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JOINT OPERATIONS IN KOREA
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BY

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THUNDERBOLT Through RIPPER
Joint Operations in Korea, 25 January - 31 March 1951

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CHAPTER I

INTRODUCTION

This paper provides an unclassified study of lessons learned during joint operations in Korea between Eighth Army and Fifth Air Force from 25 January through 31 March 1951. It is neither a comprehensive analysis of each facet of the operations nor a chronology of the events that took place.

Early in the war, analysts frequently criticized the alleged shortcomings in joint operations doctrine. Joint training between the Army and the Air Force since World War II had been artificial at best, and it seemed that many of the lessons learned in the last war were lost. In June 1950, and for the next three years, the procedures for conducting joint air-ground operations in Korea would have to be worked out under the pressure of fighting a war.

Based upon an analysis of the employment of airpower in World War II, the Air Force claimed that strategic bombing was the best use of airpower. The claim was based upon the concept that future wars would be fought as previous wars had been - total wars. It was never thought that political constraints could limit targets and tactics. Therefore, the preponderance of the Air Force budget during the years between World War II and Korea was committed toward strategic bomber development and procurement. As the Air Force became a predominantly strategic bomber force, the role of fighter aircraft was the protection of bombers and air defense. Minimal effort was devoted to expanding close air support doctrine.

Another reason for the lack of joint air-ground doctrine was as result of

the differences in theories about what comprised the enemy's traditional center of gravity. These differences were so strong that they defused all efforts to publish a mutually agreeable joint operations manual. Soldiers knew that the defeat of the enemy's army and the subsequent occupation of his territory was the center of gravity. Airmen believed that the enemy's industrial base was the ultimate source of his power, and therefore, the center of gravity. Both services constantly feared that assets would be squandered on the wrong center of gravity.

Eighth Army and Fifth Air Force were not opposed by an industrialized state in Korea. To support forces in the field, the enemy employed a simple supply system with considerable flexibility. He fought when he had supplies and rested when supplies were low. In less than two months, during the fall of 1950, Fifth Air Force successfully destroyed the war production facilities within North Korea. However, it could not touch the source of the vast majority of munitions and supplies beyond the Yalu River boundary. At any point, the traditional strategic bombing campaign was over.

Without a campaign plan, Eighth Army and Fifth Air Force units were committed piecemeal to Korea to stop the aggression. Quite often, Fifth Air Force was directed to employ all available aerial power in close support of ground troops, to the exclusion of all other targets. Since aircraft were the only source of firepower during the first six months of the war, the lack of recent air-ground training and doctrine proved disastrous.

The best source of doctrine for air-ground operations at the outbreak of the Korean War was Army Field Manual 100-20, dated 1943. There were no heavily footnoted lessons of history in this manual. The most frequently

relearned lesson of wars - that the best preparation for military operations is doctrinal training - was relearned in Korea. Such was the case with joint air-ground operations.

CHAPTER II

BACKGROUND INFORMATION

This chapter provides an historical look at the posture of both Eighth Army and Fifth Air Force from just prior to the outbreak of hostilities in Korea through the first seven months of combat. It provides an insight into the nature of the conflict and the relationship of the forces before the First United Nations Counteroffensive, from which this paper draws its lessons learned.

All United States combat forces in the Far East had become weak from budgetary constraints and years of garrison duty. There were very few war reserve or contingency items available in Japan, and there were no United States combat troops stationed in Korea. Therefore, when fighting began, a surge of critical ground and air combat items began flowing from the United States to Korea. Part I of this chapter will address the posture of Eighth Army. Part II will address the posture of Fifth Air Force.

CHAPTER II

PART I: BACKGROUND, EIGHTH ARMY, FAR EAST COMMAND

After World War II, the mission of Eighth Army was the physical occupation, economic rehabilitation, and political democratization of Japan. On 1 January 1946, Eighth Army assumed responsibility for all ground forces in Japan. Lieutenant General Walton Walker assumed command on 3 September 1948.

By 1949, Japan's recovery program had progressed to the point where Eighth Army was able to curtail some of its occupational responsibilities and return to more traditional peacetime military training duties. Despite personnel shortages and limited training areas, Eighth Army instituted a progressive combat training program.[1] The largest maneuver force that could be supported in available training areas was a battalion. Having started with squad level tactics, the divisions had progressed to battalion level exercises before they were suddenly called to combat duty in Korea. The regiments and divisions conducted command post exercises to facilitate the training of headquarters staff personnel.

In 1950, Eighth Army consisted of four United States Army divisions (the 7th, 24th, and 25th Infantry Divisions and the 1st Cavalry Division - Dismounted) serving on occupation duty in Japan.[2] All four divisions were at approximately seventy percent strength with only two of the normal three battalions in the infantry regiments. Equipment was in short supply and badly worn from World War II combat. The armored units had been provided with light M-24 tanks instead of heavier ones because of Japan's weak bridges. Many new recruits were assigned to the occupation forces to replace the combat veterans who went home after the war. During the first few days of the war,

Eighth Army transferred over 2,100 men to the first-to-fight 24th Infantry Division from the other units to bring it up to its authorized strength for combat. Equipment was also transferred. As the remaining occupation divisions were subsequently deployed to Korea, each deploying division was in worse shape than the previous one.

During the early stage of the war, a strategy of delaying was the only feasible friendly course of action. On 2 July 1950, the first United States troops to be committed piecemeal to Korea landed at Pusan. Like all Eighth Army forces, Task Force Smith, 24th Infantry Division, had been on occupation duty in soft billets. They had done little sweating there, and they would pay for it with blood in Korea.

On 7 July 1950, General Walker and his Eighth Army headquarters staff arrived in Korea. On 12 July, General Walker was designated as commander of all ground forces in Korea. His initial orders to Eighth Army were to delay the enemy advance, secure the current defensive line, stabilize the military situation, and prepare for future offensive operations.[3]

By 5 August 1950, Eighth Army units in Korea had been pushed south to the Pusan perimeter. To defend it, General Walker had five South Korean divisions and three American divisions. Although the United States Army tactical doctrine at the time considered 10,000 kilometers to be a practical front for a division, at Pusan, Eighth Army had battalions responsible for this same frontage.[4]

With the landing at Inchon and the concurrent breakout from the Pusan perimeter in mid-September 1950, Eighth Army was to be back on the 38th parallel by year's end. After General Walker's accidental death

on 23 December 1950, General Ridgway assumed command of Eighth Army.

On New Years Eve the Chinese Communist Forces attacked and pushed Eighth Army back to positions south of the Han River and Seoul. By 15 January 1951, the enemy's supply lines had lengthened to the point that they were increasingly vulnerable to air interdiction. Conversely, Eighth Army knew that a northern advance would lengthen its own supply lines and shorten the enemy's, and eventually a point would be reached where friendly air interdiction efforts were no longer a factor.

The build-up of forces and equipment by the United States and allies continued at a rapid pace during the first six months of the war. In late January 1951, for the first time, Eighth Army was able to bring to bear the firepower of two major weapon systems - armor and artillery. This new firepower freed the Fifth Air Force from allocating the preponderance of its available sorties to close air support.

The series of operations from 25 January through 31 March 1951 were carefully planned and purposefully limited. They were engineered to take full advantage of the available firepower. General Ridgway stated the purpose of the operations in these words:

> We are not interested in real estate. We are interested only in inflicting maximum casualties on the enemy with minimum losses to ourselves. To do this, we must wage a war of maneuver - slashing at the enemy when he withdraws and fighting delaying actions when he attacks.[5]

Much of the history of the Korean War is written about the arrival and employment of United States forces. The order in which Eighth Army's United States combat units arrived in Korea is as follows:[6]

U.S. 24th Division ..... 1 July 1950

U.S. 25th Division ..... 10 July 1950

U.S. 1st Cavalry Division ..... 18 July 1950

U.S. 2d Division ..... 31 July 1950

U.S. 5th Regimental Combat Team ..... 2 August 1950

U.S. 1st Provisional Marine Brigade ..... 2 August 1950

U.S. 1st Marine Division ..... 15 September 1950

U.S. 7th Division ..... 17 September 1950

U.S. 187th Airborne Regimental Combat Team ... 19 September 1950

U.S. 3d Division ..... 10 November 1950

CHAPTER II

PART II: BACKGROUND, FIFTH AIR FORCE, FAR EAST AIR FORCES

The Korean Conflict gave the United States Air Force, and specifically the Fifth Air Force, its first combat experience since it became a separate service. Based in Japan since the end of World War II, the mission of Fifth Air Force had been strictly defensive. To be able to protect Japan, its assigned combat aircraft consisted primarily of fighters. Since it had only a defensive mission, Fifth Air Force was not authorized a tactical air control group, which would prove to be critical for conducting effective offensive operations.

Although some joint air-ground training had been conducted, tactical training had concentrated on the challenges associated with air defense.[7] Since South Korea was excluded from the air defense umbrella of Japan, Fifth Air Force's only contingency mission in that area was the evacuation of American nationals. When communist forces invaded South Korea on 25 June 1950, Fifth Air Force was not prepared to assume an active role in combat operations in Korea.

At the outbreak of hostilities, there were only four airfields in Japan capable of handling the newer combat loaded jet fighters. Although the Japanese bases and communications facilities were adequate for peacetime operations, they were not adequate for sustained combat operations. With the early loss of good Korean airfields, almost all the early missions, even close air support, were flown out of Japan.

As American forces withdrew from Korea in early 1949, the United States concluded that South Korea's economy was incapable of supporting an air force.

In fact, it was feared by political leaders in the United States that a strong South Korean Air Force would only bring the world closer to World War III. That coupled with the early loss of the two best airfields in Korea, Kimpo and Suwon, meant that Fifth Air Force was left with only Pusan for use by its jet aircraft.* Airfield construction and repair would be hampered for some time because of undermanned and poorly equipped aviation engineer units. The availability of basing became even more complicated when the Chinese entered the war because of the distance to sanctuary airfields which were located beyond the range of the Japanese-based fighters.

In general terms, there were five types of air power employed in Korea. Although each was dependent upon the others to maximize effectiveness, each had its own tactical role. The types of airpower employed were supply and logistics, tactical support of ground troops, strategic bombing, battlefield air interdiction, and air superiority.

On the evening of 25 June 1950, the Fifth Air Force was ordered to establish local air superiority in the vicinity of Seoul - Kimpo - Inchon and to prevent North Korean air interference with South Korean troops reorganizing in the area. Additionally, reconnaissance assets were employed over northern South Korea to provide a clearer picture of the ground situation. On order, it was to provide airlift assets and air cover to facilitate the evacuation of American and other noncombatants from Korea. On 26 June 1950, with the issuance of a United Nations Security Council resolution condemning North Korean aggression, Fifth Air Force was cleared to conduct combat operations south of the 38th parallel. By 28 June, fighters, medium bombers, and transports were conducting extensive air operations in South Korea.

On 30 June, authorization was received to extend operations into North Korea against purely military targets.

Because Fifth Air Force remained responsible for the air defense of Japan, General Partridge divided his headquarters into two echelons. On 24 July 1950, he activated Fifth Air Force Forward at Taegu in proximity to General Walker's Eighth Army headquarters. Fifth Air Force Rear remained in Japan.

From the opening days of the war, Fifth Air Force completely controlled the skies over Korea. It flew armed reconnaissance missions and bombed at will. It destroyed much of the industry, transport capability, and armed forces of the enemy. However, fighting a limited war proved to be a significant challenge. Restrictions against attacking Manchurian airfields and industrial military complexes were recognized as not being in the interest of bringing the war to a quick conclusion. Although a strategic bombing campaign could no longer be justified, Fifth Air Force's leaders believed that aerial firepower was being squandered in the continuous support of ground forces.

The mission of Fifth Air Force during the first three months of the war was to interdict lines of communications, destroy supply centers and transportation facilities, and attack enemy ground forces which posed an immediate threat to the withdrawing Eighth Army forces. Despite repeated air attacks against the advancing North Korean Army during this period, South Korean and Eighth Army units were forced to withdraw to the Pusan stronghold. Still, airpower had inflicted such high losses on enemy personnel and equipment that the Communists lacked sufficient strength and supplies to break through the perimeter. Air power provided the ground forces time to be reinforced

and then counterattack."

Approximately five months into the war, Eighth Army units again withdrew south because of massive attacks by Chinese Communist forces. Although Fifth Air Force was tasked with the same missions it had carried out in the early months of the war, a new weapon, the MIG-15, had been introduced with the Chinese forces. The success of air-ground operations now depended upon the maintenance of air superiority against the Russian built aircraft.

Massive Chinese attacks in January of 1951 forced Fifth Air Force units to displace southward to the same bases that had been used during the summer. Due to the lack of warning time and the shortage of transportation assets available to displace the squadrons, some critical radar equipment, fuel storage sites, and temporarily disabled aircraft had to be destroyed during the withdrawal. At the same time, Communist forces were busy occupying and repairing the facilities being vacated by Fifth Air Force. Having lost the forward airfields, Fifth Air Force had trouble maintaining air superiority over northwest Korea during January and February 1951.

Since early July 1950, Fifth Air Force Rear had maintained occupation duties in Japan while Fifth Air Force Forward fought the war in Korea. On 1 December 1950, the Rear headquarters in Japan was redesignated as 314th Air Division, under the command of a brigadier general, with three main duties: the air defense of Japan; control of Japanese airfield construction programs; and logistical support for the Fifth Air Force in Korea. At the same time, Headquarters, Fifth Air Force Forward was redesignated as Fifth Air Force and henceforth devoted its full attention to the war effort in Korea.

The organization of Fifth Air Force at the outbreak of war on 25 June 1950 was as follows:[10]

8th Fighter Bomber Wing (F-80C)	Itazuke Air Base, Kyushu
68th Fighter All-Weather Squadron (F-82)	
49th Fighter Bomber Wing (F-80C)	Misawa Air Base, Honshu
35th Fighter Interceptor Wing (F-80C)	Yakota Air Base, Honshu
339th Fighter All-Weather Squadron (F-82)	
8th Tactical Reconnaissance Squadron (RF-80A)	
3d Bombardment Wing (Light) (B26)	Johnson Air Base, Honshu
374th Troop Carrier Wing (C-54)	Tachikawa Air Base, Honshu

The disposition of these units is depicted at figure 1. The organization and disposition of Fifth Air Force units on 31 December 1950 is at figure 2.

ENDNOTES

1. U.S. Eighth Army Military History Section, The First Ten Years, A Short History of the Eighth United States Army - 1944-1954, p. 4.

2. James L. Stokesbury, A Short History of the Korean War, p. 41.

3. Ibid, p. 217.

4. Ibid, p. 53.

5. Robert F. Futrell and Albert F. Simpson, "Air War in Korea: II", p. 47.

6. U.S. Eighth Army Military History Section, Appendix I.

7. Futrell and Simpson, p. 47.

8. Futrell and Simpson, p. 51.

9. William W. Momyer, Air Power in Three Wars (WW II, Korea, Vietnam), pp. 168-169.

10. Office of Air Force History, The United States Air Force in Korea 1950-1953, pp. 2-3.

CHAPTER III

SUMMARY OF THE FOUR OPERATIONS, FIRST UNITED NATIONS COUNTEROFFENSIVE

The significance of this period is that the second communist offensive into South Korea had just been halted along the general line of Pyongtaek - Wonju - Chechon - Samchok (see figure 3).[1] The enemy was predominantly the Chinese Communist Forces (CCF). General Matthew Ridgway had recently assumed command of the Eighth Army, and four operations - Thunderbolt, Roundup, Killer, and Ripper - were initiated sequentially as a series of limited objective attacks to restore the momentum. These operations were the beginning of the first counteroffensive against the Chinese Communists since they had entered the war. They also initiated the second advance northward by Eighth Army forces to the 38th Parallel.

Supply lines and lines of communications had lengthened steadily as Communist forces attacked south since the end of November 1950. In order for the communists to maintain the pursuit and continue the destruction of Eighth Army, they had to abandon their earlier practice of advancing only at night and camouflaging their forces during the day. The enemy's extended lines were increasingly vulnerable to Fifth Air Force's armed reconnaissance and interdiction missions.[2] Because of the reduced flow of supplies to the front lines, the enemy's second invasion of South Korea was halted.

On 25 January 1951, Eighth Army initiated the first of four operations to drive the enemy back to the 38th Parallel. The objectives of these four operations were to retain the initiative, to keep the enemy off-balance by unremitting pressure, to thwart enemy efforts to mass sufficient power to

undertake another general offensive, and to inflict upon the enemy the heaviest possible losses in men and material.[3] While counter-air operations neutralized the enemy threat from the air and interdiction and armed reconnaissance missions weakened the enemy supply efforts, Fifth Air Force fighter-bombers also flew in close support of Eighth Army ground forces. During these operations, air-delivered supplies provided friendly ground forces with a significant advantage and freedom to maneuver.

Figure 4 is a map of Korea with date lines which correspond to Eighth Army's limits of advance during sequential operations from late January through 21 April 1951. A reference to this figure during the following summaries will aide in the orientation and understanding of the operations.

OPERATION THUNDERBOLT - The two day period preceding THUNDERBOLT was unusually quiet. Extensive reconnaissance in force in the I and IX Corps' zones confirmed that the enemy was withdrawing. With orders to maintain a solid front and not to bypass enemy units, THUNDERBOLT was launched on 25 January 1951. It was a limited-objective attack to destroy enemy forces and regain territory south of the Han River. The enemy resisted by conducting limited counterattacks until 9 February. By nightfall on 10 February, Eighth Army units reached the south bank of the Han River. The advance had been supported by intensive air interdiction and aerial resupply missions by Fifth Air Force.[3]

OPERATION ROUNDUP - On 5 February, General Ridgway ordered Eighth Army's X Corps and Republic of Korea's III Corps, both in the central zone, to initiate an attack similar to that being carried out so successfully in the west by I and IX Corps. By 8 February, strong Communist forces were

counterattacking the right flank units in the central zone. Aerial reconnaissance flights identified large groups of enemy forces massing to the north of the line of contact.

At nightfall on 11 February, the enemy counterattacked in strength at Chip'yong-ni. For four days, Eighth Army forces defended against repeated assaults. Fifth Air Force dropped food and ammunition to the besieged friendly troops and destroyed hundreds of enemy troops with strafing and napalm attacks. Even at night, aircraft provided support by dropping flares to illuminate the battlefield. The successful defense of Chip'yong-ni proved to be the turning point in the operation. By 19 February, the initiative had passed to Eighth Army all along the front.[4]

OPERATION KILLER - Determined not to give the enemy an opportunity to rest or reorganize, General Ridgway initiated KILLER on 21 February. It was launched by IX and X Corps to deny the enemy key terrain and to destroy Communist forces that had penetrated friendly lines on the eastern side of the peninsula. Swollen streams and mud from the thawing ground hampered maneuver. Even though advances in both Corps sectors had been slow, the operation took a great toll on Communist troops and equipment.

Air reconnaissance along the front confirmed that enemy force strength was extensive. However, their mission appeared to be one of delay. Within eight days, Eighth Army forces had reached the objectives in IX and X Corps' zones. Although KILLER was successful from a maneuver perspective, much of the enemy force had been able to withdraw under the cover of adverse weather which restricted Eighth Army's ability to maneuver and Fifth Air Force's flight operations.[5]

OPERATION RIPPER - RIPPER began on 7 March with an attack in IX and X Corps' zones to continue the pressure and to destroy enemy forces and equipment. This attack was intended to threaten the enemy's control of Seoul by creating the opportunity for an envelopment. Fifth Air Force provided prompt air evacuation for the wounded and greatly enhanced maneuver flexibility by dropping food and ammunition to the advancing ground forces. On 23 March, a regimental combat team was dropped 20 miles north of Seoul to cut off the retreating Communist forces. By the end of March, RIPPER had come to a close with Eighth Army forces on the 38th parallel. All geographical objectives had been taken. However, because the main body of the enemy had again slipped away, RIPPER was considered a qualified success.[6]

Although attacks against enemy defenses were slow and methodical during this operation, the steady progress had one significant advantage. For the first time in the war, Fifth Air Force was able to assign briefed fighter flights to specified tactical air control parties.[7] Not only were the fighter squadrons were able to load their aircraft with the appropriate ordnance, but they were able to coordinate timely and accurate strikes.

A chronology of significant events pertinent to the study of these four operations is as follows:

1 January - Chinese Communist Forces launch an offensive against United Nations (UN) forces. General Ridgway orders an orderly withdrawal.

4 January - Seoul recaptured (second time) by Communist forces.

7 January - UN forces establish a new defensive line, Pyongtaek - Wonju - Chechon - Samchok.

15 January - Communist offensive halted.

21 January - General Ridgway issues orders for counteroffensive campaign.

25 January - Operation Thunderbolt begins.

5 February - Operation Roundup begins.

7 February - Communist forces forced to withdraw north of the Han River.

14 February - Seoul recaptured (second time) by United Nations forces.

21 February - Operation Killer begins.

7 March - Operation Ripper begins.

31 March - Lead elements of Eighth Army units reach 38th Parallel.

ENDNOTES

1. Department of Military Art and Engineering, USMA, Operations in Korea, p. 30.

2. John A. Warden, The Air Campaign, Planning for Combat, p. 85.

3. Department of Military Art and Engineering, USMA, p. 31.

4. James L. Stokesbury, A Short History of the Korean War, p. 120.

5. Ibid, p. 121.

6. Ibid, p. 121.

7. Ibid, p. 122.

CHAPTER IV

LESSONS LEARNED

General MacArthur stated in the spring of 1951:

> I would say the support that our tactical air has given our ground troops in Korea has perhaps never been equaled in the history of modern war.[1]

General Ridgway made a similar statement in March 1951. Both of these commanders had experienced exceptional air-ground cooperation during campaigns in World War II.

The limited war fought in Korea provided challenges different from the world wars of recent history. The commander, Far East Command, was prohibited from attacking the enemy at his bases of organization and supply in China and Russia. Thus, Eighth Army and Fifth Air Force were confined to purely tactical campaigns and their attacks were limited to the actual battle zone. This restriction, intended to confine the conflict to Korea and prevent a potential escalation to World War III, gave the enemy a sanctuary for his strategic centers and planes.

Despite these restrictions, Fifth Air Force was virtually unchallenged by counter-air, and Eighth Army's troops had little to fear from enemy air attacks. Therefore, any lessons learned from joint operations in Korea are predicated on the fact that Fifth Air Force had complete air supremacy throughout the war.[2] Joint lessons learned during this period will be addressed in four parts within this chapter:

PART I: DOCTRINE

PART II: TRAINING AND TACTICS

PART III: EQUIPMENT

PART IV: COMMAND AND LEADERSHIP

The format within each part will be:

(I.#) Problem:

(a) Facts:

(b) Lessons Learned:

The remainder of this chapter covers twenty-two problems that were experienced during the four operations previously discussed. None of the problems were overcome quickly and some are still to be resolved today. Many of the problems were interrelated, making solutions especially difficult. The next two pages provide a reference list of the problem statements.

CHAPTER IV - PROBLEM STATEMENTS REFERENCE

(I.1) - To achieve the capability for all-weather, day and night close air support and attack of moving targets. (p. 23)

(I.2) - To allow ground commanders the authority to select targets in his area of interest for attack by air. (p. 24)

(I.3) - To determine the most efficient and fastest method to attack targets of opportunity. (p. 25)

(I.4) - To achieve optimum control of close air support strikes. (p. 26)

(I.5) - To improve the capability for target acquisition and identification by Fifth Air Force pilots. (p. 27)

(I.6) - To improve the success rate of aerial resupply missions in support of ground units. (p. 28)

(II.1) - To assist pilots in identification of friendly front line units in contact. (p. 29)

(II.2) - To coordinate friendly artillery fires in support of friendly air strikes. (p. 30)

(II.3) - To maintain communications lines and positive command and control during withdrawal operations by Eighth Army. (p. 31)

(II.4) - To stop the flow of supplies to the enemy's front lines through reconnaissance and air interdiction. (p. 32)

(II.5) - To allow the Tactical Air Control Party to become a full-fledged member of the combat team to which it was attached. (p. 33)

(II.6) - To find the Communist forces' well camouflaged vehicles and equipment which was being hidden during the day. (p. 34)

(III.1)- To improve communications equipment compatibility between friendly air and ground forces in the battle area. (p. 35)

(III.2)- To evaluate the performance of the new jet powered aircraft versus that of the World War II propeller driven aircraft. (p. 36)

(III.3)- To obtain the equipment required by the air-ground operations system. (p. 37)

(III.4)- To acquire adequate airbase facilities in Korea. (p. 38)

(III.5)- To improve the limited range and station time of the F-80 jet interceptor. (p. 39)

CHAPTER IV - PROBLEM STATEMENTS REFERENCE (continued)

(III.6)- To be able to illuminate the battlefield at night by Fifth Air Force crews. (p. 40)

(IV.1) - To improve the unification of effort between Eighth Army and Fifth Air Force in the War effort. (p. 41)

(IV.2) - To quickly deploy Fifth Air Force tactical units to Korea. (p. 42)

(IV.3) - To provide aerial reconnaissance support for target intelligence to Eighth Army front line units. (p. 43)

(IV.4) - To conduct combat operations in a limited war. (p. 44)

CHAPTER IV - PART I: DOCTRINE, LESSONS LEARNED

(I.1) Problem: To achieve the capability for all weather, day and night close air support and attack of moving targets.

(a) Facts: On 15 April 1951, after these four operations were over, General Partridge stated:

> I believe that the paramount deficiency of the USAF today, certainly as regards air-ground operations, is our inability to effectively seek out and destroy the enemy at night.[4]

The enemy quickly became aware of this limitation and began attacking and operating under these conditions. Although intelligence confirmed that enemy activity was increasing at night and during periods of adverse weather, Fifth Air Force possessed only a few airplanes and trained crews capable of conducting night attacks against moving targets. Before daylight, the Communists hid their equipment so well that fighter-bombers could not find it.

Under adverse weather conditions, radar controlled bombing missions were the only effective means of attacking an enemy force. The fact that there were few tactical air control and direction parties significantly reduced this capability. If the tactical air control and direction post was improperly sited or inoperative, no close air support could be provided. Even on clear nights, pilots were unable to acquire and attack targets without artificial illumination.

(b) Lesson learned: Lacking the ability to effectively attack targets at night and in adverse weather was further complicated by a lack of ability to assess the effects of most attacks. As techniques improved, the enemy's freedom to maneuver was curtailed, but it was never stopped.

CHAPTER IV - PART I: DOCTRINE, LESSONS LEARNED (cont)

(I.2) Problem: To allow ground commanders the authority to select targets in their area of interest for attack by air.

(a) Facts: During this period, the following authorization for air strikes was imposed on the ground commanders:

1) Divisions could select targets within 15,000 meters of their front lines.

2) Corps could select targets within 30,000 meters of their front lines.[4]

This arbitrary delineation did not allow for the best use of intelligence assets available to each commander. Target selection was based upon geographical areas of responsibility rather than on tactical considerations. Because the ability of the ground commanders to identify targets beyond these ranges was usually limited, Fifth Air Force was free to engage targets at will beyond these delineated ranges.

The fact that the targets were attacked was not always bad, and in fact most of the time it proved beneficial to Eighth Army forces. However, in some cases, the uncoordinated attack of enemy forces beyond these ranges caused an unexpected enemy reaction and adversely effected subsequent ground operations at the front.

(b) Lesson learned: A ground commander must have the authority to select for attack any target, regardless of distance, which may adversely affect his tactical situation or campaign plan. The linear battlefield of the Korean War was more conducive to the reliance on specified distances than the non-linear battlefield of Airland Battle doctrine will ever allow.

(I.3) Problem: To determine the most efficient and fastest method to attack targets of opportunity.

(a) Facts: Having aircraft on ground alert to attack targets of opportunity proved to be an inefficient use of firepower. The lack of compatible and reliable communications equipment between Eighth Army and Fifth Air Force was the primary problem. The lack of trained personnel who were familiar with joint operations and the capabilities and limitations of sister services further compounded the problem. Initially, time to launch the standby aircraft averaged from 45 to 90 minutes.[9] Unless alternate targets were designated before takeoff, the sorties were often not used because targets of opportunity frequently disappeared before the scrambled aircraft sortie arrived in the target area.

A practice of scheduling preplanned missions and launching sorties throughout the day was soon adopted. Prior to attacking the preplanned target, arriving aircraft were required to check-in with a designated tactical air control party. If a high-payoff target presented itself, the sortie was diverted. This technique proved most effective when intelligence provided information that specific types of targets were operating in the area. The aircraft was then loaded with ordnance appropriate for both missions.

(b) Lesson learned: The most efficient and effective method to attack targets of opportunity was by scheduling a preplanned mission. Procedures were established to divert the sorties should a more lucrative target present itself.

(I.4) Problem: To achieve optimum control of close air support strikes.

(a) Facts: Because tactical air control parties were not always available or equipped with adequate communications equipment, Air Force (T-6) Mosquito aircraft were often used to control close air support strikes. Mosquitos, with extended station time and reliable communications equipment, proved beneficial in assisting the fast flying jets with target identification. Additionally, the T-6 aircraft proved fast and maneuverable enough to survive enemy air attacks while other liaison aircraft did not. It is estimated that Mosquitos controlled over ninety percent of the immediate close air support strikes during these four operations.[4]

Mosquito controllers did not always direct strikes to support the friendly ground commander's intent or scheme of maneuver. Often, the airborne controller would direct the strike against an exposed target which he was sure that the attacking aircraft could quickly acquire, verses a camouflaged, yet potentially more dangerous, threat to friendly forces on the ground. Mosquitos proved most beneficial in their ability to see far beyond front line contact and direct strikes against pursuing enemy forces. Many times, this allowed Eighth Army forces to withdraw without pressure. The attack of the most lucrative, versus the most dangerous, targets in some cases hindered the accomplishment of the ground commander's mission.

(b) Lesson learned: The most effective control of close air support was always achieved when airborne and ground controllers could communicate and worked together to coordinate strikes. Equipment and training was required to make this happen.

(I.5) Problem: To improve the capability for target acquisition and identification by Fifth Air Force pilots.

(a) Facts: The two greatest challenges associated with close air support and battlefield air interdiction in Korea was target acquisition and positive identification by the pilots. The ultimate goal of interdiction missions was to deny freedom of movement to the Communist forces twenty-four hours a day. The primary limitations to target acquisition were previously identified as darkness and adverse weather. Other factors affecting targeting were the excellent camouflage techniques employed by Communist forces, the speed of jet fighters over the terrain, crowds of refugees which clogged the roads and transportation centers, and the lack of reconnaissance photos available to fighter-bomber crews.

The lack of proper target intelligence forced some flight leaders to make a preliminary pass over the target area before initiating the attack.[7] This technique was also used during close support missions to prevent collateral damage and friendly casualties. During periods of adverse weather, the aircraft could not attack autonomously, and radar controlled bombing was the only effective means of employing close air support. Flares could be dropped at night but many factors such as wind, terrain, enemy reaction, and the inability to simultaneously coordinate the attack effected the outcome.

(b) Lesson learned: Both acquisition and identification capabilities would improve with experience. The most effective tactics, techniques and procedures evolved with the use of radar bombing and artificial illumination.

(I.6) Problem: To improve the success rate of aerial resupply missions in support of ground units.

(a) Facts: During early 1951, there were only two Korean airfields capable of supporting heavier Air Force transports.* Since the capacity of the air transport fleet exceeded the capacity of Korean airfields, airdropped supplies played a critical role in the sustainment and success of Eighth Army ground forces. Without this capability, the poor road networks and limited ground transportation assets would have drastically changed the tactical situation.

Although resupplying military units by parachute drop was not new, these four operations in the Korean War required the most intense aerial resupply efforts to that point in United States military history. A ten percent loss of airdropped supplies was assumed in advance, and a correspondingly greater tonnage was dropped than was required on the ground. Because communications between ground units and aircraft was unreliable, the location and proper marking of the dropping zone was the greatest qualifying factor to the success of the mission. If the tactical situation on the ground changed after the cargo aircraft were airborne, the success of the mission depended upon the capability of the ground unit to retain control of the prearranged drop zone and the capability of the aircraft crew to locate it.

(b) Lesson learned: Although reliance upon aerial resupply by parachute was a high risk endeavor for Eighth Army, the successful outcome of these four operations proved that it was worth the risk.

CHAPTER IV - PART II: TRAINING AND TACTICS, LESSONS LEARNED

(II.1) Problem: To assist pilots in the positive identification of friendly front line troops in contact.

(a) Facts: Pilot debriefings confirmed the difficulty in identifying the marking panels which were issued to and carried by front line troops. Pilots reported that friendly units seldom displayed the correct panel pattern in accordance with current signal operating instructions. Ground troops stated that when one or more of the panels were lost, it was impossible to display the correct pattern. Although white phosphorus and colored smoke were easier to see, there was also a problem of displaying the proper colors at the proper time. With smoke, there was always the potential for enemy deception. There was no compatible communications equipment available for front line combat troops and Air Force aircraft. The speed of jet aircraft further compounded the challenges.

For these reasons, Fifth Air Force pilots stated that they were forced to assume that any displayed panels or smoke marked friendly positions unless they were briefed to the contrary. Because of air supremacy, friendly vehicles were never camouflaged. In fact, the issued panels were often used to mark friendly vehicles. Pilots stated that a camouflaged vehicle was understood to be enemy.

(b) Lesson learned: A positive means to identify front line friendly troops was imperative if close air support missions were to be safe and effective. Direct communications was preferred, but redundant systems were necessary to counter ever increasing enemy deception.

(II.2) Problem: To coordinate friendly artillery fires in support of friendly air strikes.

(a) Facts: Eighth Army forces preferred to use air attacks against targets which could not be attacked by its own artillery. Ground forces relied heavily on their artillery within the first one thousand yards of the front." If artillery could be adjusted on to the target, it was usually more devastating than an air strike because of the limited amount of ordnance that the aircraft were capable of carrying. Throughout this period, the simultaneous employment of artillery fires and friendly air could not be consistently coordinated. If aircraft were available to be employed in the area, artillery fires had to cease.

As the Communist forces recognized this shortcoming, they reemerged and became more effective at employing their antiaircraft and small arms fire as soon as the artillery fire ceased. As close air support experience was gained, both services learned that the concurrent employment of artillery fire during friendly air strikes was beneficial to both. The continuous artillery support provided Eighth Army troops reduced casualties. Fifth Air Force pilots reported a marked decrease in antiaircraft fire during periods when artillery was coordinated to fire continuously.

(b) Lesson learned: To coordinate close air and artillery support, communications between the artillery fire direction centers and the tactical air control parties was essential. Although communications was essential, trained personnel at both locations proved to be the key to success.

(II.3) Problem: To maintain communications lines and positive command and control during withdrawal operations by Eighth Army.

(a) Facts: Forces committed to war unexpectedly must fight a few engagements before they reach a level of efficiency. One of the most difficult missions that Eighth Army units had to conduct during the Korean War was a withdrawal under pressure. During withdrawal operations, Eighth Army units paid far too much attention to speed to the rear without maintaining flank and rear security, or communications.[1•] Often, Fifth Air Force planes, which were on station, were unable to attack targets of opportunity and to relieve the pressure on withdrawing forces because they were unable to coordinate the strikes. Higher headquarters was unable to provide targeting information, because they too did not have communications with withdrawing front line units. Many aircraft sorties were wasted and friendly lives were lost because of this failure. Without effective command and control of front line companies, the withdrawal quickly progressed to a full retreat.

(b) Lesson learned: As the war progressed, every effort was made to create space on the ground in which the friendly unit could withdraw without being under direct pressure from enemy forces. Commanders above the battalion level learned that it was imperative to maintain lateral communications all across the front and exercise command and control of subordinate front line units during withdrawal operations.

(II.4) Problem: To stop the flow of supplies to the enemy's front lines through armed reconnaissance and air interdiction.

(a) Facts: The Communists proved very adept at quickly repairing key bridges and railroads damaged by air interdiction. The destruction of railroad bridges did hamper efforts to resupply the losses of heavy equipment such as tanks and artillery. Quite often, at destroyed bridges or rail track cuts, the enemy transferred supplies across the opening and reloaded them on another train. As trains and cars hid by day in the numerous tunnels and operated only at night, it was difficult to destroy them. Because reconnaissance did not indicate that damaged rail tracks had been repaired, there was an assumption that they were not being used. Also, less efficient means such as A-frames and trucks instead of railroads were implemented.

Although the resultant system was less efficient, it provided a targeting dilemma for Fifth Air Force. Instead of routinely attacking these assets, Fifth Air Force found it more effective to target these sites with reconnaissance sorties and then to reattack them just as the repair was almost complete.

(b) Lesson learned: In coordination with Eighth Army mine warfare and targeting cells, Fifth Air Force effectively increased Communist repair times to bridges and railroads by mixing delay and anti-disturbance weapons in the targeted areas. Night movement was delayed and harassed by dropping delayed action bombs, set to explode at night, along the roadways.

(II.5) Problem: To allow the Tactical Air Control Party (TACP) to become a full-fledged member of the combat team to which it was attached.

(a) Facts: The most forward element of the tactical control system was the TACP. The key member of this three man party was the experienced pilot. Fifth Air Force believed that rotating a large number of pilots through a period of duty with front line units would provide a long term payoff for the ground forces. Eighth Army believed that the rotation policy of twenty-one days was not sufficient, and requested that TACP members be assigned to front line units for periods of not less than six months.

Fifth Air Force stated the following reasons for not desiring to extend the twenty-one day period: morale problems of pilots who were pulled from cockpits in the middle of their requisite number of combat missions necessary to rotate home; flight pay stopped during the period of the assignment; when pilots returned to their flight units, they had to fly with new pilots and crews; and Fifth Air Force alleged that tactics often changed during the twenty-one day period that the pilots were away.[11] Several tests were conducted during this period by Fifth Air Force and Eighth Army, but no change to the assignment policy evolved.

(b) Lesson learned: A joint headquarters should have developed a formal assignment policy which was in the best interest of both services and the mission of the forces in Korea.

(II.6) Problem: To find the Communist forces' well camouflaged vehicles and equipment which was being hidden during the day.

(a) Facts: During February and March 1951, the successful fighting of Eighth Army required the Communists to move reinforcements and supplies forward without caution. As result, Fifth Air Force was provided numerous targets for armed reconnaissance missions. Because of Fifth Air Forces success, the Communist forces soon adopted a policy of moving only at night and camouflaging their personnel and equipment by day. Operation centers began plotting and analyzing all reports of night movement to determine where the camouflaged forces might be concentrating. These suspected areas were targeted for armed reconnaissance missions the next day.

On 14 February, Fifth Air Force implemented a new policy of assigning each fighter wing to a specific area of responsibility for continuous operations.[12] This policy allowed the pilots to become very familiar with their assigned area and thereby better identify subtle changes in terrain or recently camouflaged items. At the same time, Fifth Air Force intensified its night reconnaissance efforts.

(b) Lesson learned: Within a two month period, Fifth Air Force was able to adapt its tactics from daylight armed reconnaissance against excellent targets, to daylight armed reconnaissance against well camouflaged and protected targets. The success of this adaptation by Fifth Air Force allowed Eighth Army to continue the offensive.

CHAPTER IV - PART III: EQUIPMENT, LESSONS LEARNED

(III.1) Problem: To improve communications equipment compatibility between friendly air and ground forces in the battle area.

(a) Facts: Each TACP was equipped with an AN/ARC-1 radio jeep, but the rough terrain of Korea quickly battered the old equipment out of commission. There was no remote equipment available which would allow the controller to leave the vehicle hidden while moving forward to a position where he could see the target and control the strike. Although viable targets were often presented to the forward ground forces, field artillery forward observers and army aircraft generally could not communicate with air force aircraft or tactical air control parties.

Since air attacks were not recognized as being dependable by ground forces, Eighth Army unit commanders refused to take risks which relied heavily on air strikes to accomplish their missions. Three months prior to these operations, some Mosquito aircraft began carrying SCR-300 radios which allowed them to talk with forward ground units. These specially equipped aircraft experienced significantly higher mission success rates than their sister aircraft.

(b) Lesson learned: A common joint communication system had to be established if coordinated air strikes were to be timely and effective. More important, without a dependable joint communications capability, ground commanders would never rely on air strikes to be a critical part of their future plans.

(III.2) Problem: To evaluate the performance of the new jet powered aircraft verses that of the World War II propeller driven aircraft.

(a) Facts: The war had barely begun before the American press was reporting that the new jet (F-80) aircraft were ineffective, and that the piston-engine (F-51) aircraft had to be brought in to take over the tactical operations of close support, bombing, and tactical reconnaissance.[13] Because of the early loss of large airfields in Korea, only a few were capable of handling jet aircraft. Until Korean airfields could be reoccupied, Fifth Air Force fighters from Japan provided only thirty to forty minutes of close support to Eighth Army forces in Korea.

The F-51 had proven in World War II that it was capable of supporting the low level attack missions in the Korean War. The F-51 required only 1200-1400 yards of runway, while the F-80 required 2000 yards. The jet fighter also required a much stronger runway to support the extra weight and deterioration from the jet blast. Because the fuel consumption rate of jet engines was about six times greater than that of piston engines, the aviation fuel transportation system was burdened. The majority of the bad press was directly related to the additional support required to sustain the jet fighter in combat. An important consideration during the first few months was that the enemy was not using jets to oppose friendly aircraft.

(b) Lesson learned: Had the United States Air Force yielded to the allegations of the press in the early days of the war and replaced the jet fighters with slower piston engine aircraft, the Communist Chinese may have found success with the arrival of the Soviet built MIG-15 in theater.

(III.3) Problem: To obtain the equipment required by the air-ground operations system.

(a) Facts: In accordance with Army Field Manual 31-35, August 1946, the equipping of the air-ground operations system was the responsibility of the Army.[14] Eighth Army had not purchased the required equipment. In Korea, Fifth Air Force provided improvised communications equipment to meet the requirements of a functional air-ground communications system. Although Eighth Army was satisfied with the improvised system, Fifth Air Force felt the equipment was unreliable, and that the system was therefore undependable. This was especially true since Fifth Air Force was receiving tremendous pressure from Eighth Army to provide continuous and immediate close air support to ground forces. Because communications were inadequate for immediate close air support requests, aircraft had to be launched via a daily schedule. The lack of equipment and resultant inefficiency was especially critical since Fifth Air Force was employing the preponderance of its assets in close support of ground forces.

(b) Lesson learned: Because the Army had not purchased and maintained the requisite equipment to make the air-ground operations centers combat effective, a marginally effective system had to be improvised at the outbreak of the Korean War.

(III.4) Problem: To acquire adequate airbase facilities in Korea.

(a) Facts: The Korean airfield construction effort marked the first time that air facilities were constructed in a combat theater to service the new jet aircraft. During the early stages of the Korean War, Fifth Air Force was using former Japanese airfields in Korea which were already located in the most advantageous regions of the country. However, the older airfields had been constructed for lighter planes and their surfaces quickly disintegrated under the heavy wheel loadings of the new aircraft. The best that could be managed with the limited number of engineer aviation assets was a minimal rehabilitation program to keep aircraft flying. Poor runway surfaces reduced the combat loading of aircraft.

The major shortcomings in air facilities were attributed to the lack of personnel and equipment available to the Army's engineer aviation battalions. The most serious common problem was the lack of equipment for handling bulk fuel. Additionally, the short and rough runways and inadequate parking areas resulted in extensive damage and destruction of aircraft and aviation related equipment. Although the engineer aviation battalions were undermanned, Eighth Army's counteroffensive during this period progressed satisfactorily because the recently abandoned airfields to the north were quickly repaired and reoccupied.

(b) Lesson learned: The aviation engineer support structure in the Department of the Army had not been enhanced to meet the increased support requirements created by the new jet aircraft in the United States Air Force. This shortcoming adversely affected combat operations between Eighth Army and Fifth Air Force.

(III.5) Problem: To improve the limited range and station time of the F-80 jet interceptor.

(a) Facts: During these operations, the most plentiful and active aircraft was the F-80. If the F-80s were required to fly their first mission of the day from Japan, they would generally return to Taegu for rearming and refueling, and then fly a second mission from there before returning to Japan.[15] Taegu was selected because of its location in the battle area and its suitable facilities. The dependence on a single airfield for such missions carried an element of risk. On the morning of 21 February 1951, for example, low cloud cover over Taegu caused five F-80s to run out of fuel and crash land along the Naktong River.

Carrying standard wing tanks, and coming from or returning to Japan, the F-80 could remain on station in the target area for only fifteen minutes. The critical ground situation during this period and the F-80s range limitations required the prompt relocation of the jet fighter planes to Korea. However, the same problem existed after the F-80s were deployed to southern South Korean airfields when they had to attack targets along and north of the 38th Parallel.

(b) Lesson learned: To overcome this problem, the 265 gallon auxillary wing tanks were developed and installed. They provided the F-80 with an additional one hour of flight time. Additionally, tactical air controllers began flying in T-6 Mosquito aircraft to locate targets for the F-80s and direct them quickly to the attack. The recapture and reoccupation of forward staging bases in Korea allowed Fifth Air Force to overcome many operational problems with the F-80.

(III.6) Problem: To be able to illuminate the battlefield at night by Fifth Air Force crews.

(a) Facts: In order for Eighth Army's counteroffensive operations to be successful, it was acknowledged that constant pressure had to be maintained to keep the Communists off-balance and not allow them the opportunity to prepare for offensive operations. Through January 1951, the B-26 night intruder crews had used AN/M-26 paraflares which functioned only about half the time.[14] After testing the Navy's new Mark VIII lanyard-detonating flares launched through chutes in their C-47s, Fifth Air Force determined that it could provide four to five minutes of dependable illumination over the battlefield. The illumination from the Mark VIIIs proved beneficial to both attacking aircraft and friendly ground forces. For the Communists to attack under the Mark VIIIs, they risked certain counterattack.

(b) Lesson learned: As result of a recognized requirement for Fifth Air Force to keep constant pressure on the withdrawing Communist forces, it developed a reliable technique to be able to accomplish the mission. A Navy flare, dropped from an Air Force plane, to support the Army ground forces was the result.

CHAPTER IV - PART IV: LEADERSHIP AND COMMAND, LESSONS LEARNED

(IV.1) Problem: To improve the unification of effort between Eighth Army and Fifth Air Force in the prosecution of the war.

(a) Facts: The Commander-in-Chief, Far East Command (CINCFEC) could have better performed his duty as commander of a unified command if he were not directly responsible for the many details of Army command and administration. Even after CINCFEC was designated as Commander-in-Chief, United Nations Command and given responsibility for all combat operations in Korea, there was no attempt to obtain staff representation from other services in order to facilitate future joint plans and operations.[17]

Eighth Army and Fifth Air Force operated along side each other as coequal commands. With the exception of a few liaison officers, neither command had representation on the other's general headquarters staff. The challenges of an unexpected war caused each service to devote significant independent effort to obtain additional equipment, supplies, and personnel from the United States. Command decisions in Korea were often based on boundaries which partitioned missions and capabilities of the services regardless of the collective potential of available forces. These command decisions proved sufficient only because of the Communist's inability to generate any air opposition.

(b) Lesson learned: Unification, as far as command organization was concerned, did not exist. As result of the lack of unified command and control of joint operations, the combat potential of available forces in the theater was never optimized.

(IV.2) Problem: To quickly deploy Fiftn Air Force tactical units to Korea.

(a) Facts: Since there was no joint headquarters to establish priorities for the apportionment of limited transportation assets, Far East Command, an Army staffed headquarters, directed the apportionment of all services' transportation assets. In view of the fact that Eighth Army units had been allocated first priority for the use of scarce surface transportation assets plus the normal airlift allocation of Fifth Air Force, the build-up of Fifth Air Force units into Korea was delayed.[10] In addition to getting Eighth Army units into country, the critical need for supplies to sustain the growing numbers of ground troops also increased. Fifth Air Force's air transportation assets had been so generously furnished that they were often misused for many routine tasks rather than being conserved for higher priority missions.

(b) Lesson learned: All transportation assets were in high demand during the initial deployment and during the conduct of combat operations. A joint headquarters staff which understood the ground situation and future needs should have prioritized their missions.

(IV.3) Problem: To provide aerial reconnaissance support for target intelligence to Eighth Army front line units.

(a) Facts: Primarily two decisions permitted the Communists to mass forces undetected during this period: 1) the limited day photo reconnaissance capability was directed at photographing the Yalu River bridge crossing sites, and 2) the limited night photo reconnaissance capability was committed to night illumination missions for the bombers and field artillery fires.[19]

Although the Communist forces' camouflage discipline was excellent, the aerial reconnaissance capability of Fifth Air Force could have better prevented the surprise of massed Communist troops appearing in front of Eighth Army units. Since a joint headquarters staff did not exist, aerial reconnaissance priorities were being established by Fifth Air Force. The dissemination of intelligence information was also strictly controlled by Fifth Air Force.

(b) Lesson learned: The employment of a limited asset such as aerial reconnaissance platforms should have been a function of priorities established by a joint headquarters and staff. The employment should have been directed at supporting the overall campaign plan.

(IV.4) Problem: To conduct combat operations in a limited war.

(a) Facts: Early on, the military mission in the Korean War was to restore the territorial boundaries of the Republic of Korea.[20] Eighth Army and Fifth Air Force objectives were determined as result of policies which had been accepted by the members of the United Nations. The underlying intent of these policies was to confine the war to Korea. The political policy of limiting hostilities produced many restrictions on military operations, and most restrictions dealt with the employment of air power. Restrictions were necessary to maintain the alliance. A consistent rule throughout the war was, "every effort will be made to attack military targets only, and to avoid needless civilian casualties."[21]

It must be emphasized that the Korean War was fought as a United Nations operation. Since the policies represented a consensus of the nations providing forces and support to Korea, any changes to the policies had to be approved through diplomatic channels. The changes and clarifications were slow to come.

Formally announcing that Chinese Communist airspace would not be entered and that atomic weapons would not be used during the war gave the enemy psychological and physical advantages. The troops understood the decisions. They never understood the reason for announcing these decisions to the world.

(b) Lesson learned: This war was clearly a departure from previous wars in which "unconditional surrender" had been the practice. This was a limited war, requiring limited objectives to define success. The result would be a limited application of combat power.

Korea re-emphasized many old lessons. In a combat information bulletin published by the Chief of Army Field Forces, the following statement appeared:

> The one great lesson that can be learned, however, is that U.S. doctrine, tactics, techniques, organization, and equipment must be applied with vigor, imagination, and intelligence to the situations encountered there....For every weakness reported against some small part of our troops, there is somewhere in our training literature a guide for its correction; for every strength reported for the enemy, an indicated countermeasure is already provided.[22]

ENDNOTES

1. General Douglas MacArthur, Statement on Military Situation in the Far East, p. 309.

2. Department of Military Art and Engineering, USMA, Operations in Korea, p. 54.

3. Office of Air Force History, The United States Air Force in Korea 1950 - 1953, p. 325.

4. Headquarters Continental Army Command, "Lessons Learned in Korea", p. 29.

5. U.S. Air Force Historical Division, United States Air Force Operations in the Korean Conflict, 1 November 1950 - 30 June 1952, p. 207.

6. Office of Air Force, p. 706.

7. "Company Grade Officers --- Notes on Korean Action", Air Intelligence Training Bulletin, September 1951, p. 6.

8. The War History Compilation Committee, The History of the United Nations Forces in the Korean War, p. 739.

9. U.S. Air Force Historical Division, p. 201.

10. Department of Military Art and Engineering, USMA, p. 47.

11. The War History Compilation Committee, p. 664.

12. Ibid, p. 750.

13. William A. Gunn, "A Study of the Effectiveness of Air Support Operations In Korea", p. 6.

14. U.S. Air Force Historical Division, p. 196.

15. The War History Compilation Committee, p. 664.

16. U.S. Air Force Historical Division, p. 165.

17. Ibid, p. 72.

18. Ibid, p. 12.

19. Ibid, p. 27.

20. Office of Air Force History, p. 40.

21. Ibid, p. 42.

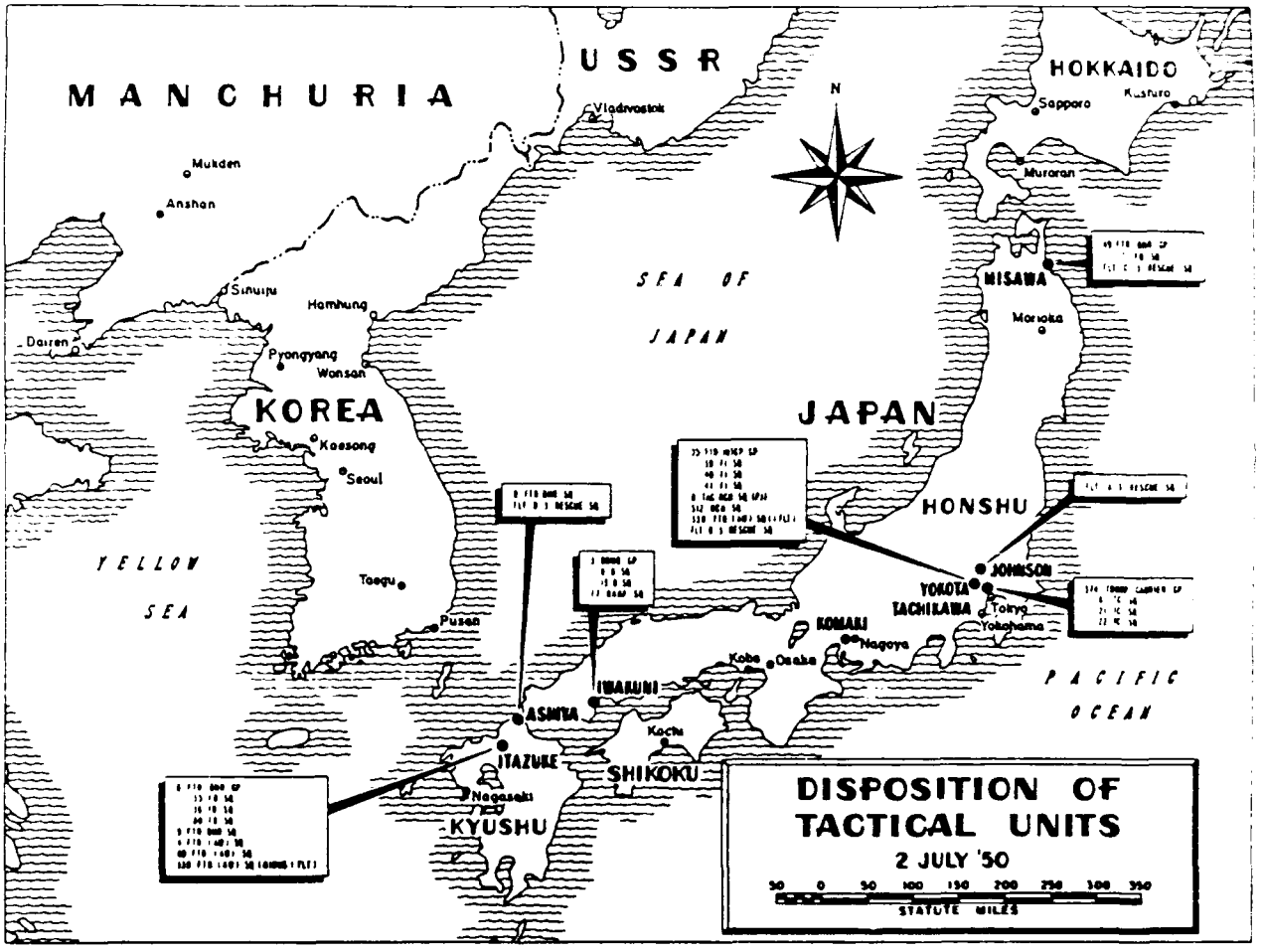
22. Department of Military Art and Engineering, USMA, Operations in Korea, p. 53.

FIGURE # 1

DISPOSITION OF

FIFTH AIR FORCE UNITS

2 JULY 1950



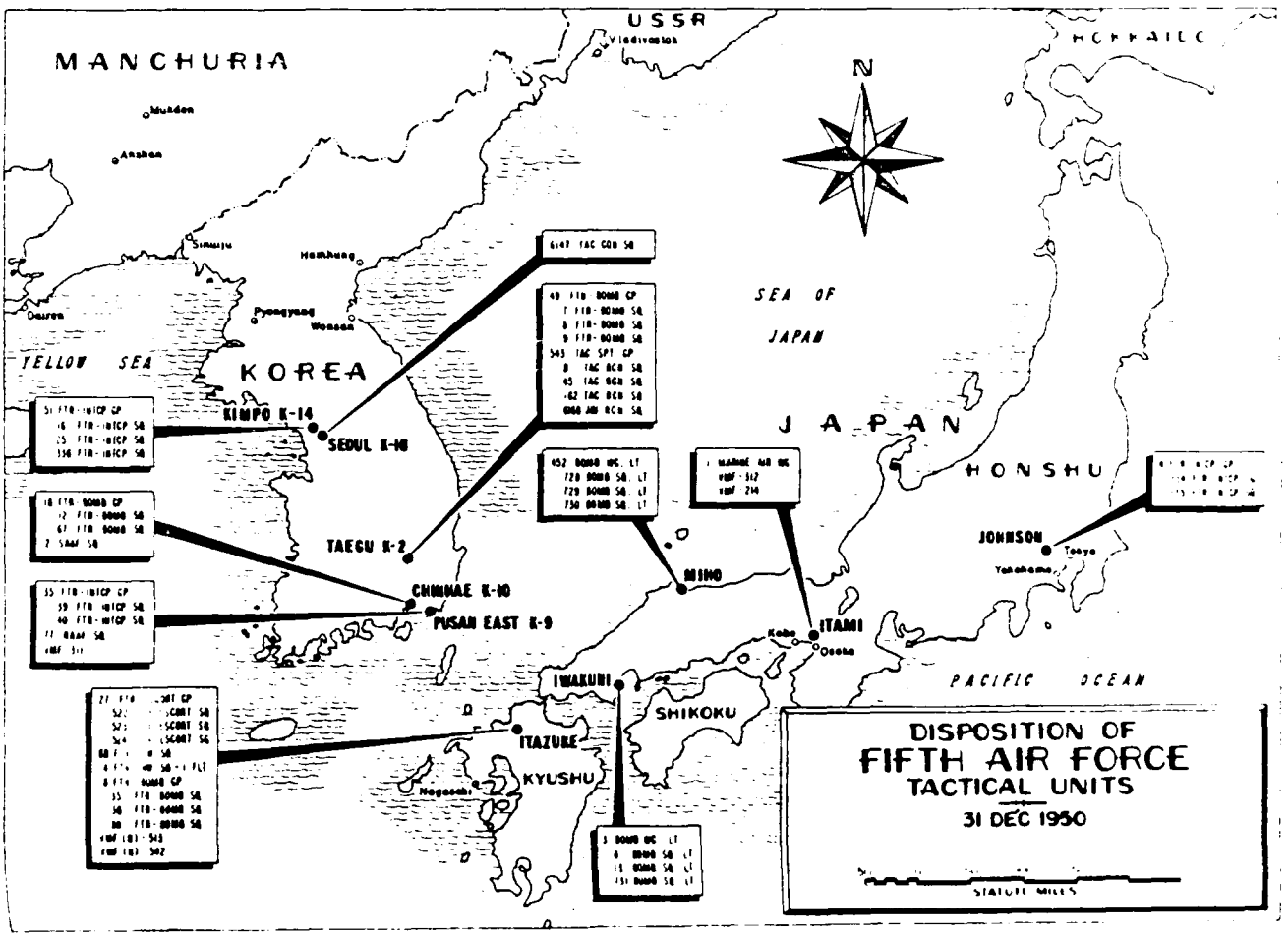
Source: Futrell, p. 35.

FIGURE # 2

DISPOSITION OF

FIFTH AIR FORCE UNITS

31 DECEMBER 1950

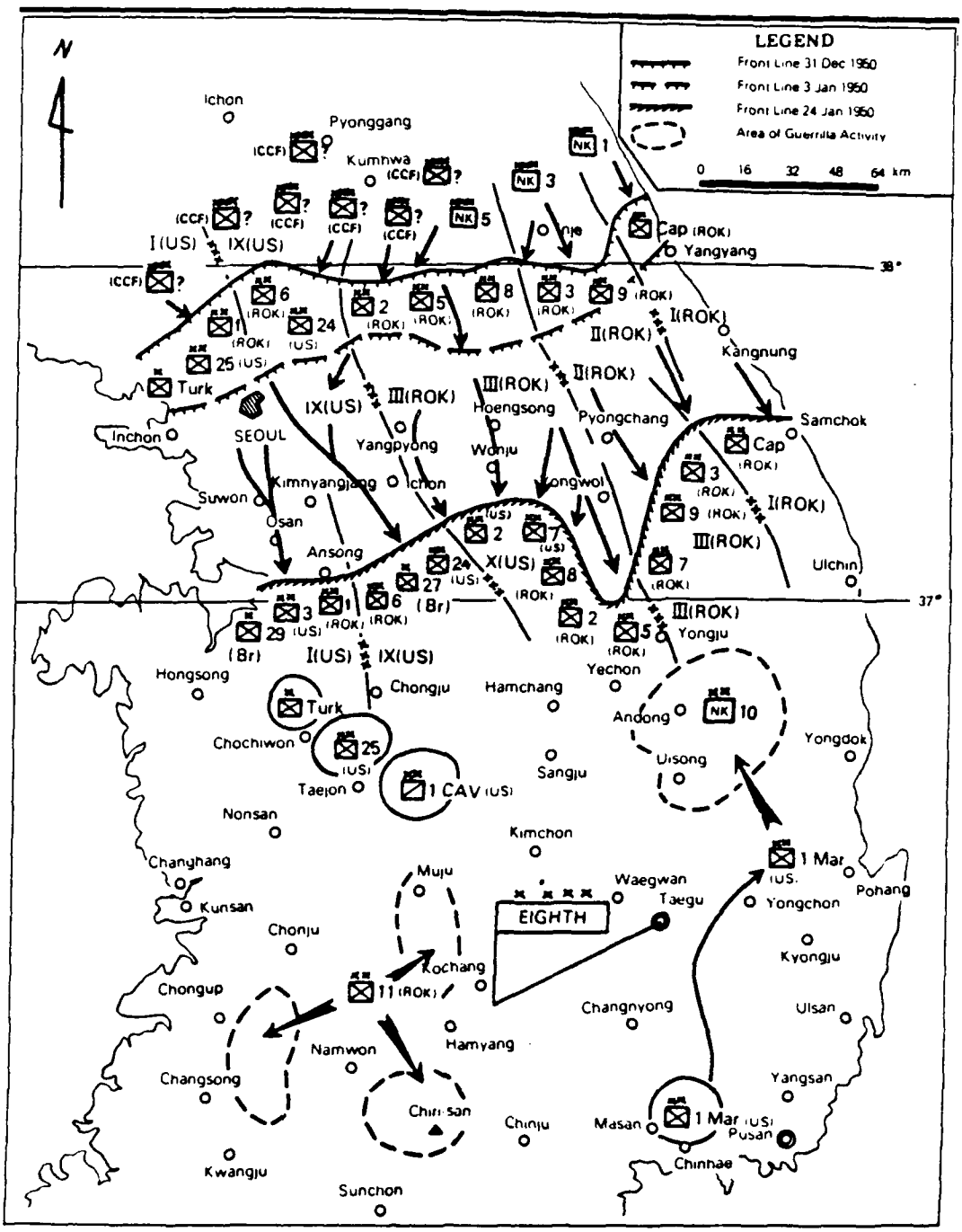


Source: Futrell, p. 274.

FIGURE # 3

CHINESE COMMUNIST FORCES OFFENSIVE

31 DECEMBER 1950 - 24 JANUARY 1951

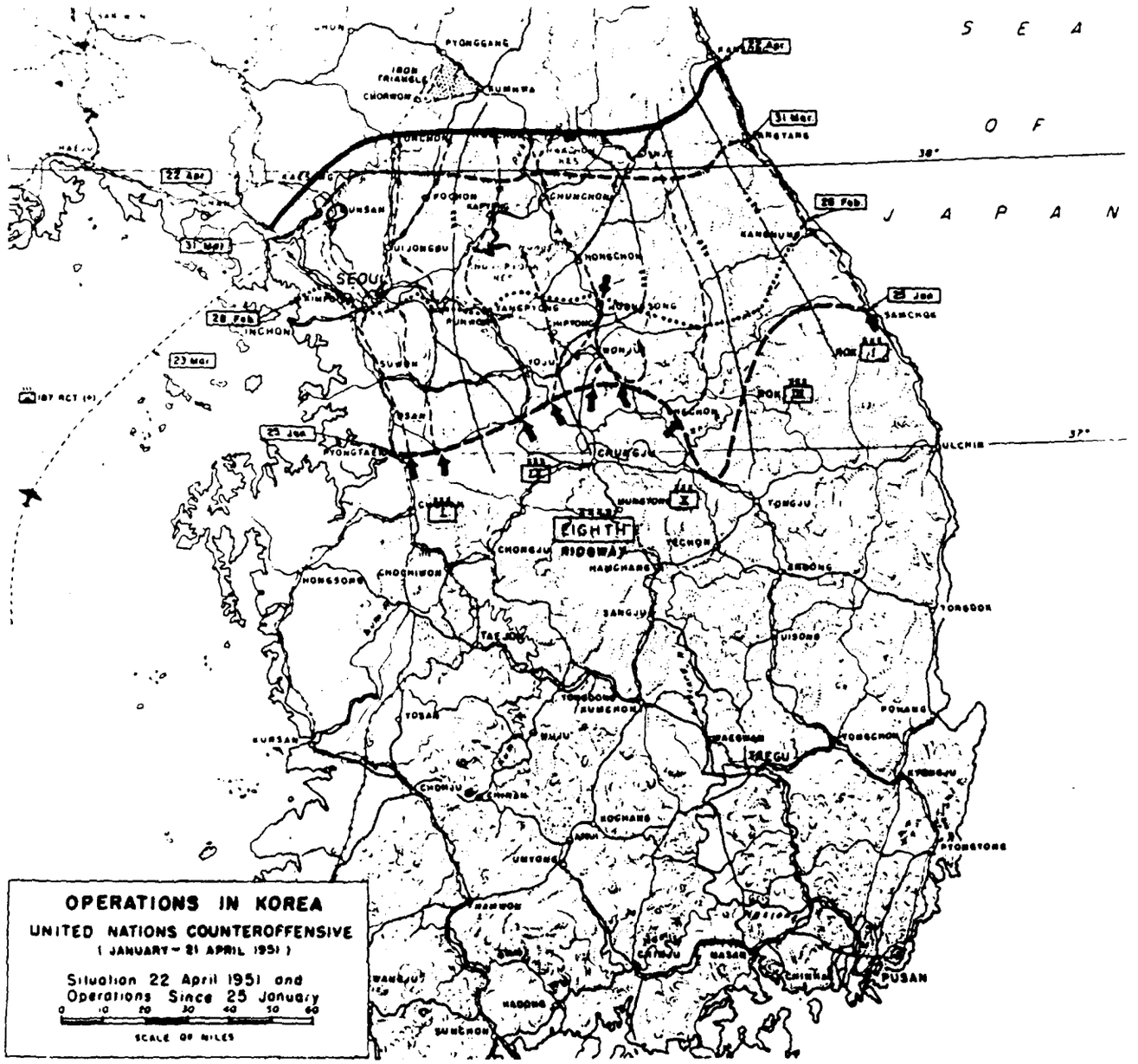


Source: War History Compilation Committee, Situation Map #11.

FIGURE # 4

EIGHTH ARMY COUNTEROFFENSIVE

JANUARY - 21 APRIL 1951



Source: Department of Military Art and Engineering, USMA, Situation Map #11.

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