No. 23
December 2018

The Mitchell Forum

The US Air Force and Army in the Korean War:
How Army Decisions Limited Airpower's Effectiveness

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About the Forum

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Abstract

American airpower was key to the United Nations Command's (UNC's) ability to defeat the North Korean invasion of South Korea in the summer of 1950, and then rescue US Army forces from disaster after the Chinese intervention in the conflict. By explaining how airpower was critical to both these events, this paper will show that because of poor understanding of airpower, US Army commanders made many decisions that seriously handicapped its effectiveness, likely prolonging the war and increasing the war's costs. US Air Force air interdiction played a major role in stopping the North Koreans at the Pusan Perimeter, due to the vulnerability of the North's mechanized forces to airpower. Army decisions, however, did not recognize the importance of interdiction initially and instead emphasized close air support. Basing availability was a major factor in airpower's effectiveness throughout the war, but Army decisions often had a negative impact on the availability of airfields. Failing to recognize the threat of Chinese intervention, Army decisions on the use of airborne forward air controllers limited their ability to detect the infiltration of Chinese troops onto the Korean Peninsula. Once US Army Gen Douglas MacArthur, the UNC commander, became aware of the presence of Chinese forces, he did not understand the limitations on interdiction and its effectiveness against light infantry moving at night and hiding during the day. After the successful ambush, when UN forces were withdrawing, airpower was finally able to inflict tremendous losses on the Chinese, when they attempted a rapid pursuit, providing time for UN forces to prepare a successful defense.

Introduction: Airpower Over Korea

During the first year of the Korean War US airpower resumed the key role that it had played in the Allies' World War II defeat of the German Army, yet too often the critically important role airpower played in Korean ground operations has been neglected.[1] This paper explains why US Air Force airpower was key to the United Nations Command's (UNC's) ability to defeat the North Korean invasion and then rescue US Army forces from disaster when the Chinese intervened. It also shows that US Army commanders in Korea had a poor understanding of airpower, which caused them to make decisions that seriously handicapped the effectiveness of US airpower, making the Korean War far costlier in hindsight than necessary. The Army's failings in Korea continue to have important policy implications today given the threat posed by North Korea, because Army doctrine still does not recognize the key role of air interdiction in defeating an opposing army at the lowest possible cost.[2]

On June 25, 1950, the Soviet-equipped and trained 135,000-man North Korean Army, employing 150 T-34/85 tanks and supported by its air force, launched a surprise invasion of South Korea. Although shocked by North Korea's action, initially the US was confident that the Republic of Korea (ROK) Army could handle the situation.

The North Korean Invasion

On June 25, 1950, the Soviet-equipped and trained 135,000-man North Korean Army, employing 150 T-34/85 tanks and supported by its air force, launched a surprise invasion of South Korea. Although shocked by North Korea's action, initially the US was confident that the Republic of Korea (ROK) Army could handle the situation. As a precaution, the commander of Far East Command (FEC), US Army Gen Douglas MacArthur, soon-to-be-named commander of UNC, ordered Far East Air Forces (FEAF), commanded by Air Force Lt Gen George E. Stratemeyer, to provide air cover for the evacuation of American nationals. On June 27, patrolling Fifth Air Force F-82s based in Japan and commanded by Air Force Maj Gen Earle E. Partridge engaged and shot down four North Korean aircraft. As powerful North Korean forces began overrunning the lightly equipped South Korean forces and moving rapidly down the peninsula, FEAF was ordered to begin bombing attacks against North Korean troops.[3]

In addition to employing airpower, the US began deploying US Army forces from the 24th Infantry Division, which was on occupation duty in Japan, on June 30, 1950. Task Force Smith, the division's initial deployment element, was quickly defeated and forced to withdraw.[4] As the North Koreans exploited this victory and continued to advance, more US Army forces under the command of Lt Gen Walton H. Walker, Eighth US Army Korea (EUSAK), began to arrive. Yet, even with these reinforcements, US and ROK units were forced to continue their retreat.

Given that its official mission was to defend Japan from a possible Soviet attack, Far East Air Forces had only 22 B-26s, 12 B-29s, 70 F-80s, and 15 F-82s available for missions in Korea. Recognizing the urgent need for more airpower, FEAF requested reinforcement from the US to include 164 F-80s. However, due to its shortage of F-80s and problems with basing, the Air Force substituted 150 F-51s.[5]

From the very beginning the limited availability of airfields handicapped Air Force effectiveness.[6] South Korea had only five improved bases, along with six primitive short sod strips. The North Koreans quickly captured the two bases suitable for the F-80, Kimpo and Suwon near Seoul, making it necessary for the F-80s to fly from bases

in Japan.[7] The 310 miles from the airfield at Itazuke, Japan to the Seoul area left F-80 pilots little fuel, and therefore little time to search for targets. Even so, on June 28 the first 24 F-80 sorties caused significant destruction when they found the roads crowded with North Korean tanks, trucks, artillery, and troops.[8] B-29s and B-26s based in Japan also began bombing, and on June 30 inflicted severe damage on North Korean tanks, trucks, and other vehicles caught in a traffic jam waiting to cross the Seoul railway bridge.[9]

To augment aircraft flying from Japan, on July 10 FEAF converted six F-80 squadrons in Japan to F-51s. The first F-51s in Korea were stationed at Taegu, and soon after arrived at Pohang. Because they could fly from Korean bases, the F-51s could devote far more time to looking for targets and could carry more weapons, including napalm, which proved especially effective at destroying tanks. This led Air Force Brig Gen Edward J. Timberlake, deputy commander of Fifth Air Force, to say on July 8, 1950—as the 24th Division was being driven from Cheonan—that "one F-51 adequately supported and fought from Taegu Airfield is equivalent to four F-80s based on Kyushu."[10]

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Initially, ensuring control of the air had a higher priority for the US Air Force than attacking the invading ground forces. As a result, many bomber sorties were directed against North Korean airfields rather than against ground troops. To prevent enemy aircraft from attacking the bombers and ROK forces, F-80s began flying patrol orbits at 10,000 feet over the Han River. Fuel reserves meant that these aircraft could stay on station for only 15 to 20 minutes before returning to Japan, but on the way home they would strafe any forces they saw moving south.[11]

Their attempt to win the war quickly rapidly exposed North Korean forces to devastating air interdiction attacks. Almost every FEAF sortie destroyed some enemy targets, because air interdiction could exploit the North Koreans' reliance on motorized vehicles and trains. Forces attempting to move rapidly were out in the open and often concentrated, making them relatively easy for American airmen to locate and destroy. Airpower's ability to exploit traffic jams caused by destroyed bridges was evident when between July 7 and 9 aircrews reported 197 trucks and 44 tanks destroyed.[12]

From the beginning of the war one of the major challenges the Air Force faced in Korea stemmed from US command arrangements. As Fifth Air Force Commander Air Force Maj Gen Earle E. Partridge noted in his diary, "…there is nothing even vaguely resembling a joint staff. GHQ [General Headquarters] is an Army Staff."[13] Not only did MacArthur's staff consist almost entirely of US Army officers, but these officers also frequently attempted to directly "run the air forces" or took actions that had an impact on airpower's effectiveness without first discussing the proposed actions with Air Force leaders. Over time, these actions and decisions led to poorly designed missions that cost lives and wasted resources in the conflict. Whereas airmen had gained a sound appreciation from World War II of air interdiction's potential contribution as a part of a balanced concept of airpower, many ground officers in the Korean War had not.[14] They saw airpower mainly in terms of close air support and lacked a good understanding of the factors that made air interdiction effective. As a result, Air Force leaders often had to explain why key operational-level decisions made without consideration of

Air Force expertise were wrong and had to be changed.[15] These explanations focused on the importance of air interdiction as opposed to close air support, responsibility for the control of airpower, logistics to include basing availability and operability, and air reconnaissance. Only after FEAF Vice Commander for Operations Air Force Maj Gen Otto P. Weyland succeeded in convincing MacArthur's GHQ staff to better use airpower assets (MacArthur approved a FEAF interdiction program on July 26, 1950) did US airpower finally begin the first of several comprehensive interdiction programs.[16]

Control of theater airpower quickly became a contentious issue when MacArthur's staff began telling FEAF how to conduct air operations. In response, Stratemeyer personally carried a memorandum to MacArthur on July 10, 1950 seeking assurances that MacArthur had the same confidence in him that he had in his airmen during World War II.

The need to educate US Army commanders about the importance of air bases also persisted throughout the conflict. During the battle on the Pusan Perimeter (August 4–September 18, 1950) Partridge sent a letter to Walker explaining that Fifth Air Force had been caught off balance repeatedly by unexpected ground force actions. He stressed the importance of the Taegu airfield to EUSAK operations, stating that the insecurity of Taegu had already cancelled the movement of three squadrons of F-51s from Japan to Taegu and the movement of one squadron to Pohang. This meant that 100 F-51s were flying missions from Japan, rather than from the Korean Peninsula. He went on to point out that if Taegu fell then Pohang would follow, and before this occurred the remaining two squadrons of F-51s would be returned to Japan, reducing their rate of operations and almost eliminating airlift into Korea.[17] Later, when US Army Gen Matthew Ridgway took over EUSAK, the basing education process had to be repeated. In this case, MacArthur was now the one who pointed out to the new EUSAK commander that recovering the use of Kimpo would help to strengthen air operations.[18]

Control of theater airpower quickly became a contentious issue when MacArthur's staff began telling FEAF how to conduct air operations. In response, Stratemeyer personally carried a memorandum to MacArthur on July 10, 1950 seeking assurances that MacArthur had the same confidence in him that he had in his airmen during World War II. Although MacArthur told Stratemeyer he had confidence in his command and was to run his own show, the struggle for control of airpower continued.[19]

One point of contention was control of US Air Force B-29 operations, since MacArthur's Chief of Staff, Maj Gen Edward M. Almond, had established a GHQ-dominated group to choose bomber targets. Weyland pointed out the deficiencies of the targets selected by this group. Only at this point was it agreed that FEAF should be allowed to take a more active role in target selection.[20]

Despite this agreement, the Army continued its efforts to direct B-29 operations. On August 13, 1950, MacArthur told Stratemeyer he wanted the entire B-29 force that was currently performing interdiction to "carpet bomb" a suspected enemy troop concentration in support of EUSAK. Air Force officers were further dismayed when the size of the Army's target area turned out to be far larger than the Air Force recommended. After reconnaissance revealed no evidence of enemy activity in the area bombed by the B-29s on August 16, both Stratemeyer and his bomber commander, Air Force Maj Gen Emmett O'Donnell, recommended that no more such missions be flown unless the ground situation was extremely critical and the enemy was in fact concentrated.[21]

Although more US Army divisions and a US Marine brigade were deployed to South Korea, the UNC forces did not stop the North Korean offensive until it reached the Pusan Perimeter. While UNC ground forces were defending the Pusan Perimeter, the FEAF and carrier-based US Navy air forces had been conducting intensive air attacks against the North Koreans. During the fight on the Pusan Perimeter FEAF had seven squadrons of F-51s available for operations on the Korean Peninsula, three of which were based at the fields at Taegu and Pohang. Also at Taegu was the 6147th Tactical Air Control Squadron, equipped with the T-6 Mosquito, which proved very effective in forward air control (FAC) operations.[22] The remainder of Fifth Air Force units committed to Korea were based in Japan. For operations over the Korean Peninsula, FEAF also had O'Donnell's FEAF Bomber Command (Provisional) with five B-29 groups and Combat Cargo Command (Provisional) under Air Force Maj Gen William H. Tunner.

By the time the North Korean Army reached the Pusan Perimeter its vulnerability to air interdiction had been significantly increased due to its dependence on support traveling over long lines of communications (LOCs). Korea's terrain, with its many rivers, ridges, and rice paddies made cross-country movement difficult to impossible, especially for motorized vehicles.

By the time the North Korean Army reached the Pusan Perimeter its vulnerability to air interdiction had been significantly increased due to its dependence on support traveling over long lines of communications (LOCs). Korea's terrain, with its many rivers, ridges, and rice paddies made cross-country movement difficult to impossible, especially for motorized vehicles. As a result, the North Koreans depended heavily on a rail and road network that crossed numerous bridges. Thanks to the US and allied possession of air superiority over the Korean Peninsula and the enemy's lack of heavy anti-aircraft artillery, B-29s could attack multiple individual targets from altitudes as low as 10,000 feet.[23]

Far East Air Forces air attacks soon convinced the North Korean Army's leaders that they could not afford the losses that resulted from movements during the day. In response, the North Koreans limited their movement to nighttime only, and came to accept the inherent delays. Despite the problems of flying nighttime missions, air interdiction, along with close air support, greatly degraded the effectiveness of North Korea's army. By early September much of the North Korean Army's supply shortages and troop losses could be attributed to UNC's use of airpower.

Only after the advance of UNC ground forces out of the Pusan Perimeter could US Far East Command intelligence accurately assess the immense impact airpower had exerted on the North Korean Army. Whereas EUSAK leaders thought they were fighting an enemy army of 100,000 with 75 percent of its equipment operational, the North Koreans actually had only about 70,000 troops with 50 percent of their equipment operational.[24] Moreover, the need to confine movement and assault to the hours of darkness severely degraded the flexibility of enemy operations, while North Korean soldiers suffered from far lower morale because of the destruction caused by airpower and their inability to fight back effectively against aerial threats.[25] Following the US and allied breakout from the Pusan Perimeter, US Army leadership finally realized that airpower, not the famed amphibious landing at Inchon, had been the key to the North Korean Army's defeat. As Walker put it in hindsight, "I will gladly lay my cards on the table and state that if it had not been for the air support that we received from the Fifth Air Force we would not have been able to stay in Korea."[26]

Inchon and the Breakout from the Pusan Perimeter

On August 28, 1950, the Joint Chiefs of Staff (JCS) gave MacArthur approval to make an amphibious landing at Inchon, which was scheduled for September 15. The plan directed US Army X Corps, commanded by MacArthur's chief of staff, Army Maj Gen Edward Almond, to make the landing, led by the First Marine Division and followed by the Seventh Infantry Division.[27] MacArthur's plan called for withdrawing the Marine brigade from EUSAK while it was still engaged in hard fighting to hold back North Korea's Great Naktong Offensive, which had made progress to the point that some Fifth Air Force units were forced to evacuate the airfield at Taegu.[28]

FEAF airpower played a major role in the success of Inchon. The intense interdiction effort FEAF had begun in mid-August 1950 not only destroyed North Korean forces and supplies, but also damaged lines of communication infrastructure, and thus prevented North Korean forces from moving rapidly to reinforce Inchon. In addition, FEAF was carrying out counter-air missions against North Korean airfields to ensure air superiority. As a result, the Marines' landing met very light resistance from the 2,000 comparatively new North Korean troops defending Inchon.

The Army's attempts to control airpower in Korea extended beyond MacArthur and his staff, and were based largely on the belief the Air Force was providing inadequate close air support.

To the south EUSAK had an important role in helping the landing at Inchon by executing three different attacks. Although EUSAK's offensive began on schedule, it quickly ran into strong North Korean defenses, and poor weather hindered air operations. However, when the weather began improving the day after the offensive began, FEAF could bring an increasing amount of airpower to bear. Finally, on September 19 the Army's First Cavalry Division managed to break through North Korean defenses. Soon all enemy forces began falling back and resistance collapsed. EUSAK forces then pursued the retreating enemy forces, with T-6 Mosquitos flying column cover.

Even so, problems for airpower created by US Army decisions occurred again after the Inchon landing. On September 20 Stratemeyer noted in his diary that he had called X Corps to tell them that for "their own good [ability to receive air support and airlift] and the maintenance of Kimpo Air Port, our Aviation Engineer Battalion and our own air base troops for Kimpo should be debarked [at Inchon] without delay. Everyone agreed but indicated that it had been held up on Almond's order as he needed fighting doughboys and ammunition."[29]

The Army's attempts to control airpower in Korea extended beyond MacArthur and his staff, and were based largely on the belief the Air Force was providing inadequate close air support. On October 7 Stratemeyer wrote in his diary that he had learned that Almond had written letters to Army Gen Mark Clark and others in the United States in which he recommended Marine Corps-type air support for Korean War operations. Marine aviation operated under the ground commander's authority, according to Almond's arguments. Stratemeyer noted that Almond made this recommendation even though the Air Force had never supported any of his ground actions. Almond's X Corps had secured exclusive support from First Marine Air Wing within the amphibious objective area of the Inchon operation, while FEAF continued to operate outside his area (hence, he was criticizing FEAF air support he had no experience of receiving). Stratemeyer also wrote of being told there was "quite a drive on in the Army led by [Gen] Mark Clark to attempt to secure for the Army its own support air force."[30]

Advance Across the 38th Parallel

Inchon had far-reaching consequences for the Korean War. On September 27, 1950 MacArthur received orders authorizing amphibious and ground operations north of the 38th parallel. MacArthur's plan was to use X Corps to make a second amphibious landing at Wonsan, rather than put it under Walker, whose forces would continue their advance north overland across the parallel.

UNC's logistics advantage quickly melted away as the distance from Pusan to the locations of planned operations increased, and the command's forces had to move through Korea over a severely damaged road and rail network. Giving X Corps transport priority at Inchon (so it could meet the tight schedule for landing at Wonsan) created a massive logistical problem.[31,32] With EUSAK and Fifth Air Force unable to rely on the Port of Inchon for the movement of supplies and forces in their advance above the 38th parallel, both had to rely heavily on FEAF to provide airlift. However, little airlift was immediately available because it was being withheld for MacArthur's planned airdrop of the 187th Airborne Regimental Combat Team. This not only tied up aircraft, but also (due to dependence on Kimpo as a forward airstrip) forced Fifth Air Force units to move out of Kimpo themselves to make room for transports being used for the air drop.[33]

With EUSAK and Fifth Air Force unable to rely on the Port of Inchon for the movement of supplies and forces in their advance above the 38th parallel, both had to rely heavily on FEAF to provide airlift.

During the advance of the UNC ground forces, Fifth Air Force units were moving onto the Korean Peninsula from Japan as fast as bases could be made operable and the constrained transportation system permitted. By the end of October, Fifth Air Force had one RF-80 squadron and three F-80 squadrons at Taegu, two F-51 squadrons at Pusan, two F-51 squadrons at Pohang, one F-51 squadron at Kimpo, and the Mosquito squadron first at Kimpo and later at Seoul's airport. Meanwhile, logistical constraints had made EUSAK's advance into North Korea a calculated risk, with its supply relying almost entirely on airlift, amounting to 1,000 tons daily. Since 450 tons of daily airlift would be needed to move two fighter wings and the Mosquito squadron forward to the Pyongyang area, and only 1,000 tons of total airlift was available, Fifth Air Force agreed to reduce its requirement to 60 tons, which prevented the forward movement of fighter bases.[34]

The Chinese Intervention

MacArthur's assumptions of little enemy resistance to UNC forces movement northward were proved wrong when, on October 25, 1950, the Chinese began attacks against elements of EUSAK, followed by similar attacks against X Corps on November 2 (the "first phase offensive," as it became known). These attacks brought a halt to EUSAK's advance and caused units to withdraw into defensive positions to wait for their logistical situation to improve.[35] On November 1 a MiG-15 fighter based in China attacked Fifth Air Force aircraft operating near the North Korean border, increasing the urgency for Fifth Air Force to move its units to airfields closer to the enemy. Then, to the puzzlement of the UNC leaders, by November 7, 1950, the Chinese broke off offensive operations.

The Chinese attacks caused MacArthur to order two weeks of intensive air attacks against the Korean end of the Yalu River bridges, beginning on November 5, 1950. This was in clear violation of directives to stay well clear of the border. On November 6, learning of this order, the JCS demanded the postponement of all bombing and asked MacArthur to explain himself. MacArthur responded that Chinese troops were "pouring" across the bridges and their movement

threatened the ultimate destruction of UNC forces.[36] This shocked the JCS, since MacArthur himself had reassured them on November 4 that the Chinese intervention had little significance. On November 6th, the JCS reversed their decision and authorized the bombing as long as the border was not violated. Surprisingly, despite his previous message, MacArthur told the JCS it would be "fatal" to weaken current policy and change his mission.[37]

Much of the reason for MacArthur's original low estimates of Chinese strength was his belief that "our Air Force" would detect incursion by large numbers of Chinese troops.[38] The success of airpower against the mechanized North Korean Army had caused MacArthur to reach dangerously wrong conclusions about airpower's ability to prevent intervention by the Chinese.[39] He did not understand the difficulties airmen had in detecting light infantry who were well trained in camouflage and who moved only at night. Remarks MacArthur made at a conference with Ridgway on December 26 would later provide even more evidence that he had developed a seriously flawed understanding of airpower's capabilities and limitations, as he argued airpower could do little to stop enemy infiltration or resupply in Korea.[40]

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MacArthur also was likely not aware of how little reconnaissance capability his air forces actually possessed. After a November 9, 1950 attack by MiGs on a vulnerable RB-29 along the Yalu, Fifth Air Force began using only the faster RF-80s to conduct reconnaissance in this area. Since Fifth Air Force possessed only one RF-80 squadron (rather than the three squadrons required by doctrine) reconnaissance in areas south of the Yalu where Chinese troops were already hiding was significantly reduced. Moreover, the reconnaissance sorties flown focused on the Yalu River bridges, not areas in the mountains where Chinese forces were massing. Compounding the problem were a lack of photo interpreters and night reconnaissance units, and the presence of smoke from forest fires that the Chinese had set to provide concealment.[41] To make matters worse, the small size of the T-6 Mosquito squadron limited the number of sorties available for visual reconnaissance, and the sorties flown rarely penetrated far beyond friendly lines due to restrictions imposed by Army commanders. Because of the Army's lack of communications during ground fighting, Army commanders were using Mosquitos for aerial identification activities of Army forces, limiting their ability to gather information on enemy movements. This prevented Mosquitos from ranging far ahead of advancing UNC ground forces to gather much needed reconnaissance.[42, 43]

On November 17, 1950 MacArthur told John Muccio, the US Ambassador to the ROK in Tokyo, that no more than 30,000 Chinese troops were in Korea. Once supplies were built up he planned to have EUSAK launch an offensive to complete the destruction of Communist forces in Korea. As this ground offensive was about to begin Fifth Air Force's basing situation had improved only very slightly. Kimpo now had two F-51 squadrons and three F-51 squadrons had just moved forward to join the Mosquito squadron at Pyongyang East Airfield.[44]

The strains between the Air Force and Army began to show by this point in the war. On November 7, 1950, Stratemeyer stated that Fifth Air Force should now have airlift priority.[45] When EUSAK complained, a new arrangement was adopted whereby X Corps would get only emergency airlift. On November 21, Partridge noted to Stratemeyer that for the first time in months EUSAK's supply system was in good shape.[46]

On November 24, when EUSAK resumed its advance, MacArthur reported to the JCS that the delay was entirely the result of logistics difficulties.[47] Meanwhile Fifth Air Force had finally succeeded in moving some of its fighter squadrons to forward fields in North Korea. Between November 17 and 19 three F-51 squadrons arrived at Hamhung, and on November 22 three F-51 squadrons arrived at Pyongyang east airfield. On November 25 two more F-51 squadrons reached Pyongyang.[48]

The UNC ground offensive met only light resistance the first day, but on the night of November 25 the offensive again came to an abrupt halt. The Chinese had begun their second campaign of the war by ambushing the South Korean Army's II Corps and exposing the US Army's 2nd Infantry Division and the Turkish Brigade to possible annihilation.[49] The Chinese ambush shocked the normally confident MacArthur, who now reported the Chinese had 200,000 troops, and ordered his forces to assume the defensive while he asked for new policy guidance. The JCS approved the shift to the defensive and recommended a withdrawal. The sudden withdrawal of UNC ground forces on December 1, 1950 had a major impact on airpower, by forcing Fifth Air Force units to quickly abandon several bases from which they had only just begun to operate, as well as much of their equipment.

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MacArthur now planned to pull back EUSAK and X Corps into separate beachheads and prepare for possible evacuation of all UNC forces from Korea.[50] Stratemeyer reported that at this point he hand-carried a memo to MacArthur explaining why he should order a withdrawal rather than an evacuation.[51] Shortly afterwards MacArthur changed his mind and ordered the withdrawal that Stratemeyer had suggested on December 7, 1950.[52]

It is interesting to note the different attitudes soldiers and airmen had about the situation facing UNC forces. Partridge, who had a good appreciation of the handicaps airpower was imposing on the enemy, noted in his diary that he was less concerned than Walker about the immediacy, strength, or location of enemy attacks. Partridge realized "we've moved by truck—our troops are fresh—[whereas the] enemy [is] forced to march at night only, supply routes long and under constant attack."[53]

Like MacArthur, Chinese leaders also had much to learn about airpower. While initially they showed great respect for UNC airpower, this attitude changed after their successful ambush of UNC ground forces in late November 1950. When the Chinese launched their third campaign of the war on December 29, 1950, they began moving rapidly in an attempt to exploit their success by blocking the retreat of UNC ground forces.[54]

The Chinese leaders were about to receive a lesson. In attempting to overtake and destroy the UNC ground forces with a rapid pursuit, the Chinese marched on roads, even during daylight, for over two weeks in the beginning of December. Moving rapidly during daylight exposed Chinese troops to such devastating air interdiction attacks that by December 16, 1950 airpower had killed or wounded an estimated 33,000 Chinese troops, the equivalent of four full-strength divisions. Their massive losses caused the Chinese to return to hiding by day and moving by night. When UNC airpower discovered that enemy troops were hiding in villages, these sites became prime targets for air attack.[55] While it may be difficult to quantify accurately, it can be inferred

that these attacks greatly degraded the effectiveness of surviving enemy soldiers.[56]

Even though UNC forces had abandoned or destroyed vast amounts of supplies and equipment during their retreat, they benefited logistically by moving closer to the port of Pusan. The reverse was true for the pursuing Chinese. Where it had been an advantage for the Chinese to be free of more easily detectable motorized transportation when moving into concealed positions near the border, their dependence on soldiers carrying their own ammunition and food created a rapidly increasing logistical problem as they advanced in December 1950 and January 1951. Not only did UNC's air attacks take a growing toll, but the fierce cold and snow also contributed to the extremely high number of casualties among Chinese troops.[57]

Analysis of this period of the Korean War reveals that many key US Army officers not only failed to understand the capabilities and limitations of airpower, but, even worse, were also unwilling to listen to airmen who attempted to explain how their decisions were harming airpower's effectiveness.

Thanks in large part to airpower, especially air interdiction, by February 1951 UNC ground forces were able to halt the enemy pursuit and even force the Chinese to withdraw. In announcing this success MacArthur's press release made what had happened largely by accident appear to be the result of his design. In any case it was clear that MacArthur had learned the vital part played by air interdiction.[58]

Conclusion

Analysis of this period of the Korean War reveals that many key US Army officers not only failed to understand the capabilities and limitations of airpower, but, even worse, were also unwilling to listen to airmen who attempted to explain how their decisions were harming airpower's effectiveness. The problem may have resulted from the Army's emphasis on the tactical rather than the operational level of war, which was apparent in the leadership's focus on close air support rather than air interdiction. As a result, the Army failed to appreciate that rapid movement by opposing ground forces, especially mechanized forces, multiplies the ability of airpower in the form of interdiction to delay and destroy the enemy. The Army's lack of attention to air interdiction helps explain why many soldiers to this day fail to recognize that, beginning in World War II, the success of US ground forces has come to depend greatly on the effectiveness of US air interdiction. In contrast, enemy army officers in both World War II and during the Korean War (as well as during other conflicts, such as the North Vietnamese "Easter Offensive" in 1972 and both Iraq wars) who have been on the receiving end of US airpower have had no difficulty in recognizing how air interdiction contributed to their defeat.[59]

Airmen who fought the Korean War attempted to pass on the hard-fought lessons of the conflict from their perspective, however. In an article published in the Fall 1953 issue of *Air University Quarterly Review*, Weyland reminded readers that "the effectiveness of [air interdiction] is directly proportional to the time, space, and firepower available for air attack." He went on to warn that "There is a tendency among many to regard all such air [interdiction] operations against ground forces merely as support of the army. This generates misguided concepts of organization, control, and employment which tend to affect adversely a smooth functioning team. But more basically it prevents us from seeing the possibilities of employing both air and surface forces in the most effective combined strategy." In what some even today might see as a radical view, Weyland noted that "overall strategy must be geared to the air situation and the capabilities of the friendly air force as much

as to ground forces concepts of maneuver and fire. There should likewise be no stigma attached to the concept that ground force strategy may be designed to exploit the effects of air strategy. If the objectives and [situation are] such that, in order to be successful, airpower must be exploited to the fullest then ground forces must support the air forces." Weyland believed an examination of the record in Korea would show that "the effective employment of air forces can permit a great reduction in the size and composition of friendly ground forces." The amount of reduction would depend on "how completely the friendly air force can exploit opportunities for attacking ground force organization, logistics, and facilities."[60]

Too often in Korea, the Army's logistical decisions prevented the Air Force from moving its fighter squadrons closer to the enemy. This became particularly important after Inchon, when UNC ground forces advanced into North Korea.

The Korean War also provides powerful evidence of how basing availability and operability contribute to airpower's effectiveness. Even with today's air refueling capabilities, basing plays a major role in determining the number of sorties that can be flown, the type of aircraft that can fly, the target areas these aircraft can reach, their time in the target area to find and attack enemy forces, and the weapons payloads they can deliver. Too often in Korea, the Army's logistical decisions prevented the Air Force from moving its fighter squadrons closer to the enemy. This became particularly important after Inchon, when UNC ground forces advanced into North Korea.

Target detection represented still another key factor in determining airpower's effectiveness in Korea. Army officers, especially those in command and intelligence positions, did not appear to recognize that airmen faced vastly greater difficulties in finding Chinese light infantry infiltrating through the mountains than in locating North Korean mechanized units moving along roads. Compounding the problem of finding enemy forces was Army commanders misuse of T-6 Mosquito aircraft, limiting their range of operations. It is quite possible that visual reconnaissance provided by Mosquitos would have detected the magnitude of the danger the Chinese posed because of their infiltration into ambush positions.

Given the central role of air operations in modern joint operations, an Air Force officer is far more likely than an Army officer to understand how to plan the employment of ground forces in a way that will allow all forces to fully exploit the effectiveness of airpower. As one expert explained, "the presence of strong inter-service politics suggests that jointness has served more as a cover to allow the services to remain dominant in their traditional roles and missions without fear of encroachment. And second, it suggests that the services offer their unique paradigms of war to compete for who can best achieve US national security objectives."[61]

Thus, if war should again break out on the Korean Peninsula, an Army officer will likely serve as the overall commander. But the experiences of the Korean War should prompt a reevaluation of this choice. As previously noted, the Army's paradigm of war, expressed in its doctrine, still fails to recognize the need to design ground force maneuver to exploit the key role air interdiction plays in successful military campaigns. Even joint doctrine does not recognize the need to design ground maneuver so that it enhances the effectiveness of air interdiction.[62] In light of the truly immense advances made since the Korean War in US Air Force capabilities to detect and precisely target mobile ground forces, even at night or during bad weather, and the increasing US and allied dependence on airpower for defeating opposing mechanized ground forces, a decision to follow Weyland's suggestion and place an airman in command of such campaigns is long overdue.[63] ✪

Endnotes

1 Robert M. Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence, KS: University Press of Kansas, 2004), 148.

2 Author's note: Current US Army doctrine fails to provide appropriate guidance by not recognizing how Army maneuver can make air interdiction more effective, creating an irresolvable dilemma for the enemy. The closest doctrine comes to this is by mentioning that Army formations need to be capable of maneuvering from positions of disadvantage in order to create opportunities for exploitation by other members of the joint force. See Field Manual 3-0, *Operations* (Washington, DC: Headquarters, Department of the Army, October 6, 2017).

3 Author's note: The importance of rapid movement explains why modern armies, to include the North Korean Army in 1950 and today, are mechanized. Besides transporting troops, trucks provide vital engineering support and, along with railroads, the supplies that armies need to achieve and then sustain rapid movement.

4 Clay Blair, *The Forgotten War: America in Korea 1950–1953* (New York: Times Books, 1987), 94–103.

5 Author's note: The F-80 required stronger and longer runways than the F-51. This limited which bases it could use and how quickly a base suitable for the F-51 could be upgraded to make it available for the F-80. The need for longer runways was first observed during F-80 operations at Itazuke, Japan. Lt Col Joseph L. Albert and Capt Billy C. Wylie, "Problems of Airfield Construction in Korea," in *Air Power the Decisive Force in Korea*, ed. James T. Stewart (New York: D. Van Nostrand Company, Inc., 1957), 232–5. Shorter runways required F-80s to carry lighter loads in order to get airborne. This meant it was not unusual to see F-80s at Itazuke carrying a small load of only two rockets, machine guns, and full drop tanks hit the steel planking overrun at the end of the runway before taking off. Comments by 1st Lt George Thomas, 36th Fighter Squadron, in an interview for the *USAF Evaluation Group*, Book II, June 25–December 1950, Historical Research Agency, Air University, Maxwell Air Force Base, AL (hereafter cited as HRA), File K168.041-1, 11-2.

6 Author's note: Airfield availability is key to understanding the US Air Force's effectiveness during the Korean War, and how US Army decisions regarding bases limited effectiveness. Before air refueling became routine for the US Air Force during the Vietnam War, the location of a base determined the depth of attacks by aircraft, the number of weapons they could deliver, the number of sorties they could fly per day, and the amount of time they could spend on station looking for suitable targets. Equally important was the number of available bases and their size, which did much to determine how many and what kind of aircraft the US and its allies could employ.

7 Conrad C. Crane, *American Airpower Strategy in Korea, 1950–1953* (Lawrence, KS: University Press of Kansas, 2000), 24–5.

8 Robert F. Futrell, *The United States Air Force in Korea, 1950–1953* (Washington, DC: Office of Air Force History, revised edition, 1983), 27.

9 Ibid, 33.

10 Ibid., 94.

11 Futrell, 31.

12 Ibid., 85–6.

13 Gen Earle E. Partridge, "Diary of Korea, 29 June–6 July 1950," HRA File K168.7014-1. Author's note: Also see USAF oral history interview of Gen Otto P. Weyland, November 19, 1974, HRA File K239.0518-813, 195–6.

14 Lt Gen Otto P. Weyland, *FEAF Report on the Korean War*, February 15, 1954, HRA File 720.04D, 52.

15 Author's note: For an excellent treatment of the frustration for Air Force officers caused by MacArthur's staff, see Weyland's oral history interview, especially pp. 196–200. Generally speaking very few, if any, of the GHQ staff had previous experience involving the employment of airpower. Moreover, despite recommendations by airmen, there had been very little joint training to teach the GHQ about official doctrine for Army-Air Force operations. See also Otto P. Weyland, *Some Lessons of the Korean War and Conclusions and Recommendations Concerning USAF Tactical Air Responsibilities* October 10, 1950, HRA File K720.609B.

16 Weyland, HRA File K720.609B.

17 Gen Earle Partridge, letter to Gen Walton Walker, August 4, 1950, HRA File K720.13A.

18 Author's note: In what seems a surprising admission of ignorance for an officer about to become a theater commander, Ridgway also admitted MacArthur pointed out to him the importance logistically, psychologically, and politically of recapturing Inchon and Seoul. See: Gen Matthew B. Ridgway, US Army (Ret.), *The Korean War* (Garden City, New York: Doubleday and Company, Inc., 1967), 107.

19 Gen Omar N. Bradley and Clay Blair, *A General's Life* (New York: Simon and Schuster, 1983), 543−4; see also Futrell, 48.

20 Futrell, 53–5. Also see Weyland's interview, 195–201.

21 Futrell, 138–9.

22 Author's note: Airmen had applied a lesson from World War II where the "Horsefly" airborne forward air controller (FAC) concept using a light aircraft had been developed. The airborne FAC with its ability to fly at slow airspeeds while at low altitudes made fighters far more effective and efficient by finding enemy troop concentrations and also managing air attacks conducted in close proximity to friendly ground forces. To perform this mission airmen determined that the unarmed, but speedy T-6 trainer aircraft equipped with eight-channel radios was the most suitable aircraft. Given the call sign "Mosquito" on July 15, 1950 by Fifth Air Force, these aircraft based at Taegu Airfield began making FEAF air operations even more effective. Futrell, 83.

23 Author's note: It took an average of 13.3 runs to destroy a bridge. In an effort to increase accuracy, FEAF requested deployment of RAZON (1,000-pound) and TARZON (12,000-pound) radio-controlled bombs. Unfortunately, despite some successes, equipment problems were to end the effort to employ guided bombs. Ibid., 130; 320.

24 Blair, 281.

25 Futrell, 168–75.

26 Eliot A. Cohen and John Gooch, *Military Misfortunes* (New York: The Free Press, 1990), 179.

27 Bradley and Blair, 554.

28 Blair, 263.

29 Lt Gen George E. Stratemeyer, diary, volume II, September 16 to December 16, 1950, HRA File K168.7018-16.

30 Ibid. Author's note: See also Weyland interview, 109–11.

31 Bradley and Blair, 567–8.

32 Author's note: Inchon lacked piers and had only five berths in the tidal basin. Ibid., 177; 220–1.

33 Futrell, 180; 208.

34 Headquarters Fifth Air Force Memo for Record on October 22, 1950, meeting on airlift to Pyongyang attended by Maj Gen Allen, Eighth Army Chief of Staff, Col Dabney, G-3, Col Steblens, G-4, and Brig Gen Timberlake, Fifth Air Force Vice Commander. HRA File K168.041-1 Volume 6 (part 4). Also see Futrell, 201–2.

35 Author's note: Eighth Army had only one and a half days' worth of ammunition and four days of food. Cohen and Gooch, *Military Misfortunes,* 184.

36 Futrell, 220-222.

37 Bradley and Blair, 583–7.

38 James, *Triumph and Disaster 1945–1964*, 528.

39 Author's note: During their October 15, 1950 meeting on Wake Island, President Truman had asked MacArthur what were the chances the Chinese or Soviets would intervene. MacArthur answered, "Very little…. The Chinese have 300,000 men in Manchuria. Of these probably not more than 100,000 to 125,000 are distributed along the Yalu River. Only 50,000 to 60,000 could be gotten across the Yalu River. They have no air force. Now that we have bases for our air force in Korea, if the Chinese tried to get down to Pyongyang there would be the greatest slaughter." Bradley and Blair, 575.

40 Author's note: According to Ridgway, MacArthur "decried the value" of air power, "flatly" stating that it could not "isolate the battlefield or stop the flow of hostile troops and supply." See: Ridgway, *The Korean War,* 82. Ridgway seems to have shared MacArthur's perspective, noting that "we had in Korea a prime example of how mistaken it is to imagine that an enemy's supply lines can be interdicted through air power alone." Ridgway, 75.

41 Futrell, 228–9.

42 *6147th Tactical Control Squadron (Airborne) History, July-October 1950*, HRA File K-SQ-AW-6147-HI. Also see J. Farmer and M. J. Strumwasser, *The Evolution of the Airborne Forward Air Controller: An Analysis of Mosquito Operations in Korea* (Santa Monica, CA: The RAND Corporation, October 1967), 30–3.

43 The Mosquito squadron commander observed that "Ground commanders seem reluctant to let airborne controllers out of his [sic] sight. This has been more noticeable each day since the airborne controller assumed the division identification. Less thought is being given to the enemy's build-up fifteen to thirty miles behind his lines." Much of this reluctance could be traced to the Army's shortage of communications required by Army doctrine, which made it dependent on the Air Force's Mosquito and Tactical Air Control Parties for relaying air requests. Farmer and Strumwasser, 33–4, 57–8.

44 Futrell, 232

45 Stratemeyer diary, November 7, 1950.

46 Ibid., 197.

47 Stratemeyer diary, November 18, 1950.

48 Futrell, 232. Also see "Study on Fifth Air Force Command Use of Forces Available," HRA File K730.3102-25.

49 Author's note: The 2nd Infantry Division's assistant commander wrote that "had it not been for the closest cooperation and all-out help given by your close air support we would not have gotten through that block [south of Kunuri] in any order at all. Never before have I had metallic links from [fighter machine gun] fire drop on my head, nor have I seen napalm splash on the road. The support was that close. That needed close support sealed up the machine gun and mortar fire in the pass which was holding up our vehicular movement on a one way road…Please convey to your little fellows my deepest appreciation. They materially helped in saving some 8,000 dough boys." Stratemeyer diary, December 26, 1950.

50 D. Clayton James, *The Years of MacArthur,* Volume III, *Triumph and Disaster 1945–1964* (Boston: Houghton-Mifflin Co., 1985), 536; see also Partridge diary, 224. On December 3, the Joint Chiefs authorized MacArthur to do as he proposed and pull his forces back to beachheads for possible defense stabilization or evacuation.

51 Author's note: Stratemeyer's memo explained that a withdrawal would have the advantage of "extend[ing] the Chinese LOCs to such a point that thousands would freeze to death besides thousands killed by air—lengthen Chinese LOCs and ours shortened—eliminates great property loss on the part of Army and AF that would result from forced evacuation from beachhead. Admiral Joy tells him takes 6 days to evacuate div. from Inchon w/5000 tons max cap…staying in Seoul all landlines, FM relays and many VHF stations would be lost. Comm. bad now and would practically stop by going into beachhead. Strongly recommends 8th Army not take up beachhead defense in Seoul-Inchon area & ASAP X Corps evacuate by water to Pusan." Stratemeyer, diary, December 6 and 7, 1950.

52 Stratemeyer's memo explains MacArthur's sudden turnabout that puzzled Blair, as noted in *The Forgotten War*, 532.

53 Partridge, diary, December 17, 1950, 253–4.

54 Russell Spurr, *Enter the Dragon: China's Undeclared War Against the US in Korea, 1950-51* (New York: Newmarket Press, 1988), 239, 251–2.

55 Author's note: The result was even more enemy casualties, inflicted directly by airpower or indirectly by denying the enemy shelter from the bitter Siberian cold. Futrell, 261–4.

56 Author's note: Chinese prisoners of war reported carrying 65-pound packs to make up for supplies destroyed by airpower. Despite the extreme cold, they were not allowed to build fires to dry their clothes or to cook for fear of air attack. See Alexander L. George, *Interdiction Bombing Experiences of Selected CCF and North Korean Army Units*, Report No. 4, Project RAND, 11 May 1951, HRA File 730.3102-25.

57 Hoyt, 167, and Spurr, 119, 239, 250, 253, and 308. Also see Futrell, 261-4; Stratemeyer diary, December 6, 1950, and February 13, 1951; and George, Report No. 4.

58 Author's note: The press release stated that "our field strategy, initiated upon Communist China's entry into the war, involving a rapid withdrawal to lengthen the enemy's supply lines with resultant pyramiding of his logistical difficulties and an almost astronomical increase in the destructiveness of our air power has worked well. In the development of this strategy the 8th Army has achieved ideal tactical successes through maximum exploitation of the air's massive blows on extended enemy concentrations and supplies…." Stratemeyer, diary, February 13, 1951.

59 Author's note: To appreciate the critically important role air interdiction played in the Allies' success in World War II see *A German Evaluation of Air Interdiction in World War II* (United States Air Force Assistant Chief of Staff Studies and Analysis, November 1970). One of many officers quoted was Gen Walter Warlimont, OKH (Army High Command) Operations Officer, who said of the German commanders in France: "All were discouraged by the Allied overpowering air force. They said that whatever they [the Germans] planned was impossible to execute and control because the Allied air force spotted and attacked every movement."

60 Gen Otto P. Weyland, "The Air Campaign in Korea," in *The Impact of Air Power*, ed. Eugene M. Emme (New York: D. Van Nostrand Company, Inc., 1959), 390–2, 398.

61 R. Russell Rumbaugh, "The Best Man for the Job," *Joint Force Quarterly 75*, 4th Quarter 2014, 91–97.

62 Author's note: Joint doctrine treats ground maneuver differently from air interdiction by calling for a joint targeting process authority while failing to call for a joint maneuver process authority that could ensure ground maneuver is designed to assist air interdiction in the defeat of an enemy army. See Joint Publication 3-0, *Joint Operations*, January 17, 2017, III-27.

63 Author's note: As was evident during Operation Desert Storm's Battle of Al Khafji, the E-8 Joint Surveillance Target Attack Radar System (JSTARS) makes it possible for US forces to detect and target enemy vehicles moving throughout a large area, even at night or during bad weather. Today, with the fielding of the Small Diameter Bomb II it becomes possible to hit and destroy these moving targets at any time and in all weather conditions.

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This paper is adapted from an article that first appeared in the fourth quarter 2018 edition (issue 91) of *Joint Force Quarterly* under the same title.