throughout the Army Air Forces; however, by focusing on language and culture skills, Chennault cultivated the attributes of an experienced intelligence force almost overnight. Local expertise provided an innate ability for the men to collect intelligence in China that would be nearly impossible to replicate using stateside officers. Chennault's investment in shaping the political environment and personnel resources provided the necessary foundation to build the Fourteenth Air Force's intelligence network quickly.



Figure 2. American trainer explains a tactical situation to Chinese soldiers (US Army Military History Institute)

Establishing Leadership

The man charged to lead intelligence operations for the Fourteenth Air Force was Col Jesse C. Williams. Williams took over intelligence operations at the beginning of 1943, replacing Lt John Birch, who was standing in as the A-2 after the departure of Col Merian C. Cooper on 30 November 1942.²⁵ An oilman with the Texas Oil Company before the war, Williams, like most of the A-2 staff, had firsthand experience working in China before entering the war.²⁶ An Air Staff officer who met with Williams a few months after he became the Fourteenth Air Force A-2 described him as a leader with a “keen imagination” who “knows how to handle men to good advantage.”²⁷ In his memoirs, Chennault evaluated Williams as one of the few staff officers he respected.²⁸ Williams likely gained Chennault’s esteem by working quickly to build and expand an air intelligence network in China.

Upon arriving at CATF headquarters, Williams focused on improving the organization and communication of intelligence. In the first line of a 31 December 1942 memorandum, Williams identified the sources and transmission of information in the Fourteenth Air Force as “unsatisfactory.”²⁹ Williams’s assessment matched the assessment made nine days earlier by Brig Gen Francis M. Brady who communicated to Tenth Air Force Commander Clayton Bissell the improper organization of the CATF A-2 section.³⁰ Williams found the development of objective folders nearly nonexistent. He immediately began building objective folders for fu-

ture Fourteenth Air Force operating areas and creating methods to ensure intelligence materials could reach the flying squadrons quickly.³¹ Furthermore, a system of rotating intelligence officers from flying units to the A-2 staff was established to promote an understanding of intelligence activities at all levels of the Fourteenth Air Force. Williams's leadership and focus on quickly fixing material deficiencies was critical to ensuring effective air intelligence within the Fourteenth Air Force.

Williams's priorities as A-2 matched Chennault's recommendations for intelligence activities.³² In the three months between January and March 1943, Williams organized the five officers and four enlisted members who comprised the A-2 staff into an effective organization. After an initial focus on the basics, Williams prioritized extending the reach and speed of intelligence within the Fourteenth Air Force. Throughout the war, gathering intelligence in any manner and quickly disseminating it to aircrew was a crucial part of Williams's intelligence strategy. As the Fourteenth Air Force matured, Williams became critical to the coordination and development of the Fourteenth Air Force's distributed intelligence network. Like Chennault, he worked to empower his men with the freedom to deliver results without burdensome interference from headquarters.³³

The emphasis Chennault placed on finding the best people for his command produced unlikely intelligence leaders. One of Chennault's most important hires was Capt John Birch. Birch started the war as a Baptist missionary serving in China. In April 1942, a chance encounter led Birch to connect with Lt Col Jimmy Doolittle and several crew members of the famed Doolittle Raid and aid in their evasion from Japanese forces.³⁴ Birch's assistance to Doolittle placed him in contact with Chennault, who later commissioned him as second lieutenant and assigned him to work intelligence for CATF.³⁵ Birch's talents as an intelligence officer later led Chennault to evaluate the missionary turned intelligence officer as "more valuable than any pilot I had in my entire force."³⁶

In the spring of 1943, Williams selected Birch to conduct fieldwork and gather intelligence for the Fourteenth Air Force. The success of Birch's initial fieldwork led to his assignment as ground liaison to Chinese general Xue Yue's Nationalist's Ninth War Area.³⁷ Soon Birch was leading the creation of a system to report ground intelligence to the Fourteenth Air Force headquarters for immediate relay to fighter and bomber units for targeting.³⁸ In a little over a year, the missionary who stumbled upon the Doolittle Raiders created the first intelligence station in the Fourteenth Air Force's air intelligence network. The success of Birch's effort to establish liaison teams with Chinese forces earned Birch the Legion of Merit and

led to a rapid expansion of field collection within the Fourteenth Air Force and later the Office of Strategic Services (OSS). Birch is best remembered in the words of one Fourteenth Air Force officer, as “the eyes of Fourteenth Air Force.”³⁹ Intelligence leadership in the Fourteenth Air Force started with Chennault. The men he selected and the expectations he set created a powerful intelligence engine which powered all of the Fourteenth Air Force. From start to finish, Chennault demanded, guided, and supported an effective intelligence organization. Although often characterized as a “one-man show,” the reality was Chennault relied extensively on others to execute his vision and provided the freedom necessary for his Airmen to shape operations.⁴⁰

Challenges to Leadership

Empowered leadership at all levels was essential to overcome the physical and political resource restraints imposed on the Fourteenth Air Force. Physically, the Himalaya Mountains restricted the movement of supplies. This included fuel and limited the number of available sorties. Politically, Stilwell’s order prohibiting Chennault from conducting intelligence operations and the emphasis on opening the Burma Road limited the resources allocated to the Fourteenth Air Force. Throughout the war, to satisfy Chennault’s demand for a constant stream of intelligence, the Fourteenth Air Force accepted nearly any source capable of intelligence collection. However, the relationship between the Fourteenth Air Force and external organizations was not purely transactional. Each organization which operated with the Fourteenth Air Force became in some way part of Chennault’s organization. Despite Chennault’s desperate need for resources, working with the Fourteenth Air Force required operating within Chennault’s concept of operations.

Before the formation of the Fourteenth Air Force, Chennault determined that a minimum of six long-range reconnaissance aircraft would be required to defend the India-China Ferry Command and support air operations in China.⁴¹ Throughout most of the war, a detachment of only three F-4s from the 9th Photo Reconnaissance Squadron served as the Fourteenth Air Force’s core photo reconnaissance capability.⁴² The limited number of photo reconnaissance aircraft is stark, but even a more robust photo reconnaissance force was unlikely to add significant capability as fuel shortages continually plagued the Fourteenth Air Force. In this environment, each sortie was precious and sustaining large photo reconnaissance missions nearly impossible.⁴³ Chennault’s minimal request for photo reconnaissance aircraft

and plans for intelligence activities suggest he realized the sortie limitation and quickly focused on developing other collection capabilities.

Even with limited photo reconnaissance collection resources, the Fourteenth Air Force accomplished impressive results. A May 1943 trip report from Maj Joseph McGee, an Air Staff intelligence officer, described Williams's photo laboratory as "the hardest working unit" he had ever seen."⁴⁴ McGee's notes also documented that the Fourteenth Air Force A-2 shop was not properly equipped to produce objective or target folders which would make the photos usable for combat missions. However, sitting on empty packing crates, Williams's men produced work which amazed the War Department officer.⁴⁵ Although the Fourteenth Air Force accomplished a great deal with limited photo capability, the collection and processing of photos would never be quick enough to satisfy Chennault's demands for rapid intelligence.

Instead, the radio net concept, consisting of multiple observers, which Chennault had envisioned during his time at the Air Corps Tactical School, became the Fourteenth Air Force's foundational intelligence resource. The arrival of additional intelligence personnel in the spring of 1943, combined with Chennault's decision-making—to either develop a loophole or ignore Stilwell's order—led to the creation of the Fourteenth Air Force's human intelligence collection operation. At the beginning of 1943, Williams sent Birch to survey the damage at several airfields the Japanese attacked in the fall of 1942.⁴⁶ Birch returned with valuable intelligence which the Fourteenth Air Force's limited photo reconnaissance had been unable to provide. After Birch's first successful mission, Williams began to send Birch on more collection operations and used the quality of Birch's reports to request more officers like Birch.⁴⁷

In late 1943, Chennault found the workforce he needed to expand his intelligence network. The OSS was struggling to gain a foothold in China. Instead of further pursuing a relationship with Chinese intelligence, the OSS approached Chennault and Williams in late December 1943. The OSS offered to support Fourteenth Air Force operations.⁴⁸ Chennault enthusiastically accepted.⁴⁹ However, as in numbered air forces around the world, bureaucratic requirements required OSS agent participation with the Fourteenth Air Force to occur under Chennault's command.⁵⁰ Despite fears within the OSS of losing their unique identity, in the spring of 1944 the OSS combined operations with the Fourteenth Air Force.⁵¹ The 5329th Air and Ground Forces Resources and Technical Staff (AGFRTS) Provisional was created as the organization responsible for the Four-

teenth Air Force's human intelligence operations. Chennault assigned Lt Col Wilfred Smith—a former professor of Oriental history at Ohio University—as commander of AGFRTS. Chennault then assigned 14 of his existing pool of intelligence officers to work along with 22 OSS agents in the new organization.⁵²



Figure 3. Intelligence unit. American officers of OSS Detachment 101 with Gen Daniel Isom Sultan at an advanced ranger base in Burma, June 1945. Col William R. Peers, detachment commander, is third from left. (National Archives photo)

The relationship between the Fourteenth Air Force and the OSS typified how Chennault managed resources. He was happy to accept help, but the leader desired to incorporate the additional personnel and operations as an integrated part of the Fourteenth Air Force. For nearly a year, the majority of OSS personnel in China were assigned and operated as part of the Fourteenth Air Force.⁵³ The OSS was one of several organizations who sought out a partnership with the Fourteenth Air Force and then found their personnel integrated into it. At its height, AGFRTS

operated six liaison teams—some with as many as 17 members—and conducted joint OSS and Fourteenth Air Force operations from shared offices in Kunming.⁵⁴ Chennault's vision of an air intelligence network came to fruition partially due to the addition of OSS agents. AGFRTS formalized the Fourteenth Air Force's air intelligence network and was Chennault's timeliest and accurate intelligence resource during the war.

Chinese Intelligence Sources

Chinese intelligence was the primary external intelligence source for nearly every American organization operating in China. The primary factor which determined the utility of Chinese intelligence was the credibility of the source. China nationals were replete with information, but often the quality and amount of information was unreliable or dependent on the American organization who dealt with the Chinese. Additionally, Chinese trust did not apply evenly to each American organization.⁵⁵ Early in the war, Pres. Franklin D. Roosevelt assigned the US Navy as the lead American intelligence organization in China.⁵⁶ Led by Cmdre Milton "Mary" Miles, the US Navy group in China failed to have an impact in theater due to Roosevelt's decree on the number of personnel Miles commanded. However, Miles possessed a personal relationship with Tai Li, the head of the Chinese Secret Police which made his organization invaluable to Chennault's design.⁵⁷

Commodore Miles and the 14th Naval Unit

Chennault's desire to improve intelligence and his strong relationship and trust in the Chinese drove him to seek a working relationship with Miles. For his part, Miles respected Chennault's appreciation of the Chinese people and his sources. Additionally, Miles later wrote Chennault "was not jealous of the US Navy" for its tactics with the Chinese Secret Police.⁵⁸ Through regular conversations, Chennault and Miles found ways to improve each other's intelligence operations. For example, after noticing targeting errors on bombing runs by the Fourteenth Air Force near Hong Kong in the winter of 1942, Miles offered to send two Navy photo interpreters to Kunming to support Fourteenth Air Force operations.⁵⁹ By May 1944, Miles sent over 98 Navy photo reconnaissance, interpretation, and radio intelligence personnel to support the Fourteenth Air Force as part of the new 14th Naval unit.⁶⁰

How Miles and Chennault each viewed the dynamics of the personnel exchange was likely the key to the program's success. In his memoirs, Miles described the

14th Naval unit as a part of the Navy Task Group, working within the Fourteenth Air Force. The mission of the unit in Miles's eyes was to send the intelligence collected by the Fourteenth Air Force to support US Navy operations.⁶¹ Chennault wrote of the same personnel in his memoir briefly as "a sizable group of Miles" Navy officers who operated in Fourteenth Air Force headquarters under my command."⁶² Although different command perceptions existed at the top, the influx of intelligence expertise enhanced Fourteenth Air Force operations. Williams pushed some of Miles's men out to the flying units—operating at forward operating airfields—where they achieved impressive results.⁶³ Col Clinton "Casey" Vincent, commander of the 668th Composite Wing, praised the naval radio unit assigned to his command for "supplying intelligence in advance of that from other sources."⁶⁴ As with the incorporation of OSS agents, Chennault and Williams demonstrated with Miles's Navy unit a willingness to integrate outside organizations with Fourteenth Air Force intelligence operations.

The intelligence capability Miles's men provided Chennault significantly improved Chennault's ability to strike Japanese shipping along the Chinese coast. By the summer of 1943, the Fourteenth Air Force routinely received real-time observations of Japanese shipping via radio from Miles's sources. The newly assigned Navy personnel then fused the data at the Fourteenth Air Force headquarters to produce actionable intelligence. Between May and October 1944, using intelligence sourced from Miles's group and B-24s with sea-search radar, the Fourteenth Air Force sank over 248,000 tons of shipping—an amount significantly more than low-altitude bombing campaigns in both the Fifth and Thirteenth Air Forces.⁶⁵

Expanding the Fourteenth Air Force Intelligence Network

In the Fourteenth Air Force, the divide between internal and external intelligence resources was often nonexistent. The manner in which both the OSS and US Navy provided external resources to the Fourteenth Air Force is an example of the unique way Chennault grew intelligence capability despite limited resources. By integrating outside resources, Chennault built the Fourteenth Air Force intelligence into an organization three times as large as the number described in official Army Air Forces (AAF) documents. However, for most of the war, intelligence operations followed the Fourteenth Air Force's concept of operation because Chennault demanded that intelligence support from external organizations be more than purely transactional. Backed by his position as the primary American fighting unit in China, Chennault built the Fourteenth Air Force into the intelligence net-

work he envisioned through detailed integration with joint and other government partners. Chennault's personality and leverage as the primary American combat force in China led to the assignment of over 100 OSS and US Navy personnel who worked directly for the Fourteenth Air Force. Joint and intergovernmental support provided the Fourteenth Air Force intelligence expertise and capacity it would not otherwise be able to produce.

A Lean Headquarters Serving Operations at the Edge

Although resourced with significant external support, Chennault's vision of air operations, supported by a "continuous stream of accurate information," unequivocally shaped the design and processes within the Fourteenth Air Force.⁶⁶ The necessity and importance of expediting the communication of the flow of intelligence throughout the Fourteenth Air Force could not be overstated.⁶⁷ Williams's A-2 headquarters in Kunming served as a central resource not only for Chennault but also for the combat units and intelligence personnel in the field. Despite the headquarters' important role in Fourteenth Air Force operations, intelligence was often collected and immediately communicated to combat aircrew. This combination of centralizing key functions to maximize efficiency while distributing time sensitive collection operations forward to the edge of the battlespace is a critical element of the Fourteenth Air Force's success.

The primary focus of Williams and the A-2 headquarters throughout the war was improving the combat capability of the flying units. Placing his focus on the operations of the flying units matched Chennault's leadership style. He was sometimes criticized by members of the Fourteenth Air Force as overly focused on operations versus taking care of administrative functions.⁶⁸ In May 1943, the Fourteenth Air Force consisted of eight intelligence officers.⁶⁹ Comprising the staff, except for Williams, were captains and lieutenants, and only three had any formal intelligence training.⁷⁰ Throughout 1943, the A-2 headquarters staff conducted the majority of intelligence work and coordination of intelligence collection activities. Their work focused on developing an appropriate list of targets in China and distributing them effectively to flying units. By the spring of 1943, the A-2 staff was able to build effective objective folders and develop and disseminate photographs within 24 hours.⁷¹ In describing his visit to observe Fourteenth Air Force intelligence, McGee assessed Williams's operation as "more than 100 percent efficient" and described "their willingness to work 24 hours a day as nothing short of inspirational."⁷² Mc-

Gee's outside observation of the Fourteenth Air Force is important to understand the driving sense of purpose which existed at the A-2 headquarters.

Intelligence Operations in the Chinese Ninth War Area

In the field, Birch's assignment to the Chinese Ninth War Area in April 1943 represented a crucial step in establishing the Fourteenth Air Force's intelligence network.⁷³ Later in 1943, additional intelligence officers were assigned to expand the network.⁷⁴ Paul Frillmann, a former American Volunteer Group chaplain turned intelligence officer, was assigned to the Sixth War Area near Changteh and several other stations along the Yangtze River to report ship and troop movement.⁷⁵ Each station typically consisted of one or two members of the Fourteenth Air Force who spoke Chinese, who had experience with the Chinese culture, and who were responsible for reporting daily via radio intelligence to Fourteenth Air Force bases.⁷⁶ The intelligence supplied from the intelligence network became critical to build intelligence products and plan future operations. The networked and integrated intelligence activities of headquarters and forward locations was essential to maximizing the Fourteenth Air Force's combat ability to inflict damage on the Japanese using limited sorties.

The Battle of Changteh and the Intelligence Network

The Battle of Changteh in the fall of 1943 best illustrates how the Fourteenth Air Force's intelligence network operated. In August 1943, the Fourteenth Air Force weekly intelligence summaries began noting the possibility of a Japanese offensive in central China.⁷⁷ On 14 October 1943, Birch's station began reporting the movement of Japanese troops and cited Chinese sources who assessed that the Japanese plan was to capture the city of Changteh.⁷⁸ Two weeks later, a Japanese force of 40,000 troops began an assault on Changteh.⁷⁹ The first American reporting on the Japanese offensive came from Birch's station. Birch's prompt reporting highlighted a genuine difference in the quality of American intelligence in China. It was not until eight days after Birch radioed an intelligence report about the Japanese attack that Stilwell's theater intelligence passed message traffic from Chinese sources to the Fourteenth Air Force reporting a Japanese attack.⁸⁰

The Fourteenth Air Force intelligence network hit high gear as the Battle of Changteh developed. The size of the battle engulfed both Birch's and Frillmann's stations. Throughout the battle, both Frillmann and Birch relayed intelligence and target positions to the Fourteenth Air Force fighter groups for action.⁸¹ The real-

time reports from Birch and Frillmann were not the only source of intelligence during the Battle of Changteh. Of the 1,278 sorties flown by the Fourteenth Air Force during the battle, approximately 12 percent were reconnaissance.⁸² Augmented by Miles's Navy group personnel, Williams's photo interpretation capability helped direct B-25s from the 11th Bombardment Squadron to destroy Japanese supply areas.⁸³ In his memoirs, Chennault praised the work of his field intelligence officers in the Battle of Changteh.⁸⁴ However, Williams's entire organization was involved in the battle. The success of real-time intelligence reporting was the result of months of preparations—operations and assessments—which helped the Fourteenth Air Force deliver Chinese forces a crucial victory.

Conclusion

Despite resource constraints and a challenging environment and adversary, the placement of intelligence operations at the edge of the Fourteenth Air Force's operations with a target-centric focus produced timely and effective air operations against the Japanese. The organizational design of the Fourteenth Air Force's intelligence was the deliberate manifestation of Chennault's radio net concept; however, it was Williams and the intelligence personnel he led who accomplished the nearly impossible task of organizing and implementing Chennault's vision. With motivated men like Birch, Williams established effective field intelligence operations less than four months after his arrival. A unique aspect of Fourteenth Air Force intelligence is that the majority of intelligence personnel were not members of the AAF; yet, they were all instilled with the concepts necessary to support air operations. The value Chennault placed on intelligence and the target-centric, operations-focused culture his intelligence force embraced ensured each Fourteenth Air Force sortie had the best intelligence support available.

The intelligence lessons and principles developed and practiced by the Fourteenth Air Force remain relevant to air operations in the Indo-Pacific theater today. The timeliness of intelligence production and dissemination across vast geographic area remains a challenge. Similarly, the principles of decentralized and distributed intelligence operations, centered on the objective are as essential to increasing the lethality and survivability of air operations as they were during World War II. Chennault led a revolution in air intelligence and developed the Fourteenth Air Force as one of the most intelligence-driven organizations in the war. Chennault's vision and leadership paired with the drive of men like Williams and Birch maximized the utility of every Fourteenth Air Force combat sortie and set a standard

for intelligence-driven air operations, which should remain the goal for air power leaders today. **JIPA**

Notes

1. Martha Byrd, *Chennault: Giving Wings to the Tiger* (University of Alabama Press, 1987), 187.
2. Ibid.
3. Ibid., 182.
4. Claire Lee Chennault, "The Role of Defensive Pursuit, Part II Interceptions," *The Coast Artillery Journal* LXXVII, no. 1 (February 1934): 8, 9, http://sill-www.army.mil/ada-online/coast-artillery-journal/_docs/1934/1-2/Jan-Feb%201934.pdf.
5. Claire Lee Chennault and Robert B. Hotz, *Way of a Fighter: The Memoirs of Claire Lee Chennault*, 1949, 22–23.
6. Chennault, Role of Defensive Pursuit, 8.
7. Ibid., 11.
8. Headquarters Tenth Air Forces, Plan for Employment of US Air Forces in China, Claire Chennault, 1 January 1941, 31 December 1945, Call# 825.01, IRIS# 00266313, USAF Collection, AFHRA, Maxwell AFB AL.
9. Military intelligence section of the general staff of a large unit, as defined by *Dictionary of United States Army Terms*, TM 20-205, 18 January 1944. Term also used to refer to an assistant chief of staff for military intelligence.
10. Headquarters China Air Task Force, Memorandum to Commanding General, American Army Forces, China, Burma and India, Attention G-2 from Claire Chennault, Suggestions for Amplifying Intelligence Activity in This Theater, 28 December 1942.
11. Ibid.
12. Ibid.
13. Ibid.
14. Ibid.
15. Ibid.
16. Operations and training section of a large unit, as defined by *Dictionary of United States Army Terms*, TM 20-205, 18 January 1944. Term also used to refer to an assistant chief of staff for operations and training; and Tenth Air Force, US Air Force Historical Study 104, 1 January–10 March 43, 79, Call# 101-104, IRIS# 00467688, AFHRA, Maxwell AFB AL.
17. Intelligence section of an air staff, as defined by *Dictionary of United States Army Terms*, TM 20-205, 18 January 1944. Term also used to refer to an officer in charge of this section.
18. Chennault, *Way of a Fighter*, 256–57.
19. Ibid., 257.
20. Ibid.
21. Ibid.
22. Ibid., 257–58.
23. Ibid., 258.
24. Ibid., 258–59.
25. China Air Task Force, Review of A-2 Activities, Lt Col Jesse Williams, 31 December 1942, Call# 825.01, IRIS# 00266313, USAF Collection, AFHRA, Maxwell AFB AL.
26. Chennault, *Way of a Fighter*, 258; and Headquarters Army Air Forces, McGee Memo, to Brock Jr. 24 May 1943.
27. McGee Memo, to Brock Jr. 24 May 1943.
28. Chennault, *Way of a Fighter*, 232.
29. China Air Task Force, Recommendations for A-2 Activities, Lt Col Jesse Williams, 31 December 1942.

30. Tenth Air Force, Notes re Visit to China, Brig Gen, Francis M. Brady, 22 December 1942, Call# 825.01, IRIS# 00266313, USAF Collection, AFHRA, Maxwell AFB AL.
31. China Air Task Force, Recommendations for A-2 Activities, Lt Col Jesse Williams, 31 December 1942.
32. Ibid.
33. Byrd, *Giving Wings to the Tiger*, 128.
34. Terry Lautz, *John Birch. A Life*. (Corby: Oxford University Press, 2016), 84.
35. Ibid., 89–97.
36. Ibid., 96.
37. Ibid., 97.
38. Ibid., 97, 100.
39. Ibid., 100.
40. Tenth Air Force, Notes re Visit to China, Brig Gen, Francis M. Brady, 22 December 1942; and Byrd, *Giving Wings to the Tiger*, 128.
41. Headquarters Tenth Air Forces, Plan for Employment of US Air Forces in China, Claire Chennault.
42. China Air Task Force, Review of A-2 Activities, July 4, 1942 to Dec 31, 1942, Lt Col Jesse C. Williams, 31 December 1942. Call# 825.01, IRIS# 00266313, USAF Collection, AFHRA, Maxwell AFB, AL.
43. Wesley Frank Craven, James Lea Cate, and Office of Air Force History, *The Army Air Forces in World War II. Vol. 6 Vol. 6* (Washington: The University of Chicago Press, 1983), 581.
44. Headquarters Army Air Forces, Memorandum to Col Malcom W. Moss from Maj Joseph McGee, Checklist which I used at Headquarters Fourteenth Air Forces, 22 May 1943, Call# 142.05-1, IRIS# 00115241, USAF Collection, AFHRA, Maxwell AFB AL.
45. Ibid.
46. Fourteenth Air Force, Interview: Capt John M. Birch, Assistant A-2, Fourteenth Air Force, with Fourteenth Air Force Historical Office Staff, 20 March 1945, Call# 862.04-3, IRIS# 00268316, USAF Collection, AFHRA, Maxwell AFB AL.
47. Headquarters Army Air Forces, Memorandum to Maj John R. Haas from Maj Joseph McGee, Report of 1st Lt John M. Birch, Assistant A-2, Fourteenth Air Force, Kunming China; 1 April 1943–17 May 1943, Call# 142.05-1, IRIS# 00115241, USAF Collection, AFHRA, Maxwell AFB AL; and Paul Frillmann and Graham Peck, *China: The Remembered Life*, 1968, 172, 175.
48. Maochun Yu, *OSS in China: Prelude to Cold War* (New Haven: Yale University Press, 1997), 154–55.
49. Ibid., 154.
50. Ibid., 155.
51. Ibid.
52. Ibid., 156; and Chennault, *Way of a Fighter*, 258.
53. Yu, *OSS in China*, 156.
54. Fourteenth Air Force, Memorandum to Commanding Officer, OSS, China Theater, 5329th AGFRTS (P) Administration and Plans, Colonel Milner, 9 Feb 1945, Call# 862.609-1, IRIS# 00268877, USAF Collection, AFHRA, Maxwell AFB AL.
55. Chennault, *Way of a Fighter*, 256.
56. Ibid., 257.
57. Ibid.
58. Milton E Miles and Daniel Hawthorne, Daniel, *A Different Kind of War: The Little-Known Story of the Combined Guerrilla Forces Created in China by the U.S. Navy and the Chinese during World War II*, (Taipei: Cave Books, 1967), 307.
59. Ibid.
60. Ibid., 309.
61. Ibid., 315.
62. Chennault, *Way of a Fighter*, 257.
63. Miles, *Different Kind of War*, 316.

64. Ibid.
65. John F Kreis, *Piercing the Fog: Intelligence and Army Air Forces Operations in World War II* (Honolulu, HI: University Press of the Pacific, 1996), 317.
66. Chennault, *Way of a Fighter*, 21.
67. Headquarters China Air Task Force, Memorandum to Commanding General, American Army Forces, China, Burma and India, Attention G-2 from Claire Chennault, Suggestions for Amplifying Intelligence Activity in This Theater, 28 December 1942.
68. Byrd, *Giving Wings to the Tiger*, 162.
69. Headquarters Army Air Forces, Intelligence Officers with the Fourteenth Air Force, Maj Joseph McGee, 26 May 1943, Call#142.05-1, IRIS# 00115241, USAF Collection, AFHRA, Maxwell AFB AL.
70. Ibid.
71. Headquarters Army Air Forces, Memorandum to Col Malcom W. Moss from Maj Joseph McGee, Checklist which I used at Headquarters Fourteenth Air Forces, 22 May 1943.
72. Ibid.
73. Fourteenth Air Force, The Changteh Campaign of October–December 1942, 20 May 1945, Cal# 862.04-3, IRIS# 00268316, USAF Collection, AFHRA, Maxwell AFB AL.
74. Ibid.
75. Ibid.
76. Ibid.
77. Ibid.
78. Ibid.
79. Ibid.
80. Ibid.
81. Ibid.; and Chennault, *Way of a Fighter*, 261.
82. Ibid.
83. Ibid.
84. Chennault, *Way of a Fighter*, 261.



Lt Col Kyle “Killer” Bressette

Lt Col Kyle “Killer” Bressette (BS, United States Air Force Academy; MMOAS, Air University; MPM, Georgetown University; MP, Air University) is the chief of intelligence, 4th Fighter Wing, Seymour Johnson AFB, North Carolina. He is responsible for directing the intelligence activities of over 45 dedicated Airmen in support of four F-15E squadrons, maximizing the lethality and survivability of over \$5.1 billion in combat assets. Lt Col Bressette is a graduate and former instructor at the United States Air Force Weapons School, a former McConn Fellow and graduate of the School of Advanced Air and Space Studies.