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USAF LOGISTIC PREPARATIONS

FOR

LIMITED WAR

1958-1961

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by

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FOREWORD

USAF Logistic Preparations for Limited War, 1958-1961, discusses a vital military problem that faced the Air Force during these years of international crises. When the full meaning of the limited war threat was recognized it became necessary to provide logistic readiness for limited war operations while firmly maintaining the capability to wage general war. The author, Charles H. Hildreth, has discussed the causes for the change in policy, efforts to improve the war readiness materiel posture, availability of conventional weapons, procurement of aircraft, training of crews, and airlift capability.

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C O N T E N T S

I. THE DEVELOPMENT OF AIR FORCE POLICY ON LIMITED WAR

In little more than one generation the United States changed from an attitude of relative indifference to aggression outside the Western Hemisphere to one favoring almost automatic involvement against Communist expansion in the Free World. Pursuing a policy of "containment" in the last decade, the United States fought a limited war* in Korea, sent military units into Lebanon and Taiwan, and bolstered the military and economic strength of numerous countries threatened by Communist domination or infiltration.[1]

During and after the Korean War the feeling developed that if our military forces had been allowed to play their "proper role" the outcome would have been "decisive." The "unsatisfactory" truce produced sentiment within the United States against future involvement in wars of this nature. Accompanying this feeling was the conviction--widely held within the Air Force--that the U.S. military effort would be devoted to preparation for all-out war and that the maintaining of a strong deterrent force would not permit any diversion of resources.[2]

By the mid-1950's, however, the complex interaction between the military and political factors that cause and determine the course of limited wars became increasingly evident.

*In this study, "limited war" refers to "any armed conflict short of an overt engagement of U.S. and USSR forces which has been directed or concurred in by competent political authority." This does not include counterinsurgency operations. Because of differing interpretations between the services, and even within the Air Force, the term is occasionally used with a slightly different meaning. In such cases, these meanings will be made clear within the context of the narrative. (See pp 14-15.)

It was generally acknowledged by 1955 that the Soviet Union was reaching a state of nuclear parity with the United States, that the United States would not start an all-out nuclear war, and that the Soviet Union could initiate nuclear war only at the risk of massive retaliation. Under these conditions, many military planners believed that the Soviets would seek to advance their program by subversion of non-Communist governments or by provoking limited wars that would not involve their own forces (e.g., Korea, Vietnam). Further, unless the United States and its allies were prepared to deter or contain such local conflicts, the Soviets could achieve their ultimate objective through a process of political and military erosion.[3]

There was basic agreement on the seriousness of the Soviet threat but great divergency in proposals for combating it. The Air Force maintained the position, supported by the Basic National Security Policy (BNSP), that our greatest danger continued to be a surprise nuclear attack. Consequently, it believed that overriding priority should be given to a strong deterrent force against general war. On this basis, the Air Force was able in the immediate post-Korean period to greatly strengthen its strategic force. The Army, usually supported by the Navy and Marine Corps, contended that this was a short-sighted policy, since there was greater likelihood of a series of limited wars, and that insufficient attention was being given to mobile ground forces and the capability to transport them quickly to contingency areas. This, it was argued, would encourage the Soviets to push their program through continued small wars.[4]

Pressure for Change

The service controversy simmered throughout 1956 and the first nine months of 1957 largely in JCS papers concerned with logistics and transportation. Then, on 10 October 1957, it flared openly when the Air Force publicly stated its position on limited war.* While recognizing the Soviet danger, the Air Force maintained that its requirements for limited war could be met with the manpower and resources provided for general war. The wide publicity for the Army's limited war theories, sparked in part by the sudden retirement of Army Deputy Chief of Staff for Research and Development Lt. Gen. James Gavin, convinced the Army staff that the time was ripe for reopening the fight. In November, Army Chief of Staff Gen. Maxwell D. Taylor asked the Joint Chiefs of Staff (JCS) to investigate U.S. capability to cope with limited war. The following month the JCS referred the Army proposal to the Joint Strategic Plans Committee, with instructions to examine U.S. capabilities in those countries where trouble was most likely to start.[5]

The committee's first study involved a possible resumption of hostilities in Korea and an attack on Taiwan. Agreement between the services was impossible and a "split" paper was forwarded to the JCS. The Army found itself arrayed against the Air Force, Navy, and Marine Corps. The majority view agreed on the overall capability of U.S. limited war forces. The Army doubted this and was particularly concerned with the adequacy of available sea transport and airlift for forces based in the United States.† In answer, the Air Force charged

*This policy was established by the Air Force Council on 24 September 1957.

†It should be noted that while the Navy and Marine Corps supported the Air Force on the adequacy of sea transport and airlift, the use of U.S.-based (contd)

that the Army position was an attempt to justify the desire for more U.S.-based divisions and to establish a firm requirement for the rapid deployment of Strategic Army Corps (STRAC) units from the ZI to meet contingency situations. In so doing, it was stated, the Army chose to overlook the use of atomics and the value of indigenous troops in Korea and Taiwan. The Air Force position continued to be based on the conviction that the first line of defense was a strong deterrent striking power. It also feared that under existing budgetary limitations any buildup in limited war capability would result in a cutback in general war capability, which might place the nation in jeopardy. Unable to resolve the divergent views, and awaiting a limited war study being made by State-Defense-JCS representatives--under National Security Council direction--JCS deferred a decision.[6]

NSC accepted the State-Defense-JCS study on 20 March 1958. Based on examination of hypothetical situations in 12 countries, the report generally supported the view that the United States had the necessary limited war capability, that the need for prompt response would put the initial burden on forces in or near the area, that prompt response would obviate the need for reinforcements, and that selected use of atomics when required would end hostilities. These conclusions were contrary to the Army position.[7]

The Army didn't give up, and at the Quantico Conference in June 1958, General Taylor made four proposals--all in opposition to Air Force policy. He

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forces, and, in this JCS paper, the overall adequacy of forces to cope with limited war, they remained solidly behind the Army on the likelihood issue.

recommended (1) establishment of a unified command to control forces designated for limited war, (2) joint planning for rapid deployment, (3) a predesignated airlift for Army forces, and (4) modernization of limited war forces. These were not new proposals. The Army had broached the unified command idea in 1955 and withdrawn it in the face of bitter opposition. Joint planning for deployment and the predesignation of airlift had already been placed before the JCS and action deferred. Nevertheless, General Taylor's proposals represented basic Army philosophy and continued to be emphasized during the ensuing months.[8]

The Army position was aided in the public mind by the publication of the so-called Rockefeller Report on the Problems of U.S. Defense early in 1958. Prepared by a panel of scholars, engineers, and industrialists who had been meeting since November 1956, the report held that "no matter how vast our over-all strength, the magnitude of the total does not assure its sufficiency in any particular situation" since the United States could not meet limited military actions with a response designed to counter an all-out surprise attack. It recognized all-out war as the greatest danger but did not believe it to be the most likely threat. It also maintained that a major weakness in our military structure was the "lack of mobile forces capable of intervening rapidly and of restoring a local situation before matters got out of hand."[9]

In an address in New York City on 7 November 1958, Gen. Curtis E. LeMay, Air Force Vice Chief of Staff, took vigorous exception to inferences that the Air Force could not successfully wage a limited war. He insisted that an

essential aspect of our total general war force was its inherent limited war capacity. LeMay paid tribute to the versatility, flexibility, and speed of the Composite Air Strike Force (CASF) units recently deployed to Lebanon and Taiwan,* stressing that in both incidents tactical fighters, bombers, and support aircraft reached the areas in a minimum amount of time.10

The conclusion that the Lebanon and Taiwan crises had proved USAF ability to cope with limited wars was by no means unanimous. The Air Staff and the three Air Force commanders most concerned with the CASF deployments in 1958 agreed that the forces had performed well. However, there was general agreement that it was most fortunate for the rapidly deployed CASF's that they did not have to engage the enemy since the invaluable lessons might have been dangerously expensive for the limited U.S. tactical air forces. As Gen. Laurence S. Kuter, commander of the Pacific Air Forces, observed on 1 December 1958, "Our military stature presents a shocking contrast to our psychological effectiveness." The general stressed that his overall inventory was increased by only 14 percent and the psychological impact was "vastly out of proportion to the actual increase in military capacity."11

The Lebanon and Taiwan incidents marked a gradual shift in the Air Force attitude toward preparations for limited war. Limited war planning became a matter of increasing concern. While official policy did not change appreciably during 1959, discussions within the Air Staff indicated the need for relaxing the "traditional" position. This was not an easy task. As Gen. Frank F.

*For a discussion of these two operations, see studies prepared by USAF Historical Division Liaison Office: Air Operations in the Lebanon Crisis--1958 (S), and Air Operations in the Taiwan Crisis--1958 (S).

Everest, commander of the Tactical Air Command, informed the Naval War College in December 1959:

> It is in the application of our strategy to limited war that mental and vocal bedlam prevails. The threat does not loom simply and clearly for all to see. Muddying the waters further are strong currents of traditionalism and loyalty to the past. Contributing to the confusion . . . is a tendency to restrict thinking in regard to a possible limited war in the future to the projection of a specific war in the past--usually Korea.

Also present was the fear that if it became widely believed that the Air Force was concentrating on and increasing the limited war capability, it "might be the final act on the part of the U.S., in light of constant Army and Navy emphasis upon limited war, to convince the USSR that the U.S. no longer relies upon a strategic deterrent."[12]

Nevertheless, the need for reappraisal of the Air Force position was recognized by Gen. Thomas D. White, Air Force Chief of Staff, and his planning staff. On 24 July 1959, Col. Robert C. Richardson, III, chief of the Long-Range Objectives Group, informed Maj. Gen. Hewitt T. Wheless, Director of Plans, that extensive study showed knowledgeable opinion overwhelmingly opposed to the concept that the United States could provide adequately for all future limited war requirements from within its general war capabilities. "The more we persist in our present position without being able to prove our point to the satisfaction of an unbiased audience," he stated, "the more vulnerable we become to accusations by friends or foes, that our position stems from purely selfish parochial interests." This, Colonel Richardson concluded, made the Air Force no better in the opinion of outsiders than the Army, "whom we are constantly accusing of 'pushing' concepts and strategies

not because they believe they are sound but because they further their own service objectives."[13]

Colonel Richardson recommended to General Wheless that the issue be raised at a meeting with the deputy chiefs and the Chief of Staff. As a point of departure for discussion he felt that national security requirements for the decade ahead should be based upon two principal safeguards: (1) a force structure designed to provide a shield against the dangers of general war; and (2) a companion force structure and weapon system capable of providing the U.S. with the ability to reply to limited war situations while at the same time providing an additional capability--instantly available--for use in general war. Recognition of these two needs was not intended as support for a separate limited war force--an Army demand. Rather, a diversified but highly integrated U.S. force composition was desired to provide flexibility and adaptability to any situation.[14]

On the precise date of the Richardson recommendation, 24 July 1959, Philip F. Hilbert, Deputy for Requirements Review, Office of the Under Secretary of the Air Force, registered his concern over the Air Force's limited war stand. He wrote: "Our position that our general war capability is adequate to include limited war capability has been subjected to attack and clearly needs better definition and perhaps some qualification." Hilbert was disturbed over the lack of clarity as to which general war forces could be diverted to limited war activities without unacceptably degrading the general war capability. He was also concerned over the probability that political considerations would require the use of high-explosive (HE) bombs in limited

wars and was apprehensive as to the effect this would have on the availability of aircraft for either type of conflict.* The lack of a "clear and logical position on these points" worried Hilbert in view of the continuous efforts of the other services to secure recognition for their limited war requirements over and above their general war needs. He cautioned that to the extent these limited war requirements were recognized and financed for the other services, "some part of the total defense budget ceilings are going to others, and we, by what may be an oversimplified position, would not share in them."[15]

The Navy, as well as the Army, had already provided cause for these apprehensions. A Navy document, The Navy of the 1970 Era, signed by the Chief of Naval Operations and issued in January 1958, stated that Navy aircraft carriers were being "optimized for limited war" and estimated that some 7,000 aircraft would be required in 1970 for the Navy and Marine Corps. This was twice the Air Force objective for limited war. It was also evidence that Air Force failure to improve its limited war posture could result in the loss by default of a major portion of its tactical air mission.[16]

Similarly, Army planning for materiel requirements in October 1959 indicated that the Army was thinking in terms of 42 divisions for general war and 21 divisions for limited war. Additionally, the Army stated a D-day requirement for a limited war stockage over and above the requirement for a general war stockage of 12 months. This situation seriously concerned the Air Force--which included its limited war stockage within its general war requirements.

*The HE vs. nuclear bomb controversy will be discussed in detail in a separate section of this study. (See pp 27-31.)

The Army figures were interpreted as an effort to support higher budget requests and to validate the contention that the Army was grossly underfinanced. As an answer to the Army plan, Hilbert again suggested the possibility that the Air Force position should be amended "with regard to limited war, both from the point of view of realism and also to accommodate to other service concepts."17

Shift in Policy

Although an Air Force position paper of December 1959 reflected little change in the concept and requirements for limited war, by March 1960 a shift in attitude appeared. In Air Force Objective Series (AFOS) 2/5 of 14 March, the long-range concept recognized the need of designing into the Air Force "the inherent capability and characteristics required to cope successfully with limited wars."18

By the summer of 1960 more drastic changes were underway. Directly or indirectly these changes stemmed from two factors. The first was the growing attention and emphasis given limited war--particularly nonnuclear--by the military services, the Department of Defense, the NSC, and other government agencies. The second was General White's conviction that the new Administration--regardless of political party--would place greater emphasis on limited war. At a staff meeting on 16 August 1960, White called for a complete reexamination of the Air Force position. At the working level the reexamination was already being made, and in an interim reply to the Chief of Staff, Maj. Gen. C. H. Childre, Acting Deputy Chief of Staff for Plans and Programs (DCS/P&P), suggested that "some reorientation and change in emphasis may be appropriate at this time"--namely, the future role of the

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tactical air forces. He pointed to (1) the growing recognition of the importance of oversea-based tactical forces as visible evidence of military strength available to support U.S. political commitments; and (2) the growing capability of Soviet short- and medium-range missiles, which cast doubt on the ability of the oversea tactical units to contribute in a general war. Consequently, Childre suggested that it would be better to put less emphasis on TAC's general war capability and more on its limited war posture. The acceptance of this idea would mean a major deviation from the traditional view that all forces were designed for general war and that limited wars would be handled within the general war capability.[19]

On 20 October 1960, General White enlarged the scope of the reexamination with a statement that affected the basis of the Air Force's previous position: "The Air Force must have a sound, well conceived program for forces which can contribute to a limited war of any magnitude--it will not suffice to say that we are well prepared for limited war because we have nuclear weapons in quantity."[20]

In a report to White in November, Maj. Gen. Glen W. Martin, Director of Plans,* presented a position statement generally reflecting this attitude. Maintaining that the United States must possess the strength to permit operations "across the entire spectrum of military activities," he called for Air Force capability to permit "decisive application of the required amount of force (to include nuclear or non-nuclear weapons where militarily appropriate)." He dismissed the Army's demand for specialized limited war forces by asserting

*General Martin succeeded General Wheless as Director of Plans, DCS/P&P, on 17 September 1960.

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that the "inherent flexibility of the Air Force's weapon system" made such a force unnecessary.[21]

On the other hand, General Martin acknowledged that the Air Force did not actually have the desired capability. He noted that because of the necessity of insuring an optimum general war posture—within tight budgetary ceilings—it had been impossible to place sufficient emphasis upon flexibility for limited war. This was most evident in the nonnuclear area but applied also in research and development, procurement, prestockage, weapon systems, and training. General Martin recommended correcting these deficiencies by giving additional emphasis to developing tactical force capability.

Of equal importance was the uncertainty concerning that portion of the USAF position which called for the decisive use of force. While this could be supported from a military view, the evidence since World War II indicated that political reasons might place restrictions upon the amount of force applied, particularly in the case of nuclear weapons. General Martin therefore recommended that Air Force planners recognize and prepare for such a limitation.[22]

USAF Program Guidance, dated December 1960, reflected the changing Air Force attitude. While it stated that "USAF requirements in limited war can be met with forces provided for general war," a qualifying statement was appended saying that "the materiel resources necessary to support those forces in limited war must be tailored by type, quantity and location to insure maximum capability and flexibility of operations."[23]

Events during the first few months of 1961, however, alerted Air Force planners to the need for possible further change. In February, the new

Secretary of Defense, Robert S. McNamara, requested the JCS to review the requirements of U.S. military forces to meet limited and "sublimited" (guerrilla or subversion-type) war situations. It was assumed that this study would form the basis for a request to Congress for additional funds. In view of McNamara's request and other indications that the new administration favored an increase in military capabilities to provide a wider choice in employing conventional forces, the Deputy Director of Plans for Policy, Col. Adriel N. Williams,φ feared that the U.S. general war capability might be seriously affected. On 14 March 1961, he wrote to Maj. Gen. David A. Burchinal, Director of Plans:* "It would appear prudent, at this time, for the Air Force to center its efforts on justifying the overriding priority of general war forces within the total inventory of forces designed to meet the entire spectrum of possible armed conflict." Despite growing flexibility in preparing for limited war, the basic USAF position that nothing should take precedence over the general war effort was not changed.[24]

Extremely serious from the Air Force point of view were the steps taken during 1960 and the first several months of 1961 challenging the position that any conflict involving troops of the USSR would be general war. As pressure increased to plan and equip for "limited war" with the Soviet Union, the Air Force, seeing this as a major threat to the nation, stood alone among the services in resisting this pressure.

*General Burchinal had replaced General Martin as Director of Plans on 25 January 1961.

φ a real dummy, nobody go by what he said.

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From May 1954 until March 1959 the U.S. war policy was defined in NSC documents. General war was delineated as war with the Soviet Bloc, thereby rejecting by inference limited war with the Soviet Union. In fact, on 20 March 1958 the NSC had approved the State-Defense-JCS limited war study defining limited war as "any armed conflict short of an overt engagement of U.S. and USSR forces which has been directed or concurred in by competent political authority." A year later, 17 March 1959, NSC approved the study, U.S. Policy in the Event of War. This document was divided into two sections: "A," General War; and "B," War in Which the USSR Was Not a Belligerent. An attached footnote indicated that U.S. policy was based on the assumption that any war with the USSR would be general war. Significantly, however, in April 1960 this footnote was deleted by the NSC Planning Board as an "editorial" deletion.[25]

During discussion of the Joint Strategic Plans Committee over the Joint Strategic Capabilities Plan (JSCP) for fiscal year 1961, the pressure for changing U.S. policy with respect to limited war became intense. The Army and Navy sought approval for a position that was directly contrary to previously established national policy and that would recognize the possibility of limited war between the United States and Russia. They suggested that such a war could be on the scale of World War II and could be nonnuclear. The Air Force was bitterly opposed. Inability to resolve this conflict resulted in a meeting between the JCS and Secretary of Defense Thomas S. Gates on 29 February 1960. The Secretary recognized that the underlying issue was an attempt by the Army and Navy to establish resource requirements and considerably higher force levels. Consequently, he supported the Air Force position that war with Russia would be by definition a general war.[26]

During 1960, Basic National Security Policy continued to support the Air Force position. "Local aggression" was defined as "conflict occurring outside the NATO area in which limited U.S. forces participate because U.S. interests are involved. Conflicts occurring in the NATO area or elsewhere involving . . . forces of the United States and the USSR should not be construed as local aggression." During the final review of this segment of the BNSP by the NSC and the President, however, the word "sizeable" was inserted in the phrase "involving /sizeable/ forces of the United States and the USSR." To Air Force planners, the interjection of this word created a contradiction--or at least a "grey" area--which would encourage the Army and Navy to continue setting up resource requirements and developing plans for forces to be used in sustained or repeated "limited" engagements with the USSR.[27]

Although Air Force planners, by the end of 1960, saw the need to modify Air Force limited war policy, they continued to take a firm stand against any shifts in military strategy that would commit the United States to a program forseeing a direct engagement with the USSR in a limited or conventional--nonnuclear--conflict. In their judgment, proponents of a limited strategy toward the USSR ignored or misunderstood the nature of the Soviet threat. The Air Force recognized the possibility of momentary conflicts of minor military elements of the United States and the USSR in the nature of incidents, incursions, and exploratory maneuvers but stressed that such clashes contained the ingredients for rapid expansion. Therefore, it insisted that conflict between U.S. and Soviet forces must not occur as a result of a strategy that invites limited or conventional engagements. It argued that if our military strategy is to remain

responsive to our national security policy the U.S. must prevent the substance of deterrence--the capability of waging total war successfully--from being weakened. A weaker strategy, implying that limited military containment is acceptable to the United States, would do this.

The Air Force position on limited war was clearly defined on 28 February 1961 by Lt. Gen. John K. Gerhart, DCS/P&P. General Gerhart recognized that limited war was more probable than an all-out thermonuclear struggle since our deterrent strength has forced the Communists to pursue their goals through lesser forms of conflict. But there was nothing to indicate that the fighting of limited wars would cause the Communists to be diverted from their ambition to defeat us completely. Therefore he considered it a dangerous fallacy to believe the problems of general war could be solved by committing a greater portion of our strength to limited wars--wars in which manpower and nonnuclear weapons would be the principal determinants. Gerhart warned that U.S. acceptance of a policy to fight a limited war with the USSR--with conventional weapons--would in effect enable the Russians to exploit the power of their 2,000,000-man ground force, their 800,000-man air force, and their 700,000-man naval force without the risk of nuclear retaliation. The USSR must not be allowed to have the initiative as to the types of weapons that would be used or as to the magnitude of the conflict. The United States must retain the ability to raise the stake of the war by threatening expansion of the conflict to a point unacceptable to the Communists. "It is fallacious to assume," General Gerhart maintained, "that we could find a safe retreat from the perils of general war by turning the

clock back to 1918 or 1942 and committing ourselves to fight limited wars with the outmoded combat techniques of World Wars I and II."[28]

II. IMPROVING LIMITED WAR WRM POSTURE

During the Lebanon incident in the summer of 1958 the confused situation surrounding the prestocked war readiness materiel (WRM) designated for use of TAC's Composite Air Strike Force aroused the fears of commanders and planners. Although combat aircraft arrived in the theater quickly, the prepositioned support equipment was not readily available. Until the support C-130's arrived from the United States with service personnel, there was great inefficiency, and "turnaround" operations for tactical aircraft "took an unbelievable amount of time" during the first few days of the operation.[1]

Similarly, confusion existed in Taiwan during the summer and fall of 1958 when the Air Force attempted to move vast quantities of war materiel into the troubled area. During a crucial period of the operation a backlog of freight at Travis AFB, Calif., resulted in the creation of a 19-day pipeline time for F-100 parts. Not until December—well after the crisis had passed—was this time reduced to a reasonable 8.6 days for F-100 parts and 10.4 days for F-104 spares.[2]

The adequacy of the Air Force's logistic support system was under question by members of the Air Staff during this period. In August, Lt. Gen. Clarence S. Irvine, DCS/Materiel, informed General Gerhart, DCS/P&P, of indications that the WRM was inadequate and not always properly distributed between the forces. Although Gerhart believed that the WRM posture was not inadequate to the point where the risk factor was more than minimal, he agreed in September that a close examination of Air Force logistic support was "both appropriate and timely, and that if the study disclosed inadequacies beyond a point of acceptable risk, immediate corrective action should be taken."[3]

The adequacy of WRM was also discussed in a Rand Corporation study published in August 1958. Observing that limited wars were unpredictable and could occur in several places, the study concluded that the Air Force should design its force posture to permit quick response to an attack wherever it began. Since the large number of possible operating bases and variable political restrictions ruled out prepositioning complete sets of materiel at every possible employment base, it was suggested that the Air Force prestock limited war supplies in a central location in each major theater. This would allow the materiel to be quickly airlifted to the combat zone.[4]

At the same time, the Lebanon and Taiwan experiences prompted the commanders in the Middle East and the Pacific, and the commander of TAC, to urge Air Force planners to liberalize the policies on limited war supply. At the USAF Commanders Conference in November 1958, General Kuter, PACAF commander, recommended prepositioning key supplies and support items for contingency operations in potential trouble spots to prevent future transportation bottlenecks and to insure an adequate reaction to aggression. Early in 1959, TAC--supported by USAFE--proposed to Headquarters USAF that prestockage for limited wars be separately identified and included in the war plans.[5]

Growing Flexibility--1959

The lessons of Lebanon and Taiwan clearly showed the need for greater combat flexibility than allowed in the basic USAF position established by the Air Force council on 24 September 1957. Recognizing this need, the Air Force began to improve the oversea commander's limited war capability within the general war resources. Although oversea major air commanders were denied the authority to request additional materiel specifically for limited war, the

Air Materiel Command's Improved Logistics Program gave tacit recognition to limited war needs and provided the opportunity for additional flexibility in WRM storage. Under this program, AMC planned to close 13 depots overseas and 14 in the United States by 1 July 1962 in response to new weapon system concepts, the changing force structure, and revised deployment requirements. This meant that vast quantities of materiel would be declared surplus. A need for greater discrimination in surplus declarations was revealed in September 1958 through a comparative study between recent materiel requirements for the Lebanon operation and materiel marked for disposal because of the depot closings. Items such as tents, ship equipment, auxiliary powerplants, generators, electric cable, radio transmitters, and POL pipeline kits were listed as surplus and later appeared on immediate operational requirement lists. To correct this, in October 1958, Maj. Gen. Mark E. Bradley, Jr., Assistant DCS/Materiel, instructed AMC and other major commands to review the situation "with a view toward retention of those items which are useful in readiness operations."[6]

In January 1959 the Air Force reaffirmed these instructions with the decision to retain in oversea storage those articles needed for periods of limited war, civilian disaster, and other emergencies. It required that these items be excess to all theater and WRM requirements, be adaptable to long-term storage with no supporting maintenance, and be unrestricted by controls of higher headquarters or other services. Quantities were to be determined for the support of a 10,000-man force in each of the following areas: northern Europe; central Europe; southern Europe; northern Pacific; and southern Pacific. In May, AMC received guidelines from the Air Force permitting the implementation of the program.[7]

Additional changes came in March 1959 when General LeMay approved the recommendations of a study group established in the fall of 1958 to evaluate WRM requirements for general war. The group made a comprehensive review of all aspects of the WRM Program: the ground rules on which it was based, the implementing policies and procedures, and the cost of materials. The sortie and attrition rates used in the computation of WRM requirements provided the basic data.[8]

Based on the premise that the major activity of general war would take place during the first few days, the WRM study group realistically recommended applying attrition rates at D plus 5 days as well as D plus 30 days--the former practice. Equally realistic, recognizing that this nation would absorb an all-out nuclear blow, was the recommendation to reduce Strategic Air Command sortie rates by 50 percent, Air Defense Command by 60 percent, and the tactical forces by 10 to 45 percent. Since it was USAF practice to provide for limited war operations within general war resources by "padding" sortie rates, the decision to cut drastically the number of planned sorties was a severe blow to the limited war capability. To remedy this deficiency, the WRM study group--in line with General Kuter's request of November 1958--suggested that major commands be given authority to redistribute their WRM assets to locations where they could best be used in conducting limited wars. General LeMay's approval of the findings of the study group profoundly affected the Air Force's logistic planning for limited war.[9]

The pressure for more drastic and realistic logistic planning increased during the last six months of 1959. In August a group was formed within Headquarters USAF to deal directly with the question of Air Force capability to

support both general and limited wars under the current force structure and materiel support policy. At the suggestion of Brig. Gen. Laurence B. Kelly, Director of Logistics Plans, the study group deviated from the traditional position by recommending that limited war requirements be separated from general war requirements in the war plans. In early November a review task group under the leadership of the Director of Plans examined the validity of this recommendation in relation to the operational and wartime planning concepts and activities included in the USAF war plans. Particular emphasis was given to sortie rates, attrition rates, command mission, weapon availability, and the application of gross assets against wartime requirements. The group also studied the need for possible changes in war planning documents to show separate requirements for general and limited wars.[10]

Reversal of Policy--1960

In December 1959 the importance of the November review was reflected in the serious concern expressed by Philip F. Hilbert of the Office of the Under Secretary of the Air Force. He was particularly anxious about the revised planning factors that, despite increased efforts to provide realistic sortie computations, established higher sortie rates for PACAF and USAFE than were necessary in order to insure sufficient support for local war. In actuality, he charged, this was a "sub rosa effort" to do secretly "what we should do openly," and he warned that "these hidden attempts to be realistic are dangerous because there is no solid way to either appraise them or determine their real effect on requirements. Furthermore, such action could bring us /the Air Force/ in conflict with the JCS and/or OSD."[11]

This same sentiment was expressed in the final report of the review task group in February 1960:[12]

> Despite the money we've invested in war readiness materiel to support our forces in general and limited war, this support is still inadequate. The cause of our problem appears to lie in USAF war plans. Under the guise of general war only we are trying to provide our forces with materiel resources for both general and limited war. To maintain this pretense of general war only, we changed wording in our war plans. We granted war readiness materiel redistribution authority to commanders. We 'gimmicked' and twisted our war plans, the WPR and WPC, in an effort to adequately support our combat forces. Yet, we still do not have our WRM in the quantities we need and at the proper locations.

Bearing out these charges, the USAF Mid-Range Wartime Requirements Plan (WPR) and the USAF Wartime Capabilities Plan (WPC) continued to show general and limited war requirements under the heading of general war. It was obvious—since both the Air Staff and the major commanders recognized the need—that some "gimmicking" and twisting were present to compensate for the failure to separate general and limited war materiel. For example, there were certain areas in Southeast Asia where only limited war operations were expected, but to abide by the "ground rule" of indicating only general war requirements and still provide WRM/support, these locations were included in the war plans as general war theaters.[13]

The WPR and WPC also provided a measure of limited war WRM by depicting both conventional and nuclear wartime activity in terms of numbers of aircraft and numbers of sorties at each separate operating location. On paper, the Air Force moved its forces from one location to another and indicated both types of sorties at each location—ostensibly for general war but actually for both general and limited conflict. As an illustration, in Southeast Asia

the major requirement was for conventional rather than nuclear sorties, but in Japan the situation was reversed. Yet, it was necessary to provide both nuclear and conventional ordnance in each location.[14]

But, even with these "adjustments" to the war plans, it was impossible to provide the required amount of limited war WRM. The review task group therefore concluded that a distinction between general war and contingency-type operations was essential in the USAF war plans. This recommendation was in concurrence with the view of Gen. Frederic H. Smith, Jr., USAFE commander, who, in a message to the Chief of Staff in January 1960, had agreed with the proposed separation of general and limited war requirements on its practical merits. The resultant realignment of sorties, he observed, would result in appreciable savings in WRM stockage and not degrade the general war posture. Additionally, recognition of limited war in the war plans would insure that WRM was located where limited war action was most likely to occur.[15]

In March 1960 an ad hoc group of representatives from DCS/P&P, DCS/Operations, DCS/Materiel, and the major commands completed a study designed to provide realistic sortie requirements for both general and limited war. This study was based on the premise that aircraft and personnel for limited war would continue to be planned within the general war force structure but the materiel resources would be tailored and located to support each war situation. Planning included the use of both nuclear and nonnuclear weapons for the two types of war, and the utilization of forces was aligned with weapon availability. The conclusions of this study called for the adjustment and realignment of WRM stocks to conform with the separation of general and limited war resources and, as a result of this realistic reappraisal, with further reduction of planned combat sorties.[16]

General LeMay approved the findings of the ad hoc group on 11 April and ordered their inclusion in USAF war plans. On 27 May, General Bradley,* informing the major commands of this decision, ordered a reduction in wartime sorties and the separation of limited and general war activities. The major results of this basic change in policy were (1) an overall reduction of aircraft sortie rates and an attendant decrease in WRM requirements; (2) the establishment of inviolate levels of WRM to prevent degradation of general war capability; and (3) the granting of authority to the commands to distribute WRM in the required quantities at or near the planned war operating locations--thus improving reaction time in any emergency situation.[17]

The new concept was reflected in the Air Force Objective Series paper, Long Range Concepts of Logistics, published in June 1960. It stated that the Air Force would meet its logistical demands "with a peacetime logistical system designed to fully support authorized unit equipment operationally ready at all times." This required "a selective program for prepositioning an inviolate level of war readiness materiel for general war operations; and inviolate level of war readiness materiel to support limited war operations . . . ; and the assurance of adequate transportation to deploy and resupply these forces as required."[18]

WRM requirements for limited war were based on JCS-approved plans. By November 1960 the stocks were deemed sufficient to permit immediate reaction to anticipated limited war actions. However, in certain potential trouble areas,

*General Bradley had been promoted to the post of DCS/Materiel and the rank of lieutenant general at the end of June 1959.

Southeast Asia for example, the lack of base agreements precluded full implementation of the prestockage policy. In these instances, the required limited war supplies were positioned at the nearest U.S.-controlled base—Clark Air Base in the case of Southeast Asia. This was an unsatisfactory arrangement, not only because of the distant location but also because it placed an additional burden on transportation resources. Efforts were made during the year to correct the situation. Although little was accomplished in Laos and Vietnam because of conflict with the Geneva Accord of July 1954, restricted prestockage rights were obtained in Thailand.[19]

USAF Program Guidance, published in December 1960, showed the profound change in Air Force policy on limited war preparations since the Lebanon and Taiwan crises of 1958. It was clearly stated that the "complete range and quantity of war consumables to support limited wars must be acquired and prepositioned during peacetime, insofar as possible, at or near the planned war operation location." Additionally, all units having limited war missions were authorized a limited war WRM list of items. The kind and amount of materiel on these lists were to be determined by the major commander and such materiel was to be in addition to the peacetime operating stocks and to the general war WRM list. The Tactical Air Command, for example, was authorized a separate WRM list for those of its units having both general and limited war assignments. This list was to consist of the materiel to support the sum of sorties and flying hours for general war plus an additional amount of WRM to support 30 days of limited war operations.[20]

III. WEAPONS FOR LIMITED WAR

Following the Korean War, many key military and civilian planners felt that the military might of the nation should never again be used in a long-term war fought with conventional weapons. Influenced by this opinion, the Air Force favored the development of increased nuclear capability. This led to the August 1956 USAF policy statement that "no requirement exists for technical development to advance the state of the art in conventional explosives and incendiary materiel, pyrotechnics, bomb shapes, bomb penetration, fragmentation, etc."[1] Until the Lebanon and Taiwan incidents, it was generally assumed that tactical nuclear weapons would be used when and if required. But these events and the ensuing discussions within the NSC, the JCS, and the Air Force placed this assumption in doubt.

Use of Nuclear Weapons

Extensive studies within the Air Staff and by Air Force-sponsored contractors initially supported the military necessity for tactical nuclear weapons to be used in certain limited war situations. The Sierra Project, a Rand Corporation study initiated with USAF approval in 1954, provided some significant conclusions in 1958. Centering attention on the entire arc of countries southward from Korea to Pakistan for the time period 1955-59, the study defined highest-grade limited war as one in which Red China used modern air and ground elements in quantity. It was determined, hypothetically, that U.S. forces facing such an army in Thailand, Korea, or Taiwan could not

even win limited objectives unless nuclear weapons were authorized. In a limited war of less intensity, it was estimated that a guerrilla force could occupy most of a country, and at best it would take more than a year to expel it unless nuclear weapons were used by the United States. If both sides used nuclear weapons the best the United States could hope for would be a stalemate. In the analysis of danger in the Taiwan Strait, the Sierra study maintained that unless nuclear weapons were employed, a large invasion fleet could capture Taiwan in 40 days.[2]

The limited war capability of the United States and the choice of weapons to be used were thoroughly investigated during the summer of 1958 by representatives of the Department of State, DOD, the JCS, and the CIA. They concluded that in Asia our forces were adequate through July 1961 only if we used nuclear weapons and the enemy did not. Selective use of nuclear weapons was deemed necessary since the United States did not have sufficient ready nonnuclear forces. They informed NSC that withholding authorization to use nuclear weapons in Asia would require additional oversea deployments, construction of new bases, and augmentation of the air/sealift. On the other hand, prompt and vigorous nuclear response would obviate the requirement for major reinforcement.[3]

Nevertheless, the report recognized that, despite the military advantages that might accrue from the use of nuclear weapons, political rather than military strategy would determine the manner in which limited military operations were initiated and conducted. Consequently, no firm recommendation as to the use of nuclear weapons was made, but it was suggested, and so ordered

by the NSC, that National Intelligence Estimates be prepared on (1) world reactions and (2) Sino-Soviet military reactions to U.S. use of nuclear weapons in limited military operations against Communist forces in the Far East. It was also recommended that greater efforts be made to explain to the Free World the U.S. intention with respect to nuclear weapons, the radiation effects, and the relative efficiency of low-yield weapons in certain limited military operations.[4]

In accordance with the NSC's request, the CIA prepared an intelligence estimate—Sino-Soviet and Free World Reactions to U.S. Use of Nuclear Weapons in Limited Wars in the Far East. Four possible situations were surveyed: a North Korean invasion of South Korea, a Chinese Communist attack on Quemoy and Matsu, a Chinese Communist attack on Taiwan, and a North Vietnam attack on South Vietnam and Laos. The conclusions were discouraging to advocates of the use of nuclear weapons in the Far East. CIA warned that the use of nuclear weapons would involve grave risk of retaliation. While the USSR would avoid the risk of general war, it would estimate that the use of nuclears by local forces need not lead to general war and it would provide them for its allies, confining their use to limits established by the United States. Meanwhile, this country would be widely condemned by popular opinion—especially in Asia. CIA stated bluntly that in most countries the adverse reactions would overshadow the favorable effects. Rand Corporation analysts supported this conclusion. In September 1958, with the threat of a Chinese invasion of Matsu imminent, the Rand position was that "it would not be wise to assume that any use of nuclear weapons by the U.S. in defense of the islands would have a favorable reaction in Asia." Rather, it was likely to have an unfavorable effect on relations between the United States and the Asiatic

powers, including India, Japan, Burma, and Indonesia, and on public opinion in Europe.[5]

The total situation created, in the words of General Everest, "mental and vocal bedlam."* The Air Force believed that without the use of nuclear weapons in certain limited wars we faced defeat, or at least a long drawn-out and costly conflict with little hope of victory. It also felt that a U.S. declaration not to use nuclear weapons in limited wars would increase the likelihood of these wars and the probability of their spread.[6]

While recognizing that its views on the use of nuclear weapons in limited war had to be tempered by the possible political implications of their use, the Air Force continued to argue within the JCS for recognition that such weapons were needed. As late as December 1960, it refused to concur in a JCS paper opposing the use of nuclear weapons in Korea--a paper in USAF terms "so fallacious that if implemented, could result in a major defeat of U.S. Allied forces." Additionally, the Air Force maintained that the submission of this study to the NSC would constitute JCS indorsement of the State Department view that the use of nuclear weapons in any limited war was undesirable. The Air Force feared this would result in a revision of national policy that could destroy our limited war capability.[7]

Inconsistency and confusion in the proposed JCS paper was apparent for, as the Air Force pointed out, the Joint Chiefs had already approved the CINCPAC operational plan for the defense of Korea, which did not "envision that there would be prolonged hostilities using nonnuclear weapons." The

*See above, p 7 .

Air Force warned that a resumption of hostilities on a nonnuclear basis would be extremely costly in lives, resources, and money and that the outcome not only might be inconclusive but defeat and withdrawal might occur.[8]

The Air Force position was delineated in the fall of 1960 with the publication of its long-range concepts as to the nature of future wars. It stated that nuclear weapons would be used by U.S. forces to oppose any major overt act of aggression by Soviet or Chinese Communist forces against vital Free World areas outside NATO, but it acknowledged that political considerations might delay a decision to use them. The only wars the Air Force felt it could fight solely with HE weapons were those in areas remote from NATO, the USSR, and adjacent Communist states and those conflicts involving no Soviet or Chinese forces other than irregular volunteers. The specific long-range objective of the Air Force was to secure a national and international climate that would permit tactical nuclear weapons to be considered in the same light as HE weapons.[9]

Conventional Bomb Capability

The conventional weapon posture of the Air Force in 1958 was the result of a 10-year post-World War II development program and the 1956 policy prohibiting further applied research for optimizing nonnuclear weapons. As late as February 1958 the Air Force informed its subordinate commands that conventional weapons were to be "played down" and advancements in this field were to be accomplished by monitoring the Navy's conventional weapon development program. After 1956 the Air Force did not place new conventional munitions under development; it did, however, validate requirements for conventional weapons that would provide increased effectiveness. Accordingly the Air Force was able to

procure "new series" bombs--developed prior to 1956--and certain Navy-developed air-launched rockets and missiles (GAR-8 Sidewinder, GAM-83A Bullpup). Coincident with this buildup of newer munitions, the Air Force began to systematically dispose of World War II-type "iron bombs."[10]

The controversy concerning the use of nuclear weapons focused attention on the need for conventional war supplies and aroused concern in the Joint Staff and Air Staff over the maintenance of sufficient supplies of "iron bombs" for limited wars. At the same time that the wisdom of the program for disposal of World War II-type bombs was questioned, some officials wondered whether disposal of these obsolete weapons could not take place at a faster rate. As a result, a study was made of the entire conventional bomb situation. Based on the assumption that the use of "iron bombs" in general war was highly improbable and that limited war would require only six-month support, the DCS/Materiel determined that there were sufficient quantities of new-series nonnuclear bombs to provide for any limited war campaign. In fact, since the logistic support objective of any type of war was a 60-day level of WRM items, the limiting factor in a nonnuclear war, it appeared, would not be conventional bombs but logistic items needed to support wartime flying--POL, spares, engines, auxiliary fuel tanks. It was also disclosed that World War II-vintage bombs, although some of them could be used, were not designed for Century aircraft and were not configured for external carriage at high-subsonic speeds. Since their use would require less than optimum tactics, in March 1959 the Air Force again sanctioned the expeditious disposal of the older weapons and retention of adequate stock levels of new-series bombs for employment in HE-type operations.[11]

Even with "an adequate supply" of new-series iron bombs, maintaining

capability was difficult. In a general war situation iron bombs were of relatively small importance, but in a limited war operation the location and availability of these weapons was of prime concern. In December 1958 there were 420,420 of the M-117 GP (new-series) bombs in the Air Force inventory. Although 42,215 were prepositioned overseas against a 1 January 1959 D-day requirement of 39,233, only 3,072 were in PACAF against a requirement of 10,170. The large inventory stockpiled in the United States, the relatively small number overseas, the mislocation of those bombs in the oversea theaters, and the length of time required for transportation caused concern and study in the Air Staff early in 1959.[12]

On 20 May a message from Headquarters USAF to all major commands established the policy relative to conventional bomb inventory. The disposal of all World War II-type bombs was reaffirmed and prestockage of new-series bombs was increased from a two-month to a six-month level in PACAF and to a three-month level in USAFE. The difference in theater stockage requirements was based on the increased possibility of limited war in the Pacific and the greater pipeline time required for resupply of materiel. Headquarters USAF stipulated that the new levels would be established as storage space became available through the disposal of World War II bombs and would be limited to bombs available from current excess, thus requiring no additional procurement.[13]

By October 1959, USAFE possessed its three-month inventory of new-series HE bombs and its disposal program was proceeding satisfactorily. PACAF expected to reach its inventory early in 1960. Disposal of World War II bombs in PACAF--a prerequisite for securing space--was averaging approximately 6,000

tons per month.[14]

The Air Force, by December 1960, had exceeded its oversea requirements for the 750-pound M-117 bomb in both theaters. In USAFE, 34,077 bombs were stocked against a requirement of 17,267; in PACAF, 17,787 were on hand against a requirement of 14,122; 51,864 new-series M-117 bombs were stocked overseas against a requirement of 31,389.*[15]

Capability of Other Conventional Weapons

Aside from HE bombs, the retention of "adequate stock levels" of conventional weapons was not a simple task. In December 1958, General Wheless, then Director of Plans, cautioned Maj. Gen. H. C. Donnelly, Assistant DCS/P&P, that great care was needed in providing guidance regarding the requirements for HE capability. "We might as well face up to the fact," Wheless said, "that except for certain items such as H. E. bombs . . . we are unprepared to engage in any large scale H. E. operations on a sustained basis." Recognition of this situation was reflected during the same month in the modification of the Air Force policy statement of August 1956 that "no requirement exists for technical development . . . in conventional explosives." The statement was reinterpreted so as not to apply to the development of guided conventional weapons such as the GAM-83 Bullpup or GAR-8 Sidewinder.[16]

The introduction of the Navy's GAM-83 Bullpup into the Air Force inventory in 1959 provided more operational flexibility and simpler logistic management. An air-to-surface guided missile, this versatile weapon was very effective and

*The lower December 1960 requirement for oversea stockage reflects the general cutback in sortie requirements and the division of WRM into limited and general war categories, as discussed above, pp 24-26.

could be utilized without forcing the delivery aircraft to come too close to enemy defenses. Subsequently, TAC suggested that the conventional stockpile--other than HE bombs--be reduced to the Bullpup warheads and a few specialized items for conventional warfare, such as Mab-frag bomblets, improved napalm fire bombs, and GAR-8 rockets.*[17]

By April 1959 the Air Staff had indicated agreement with TAC's suggestion and had authorized development and training for the GAM-83 Bullpup, the GAR-8 Sidewinder, Mab-frag bomblets, MA-1 railroad mines, and the improved BLU-1 napalm fire bomb. Funds had been released, standardization action completed, and a limited number of GAM-83's and Mab-frag bomblets were on contract for fiscal year 1960. The GAR-8 was under procurement and 25 percent of the required supply was on hand.[18]

By December 1960--with WRM separated and prestocked for both general and limited war--conventional weapon capability had improved both in terms of numbers and standardization of weapons. Already stocked above or very near requirement levels were M-116A2 napalm bombs and M-35 and M-36 incendiary cluster bombs. Improved antimateriel and antipersonnel cluster bombs were scheduled to enter the inventory on 1 April and 1 July 1961 respectively, and procurement was scheduled for new anti-

*In the war with Germany and Japan, the Army Air Forces used 20 different bombs with 15 to 20 fuze combinations available for each weapon. The Korean action involved 55 line items of conventional ammunition. Major logistical problems had resulted.

railroad mines and napalm bombs. The supply of 20-mm. ammunition was more than adequate. The inventory for the GAR-8 was 4,559 as opposed to a requirement of 2,106. The supply of HE 2.75 rockets far exceeded requirements--1,242,352 were prestocked in USAFE and PACAF against a forecast need of 142,405. The weakness of the prestockage program was not numbers but location. Since lack of storage facilities precluded prepositioning in certain areas, it was necessary to store weapons at alternate tactical bases--St.-Mihiel, France; Kadena AB, Okinawa; Clark AB, Philippines; Osan AB, Korea; and on Taiwan.[19]

Aircraft for Limited War

Increased attention was given also to equipping aircraft designated for the limited war function. Within TAC, the F-100 Super Sabre carried the primary burden. A Mach 1.25 aircraft, the F-100 was equipped to carry either a nuclear bomb or 5,500 pounds of HE bombs—an HE load equivalent to the B-17 capability during World War II. On 18 March 1959 the limited war potential of this aircraft was enhanced by the decision to modify 80 F-100 D/F's to carry the GAM-83A (HE warhead) or GAM-83B (nuclear warhead) Bullpup. Modification of an additional 498 F-100 D/F aircraft was approved on 8 September 1960, and the entire project was scheduled to be completed in April 1963. Four squadrons were equipped for and trained in the use of the missile by May 1961, but long lead time in procuring modification kits presaged a three to four-month slippage in the program. The total Super Sabre modification cost for fiscal years 1961 and 1962 was estimated at $20.4 million.[20]

The Air Force also authorized a GAM-83 configuration for TAC's newest aircraft, the F-105 Thunderchief. The F-105 is a Mach 2 aircraft with a bomb bay longer than that of the B-17 and capable of carrying an equal load of HE bombs. Introduction of the GAM-83A will occur on the 115th F-105D produced and the GAM-83B on the 246th aircraft. In January 1961 modification was approved for those F-105's manufactured prior to the Bullpup configuration.[21]

Although TAC fighters were scheduled to carry the major burden of limited war, a portion of the bombing mission was assigned to SAC's intercontinental bomber force. To expand its nonnuclear weapon-delivery capability, the Air Force had completed procurement in 1956 of 500 high-density bomb-bay kits for use in converting the B-47 for conventional warfare. By September 1959 this program was under critical review. SAC was primarily concerned with the amount of "down-time" required to convert its medium bombers and with the fact that each aircraft in a conventional configuration left one to two general war targets uncovered.* The AMC also questioned the need for retaining so many kits in the ZI stocks.[22]

Until the fall of 1959, Headquarters USAF consistently rejected any cutback in the retention and maintenance of these kits. In September, however, the Assistant DCS/Materiel asked the DCS/Operations to review the Air Force's operational requirements in this regard. Replying in

*Conversion to the short bomb bay--allowing the B-47 to carry 750-pound bombs--required 216 manhours. Conversion to the long bomb bay--allowing the aircraft to carry one 10,000- or 12,000-pound bomb or 21 of the 750-pound bombs--took 1,140 manhours. In 1959 the use of the entire bomb-bay conversion capability would result in modification of approximately 41 percent of the B-47 fleet; against the 1963 projected B-47 inventory the modification would be 60 percent. This would mean an equal loss of general war target coverage.

December, DCS/Operations recommended that the inventory be reduced to 264 short bomb-bay kits. This number (240 plus 10 percent) was based on the Joint Strategic Capabilities Plan, which required 5 1/3 B-47 wings (240 aircraft) to support the nonnuclear capability. This was the maximum number that could be withdrawn from the general war capability. The recommendation to retain only short bomb-bay kits was prompted by the excessive down-time associated with the long bomb-bay kit conversion. Prepositioning of the kits was to be as follows: 45 each in North Africa or Spain, the United Kingdom, and Guam; 50 on operational bases in CONUS; and 79 in depot storage. Predicated on this recommendation, Headquarters USAF instructed AMC to dispose of the surplus bomb-bay kits and the 10,000- and 12,000-pound bombs made excess by the decision to delete the long bomb-bay kit.[23]

The cutback in bomb-bay conversion kits for the B-47 did not lessen the Air Force's strategic nonnuclear bombing capability, for an additional and more readily accessible source of nonnuclear delivery existed in the B-52. Through the G model, every third B-52 was equipped for rapid conversion, enabling it to carry 27 of the 750-pound bombs. Conversion by a three-man crew took three hours.[24]

The lack of aircraft suitable for operations from small and often unimproved airfields remained a problem. To fill this need, the Air Force became interested in acquiring a STOL (short takeoff and landing) aircraft, and on 14 July 1960, SOR 183 stated a requirement for a tactical fighter aircraft having such characteristics. This document stipulated that the airplane should be capable of rapid deployment to and operation

from troubled areas. It was to fly low-low high-profile missions of 800-nautical-mile radius that included a 400-nautical-mile Mach 1.2 run-in to the target. Equipped with two engines and manned by two pilots, the STOL was to be capable of flying an unrefueled ferry mission of 3,300 nautical miles carrying a 1,000-pound load internally.[25]

Although $5.3 million in research, development, test, and evaluation (RDT&E) funds were obligated by April 1961 for preliminary development of the STOL, formal approval by the Secretary of Defense was not immediately received. The Office of the Secretary of Defense had established a working group to investigate the STOL requirement in terms of triservice application, and approval for the Air Force SOR was being held in abeyance until the study was complete. In anticipation of approval, however, the Air Force took steps to provide additional funds in the USAF budget program--$24.6 million for fiscal year 1961 and $55 million for fiscal year 1962. These funds were considered adequate for initial development programs.[26]

Training Crews for Conventional Warfare

The Air Force's increased emphasis during 1959-60 on its limited war capability in munitions and aircraft also focused attention on its training program for conventional warfare. In March 1959, General Wheless stated: "Whether we like it or not, we must maintain at least a familiarity with H. E. operations in all our tactical units, until it is clear that we will be able to use atomic munitions at the outset of any limited war." Since past events showed that the automatic use of nuclear weapons

[redacted]

was unlikely, General Gerhart "strongly concurred that an effective conventional capability must be retained indefinitely in the Air Force." As an immediate measure he recommended that at least one wing in USAFE and in PACAF and two wings in TAC's CASF maintain complete proficiency in conventional operations. The long-range objective was the establishment of conventional capability in all tactical units.[27]

General LeMay indorsed this position on 15 July 1959 when he advised TAC that it was essential for all tactical units to maintain the capability to deliver high-explosive ordnance in order to insure the successful accomplishment of the limited war mission. Since the lack of bombing and gunnery ranges, flying hours, and other critical resources precluded dual qualification of all aircrews, General LeMay ordered that a nucleus of both air and ground support crews be sufficiently trained in HE tactics to enable quick and effective response to limited war situations. The nucleus of one tactical fighter wing in both USAFE and PACAF and five wings in TAC were to qualify their aircrews within one year. This was to include the necessary ground training for armament personnel to make them familiar with the task of loading, fuzing, and handling high-explosive ordnance.[28]

[redacted]

[redacted]

IV. AIRLIFT FOR LIMITED WAR

It was generally accepted within the Air Force that an airlift capable of supporting a general war was adequate to support a limited war. In October 1958, however, General Bradley, then assistant DCS/Materiel, observed that while the conclusion might be true in general, Air Force logistic support did prove insufficient during the Lebanon and Taiwan emergencies and that it might be dangerous to adhere to this assumption in the future. "It is conceivable," he continued, "that future airlift requirements in support of general war may decline to the point that they no longer equal the airlift required to support a limited war." Determining future airlift needs for limited war was not easy, and between 1958 and 1961 the Air Force and the JCS gave considerable study to the problem.[1]

The C-124 Controversy

Within the Air Force the problem of command responsibility for maintaining heavy troop carrier capability was steeped in controversy. It began on 1 July 1957 when 10 squadrons of C-124's were transferred from TAC to the Military Air Transport Service (MATS)--thus divesting TAC of its heavy troop carrier force. Although several initial attempts, beginning in June 1958, to regain the Globemaster units were unsuccessful, TAC persisted in its efforts because of its responsibility for the CASF.

[redacted]

Designed for speedy deployment to and immediate operations in a troubled area, a CASF required 48 C-130 Hercules aircraft to airlift immediately 908 personnel and 356 tons of equipment, thus providing an initial strike capability. To accomplish this TAC maintained an alert position to insure the departure of 8 C-130's within 2 to 4 hours, 10 more in 8 hours, and the entire complement of 48 within 24 hours.

The Lebanon and Taiwan crises underlined the fact that TAC's C-130 airlift was not sufficient. The plan for a CASF deployment to the Middle East required that MATS furnish a supplemental force of 55 C-124 trips to complete the Bravo package and an additional 111 trips for the Charlie follow-on force.* A similar deployment to the Far East required 104 and 111 sorties respectively. On 24 September 1958, Gen. Otto P. Weyland, TAC commander, bluntly informed the DCS/Operations, "I do not have sufficient airlift . . . to insure immediate reaction of the CASF and MATS has not been able to meet the short reaction time required." In July 1959, General Weyland argued that for MATS to maintain the C-124's on the same alert schedule practiced by TAC would have an adverse effect on MATS scheduled operations. Therefore, he insisted, the Globemasters should be returned to TAC for full utilization in combat posture.[2]

*Bravo force--1 command element, 1 communication element, 3 F-100 squadrons, 1 composite reconnaissance squadron, 3 C-130 squadrons; Charlie force--same units as Bravo force, plus 7 F-100 squadrons and additional communication elements.

In addition to the CASF requirement, TAC maintained four tactical squadrons on rotation overseas. During the period of September 1957 to October 1958, these rotational deployments required MATS to supply 223 C-124 sorties to move 5,181,646 pounds of cargo and 6,717 people. The TAC commander contended in July 1959 that moves of this nature were closely allied to combat operations and were, therefore, a function of a tactical command rather than an organization primarily concerned with scheduled movements of personnel and logistics.[3]

The ability to provide airlift for airborne forces in the oversea theaters was also involved in the C-124 controversy. TAC felt that it should perform this function during a limited war situation but recognized that without C-124 aircraft this was impossible until after its CASF units had been deployed. As a delay in the movement of airborne troops would not meet the requirements of the theater commands, the responsibility for supplying the airborne airlift in the opening and crucial period of an operation fell on the theater commands augmented by MATS.[4]

In October 1959 both TAC and MATS presented their positions on the need for C-124 capability to the Force Estimates Board at Headquarters USAF. MATS emphasized the fact that the current utilization rate of the C-124 was higher than it had been under TAC and, also, that reassignment of the units and aircraft would compromise the industrial funding associated with the single manager concept. TAC based its argument on its better operational capability to support Army airborne requirements, since airborne operations must be supported by such TAC functions as

fighter escort, close air support, and air traffic control. Additionally, TAC cited responsibility for determining the validity of Army requests and requirements for airlift support as one of its functions. The assignment of the C-124 heavy troop carrier wings to MATS had divided USAF support capabilities. Since the C-124's represented 20 percent of the available combat airlift, TAC contended that these wings should be returned, but failing this, operational control should be given to TAC during extensive airborne exercises and operations.[5]

The following month the Force Estimates Board recommended that the C-124's stay with MATS. However, a directive was signed by the Vice Chief of Staff making TAC the sole contact with the Army for all Air Force airlift applied to the support of joint airborne training and operations. The TAC commander was also assigned the responsibility for planning, controlling, and utilizing MATS aircraft operating in support of these requirements.[6]

Controversy with the Army

Providing airlift to the Army was a basic Air Force requirement. The manner and amount, however, was subject to considerable discussion and involved the JCS. On 29 May 1958 the Deputy Director J-4 (Logistics), Joint Staff, directed that a study be prepared on U.S. transportation capabilities in the event of limited war. The Army was the motivating agency behind this study, having previously sent a memorandum to the JCS stating that certain Army forces based in the ZI were required to support limited wars and, consequently, airlift should be predesignated and allocated for an initial deployment of two battle groups. Additionally,

the combined sealift and airlift should be capable of transporting a two-division force within 30 days.[7]

On 14 June, the Army Chief of Staff--General Taylor--wrote to General White justifying the Army memorandum and pointing out that the JCS commands had prepared contingency plans to provide for movement of augmentation forces from the United States, but the mode of transportation and time-phasing had not been determined. Asserting that the time for determination had arrived, he requested General White's support in attaining a joint agreement on the size of the force that must be airlifted from the ZI.[8]

The Air Force agreed that further study was desirable and once specific requirements were established the necessary amount of airlift could be determined and movement plans developed. However, until this was accomplished the Air Force was opposed to the inclusion of any specified airlift requirements from the ZI. That agreement with General Taylor's proposal would be difficult was indicated on 26 June when General White informed the JCS that the predesignation of sufficient airlift to deploy two battle groups was without justification since no requirement had been established for air movement of such a force. In this stand, the Air Force had the strong support of the Navy and Marines.[9]

In cooperation with the Army, J-4 (Logistics) prepared an initial study designating the combat forces to be deployed by airlift and sealift. When submitted to the service JCS contact offices on 24 October for coordination, the study met opposition. It was rewritten to omit any

reference to requirements for limited war transportation, required augmentation forces from CONUS, and predesignation of airlift.[10]

The Army rejected the revised study, claiming that it was not responsive to guidance from the President, the Secretary of Defense, and the JCS in that it failed to consider (1) the predesignation of airlift in support of spearhead forces, (2) the testing of joint mobility force movements, and (3) the initiation and preparation of detailed airlift and sealift movement plans.[11]

The Air Force--supported by the Navy, Marine Corps, and Chairman of the JCS--maintained that it was necessary for the JCS to provide for flexible planning because of the many courses a limited war might take. This view held that the study of transportation capabilities should not attempt to determine specific requirements but should provide information on transportation resources available to meet the situation at the time of a contingency. In order to preserve the inherent flexibility of the airlift force, predesignation of airlift should be considered only for specific forces assigned specific tasks to support a limited war.[12]

The basic difference between the minority and majority views remained one of requirements versus capabilities and predesignation of airlift and sealift versus decision by the JCS at the time of trouble. Unable to win Army concurrence the JCS on 10 December 1958 agreed to forward a split decision to the Secretary of Defense. The final majority report, forwarded on 23 December, identified the sealift and airlift capabilities available to support limited war in fiscal year 1959; recognized that the requirement for augmentation forces to support limited war contingency plans had not been delineated by the JCS and

no statement of adequacy could be made; and, because of the many imponderables involved in limited war situations, hypothetically demonstrated the relationship between transportation capabilities and movement of forces.[13]

On 16 January 1959 OSD informed JCS that the majority view was approved. This position was used as the basis for a report to the President.[14]

Testing and Improving Airlift Capability

Despite the reluctance of most members of the JCS to predesignate units to airlift specific Army ground forces, the need for both strategic and tactical airlift for the Army was appreciated, and during 1959-60 several comprehensive studies of airlift capabilities were made. Meanwhile, airlift capability was divided between MATS and the tactical air forces (TAC, USAFE, and PACAF). In the event of a national emergency, aircraft of the Civilian Reserve Air Fleet (CRAF) could be drawn upon. MATS was responsible for the strategic airlift and TAC for the tactical airlift. In general, this meant that MATS would carry Army troops and cargo to oversea theaters and the tactical air forces would lift the soldiers into the battle area for airborne assault.

Examination of strategic airlift capability in the spring of 1960 showed that 648 four-engine transport aircraft (MATS, TAC, and CRAF) were available in the continental U.S. to support a limited war, leaving 217 transports to support SAC in the event of general war and to continue vital peacetime airlift to the oversea commands. It was further determined that with available aircraft the Air Force could transport 27,000 troops and 21,000 tons of cargo from the United States to Europe in 12 days or

19,000 troops and 11,000 tons of cargo to Korea in 15 days. Quick response to an emergency situation was also considered. MATS maintained 38 aircraft of various types on alert to provide the initial support for SAC in event of general war. In addition, TAC maintained 8 C-130's on a two-to four-hour alert to support the CASF or STRAC. In a limited war emergency the Air Force had sufficient aircraft to airlift 1,500 troops and 400 tons of equipment--slightly less than one battle group--to a theater of operations within hours.[15]

In March 1960 the Air Force demonstrated its ability to airlift Army troops and cargo in Exercise Big Slam/Puerto Pine. The primary purpose of the exercise, conducted from 14 to 28 March, was to test the ability of MATS to surge from its peacetime utilization rate of five flying hours per day to a wartime rate of approximately eight hours per day and to sustain this rate over an extended period. At the same time, a test was also made of its ability, in cooperation with the Continental Army Command (CONARC), to deploy a sizable Army force for limited war action.

The operational exercise was conducted in two parts. Big Slam tested increased utilization and involved all 447 aircraft of the strategic airlift force. Half of the aircraft continued flying the global air logistic supply route but at an expanded rate. The other half of the force was diverted to Puerto Pine, in which it airlifted 21,000 troops of the Strategic Army Corps (STRAC) and 11,000 tons of combat equipment from 14 U.S. bases to two staging areas in Puerto Rico and returned within

the 14-day period. The operation proved the ability of MATS to accelerate from peacetime to wartime flying rates and the ability to conduct large-scale movements of men and equipment. On the other hand, it was recognized that this was a short-distance deployment and that the 11,000 tons of equipment constituted about one-third the amount the troops would need for immediate combat readiness. The key factor was the limitation imposed on MATS by obsolescent aircraft that lacked the speed, range, and carrying capacity to airlift fully equipped battle divisions to distant trouble spots in a minimum of time.[16]

Logistically, the operational test was deceiving because necessary equipment and supplies had been prepositioned at Roosevelt Roads, Puerto Rico, five days before the exercise began, having been flown in by 29 C-124's and 1 C-133. There had also been extensive prepositioning at Ramey AFB, Puerto Rico, and at the onload stations of Pope AFB, N. C., and Campbell AFB, Ky. It was apparent that a "no notice" deployment to an area without WRM would require a large portion of the MATS fleet to haul the equipment and supplies into place during the initial phase. Therefore, the number of MATS aircraft available for troop movement was contingent upon the extent of prestockage at the destination.[17]

Meanwhile, efforts to resolve Air Force and Army differences over airlift for Army forces met with some success. On 15 March 1960 the "White-Lemnitzer Agreement" was concluded between the chiefs of staff of the Air Force and the Army.* A bilateral agreement--without the sanction

*Gen. Lyman L. Lemnitzer succeeded General Taylor as Army Chief of Staff on 1 July 1959.

of the JCS--this paper established mutual objectives for providing a well-balanced strategic airlift for the Army forces. For planning purposes, suitable destinations in the various areas were established as Turkey in the Middle East, South Vietnam in Southeast Asia, and Panama for the Caribbean. The agreement also stipulated that plans must be flexible so as to permit the least possible delay in case of change in the actual deployment destination, that initial fighting forces must be capable of immediately moving to the scene of aggression, and that capability must exist for providing quick reinforcement and supply to sustain combat for as long as necessary. To accomplish these objectives, the Army and the Air Force agreed that there should be enough air transport to (1) fly one to two battle groups from either the United States or an oversea theater to any trouble spot in the world, departing within hours of the execution order; (2) increase the size of this force to one division within 7 to 10 days; (3) continue augmentation up to two divisions within 30 days; and (4) continue reinforcement as and when required.[18]

To insure continued coordination and cooperation between the Army and the Air Force the March agreement also provided for two planning groups. A Joint Planning Group (JPG), consisting of five senior officers from Headquarters TAC and five senior officers from Headquarters CONARC, was established for contingency planning. In May, TAC requested that a field grade officer from MATS also be assigned as a permanent member of the JPG to insure that planning for utilization of MATS and TAC aircraft would be based on current operational data. In addition, a Joint Plans Development Group (JPDG) was formed as

a continuous working agency to coordinate the development of TAC-CONARC plans for joint exercises and operations. Formed as an agency of TAC headquarters, the JPDG was located at Fort Bragg, N. C. The group was composed of five USAF and five Army officers serving on a full-time basis.[19]

The White-Lemnitzer Agreement was a major step toward coordinating Army airlift requirements and Air Force capabilities. The document provided planning objectives rather than firm requirements since the JCS had not approved plans for the deployment of Army's STRAC forces in limited war contingencies nor were the "requirements" reflected in a specific war plan. The limiting factor in moving the Army ground forces was not the number of aircraft--after 24 hours there would be approximately 300 ready to move out--but the number of flying hours the airlift forces could support.[20] USAF ability to meet the Army airlift need in December 1960 is shown in the following table:[21]

	Army Requirements in Days		MATS Capability in Days	
Units	Middle East	SE Asia	Middle East	SE Asia
1 battle group (theater)	1	2	4	5
1 battle group (CONUS)	1	3	4	8
plus CASF			7	10
1 division	7	10	17	25
plus CASF			19	28
2 divisions	30	30	38	62
plus CASF			40	65

Planning for tactical airlift was also a subject of the White-Lemnitzer Agreement. The Army desired enough tactical airlift to support a simultaneous airborne attack by the assault echelon of one airborne division plus two airborne battle groups (15,240 troops and equipment). It was agreed between the two services that (1) for the airborne assault a minimum of one battle group should be maintained in both the European and Pacific theaters, with readily available augmentation capability in the United States to lift a second battle group to either area; (2) five battle groups should be maintained within the United States to augment the theater capability, for training, and for contingencies in the Western Hemisphere; and (3) a sizable part of the total tactical airlift capability should be in active units so as to be immediately available to support limited war operations.[22]

By January 1961 the tactical airlift in TAC and the oversea commands was capable of lifting simultaneously the initial airborne assault landings by two airborne battle groups and deploying a TAC CASF force. The remainder of the tactical airlift force, plus the aircraft available in reserve units of the Continental Air Command, represented a potential capable of carrying the assault troops of two airborne divisions on a mission of 500-nautical-mile radius.[23]

The military policies of the new administration gave increased emphasis to providing adequate tactical carrier support for combat forces. In April 1961, Secretary of Defense Robert McNamara appeared before the Senate Committee on the Armed Forces and presented his views on limited war. "Our limited forces should be properly deployed, properly trained, and properly

equipped to deal with the entire spectrum of such actions; and they should have the means to move quickly to wherever they may be needed on very short notice."[24]

Shortly after his inauguration, President John F. Kennedy directed the Department of Defense to increase the USAF airlift capability. Procurement of the Lockheed C-130E extended-range turboprop aircraft was increased from 50 to 99 aircraft. By reducing the program for the C-130B shorter-range transport by 26 and speeding up production of the remainder of these aircraft it appeared possible to obtain delivery of the first 50 C-130E's by March 1963. In addition the decision was made to procure for MATS 30 Boeing C-135A jet transports, a modified version of the KC-135 tanker. To get them more quickly, the Air Force diverted 17 KC-135 tankers to the transport configuration, scheduling the first delivery for June 1961 and delivery thereafter at the rate of two per month until completion of the order.[25]

These additional aircraft were placed under procurement to help meet airlift requirements until the specially designed, long-range C-141 jet transport became available. Although a contractor had been selected and development work begun on the C-141, the first delivery to operational squadrons was not expected until 1965.[26]

V. SUMMARY

By focusing attention on certain weaknesses of U.S. ability to cope with limited war, the Lebanon and Taiwan crises of 1958 prompted the Air Force to adjust its policies to meet the changing international and military situation. The two crises revealed shortcomings in Air Force policies, particularly with respect to the prestockage of and failure to separate war readiness materiel, the use of nuclear weapons, the availability of conventional weapons, and the adequacy of airlift. As a consequence, the established Air Force position that limited wars could be fought with the same forces and supplies available for general war came under attack by oversea major air commanders and by certain members of the Air Staff.

The task of modifying the established USAF position on limited war was not easy and, initially, led to the adoption of halfway measures to meet new military requirements. Slight changes in wording of war plans were made, and theater commanders were granted authorization to redistribute their WRM to locations where they could best be used for conducting a contingency operation. By April 1960, when it was evident that more drastic action was necessary, the Vice Chief of Staff approved the separation of WRM for general and limited war. During the remainder of the year, progress was made in prepositioning WRM in potential trouble areas.

The employment of nuclear weapons in limited wars was discussed intensively within the Air Staff and the JCS. The Air Force insisted on the necessity of using nuclear weapons to avoid defeat in some potential theaters

and warned that if the USSR knew they would not be used the number of limited wars probably would rise. Nevertheless, the Air Force became increasingly aware that the international political climate might prevent the use of these weapons and took steps to acquire more sophisticated conventional armament. This was not a retreat from its belief in the need for nuclear weapons to assure the maintenance of a strong deterrent posture. Also, the Air Force continued its efforts to persuade public opinion in the United States and abroad to accept the use of tactical nuclear weapons in the same spirit as it accepted the use of HE weapons.

The Air Force changed its position that airlift sufficient for general war was sufficient for limited war. It resolved the issue of command control of C-124 troop carrier units by leaving the Globemasters with MATS but making TAC the principal USAF agent for arranging with the Army all airlift required to support joint airborne operations. The Air Force's support of Army airlift needs received detailed scrutiny by the JCS. As a result, Air Force airlift capabilities were identified but no specific forces were predesignated, contrary to Army recommendations. Because of the many variables in contingency planning, the JCS reserved for themselves flexibility of action with respect to choice of forces, time-phasing, and mode of deployment. A milestone in Air Force-Army cooperation on airlift problems was reached in March 1960 by the signing of the White-Lemnitzer Agreement.

Finally, the President in early 1961 ordered the Department of Defense to increase the Air Force's transport capability. By this action the new administration also indicated its desire for more flexibility of action to

face the growing threat of limited war engagements. By other steps, too, it demonstrated interest in molding a U.S. military establishment capable of meeting aggression through raising the "threshold of conflict" by degrees rather than by a "quantum jump" that might spell the end of Western civilization.

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26. Ibid.

G L O S S A R Y

AFOS	Air Force Objective Series
ASSS	Air Staff Summary Sheet
CASF	Composite Air Strike Force
COMAMC	Commander, Air Materiel Command
COMTAC	Commander, Tactical Air Command
CONARC	Continental Army Command
D/	Director of
HE	High explosive
ISA	International Security Affairs
JPDG	Joint Plans Development Group
JPG	Joint Planning Group
Log	Logistics
LP	Logistics Plans
MLP	Directorate of Logistics Plans
MTP	Directorate of Transportation
n	note
nd	no date
NSC	National Security Council
Ops	Operations
OSAF	Office, Secretary of the Air Force
Pdn	Production
PRB	Records Branch, Directorate of Plans
Prelm	Preliminary
Prog	Program
Rqmts	Requirements
SOD	Secretary of Defense
SOR	Specific Operational Requirement
S&S	Services and Supply
USA	U.S. Army
WP	War Plans
WRM	War readiness materiel