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STRENGTHENING USAF GENERAL PURPOSE FORCES

1961-1964

by

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USAF Historical Division Liaison Office

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#### FOREWORD

Probably no phase of recent Air Force history has been more significant than the development of strong general purpose forces to deter or win limited conflicts, including the "wars of national liberation" advocated by Soviet Premier Nikita Khrushchev in January 1961. Strengthening USAF General Purpose Forces, 1961-1964, an account of this buildup, also includes a brief summary of the change in national military policy which gave rise to it.

The author discusses the viewpoints of the top planners in the Office of the Secretary of the Air Force and in Headquarters USAF. At the same time, he describes how these officials adjusted to the military policy inaugurated by President John F. Kennedy and his Secretary of Defense, Robert S. McNamara. Concurrently, the author notes how the growing emphasis on general purpose forces required closer coordination with the other military services, especially the Army, and aggravated the problems of interservice support.

The buildup of tactical forces took place in a period of growing world tension and simultaneously with other important national programs, such as the exploration of space and attempts to improve the domestic economy. Resulting strains on the national budget and the unfavorable balance of gold payments created numerous and sometimes unforeseen difficulties.

Prepared as part of a continuing <u>History of Headquarters USAF</u>, this study is being issued separately to make it available quickly in a conveniently usable form. A companion study by the same author, <u>Strengthening USAF Airlift Forces</u>, <u>1961-1964</u>, covers a related phase of U.S. preparations to resist aggression by limited means.

Max Rosenberg

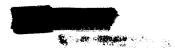
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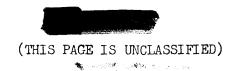
## CONTENTS

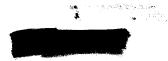
FOREWO	RD																									
I.	THE	NEW	MI	LII	AR	Y I	POI	ΙC	Y	•	• "	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
		The The	Ke Mc	nne Nam	edy ar	Me a '	ess Tes	ag sti	es mo	ny	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	2 5
II.	ANA]	LYSI	S 0	F 3	HE	N1	ŒW	PC	LI	CY	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	9
		The The JCS Pro Pro USA	Mc St ble	Nan udi ms ms	nar ies of of	a I	rec ire	que • • • • • • • • • • • • • • • • • • •	• • an De	s Defe	• ef ns	• en	• •	•	•	•	•	•		•	•	•	•	•	•	16 18
III.	THE	PRO	BLE	M (	OF	IN'	TE	RSE	CRV	πC	E	Sl	ΙPF	PO1	RT	•	•	•	•	•	•	•	•	•	• ,	32
		Imp Dis Spe	put	es	Ov	er	Ta	act	iic	al	. A	ir	рc	)W	er	•	•	•	•	•	•	•	•	•	•	36
IV.	BUI	LDUP	OF	T	ACI	TC.	AL	FC	ORC	ŒS	5	•	•	•	•	,	•	•	•	•	•	•	•	•	•	52
		Win Adv Non	anc	ed	Αi	rc	ra	ft													•	•	•	•	•	-59
٧.	CON	CLUS	ION	Ī			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	70
NOTES			•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠.	•	•	71
APPENI	DICES		•	•	• •		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	82
Ar	pend pend pend	ix I	Ι							•			•	•	•	•	•	•	•	•	•	•	•	•	•	8
GLOSSA	ARY.				•		•			•		•			. •				•			•	•	•	•	8



#### I. THE NEW MILITARY POLICY

- (U) After the Korean War, when the policy of "massive retaliation" predominated, high-level officials of the United States never supported programs especially designed for limited war to the extent that they supported strategic warfare and continental defense programs. By 1956, however, many national leaders did agree that limited war was a probable danger and that some military forces were required to meet it. The Air Force believed that there was no sharp line of demarcation between strategic and tactical airpower and that its total war force had an inherent ability to meet any level of conflict.
- (U) Within budgetary restrictions and with the Air Force moving cautiously and somewhat reluctantly, the military services took a number of specific actions to deter or win limited wars. The Navy, whose Marine Corps was a primary component of U.S. limited war capability, prepared its carrier task forces for this type of conflict. The Army established its Strategic Army Corps in 1958. Although Air Force leaders feared that extensive strengthening of limited war forces would weaken the strategic forces, the Tactical Air Command created composite air strike forces in the same year to deter or respond to local aggression.
- (U) These developments, however, were largely begun from below by the military leaders of the services. Efforts to meet the threat of





limited war were made piecemeal, without the unity or direction that could come only from the highest levels of government. These had to await the advent of the administration of President John F. Kennedy in 1961 and the innovations of the next four years.

The strengthening of general purpose forces, which began in 1961, was perhaps the most significant Air Force development since the arrival of intercontinental ballistic missiles and space vehicles.\*

In 1959 the Air Force had a tactical force of 18 wings and planned a gradual reduction to only 13. Early in 1961, after the force had fallen to 16 wings, a change in basic national military policy ushered in by the Kennedy administration, coupled with disturbing international events, resulted in a rapid buildup in tactical units and a new program calling for 21 wings by 30 June 1963. In September 1963 the Kennedy administration authorized 24 wings, 14 to be equipped with the new F-4C. By 1967 the advanced F-111A (formerly the TFX) would also be coming into the tactical force.

#### The Kennedy Messages

During the Kennedy administration, public statements by the President and his Secretary of Defense, Robert S. McNamara, served as definitive statements on national military strategy. This was made clear in January 1963 after Air Staff officials had been uncertain as

<sup>\*</sup>A concurrent buildup of the airlift forces consisted not so much in increasing the size of the force as in replacing old obsolescent aircraft with new, high-performance planes. For a discussion of the airlift buildup, see George F. Lemmer, Strengthening USAF Airlift Forces, 1961-1964 (preliminary draft in AFCHO files).



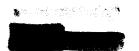


to the precise source of current national defense policy. At that time, the Office of the Secretary of Defense (OSD) announced that National Security Council 5906/1, "Basic National Security Policy," had been rescinded and "for the present, current policy guidance is to be found in existing major policy statements of the President and Cabinet officers, both classified and unclassified."

(U) In his first important pronouncement on defense policy, delivered to Congress on 28 March 1961, President Kennedy stated unmistakably that a major reorientation was in the making. Reaffirming that the primary purpose of U.S. arms was to deter all wars, "general or limited, nuclear or conventional, large or small," he declared that nonnuclear limited and guerrilla warfare had been the most active threat to free world security since World War II. If the United States could not repel a major aggression with conventional forces, it should take

whatever action with whatever weapons are appropriate...but our objective now is to increase our ability to confine our response to nonnuclear weapons, and to lessen the incentive for any limited aggression by making clear what our response will accomplish.

(U) The President believed that the United States would have to make a substantial contribution to defense against aggression in foreign lands by providing strong, highly mobile forces trained in conventional and guerrilla warfare, with substantial airlift and sealift capacity and prestocked oversea bases. Any potential aggressor should know that U.S. response to any kind of attack would be "suitable, selective, swift,





and effective." President Kennedy wanted weapon systems that would permit "deliberation and discrimination as to timing, scope, and targets." He called for "entirely new types of nonnuclear weapons and equipment—with increased firepower, mobility, and communications, and more suited to the kinds of tasks our limited war forces will most likely be required to perform."

- (U) Although President Kennedy devoted a major share of his request for augmenting the original Eisenhower fiscal year 1962 budget to strengthening and protecting the strategic deterrent forces, the new obligational authority for general purpose forces emphasized the new policy. It called for \$45 million for development of an advanced tactical aircraft, \$25 million to improve the F-105's ability to handle conventional ordnance, and \$65 million to increase readiness training of Army and Air Force units.
- (U) The President's State of the Union message on 25 May 1961 noted that U.S. military strength would reinforce friendly nations, although their own forces would have to shoulder the main burden of defense against local attacks, subversion, insurrection, or guerrilla warfare. He endorsed an increased emphasis on the conventional strength of the North Atlantic Treaty Organization (NATO). The crisis in Southeast Asia, the rising threat of communism in Latin America, and the increased arms traffic in Africa also added to the conventional military requirements of the free world. What was needed to



meet the challenge was not large new levies of men but "a change of position" that would give the nation greater flexibility. 5

### The McNamara Testimony

- Robert S. McNamara, clarified the new policy. The administration was particularly concerned with enhancing the nonnuclear capability of limited war forces since, he implied, there had been too much emphasis previously on their nuclear capability. While the United States could not preclude the use of tactical nuclear weapons, many situations might arise in which it would be neither advisable nor feasible to use them. The nation should not be forced into such action because it had no alternative. Conventional weapons and equipment should be developed to improve the firepower, mobility, and logistic support of ground and tactical air forces. Research and development should lead to fresh technical and tactical concepts.
- (U) The administration was convinced that the United States should be able to resist local, limited aggression in various regions of the world and at the same time avoid the immense human disaster of a general thermonuclear war. Asked in April 1961 whether a limited military action, if pressed to victory, would expand to a general war, the Secretary replied that this country could secure political objectives in troubled areas "without necessarily incurring the escalation that you mention..." Escalation was more likely if the United States

was not properly prepared for limited actions to support political objectives. He noted that on 6 January 1961 Premier Nikita Khrushchev of the Soviet Union had recognized the great dangers in nuclear war and had supported "wars of liberation" instead. Such conflicts had now become the greatest military threat to the United States.

- (U) Most U.S. leaders agreed that this country might have to engage in nonnuclear conflict in many regions, but they did not agree on such a possibility for Europe. Many key USAF officers believed that any important military action in Europe would necessitate the immediate use of nuclear weapons. The administration maintained, however, that it would not be to the advantage of the United States or its allies to use nuclear weapons in Europe if they could deal with difficult situations by nonnuclear means. Even low-kiloton nuclear weapons were extremely destructive and hardly suited to defending the heavily populated areas of Europe. Furthermore, while the use of tactical nuclear weapons would not inevitably escalate to global nuclear war, Secretary McNamara stated that "it does present a definite threshold beyond which we enter a vast unknown."
- (U) The administration concluded that the United States and Western Europe should be able to confront the enemy at any level of provocation with appropriate military response to deter and, if necessary, win nuclear or nonnuclear wars. Therefore, while the United States should continue to modernize its nuclear weapons to meet an onslaught designed to overrun Europe, it should also increase its nonnuclear capabilities



to foreclose to the enemy the freedom of action he might think he would have in lesser military provocations.

- (U) In February 1963, Secretary McNamara stated that "even in limited war situations we should not preclude the use of tactical nuclear weapons." A year later he told Congress that NATO could not hold indefinitely with conventional weapons alone. But the administration was also convinced that the United States had overestimated the size and capability of Communist ground forces and had been unduly pessimistic about free world prospects in nonnuclear war. Asked whether U.S. oversea bases would be available for a large-scale conventional war, the Secretary declared that U.S. tactical fighters could launch nonnuclear attacks from any major oversea base. But he did not believe that a large-scale conventional war of the type of World War II would occur in Europe.
- President Lyndon B. Johnson, was uncertain as to the length and intensity of the conventional war the United States ought to be prepared to wage. In his recommendations to the President in September 1963 and October 1964, Secretary McNamara seemed to agree with a majority of the Joint Chiefs of Staff (JCS) that the U.S. strategic concept did not dictate a short war, one of predetermined length, or an automatic escalation point. The dissenting Air Force Chief of Staff, Gen. Curtis E. LeMay, held that although the strategic concept had one objective of frustrating a major nonnuclear assault without the use of nuclear





weapons, this did not mean that the country had to use general purpose forces for an unlimited period of time.

that would require the Air Force to procure enough nonnuclear ordnance to wage full-scale conventional war anywhere for at least 90 days and in Southeast Asia or the Middle East for 180 days or, under some conditions, indefinitely. Within six months, new production would replace the stocks of munitions and aircraft being used up. Admitting that these were rough estimates, he did not state whether a large-scale conventional war might escalate to a general nuclear exchange if it continued beyond the 180-day period with no decision or pause for negotiations, or if the West suffered unacceptable losses. In any case, administration thinking represented a significant shift from the general belief before 1961 that any important military engagement in Europe would precipitate the use of nuclear weapons.



Secretary McNamara based logistic requirements on 84,000 sorties, or 28 sorties per month per aircraft for a force of 1,000 tactical aircraft. Presumably because of production slippage and the high cost of new munitions, in October 1964 he reduced requirements by estimating 60,000 sorties or 21 sorties per month per aircraft—still a 90-day supply for 1,000 aircraft. In addition, he wanted enough pylons, external fuel tanks, and older type air-to-surface munitions to be on hand to fight a second 90-day period. (Draft memo, SOD to the President, 13 Sep 63 and 15 Oct 64.)



### II. ANALYSIS OF THE NEW POLICY

Secretary McNamara directed a comprehensive Department of Defense (DOD) review of military policy and the suitability of weapons and techniques. On 8 March 1961 he assigned to OSD agencies and the military services 92 (later expanded to more than 100) study projects. Most pertinent to the USAF buildup of general purpose forces were: (1) a plan for integrating the Strategic Army Corps and the USAF Tactical Air Command into one command; (2) a comparison of Army-Air Force close air support with that of the Marine Corps-Navy; (3) justification of continued F-105 production; (4) specifications for a "jointfighter;" (5) a detailed program for limited war training exercises; (6) a study of limited war weapons to determine whether any were obsolete; and (7) a review of limited war research and development programs.

## The Alvarez Reports

At about the time these projects were assigned, an independent panel was established to make recommendations on limited war which would be used in preparing the fiscal year 1963 budget. Headed by Dr. Luis W. Alvarez of the Lawrence Radiation Laboratory, University of California, it reported to Dr. Harold Brown, OSD Director of Defense



Research and Engineering. The panel reports of 15 August and 9 November 1961 sharply criticized past U.S. policy for relying too much on massive retaliation and tactical nuclear weapons as deterrents to war and for neglecting research on nonnuclear weapons.

- The panel noted with concern that the services spent only
  25 percent of military research and development money for limited war
  equipment, and this included tactical nuclear weapons which were also
  applicable for general war. Budgets did not significantly reflect the
  new emphasis on limited war because of the ponderous organization of
  the Department of Defense with its built-in inertia. Development of
  large, sophisticated weapons also absorbed most of the money and left
  little to carry on the small, mundane projects needed for limited war.
  It was much easier to "sell" and keep alive a technically exciting large
  project than a series of small projects—"easier to herd an elephant
  than a thousand rabbits."
- On 9 November the Alvarez Panel suggested that the services reexamine their policies to determine the level of war upon which they were basing requirements for equipment. The Air Force, it claimed, was basing requirements almost entirely on general war, the Marine Corps on limited war, the Army and Navy on a middle ground. The panel wanted the fiscal year 1963 budget to show large increases for procurement of developed items applicable to limited war in remote areas. It declared that the services had deferred such procurement in favor of new items just over the horizon which promised greater effectiveness,



but the result was that few items were on hand. Critical gaps existed in equipment for battlefield communications in jungles and mountains, location of guerrillas by ground surveillance and reconnaissance, and mobility in jungles, swamps, and mountains. The services also needed low-cost equipment for close air support in underdeveloped areas, chemical agents that would incapacitate but not kill, antiradar missiles, and new nonnuclear fragmentation warheads.

- Army Sergeant or Pershing, were suitable for conventional warfare because accurate target information was not available at launching sites. Drones or aircraft obtained accurate reconnaissance information except when targets were mobile. Missiles were less vulnerable than aircraft, but where air bases could survive, the airplane was superior for weapon delivery. It was also cheaper, since it could alleviate much of the targeting problem. The panel advocated increased Army-Air Force joint training to help solve targeting and support problems, and it desired aircraft armed with air-to-surface missiles for supporting amphibious operations.
- Current methods and equipment for reconnaissance and surveillance, according to the panel, were inadequate. Although several Air
  Force programs would improve matters, some USAF proposals seemed too
  complex. A substantial increase in the number of USAF reconnaissance
  planes would offer the most practicable immediate help. Lightweight
  devices were needed, however, to detect material and personnel in



heavily forested areas. As a partial solution, reconnaissance and strike capabilities should be combined in the same aircraft.

During the next three years, Secretary McNamara based many plans and programs on the suggestions and recommendations of the Alvarez Panel. Many of the new objectives required complex, difficult, and costly solutions, and it was not surprising that these years were filled with controversy, hard decisions, and in some cases, only slow progress toward preparing the nation to meet potential enemies on "any level of provocation." And change had to take place within the confines of a budget that might be expanded but could never be unlimited.

#### The McNamara Requests

The full impact of the Kennedy administration's military thinking was evident by 1962. In February Secretary McNamara asked the JCS Chairman, Gen. Lyman L. Lemnitzer, to establish a working group to determine the forces required to withstand various degrees of Sino-Soviet aggression in four regions—Europe, the Middle East, Southeast Asia, and Northeast Asia. \*\* Conflicts or crises might arise, either slowly or rapidly, when Soviet or Chinese forces attacked U.S.

The chief problems to be studied were: (1) Europe—forces to hold in place and to hold the Rhine and Italy; (2) Middle East (including Turkey and possibly Greece)—forces to hold enough territory to permit reinforcement and a counteroffensive and to prevent Soviet seizure of Persian Gulf or Mediterranean objectives; (3) Southeast Asia—forces to hold South Vietnam, Thailand, and Laos on the 17th parallel, to hold enough territory to permit a counteroffensive, and to hold Taiwan; and (4) Korea—forces to hold in place and to hold enough territory on the peninsula to reinforce and counterattack.





and allied positions in each theater or more than one theater. It was considered unlikely, however, that the entire enemy force would be thrown against a single theater. The group would assume that neither side would use nuclear weapons.

Accompanying studies, not primarily regional, would also be needed, including a major intelligence effort on Soviet ground and tactical air forces that would take into account the logistic and force limitations of both sides. Secretary McNamara emphasized that he did not want, at this time, a recommendation on total U.S. force requirements or answers to political, economic, and other nonmilitary questions. He wanted quantitative answers to questions on military requirements to provide data for fiscal year 1964 budget decisions and the DOD program for 1964-1969. Ground rules were furnished by OSD, with Charles J. Hitch, Assistant Secretary of Defense, Comptroller, providing guidance.

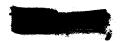
In October 1962, Assistant Secretary Hitch enlarged the study by requesting JCS to assess the ability of U.S. and allied general purpose forces to halt a surprise Soviet attack on central Europe and force a "pause" as far east as possible. Basing this part of the study on the NATO force programmed for 1964, the group would assume that both NATO and the Communists would augment their forces immediately after the Soviet attack, would not use nuclear weapons, and would hope to keep the area of conflict limited. Since both sides would maintain nuclear weapons in readiness, the threat of general war would exist during the conflict. The group would also assume that the United States



would have an abundant supply of modern conventional munitions and the Soviets would not. This last assumption gave rise to grave Air Force doubts as to the validity of certain OSD and JCS assessments.

Meanwhile, in May 1962 Secretary McNamara had requested a second study which was a continuation of the first. It called for a thorough analysis of the requirement for tactical nuclear weapons, particularly in Europe. The Secretary stated that U.S. "posture, doctrine, and understanding of objectives for the use of tactical nuclear weapons in ground combat in Europe is in a very unsatisfactory state." He asked when Army nuclear weapons would be needed and what objectives they would be expected to achieve. He noted that the case for having tactical alert aircraft and missiles for nuclear interdiction was based on the argument that they could help deter the Soviet Union from escalating a conventional war to a nuclear one, convince the Soviets of the dangers of aggression by demonstrating U.S. resolve, and prevent the psychological state of U.S. allies from becoming intolerable if the weapons were not in the theater. But the Secretary questioned the wisdom of having a large number in Europe. He wondered whether long-range strategic forces would not be the decisive element in a nuclear conflict and, if not, whether they should not be strengthened to make them so.

U.S. allies in a nuclear war confined to Europe, Secretary McNamara wanted to know whether such a conflict was likely, whether this country



would reply to a Soviet nuclear attack in Europe by launching a general war, and whether it would be advantageous to go to nuclear war in response to a Soviet nonnuclear attack. He asked, "What evidence supports the notion that the use of nuclear weapons is advantageous to the side with less manpower...? In any case, is it feasible to defend Europe with nuclear weapons without destroying it?" The Secretary implied that the United States was buying tactical nuclear weapons but not real military capability since it was not protecting the vulnerable line of communication and knew little about maintaining command and control in a local atomic war. If the United States wanted merely to maintain a nuclear facade in Europe, this could be done at less cost and risk.

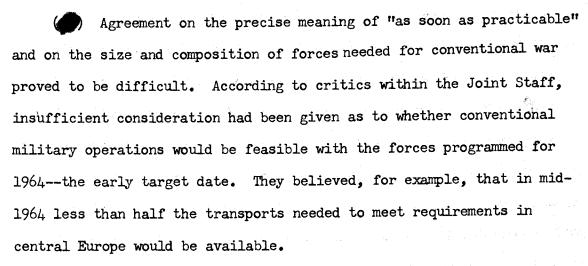
McNamara asked the group to study the effects of a Soviet assault with tactical nuclear weapons and U.S. escalation of a non-nuclear war it was losing. The main question was whether the combatants could keep such a war from escalating into major attacks on U.S., Western European, and Soviet homelands. The group would estimate the minimum essential numbers and types of tactical nuclear weapons required to (1) reassure Europeans that nuclear weapons were committed to their defense, (2) deter the Soviets from escalating a conventional war to a tactical atomic conflict, (3) deter the Soviets from massing troops for a large conventional assault, and (4) demonstrate U.S.-European resolve in the face of a Soviet attack by detonating a few nuclear warheads in central Europe to convince the U.S.S.R. of the dangers of aggression.



By September 1963 Secretary McNamara was convinced that by fiscal year 1966 the tactical nuclear alert should be given to Pershing and strategic missiles and taken away from tactical aircraft—the USAF "quick reaction alert" forces. He now doubted the wisdom of maintaining "dual-capable" aircraft that would fight either nuclear or conventional wars. Tactical aircraft, he believed, should be put to their best use—nonnuclear combat. Missiles like Pershing and Sergeant could best provide the tactical nuclear requirement overseas. If they were not good enough for this job, he thought, they had no mission that justified their cost.

### JCS Studies

Meanwhile, JCS had launched studies and reviews that clearly reflected the new military policy. In June 1961, the Joint Staff began a study to determine the kind of mobilization required to provide a flexible response to the looming Berlin crisis and others that the Communists might instigate. The study emphasized conventional ground and air forces, an improved industrial mobilization base, and partial mobilization of ready reserve forces. In October, the JCS pointed out to Secretary McNamara that increased emphasis on nonnuclear war substantially increased logistical requirements. They agreed that procurement would have to be broadened to provide greater support for regular conventional forces, reserve forces, and U.S. allies. At this time, JCS had accepted the general objective of attaining as soon as practicable the ability to wage six months of nonnuclear combat.



In June 1963, Gen. Maxwell D. Taylor, JCS Chairman since

1 October 1962, told Secretary McNamara that JCS studies on the employment of tactical aircraft in nonnuclear operations were detailed,
well-organized, and useful but should not be used as a basis for
determining requirements for tactical aircraft. The studies contained
enough unrealistic assumptions, especially with regard to allocation
of airlift, to make them invalid in several respects and unreliable
guides in determining the ability of the United States to meet specific
contingencies. Joint strategic objective plans and related documents,
such as JCS comments on program change proposals, remained the bases
for budget and program decisions.

In July 1963, General Taylor asked the Joint Staff to arrange possible forms of conflict in order of probable occurrence and then estimate the percentage of military assets that the United States was devoting to each type. He wanted to know if this country was taking



into account the probability of occurrence in its preparations or if it was spending too much on the least probable form.

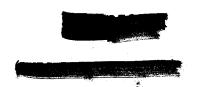
The study, approved by the JCS in October, concluded that current planning did take into account the probability of various forms of conflict. Lesser forms were more likely to occur than those approaching general war, but about 85 percent of the budget was spent justifiably in preparing for forms least likely to occur. JCS believed that deterrence of the higher, more expensive, and more dangerous types of warfare induced a rational enemy to seek his objective through less expensive and less dangerous actions. If U.S. deterrent posture were weakened significantly, the likelihood of higher levels of warfare would increase since the risks to an enemy would decrease. Preparation for lesser forms of war would be limited only by the judgment of responsible officials as to resources that could safely be diverted from the strategic deterrent.

The Air Force agreed with these conclusions since they conformed in general to its strategy. It added that estimates of the allocation of funds among various types of conflict could only be loose approximations. Under current planning guidance, all forces would be used in a general war, yet a certain percentage of them possessed limited war capabilities also. To the Air Force, there seemed to be no accurate means of figuring the relative costs.



#### Problems of European Defense

- The administration's request for searching reviews of preparations for the defense of Western Europe showed its deep concern over the possibility that tensions in that area might produce conflict that would lead to general war. The Berlin crisis of October-December 1961 required the hurried dispatch of 11 Air National Guard (ANG) squadrons to Europe. In July 1962 a JCS study group concluded that NATO's current forces could not defend Western Europe without using nuclear weapons. Except for the United States, NATO nations were not supporting or planning adequate forces to defend that area. Impressed, Secretary McNamara told Congress in February 1963 that although NATO had greater strength than generally attributed to it, it could not withstand any large Soviet conventional attack. Such an attack, he believed, would have to be met "fairly promptly" with tactical nuclear 13 weapons.
- Another JCS study, requested by the President in April 1963 stated that only the U.S. Seventh Army among the ground forces in Western Europe had the logistic capability to fight more than 30 days, and most European ground forces could not sustain conventional combat for more than 15 days. Of the NATO air forces, only the U.S. Air Forces in Europe could fight more than 30 days of conventional war. NATO air forces were also extremely vulnerable to surprise attack, a situation that had to be corrected before the Allies could improve significantly their ability to wage nonnuclear war.





In February 1964 Secretary McNamara stated that forces planned for NATO by the end of fiscal year 1966, if "fully manned, trained, equipped, and properly positioned," could hold an initial Soviet attack by nonnuclear means alone. He estimated that by 1966 the United States and its allies could be equal to the Warsaw Pact nations in the number of tactical aircraft and 30 percent ahead of them in quality. These force goals were well within NATO's abilities, but he noted that the alliance was some distance away from achieving them. Until these requirements were met, he believed that the defense of Western Europe would require the use of tactical nuclear weapons.

In any conventional war in Europe, air superiority would be essential but the aircraft were so highly concentrated on so few bases that they were highly vulnerable to a surprise attack. Protection from nuclear attack appeared impracticable, but in 1962 the Air Force offered a plan for substantial protection against nonnuclear ordnance. Earth-covered steel shelters would be built at about \$100,000 each, coupled with a technique for rapid repair of base facilities. Congress eliminated OSD's request for \$30 million for this program in 1963, apparently because the Air Force had not yet completed its testing of the shelters. Convinced of the need for the program, Secretary McNamara in early 1964 included \$20 million in the 1965 budget for construction. He did not think the United States could justify spending nearly \$1 billion per year for tactical aircraft when Air Force and OSD studies indicated that most of those in Europe would



the unfavorable balance of payments (gold flow) and take advantage of the increasing speed of deployment, the administration began to reduce the number of tactical aircraft stationed in Europe. The Secretary believed that by 1968 the Air Force would be able to deploy 400 fighters to Europe in three days, using KC-135 tankers and only 37 percent of MATS capacity.

### Problems of Asian Defense

A major subject of OSD and JCS analysis was the advisability of using nuclear weapons at the outset of any large-scale Chinese Communist aggression against South Korea, Taiwan, or Southeast Asia. In May 1961 Secretary McNamara asked the JCS to examine this issue and in June the JCS stated unanimously that the United States could not successfully engage the Chinese Communists with conventional weapons alone. In November 1962, after General Taylor returned from a Pacific trip, the Secretary asked for a study of the effect on U.S. and allied requirements of a decision to use nuclear weapons at the outset of a large attack by the Chinese Communists. At this time the administration desired to reduce military assistance to the Chinese Nationalists and the South Koreans in order to reduce the outward flow of gold.





General Taylor and the Army suggested substituting Sergeant and Pershing missiles for ground forces in Korea. OSD and JCS agreed that adoption of this plan, plus a sizable reduction in military assistance program (MAP) funds for Taiwan, might cut the adverse gold flow by \$44 to \$47 million and save \$22 million per year in operating expenses. Adm. Harry D. Felt, Commander-in-Chief, Pacific (CINCPAC) commented, however, that if MAP funds for South Korea were reduced, the Pacific Air Forces and the Seventh Fleet would have to be increased substantially. He cautioned against an automatic use of nuclear weapons against the Chinese Communists, claiming that this would impose an undesirable rigidity on U.S. policy. He also implied that political considerations would militate against such a critical decision. J-5 agreed and recommended that the proposal not be used as a basis for reducing forces in South Korea, Taiwan, and Southeast Asia.

USAF planners thought that there were alternatives to the Taylor-OSD plan. Maj. Gen. John W. Carpenter, Director of Plans, USAF, believed that the suggestion to use nuclear weapons at the outset of

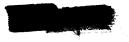
As modified over the next five months, the plan called for: (1) a Sergeant-Pershing missile command in South Korea; (2) one or more Polaris submarines in the Western Pacific; (3) air defense of key points by surface-to-air missiles manned by South Koreans; (4) improved aircraft control and warning; (5) maintenance of the current commitment of U.S. aircraft in Korea; (6) USAF and Navy aircraft in the Pacific, some with nuclear capability, for the defense of South Korea; (7) reduction of U.S. ground forces in South Korea to the requirements of the United Nations headquarters and the nuclear missile command; and after these measures had been taken, (8) reduction of the size of the South Korean Army to that of the North Korean.



major Chinese Communist aggression was a "180-degree change in the right direction." To the Air Force, this was not a new strategy since JCS plans assumed that nuclear weapons would be used when authorized by the President. The Sergeant-Pershing missile command, however, would be merely a costly duplication of nuclear capability either already in the Pacific or quickly available. The Air Force thought the best solution was to withdraw U.S. Army forces from South Korea and permanently assign two fighter squadrons armed with nuclear weapons. It also argued that the lower yield of its tactical weapons made them more suitable than the Sergeant or Pershing missiles for support of local ground troops.

By May 1963 JCS agreed that the nuclear strategy might deter large-scale Chinese Communist aggression in the Western Pacific and Southeast Asia but might not prevent lesser forms of aggression against which the United States would be unwilling to use nuclear weapons. An open proclamation of an intention to use nuclear weapons might also risk: (1) South Korean resistance to U.S. military control; (2) withdrawal by other U.N. members from Korea; (3) increased neutralism among U.S. allies in Asia; (4) Japanese withdrawal of U.S. rights in its ports and airfields; and (5) severe unemployment in South Korea if there were large reductions in its army. And JCS doubted that friendly forces in Asia were strong enough to permit any reduction in currently planned U.S. ground, naval, and air forces.

In January 1964 JCS tentatively approved the plan for Korea, apparently to satisfy the administration's desire to reduce MAP



expenditures and the adverse gold flow. But when the President asked in May about withdrawal of a division from Korea, JCS recommended postponement. One month later, the Office of the Assistant Secretary of Defense for International Security Affairs agreed with the recommendation because of unsettled conditions in Southeast Asia. Meanwhile, in October 1963, JCS decided, in view of the greater ability of U.S. forces to deploy quickly and a possible reduction in MAP funds, that Nationalist Chinese forces should be cut somewhat. While MAP support for the Nationalist army and navy could be reduced, the Nationalist air force would have to remain strong since the greatest threat was the Chinese Communist air force across the strait. JCS acknowledged that an increased ability to deploy forces might not be as reassuring to an Asian ally as the presence of U.S. military forces.

JCS had also suggested in May 1963 that Nationalist Chinese forces act as a strategic reserve for possible use elsewhere in Asia against the Chinese Communists. Secretary McNamara, who thought the idea plausible on military grounds, asked Secretary of State Dean Rusk for his views. Secretary Rusk advised strongly against using these forces in Southeast Asia where they would not be welcome except in a desperate situation. Nationalist China would not commit its forces except as part of an attempt to regain control of mainland China. The Chinese Communists realized this and, if Nationalists entered a conflict in Southeast Asia, would attack with all their power. Nationalist forces would be important during a major Communist aggression, however, and





Secretary Rusk cautioned against reducing them during the period of uncertainty in Peking following its break with Moscow. They tied down large Communist forces opposite Taiwan, and if the Communists attacked Korea or Southeast Asia, Nationalist feints along the mainland might draw off part of these forces from their main points of attack.

Secretary Rusk concluded that the introduction of Nationalist troops into Southeast Asia would be politically justifiable only in the event of a large-scale Chinese Communist attack.

The difficulties in discovering an effective defense in the Far East were caused by the traditional dread of becoming involved in a land war on the continent of Asia and the extreme reluctance to use nuclear weapons in anything less than all-out war. Although Secretary McNamara and General Taylor were strong proponents of keeping wars limited whenever possible, they favored using nuclear weapons at the outset of any large-scale aggression by the Chinese Communists. Behind this apparent paradox was a desire to deter the Chinese Communists without having to finance a conventional force that would be strong enough to do this. U.S. leaders had to consider the amount of money that it would be economically and politically feasible to spend, as well as the problem of the unfavorable balance of payments. The assumptions that the Chinese Communists would not be able to manufacture a significant number of nuclear weapons for several years and that the Soviet Union would not furnish them to the Chinese lent a certain credence to this strategy.





#### <u>USAF</u> <u>Limited War</u> <u>Concepts</u>

The Air Force concurred in the administration's decision to build up general purpose forces and become better able to resist military aggression of the conventional, nonnuclear variety and of the insurgency or guerrilla type. It had done some planning along these lines since 1958 and especially during the closing months of 1960, partly in response to the interest of the current Secretary of Defense Thomas S. Gates, Jr. \* But the Air Force had strong reservations about the strategy and program of OSD and JCS during the 1961-1964 period. It believed that they exaggerated the likelihood of large-scale conventional war and underestimated the threat of catastrophic general war. The Air Force also tended to believe that the forces that were available to deter or win general war could also deter or win limited war. USAF planners accepted the use of conventional forces when practicable, but they thought any war with the Soviet Union or the Chinese Communists would require early use of nuclear weapons unless the United States drastically increased its forces and the industrial base that supported them. To prepare adequately for conventional war in Europe would demand



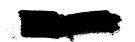
For a discussion of USAF attitudes on limited war, see Charles H. Hildreth, <u>USAF Logistic Preparations for Limited War, 1958-1961</u> (AFCHO, 1962), pp 1-17. For the interest of TAC and other USAF officials in better weapons for localized war since 1958, see Arthur K. Marmor, <u>The Search for New USAF Weapons</u>, 1958-1959 (AFCHO, 1961), pp 45-52.



substantially larger forces than OSD appeared willing to budget. The Air Force heartily approved the use of nuclear weapons at the outset of large-scale Chinese Communist aggression. For such an event it considered its nuclear-armed aircraft more economical and effective than Army missiles.

In April 1962 General LeMay, Air Force Chief of Staff, declared that a Joint Staff group's appraisal of general purpose force requirements did not furnish a sound basis for the fiscal year 1964 budget or 1964-1968 programs, as Secretary McNamara had anticipated. LeMay noted that initial airlift requirements for several situations were two to five times that provided for in current programs; proposed forces were sufficient for only the initial phases of a conventional conflict, not for one of indefinite duration; the Soviet Union's ability to use advanced nonnuclear weapons and its latest jet fighter (the Mach 2.5 Flipper) had been perhaps underestimated; and the vulnerability of European bases had not been fully taken into account. LeMay objected to the assumption that the West would lose sizable portions of territory that would later have to be liberated. He declared that JCS, the Supreme Allied Commander, Europe, and the North Atlantic Council had consistently rejected this strategy, the NATO nations would never approve it, and abandonment of the resolve to hold at the point of contact would reflect lack of will on the part of the United States.

Despite these objections, Secretary McNamara in November 1962 used the proposals in his budget and program recommendations to





the President. Air Force Secretary Eugene M. Zuckert told Secretary McNamara that although he agreed with the objective of increasing U.S. ability to meet a wide range of military contingencies and getting a better return for defense expenditures, he supported the Air Staff in disagreeing with some phases of the program. While supporting modernization of the approved 21-wing tactical fighter force, he thought it insufficient and recommended at least 25 wings. Secretary Zuckert believed the Cuban crisis of October 1962 had demonstrated that 21 wings could not adequately support a prolonged unanticipated contingency and at the same time maintain commitments elsewhere. And the current narrow production base did not provide capacity for rapid expansion.

The Air Force also believed Secretary McNamara had not provided sufficient airlift forces. Secretary Zuckert suggested at least six more squadrons. Reflecting USAF doubts about extensive large-scale conventional warfare, he thought much of the \$400 to \$500 million per year recommended for tactical nonnuclear ordnance could be better used elsewhere. And he cautioned against large-scale tests of Army concepts in which that service would provide much of its own airlift. The Air Force, he said, was developing highly improved methods of furnishing airlift support to the Army, and this encroachment into USAF functions might be undesirable in the long run for U.S. defenses.

Secretary Zuckert had voiced what his service considered minimum requirements. The Air Staff believed much larger conventional forces than anyone had recommended would be needed to successfully hold





along the eastern border of West Germany against a precipitant Soviet attack. In December 1962 the Joint Strategic Survey Council (JSSC) estimated that about 4,500 aircraft would be needed on D-day, or 1,500 more than the NATO central region had available. This would require about 20 additional wings and 56,000 additional people.

Accepting these figures as reasonable, the USAF Directorate of Plans informed the JSSC that 20 new air bases would be needed to avoid overcrowding the 115 currently in use by U.S. and NATO forces.

A 90-day supply of nonnuclear aircraft ammunition would also be needed in the theater plus a 90-day supply in the United States. OSD had directed the Air Force to acquire a 90-day supply in this country, but except for 2.75-inch rockets left over from the Korean War, very little was as yet on hand. Daily petroleum, oil, and lubricant (POL) requirements for 4,500 aircraft was 6,285,500 gallons, substantially exceeding prestockage and pipeline capacities in central Europe. Replacement requirements for aircraft approximated 2,650 for the first month, 1,900 for the second, and 945 for each month thereafter. Assuming that it would take 36 months to reach a 945-per-month production rate, the United States would need about 36,670 aircraft on hand and from new production to fight three years.

Secretary McNamara did not recommend to the President the 25 tactical wings that the Air Force desired. He was convinced that the West equaled the Warsaw Pact nations in quantity and surpassed them in quality, was uncertain as to the number of tactical aircraft



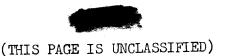
needed, and was perturbed by their high cost. He believed that it would be better to improve effectiveness and mobility than to buy more planes, and he continued to be impressed by the possibilities inherent in improved conventional munitions. In September 1963, however, he recommended adding three more wings by the end of fiscal year 1966. Except for its Army member, JCS had wanted to buy substantially more aircraft than McNamara had approved. The Secretary also recommended a substantial reduction in the number of tactical fighters stationed overseas, and he partially accepted the USAF aircraft shelter and rapid base repair proposals.

By the end of June 1964, the Air Force had carefully studied the problem of dual assignments of tactical aircraft units. In February 1964 a study group headed by the USAF Directorate of Operations analyzed the extent to which tactical units could perform simultaneously the tasks of counter air defense, interdiction, and close air support. It concluded that crew training would be a problem. While all crews could be trained in all tasks, they could not maintain a high proficiency in all. Overseas, crews would be assigned primary and secondary tasks, depending on whether their missions were static defense or tactical strike. The study group emphasized that each task was a full-time job which had to be performed during the same phase of conflict and could not be performed simultaneously by the same unit. In the United States, however, the Air Force believed crews could maintain multiple qualifications and be brought up to peak proficiency in one task within 15 to 30 days.





- (U) In a discussion of deterrence and the mission of general purpose forces in January 1964, Secretary Zuckert said that the United States had to establish priorities in the allocation of its defense resources since it could not defeat the adversary at every spot of his choosing. It ought to retain the ability to escalate a conflict to a level where it had the advantage. This country would have to keep a military advantage at the upper level of the "conflict spectrum"—the strategic deterrent—but it could not permit any significant gap below this level. Since general war would not be undertaken against the Soviet Union in response to pinpricks, the nation had to maintain extensive capabilities further down the conflict scale, through tactical nuclear warfare to various types of conventional warfare.
- (U) Secretary Zuckert believed that in certain places and circumstances the United States might face conflicts which it could not win, or could win only through gargantuan efforts that would damage other commitments and capabilities. At this point, he thought the nation would have to escalate, not to general "city-busting" war, but to new thresholds where it would hold a military advantage and be able and willing to negotiate. If the United States was prepared to escalate to its own advantage when there was no reasonable alternative, its deterrence would be effective for any form of conflict. Presumably, this statement conformed to OSD policy, and in retrospect appeared applicable to the situation in South Vietnam.



#### III. THE PROBLEM OF INTERSERVICE SUPPORT

- No phase of the buildup of general purpose forces was more important than improving coordination among the military services. In late 1960, Secretary of Defense Gates had criticized the Air Force and the Navy for developing separate and dissimilar tactical weapon systems. The Air Force had developed high-performance, high-cost planes; the Navy slower, low-flying, low-cost aircraft. As a result, the Air Force restudied its theories on tactical air support of ground operations and decided that its belief in a minimum number of versatile tactical weapon systems was justified. The Army and the Navy continued to argue for specialized weapons, each best fitted for a given task.
- (U) In February 1961 Gen. Thomas D. White, Air Force Chief of Staff, and Gen. George H. Decker, Army Chief of Staff, agreed that the Air Force should retain, largely for ground support, ll tactical squadrons previously scheduled to be dropped. The Army could select the types of aircraft to be used by these squadrons. After the Air Force provided data on eight separate planes, the Army decided that the Air Force should make the choice. In April both General White and Secretary Zuckert assured Congress that Army-Air Force cooperation was improving daily, citing the White-Decker agreement. General White also drew



attention to the composite air strike forces organized and stationed in the United States that could move immediately to Europe or the Far East in an emergency to provide tactical airpower.

(U) A major move toward coordination of tactical forces came on 28 December 1961 when the unified U.S. Strike Command (STRICOM) became operational with Army Gen. Paul D. Adams as Commander-in-Chief.

Its forces were drawn from the Army's Strategic Army Corps (STRAC) and the Air Force's Tactical Air Command (TAC). Its airlift units came from TAC and the Military Air Transport Service (MATS). STRICOM immediately prepared to respond quickly to threats against the peace anywhere in the world by reinforcing field commands or carrying out separate contingency operations as directed by JCS. STRICOM trained for its mission by engaging in field exercises and maneuvers that were designed to weld STRAC-TAC units into an effective combat team. The first exercise took place at the end of 1961.

# Improvements in Close Air Support

(U) In stressing the importance of close air support for Army ground troops, General LeMay assured Congress in February 1963 that, since all combat-ready units of the Army and TAC stationed in the United States were assigned to STRICOM where they were directed by a joint staff, the Air Force and the Army were working together more closely than ever before. He doubted that the mission had changed since World War II and Korea, but he believed that the Air Force





could learn to perform its mission better by developing new techniques and equipment. Supporting this approach, Secretary Zuckert pointed out that the Air Force had already made substantial progress in improving the ability of the C-123 and C-130 troop transports to use short, only partially improved airfields.

- (U) Secretary McNamara also pressed the Army and the Air Force to improve the quantity and quality of close air support, reconnaissance, and airlift without duplicating each other's functions. Although increasingly uneasy about his efforts to obtain more mobility for the Army, USAF leaders were somewhat reassured by the Secretary's insistence that conventional warfare would be difficult, if not impossible, to carry out without the air superiority, interdiction, and close support provided by the Air Force.
- Gen. Walter C. Sweeney, Commander of TAC, cooperated closely and loyally with General Adams to make STRICOM effective. He urged that while TAC retain nuclear weapons, it also achieve a strike capability that would insure U.S. success at any level of conflict below general war. This would permit the Air Force to retain its traditional tactical air mission, which some feared was in danger of being infringed upon by the Army. As part of the strike capability, there would have to be sufficient airlift for all contingencies.
- To provide better support for the Army, the Air Force established a tactical air reconnaissance center (TARC) at Shaw AFB, S.C., and a tactical air warfare center (TAWC) at Eglin AFB, Fla. It





assigned air liaison officers and air controllers to Army corps and divisions, provided each fighter squadron with 10 pilots qualified as forward air controllers, and reduced the time required to obtain tactical air strikes in battle areas. The Air Force furnished aircraft, crews, and loadmasters to help the Army conduct tests, and it developed an extraction system to unload transports quickly and a "Sky Hook" to enable an aircraft to snatch personnel or cargo from isolated areas. And the new F-4C fighter, which began to enter combat units at the end of 1963, was committed primarily to the close air support mission.

The establishment of TARC and TAWC was of paramount importance. Serious reconnaissance deficiencies revealed during the Cuban crisis of October 1962 and during Southeast Asia operations pointed up the need for more central direction of this activity. As soon as TARC was organized in July 1963, it examined the entire reconnaissance process, from the establishment of a requirement to analysis of the intelligence product. It began developing, validating, and testing tactical air reconnaissance equipment, tactics, procedures, and training. TARC studies on locating and evaluating intelligence signals helped the Air Force decide on subsystems for the RF-4C and the RF-111A. It tested an inflight film processing magazine, an infrared sensor, continuous strip and panoramic cameras, a radio antenna for the RF-101, and a portable film processor. General Sweeney emphasized the need for sensors capable of transmitting air-ground data, a field in which the Army was moving ahead. Lack of funds was an impediment, for General





Sweeney estimated that the necessary equipment would cost \$2.4 million.

TAWC, established in December 1963, developed and tested close support tactics and equipment. Under STRICOM supervision, it conducted a series of its own tests -- Indian River I, II, and III -extending through the summer of 1964. It also prepared for two joint tests directed by STRICOM--Goldfire I and II--to follow in the fall of 1964 and the spring of 1965. These were designed to provide a comprehensive evaluation of how airpower could be teamed most effectively with Army forces. STRICOM's training program was the principal means for creating a mobile, combat-ready force, trained as an integrated Army-Air Force unit and instantly available. Exercises varied in size and purpose but all stressed conventional warfare, counterinsurgency, rapid reaction, speedy buildup, and quick deployment. Large-scale exercises were programmed at three per year through 1963, but General Sweeney stated that this could not continue because of the cost. General Adams, STRICOM Commander, planned only two large ones per year after the end of 1963.

# Disputes Over Tactical Airpower

(U) During these preparations for limited war, serious differences of opinion arose between the Air Force and the other services over the most effective use of tactical airpower. Some of these differences extended as far back as World War II, but they arose with new





intensity between 1961 and 1964. Clearly apparent by 1962, they had still not been reconciled by the end of 1964. At the heart of the disagreements was the Air Force concept that the most effective means of attaining air superiority was to concentrate air units under one commander and destroy enemy aircraft and base facilities to keep enemy planes from reaching the battlefield. The Army and the Navy advocated the primacy of a defensive air umbrella over the battle area.

(U) The interservice dispute gave rise to argument over the proper types of tactical aircraft. The Air Force wanted high-performance, multi-purpose planes; the other services argued for aircraft designed specifically for close support of ground troops. High-performance planes, the Army and Navy argued, with some support from OSD, were suited for air defense and interdiction but not for close support. Airmen argued that fast jets could support ground troops more effectively than the slow conventional fighters of World War II and Korea,

<sup>\*</sup> Discrember 1962 Lt. Gen. Theodore W. Parker, Army Deputy Chief of Staff for Military Operations, went so far as to question the effectiveness of all tactical aircraft for gaining air superiority and for interdiction in future conventional wars. Admitting their effectiveness in World War II and Korea, Parker declared that this was gradually decreasing because of the growing advantages of surface-to-air missiles. He thought such missiles would soon impose unacceptable losses on fighter aircraft and that by 1967 these fighters could have little effect on the outcome of a nonnuclear war, specifically one in Europe where the United States would be opposed by a well-armed enemy. (Memo, Lt. Gen. Theodore W. Parker, DCS/Mil Opns, USA to Chmn, JCS, 5 Sep 62, subj: Rpt of Chmn's Working Gp on ...Gen Purpose Forces.)



but they never convinced the doubters in the Army, Navy, and Congress. Congressman Daniel J. Flood of Pennsylvania, for example, thought jets flew so fast that their crews could not locate enemy troops, let alone attack them effectively. The strongest case for special purpose planes pertained to special air warfare in remote, jungle areas where there was no air opposition. The Air Force admitted that modified low-performance aircraft could serve a useful purpose in such cases. It believed, however, that older obsolescent planes could do this job and no new ones needed to be developed. Secretary McNamara and Dr. Brown decided, nevertheless, that a specialized plane had merit for jungle warfare, and at the end of 1964 the Navy was developing a light attack and reconnaissance aircraft (LARA) for this purpose.

(U) The most prominent Army-Air Force dispute during these years arose over Army plans to increase mobility, gain greater control of close air support and reconnaissance, and substantially increase the number and size of its aircraft. The Army had been dissatisfied with its air arm since the Key West agreement of 1948 and, particularly, since the Pace-Finletter agreement of November 1952 which had limited it, except for helicopters, to planes of 5,000 pounds or less. It had been unable to improve its position during the 1950's when the Eisenhower administration placed primary emphasis on strategic airpower, an emphasis which had also restricted USAF tactical strength and modernization. As a result, the Air Force could not supply the close air support and airlift the Army wanted. These missions received a





low national priority until 1961 when the Kennedy administration began to press for greater power to wage conventional war.

This Air Force weakness gave the Army an opportunity to push its own concepts. After Secretary McNamara directed the Army in April 1962 to study its mobility requirements, a board headed by Lt. Gen. Hamilton H. Howze recommended in August the creation of five air assault divisions, plus a number of air combat cavalry brigades, air transport brigades, and corps aviation brigades. These units would not only greatly increase the number of Army aircraft but also assume some of the close support, reconnaissance, and air logistic functions of the Air Force.

Meanwhile, in June 1962, the Air Force had established a board headed by Lt. Gen. Gabriel P. Disosway, Vice Commander of TAC, to examine means of providing better air support to the Army. When the Howze Board report appeared, the Disosway Board was assigned the task of scrutinizing the new Army concepts. It made its report to the USAF Chief of Staff in September. Then, in February 1963 McNamara asked the Army and Air Force to restudy means of improving close air support. On 27 March General LeMay assigned TAC responsibility for the Air Force portion of this study. General Sweeney set up a board headed by Maj. Gen. Fred M. Dean, Deputy Commander of the Twelfth Air Force, which met intermittently with a counterpart Army board at Fort George Meade, Md., for more than four months. The Air Force board reported to Headquarters USAF on 15 August.



- Although the Army and the Air Force agreed on many aspects of close air support and mobility, the various board reports revealed that the two services could not resolve their differences on airground command relationships or on types of weapons needed. The Air Force believed acceptance of Army proposals would place it in a purely supplementary role. It would not agree to giving field armies or independent corps control over Air Force units. It stood firmly against development in the 1960's of a specialized aircraft for close support. Until an effective vertical or short take-off and landing (V/STOL) plane could be developed, TAC did not want to spend time and money on any new fighters except the F-4C and the F-111A. In these decisions, the Air Force boards and TAC were supported by Secretary Zuckert.
- (U) OSD adopted a "wait and see" attitude toward the major Army concepts. In February 1963 Secretary McNamara told Congress that, although new types of units could significantly increase Army capabilities, they were so revolutionary and so closely related to the Air Force mission that he wanted the concepts tested first. He increased procurement of Army aircraft to improve the mobility of existing forces and to conduct tests of Howze proposals. But the Secretary said that the Howze Board did not take into full account how the Air Force might contribute to Army mobility. And he had serious doubts concerning the need for much of the transport capacity that would be furnished by the new Army air-transport brigades. With the C-141, the C-130E, and modifications



of other transports, the Air Force might be able to deliver supplies directly to Army units. These planes possessed good STOL characteristics, and the Air Force was rapidly improving its skills in logistic support.

(U) Referring to contentions that the Air Force had not met Army requirements for mobility and fire support, Secretary McNamara thought that this was probably true in the past. But he seemed to believe that the Air Force could better meet these needs in the future than an expanded Army. The Air Force had neglected these functions, he held, because of a tight dollar ceiling and the priority given strategic deterrence. He thought this no longer true, since service budgets were now considered in terms of DOD missions rather than separately. General LeMay, he added, was sincerely interested in providing better support to the Army. General Taylor agreed, citing the new budget system and the creation of STRICOM.

To the Air Force, Army increases in aircraft were inroads into USAF tactical and airlift missions. Early in 1964, General LeMay pointed out that the Army's air arm had increased from about 200 planes in 1947 to about 6,000 in 1964. He stated that the number would expand

<sup>&</sup>quot;(U) Unconvinced, Congressman Flood declared that the Air Force was only seeming to cooperate because word had come down from the White House and OSD that there would be more emphasis on limited war. "So the Air Force, beginning with LeMay, very hurriedly, says, 'Look, we had better get into this act or there ain't going to be no Air Force at all. We will be down under ground wet nursing missiles."



calling this a duplication, he maintained that the Air Force could do the job the Army wanted done more effectively and economically. Although Gen. Earle G. Wheeler, Army Chief of Staff, denied any duplication of the USAF mission, he admitted that the Army had 6,000 planes (plus 8,000 pilots), was accelerating pilot training, and wanted more twin-engine aircraft.

Within JCS the impasse over proper assignment of aviation responsibilities continued through 1964. The determination of how much close air support and airlift would be supplied by each service awaited McNamara's analysis of the results of STRICOM tests. On 23 August 1963, JCS had approved a STRICOM program for joint tests of both Army and Air Force concepts, but in March 1964, with OSD approval, joint tests of the Howze proposals were postponed indefinitely and the Army was permitted to test its own concepts during 1964.

Eglin AFB in exercises Indian River I and II and then at Fort Leonard Wood, Mo., from October to December in Goldfire I. The 1st Infantry Division worked with TAWC on the field tests of USAF principles. The 11th Air Assault Division conducted extensive tests at Fort Benning, Ga., in an attempt to justify the ideas advanced in the Howze Board 11 report.

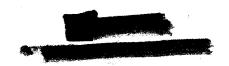
Although STRICOM had not reported officially on results of Goldfire I by the end of 1964, the Air Force thought its concepts

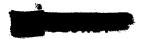


had been proven sound. But the Army remained unsatisfied with the Air Force's ability to provide tactical mobility. It claimed that the Air Force used too few helicopters, too much engineering equipment (including some items that had to be moved overland rather than airlifted), and too many aircraft to support a single reinforced brigade. The Army thought the C-130 impractical for forward support since the Air Force would not move it far enough forward. The Army favored helicopters for such close-in work. It also thought that air supply by parachute and "sky hook" extraction was unrealistic. At the same time, the Fort Benning tests revealed weaknesses in Army concepts, especially in vulnerability of aircraft, low-level navigation, and high costs.

Advance reports on the fiscal year 1966 DOD budget indicated that Secretary McNamara would approve only a part of the Army's plan to organize air assault divisions. No provision was made in the new budget for the 20,000 men in the experimental 11th Air Assault Division or for continuation of the experiment, which would have required substantial increases in equipment—particularly helicopters and fixed—wing aircraft. The Army did receive money for some of the new helicopters and planes it wanted and its aviation requirements continued as a subject of study in 1965.\*

<sup>\*</sup> On 16 June 1965, however, Secretary McNamara announced that he had authorized the Army to organize the 1st Cavalry Division (Airmobile). Formed from the 1st Cavalry Division and the recently abolished 1lth Air Assault Division, the new unit would be equipped with 434 aircraft, almost all of which would he helicopters. (DOD News Release No. 404-65, 16 Jun 65.)





# Special Air Warfare

(U) After Premier Khrushchev's January 1961 speech on "wars of national liberation," the United States paid increased attention to counterinsurgency, later referred to as special air warfare. President Kennedy asked Congress for "strengthened capacity to meet limited military adventures and threats to the free world that are not large enough to justify the label of limited war." He asked the services to improve their abilities to deal with guerrilla forces, insurrections, or subversions, and to train local allied forces. The President wanted an effort devoted to this challenge comparable to preparations for conventional warfare. 13

The Department of Defense at first assumed that the primary military contributions of special air warfare (SAW) activities would be the establishment and maintenance of internal security, including civic action aimed at political and socio-economic reform in countries threatened by Communist subversion. Although the Air Force made some effort in this direction during 1961, no military service did enough to satisfy the President and the Secretary of Defense. Near the end of the year, General LeMay directed the Air Staff to set up a task force to review accomplishments and make recommendations. On 11 January 1962, before the task force reported, President Kennedy asked the services to make a greater effort, and the USAF group was directed to present a plan of action that would insure effective preparations for counterinsurgency. In February an Air Force plan outlined SAW responsibilities,

describing more than 230 actions that needed to be taken relating to planning, organization, training, equipment, and doctrine. About this time, General LeMay declared that the Air Force had not participated sufficiently in DOD counterinsurgency activities, suggested that it press for additional programs and funds, and directed his staff to keep the President informed of USAF capabilities in this type of conflict. The Air Staff exerted considerable effort to keep all echelons abreast of new developments. It stepped up training, established SAW orientation courses, and set up a special course for USAF officers in South Vietnam. Secretary Zuckert doubted, however, whether President Kennedy would be satisfied, and in June 1962 the President proved that these doubts were well founded.

Meanwhile, a major USAF contribution was the creation on 27 April 1962 of the Special Air Warfare Center (SAWC) at Eglin AFB. Located on Hurlburt Field, part of the Eglin complex, SAWC developed doctrine for employment of tactical airpower, trained crews, and adapted older aircraft to this new purpose. The planes included C-46's, C-47's, B-26's, T-28's, U-10's, and the former Navy aircraft, the A-1E. At SAWC the 1st Air Commando Group (later raised to wing level) was created and trained and the Combat Applications Group



<sup>\*</sup> For a comprehensive review of this subject, see Charles H. Hildreth, USAF Counterinsurgency Doctrines and Capabilities, 1961-1962 (AFCHO, 1964) and Hildreth, USAF Special Air Warfare Doctrines and Capabilities, 1963 (AFCHO, 1964).

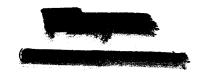


subsequently a Wing) carried out experiments with both old and new nonnuclear munitions.

when the training of local nationals in air operations and provided air support for the expanding Army special forces. By the end of June, major SAW detachments were in South Vietnam and Panama, and mobile training teams (MTT's) were in Greece, Saudi Arabia, Mali, and Iran. Most of these efforts were carried out jointly with the other services. On 24 July 1963, President Kennedy informed JCS that he was satisfied with the work of the MTT's but thought larger teams would make more favorable impressions on foreign countries. The Air Force augmented the program and included MTT's in its fiscal year 1964 Military Assistance Program. In July 1963 the JCS approved a composite SAW squadron for Europe, and in October SAWC received responsibility for managing the MTT's.

In September 1963 Secretary McNamara approved transfer of 75 C-123's to SAW forces by fiscal year 1965. A month later he approved an increase in SAW squadrons from six to 10. By the end of June 1965 the Air Force was scheduled to have 3 composite SAW squadrons with 84 aircraft in PACAF, 1 with 30 aircraft in USAFE, 1 with 46 aircraft in the Southern Command,\* and 5 with 93 aircraft in TAC--a total of 10 squadrons and 253 aircraft.

<sup>\*</sup>The U.S. Caribbean Command became the U.S. Southern Command on 6 June 1963.





- Meanwhile, during the latter half of 1962, major doctrinal differences between the Army and Air Force regarding special air warfare had become pronounced. In May the Air Force had submitted to OSD its first proposal to expand SAW forces. It had been based on the requirements of the Commander-in-Chief, Europe (CINCEUR), Commander-in-Chief, Pacific (CINCPAC), and the Commander-in-Chief, Caribbean (CINCARIB). The Air Force requested two air commando wings in the United States and a permanent composite squadron in Panama, specifically oriented toward Latin America.
- McNamara asked the Army for its proposal, and the reply included a request for a special warfare aviation brigade and a number of aviation detachments. Believing counterinsurgency chiefly a ground operation, the Army opposed spending large sums on USAF special purpose air forces. It argued that they duplicated existing Army capabilities. But the Air Force maintained that each service should contribute those skills peculiar to its mission, and that close support, airlift, and the dropping of troops were USAF tasks in any type of conflict. It appeared to the Air Force that the Army intended to conduct air-ground support, airborne personnel movement, resupply, and psychological warfare. The Air Force believed it could do these jobs better than the Army because it had the experience, training, facilities, and crews. It supported Army efforts to improve its ability to wage special warfare on the



ground but objected to more Army planes and aircrews. Increased requirements for Southeast Asia and Latin America, strongly supported by CINCPAC and CINCARIB, led Secretary McNamara to grant the Air Force larger SAW forces in November and December 1962, March 1963, and finally to permit establishment of the 10-squadron force in September.

- (U) In late 1962 and early 1963, congressmen began to question the effectiveness of the aircraft that the Air Force was using in South Vietnam to supply, train, and advise the Vietnamese Air Force in its struggle with the insurgent Viet Cong. In February 1963, Congressman George H. Mahon of Texas asked whether the Air Force was ineffective in South Vietnam and whether USAF units might not be withdrawn. General LeMay and Secretary Zuckert declared that Gen. Paul D. Harkins, Commander of the Military Assistance Command, Vietnam, thought fixed-wing aircraft were necessary there and wanted more of them. The Department of State was reluctant to approve bombing and strafing that might hurt friends as well as foes, but the U.S. Ambassador to South Vietnam, Frederick E. Nolting, supported continuation of interdiction operations. Secretary Zuckert admitted that innocent people might be hurt and killed and criticism grow as more airpower was used against the Viet Cong, but added that this was one of the perils of war, even when men fought with spears.
- (U) In February 1963 Congressman Robert L.F. Sikes of Florida said he understood USAF officers did not support the use of older



<sup>\*</sup>For discussion of USAF problems in Vietnam, see Jacob Van Staaveren, USAF Plans and Policies in South Vietnam, 1961-1963 (AFCHO, 1965).



aircraft in SAW operations and insisted on high-performance fighter-bombers. Secretary McNamara did not think this the case, for he knew that General LeMay believed older planes were valuable and that SAW forces were trained to employ them. The Secretary added that the Air Force believed some types of special warfare would require more sophisticated aircraft, and he agreed that this was probably true.

(U) During these hearings, Congressman Flood argued that USAF jets and other fixed-wing aircraft should not support Army troops in the jungle because they could not stay over the targets long enough to identify what they were shooting at or dropping bombs on. He said Army "choppers" (helicopters) and light planes should provide this support. General LeMay replied that helicopters could not survive air resistance or even heavy ground fire. Furthermore, they were not suitable platforms for machine guns or rockets because they vibrated so much that gunners firing from them could not hit anything. Light planes could provide good battlefield surveillance if there was no air resistance. Otherwise, they needed high-performance aircraft to protect them. General LeMay insisted that the jet could do a much better job of support than its opponents would admit.

Among SAW fighter-bombers, only the A-lE and the B-26, according to TAC, carried an adequate load of ordnance. The A-lE was best, but the B-26, modified for SAW operations, carried a respectable load and could also be equipped for photo reconnaissance. The failure of a wing of a B-26 aircraft in South Vietnam on 16 August 1963 led to

careful wing inspections, restrictions of weight carried on wings, and cessation of accelerating maneuvers. The number of B-26's at SAWC was barely sufficient for fiscal year 1964 needs. At the end of December 1963, the Air Force was rehabilitating about 40 B-26's for special air warfare by giving them new engines, propellers and gunsights, adding the KC-135 wheel, brake, and antiskid system, and providing a modern communication system. 18

(U) The Air Force studied possible replacements for the A-lE since inventories of this plane were limited. It cooperated with the Director of Defense Research and Engineering and the Navy to make the LARA\* a useful plane but was not very enthusiastic about the likely outcome. Lt. Gen. James Ferguson, USAF Deputy Chief of Staff for Research and Development, said that helicopters had clearly demonstrated the value of short take-off and landing in special air warfare, but the usefulness of the "choppers" was limited by their lack of speed and range. It appeared to him that only a superior-performance V/STOL aircraft, for which the Air Force was readying proposals, could fill the need.

Throughout 1964, the primary USAF special air warfare task consisted of training and advising local forces in South Vietnam.

Preparations were under way to change this, however, when national strategic policy directed. After Secretary McNamara returned from South Vietnam in March, he made 12 recommendations for reversing the

<sup>\*</sup>See pp 38 and 73.



deteriorating situation in that country, and all were approved by President Johnson. Most of the recommendations called for accelerating programs already in effect, but one went much farther. It directed the services to be prepared, on 72-hour notice, to initiate Laotian and Cambodian "border control actions" and, on 30-day notice, to apply graduated overt military pressure on North Vietnam.

Ey the end of March CINCPAC had prepared a plan, and JCS had told the Secretary that only military action against Hanoi could quickly turn the tide that had been running against South Vietnam.

The Joint Chiefs suggested air and naval action. On 14 April 1964,

General LeMay and Gen. Wallace M. Greene, Commandant of the Marine

Corps, informed the Secretary that they supported air and naval strikes against North Vietnam because they believed this would stop rebel attacks in the South. General Taylor, JCS Chairman, General Wheeler,

Army Chief of Staff, and Adm. David L. McDonald, Chief of Naval

Operations, opposed military action at that time. It was not until

February 1965 that the United States began putting the new policy into effect.



#### IV. BUILDUP OF TACTICAL FORCES

President Kennedy's demand in March 1961 that conventional military forces be strengthened to give the nation "a wider choice than humiliation or all-out nuclear action" set the Secretary of Defense, JCS, and the three services to work on a thorough reappraisal of U.S. defense posture. In April Secretary McNamara asked JCS to determine to what extent the conventional forces ought to be strengthened and in what manner. The first JCS report, completed in May, was not acceptable to the Secretary because of wide service disagreements, but he decided by September on substantially more tactical aircraft than the Air Force had proposed for its fiscal year 1963 budget.

In October McNamara instructed the Air Force, in cooperation with Army, to determine: (1) the number of fighter-bombers needed to perform the worldwide tactical air mission, including close support of 14 active Army divisions; (2) the balance between multipurpose and single purpose, close support aircraft; (3) a means of re-equipping ANG squadrons; and (4) the amount of money that would be required. This noticeable shift of emphasis marked the beginning of a buildup that absorbed a significant portion of the Air Staff's effort over the next three years. It involved planning a sizeable increase in wing strength, procurement of large numbers of new aircraft, and development and purchase of large quantities of nonnuclear munitions. 1





### Wing Strength

The Air Force study, completed late in November 1961, recommended that tactical aircraft strength be raised to 23 wings with 1,695 aircraft and that the ANG should remain at 7 wings with 525 aircraft. Specific composition of the forces would depend on the rate of modernization. New, high-performance aircraft, designed to perform the air superiority, interdiction, and close support roles, should be obtained as rapidly as possible, but no new planes should be procured specifically for close support. Air Force planners believed that aircraft already on hand could most economically satisfy special needs.

The planners wanted immediate procurement of the F-105 and the F-4H (later F-4C), beginning at the rate of 40 and 35 per month, respectively. A decision on the desired quantity of each of these aircraft could be made after production schedules, performance, and logistic requirements had been compared. Those F-100's and F-101's replaced in the active inventory by the newer aircraft would enter ANG wings released from active duty after the Berlin crisis was over.

The Air Force estimated the cost of this program at approximately \$13.1 billion-\$1.5 billion in fiscal year 1962, \$2.4 billion in 1963, \$2.7 billion in 1964, \$2.4 billion in 1965, \$2.1 billion in 1966, and \$2.0 billion in 1967.

At the end of 1961 the USAF tactical fighter and light bomber force consisted of approximately 18 wings--7 wings with 504 aircraft

<sup>\*</sup>Tactical forces had recently been strengthened by the call-up of 11 ANG squadrons to meet the Berlin crisis of 1961-62.





under TAC in the United States, 7 with 498 aircraft in USAFE, and 4 with 273 aircraft under PACAF. The oversea forces, a major portion of the deterrent force of the unified theater commanders, would strike the tactical targets that would normally be attacked in either a nuclear or a conventional conflict. In late 1961 they were committed to strike with nuclear weapons.

In the United States, TAC maintained about half its force in high readiness, while the other half was required to support this readiness through training, exercise, and replacements. Normally, TAC kept  $2\frac{1}{2}$  wings, consisting of approximately 180 aircraft, ready for deployment in the Composite Air Strike Force (CASF), but it was not able to maintain this strength during the Berlin crisis because so many units were in Europe. One wing was normally on permanent rotation to Europe.

Spokesmen for Secretary Zuckert believed, even without regard to the Berlin crisis or OSD's new directive to furnish close air support for 14 Army divisions, that USAF tactical forces were stretched very thin. They thought CASF strength ought to be increased by five squadrons—90 aircraft—to a total of 15. In addition, two more wings were meeded in the Far East, preferably in or near areas where limited conflict seemed most probable.

The Army agreed with the USAF proposal except that it wanted more aircraft designated exclusively for close support. Army strategists asked for three squadrons of tactical aircraft per division for

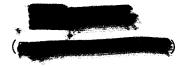




close support alone, whereas the Air Force thought three squadrons per division would be enough for all three tactical roles. Nevertheless, Secretary of the Army Elvis J. Stahr, Jr., supported the Air Force's recommendation of 23 tactical fighter wings, since this went a long way toward meeting Army requirements. Stahr stated that the Army's main concern was that close support be where it was needed, when it was needed, and under a system of operational control that made it responsive to Army needs.

This concern reflected the long-standing difference on the proper use of tactical airpower, which the Army and Air Force could never resolve. The Air Force argued that, since ground units could not operate in an area where the United States or its allies did not have air superiority, gaining and holding this superiority was the first job of tactical air units. Close support was not an entity apart from air superiority and interdiction, and it was impossible to predict what percentage of the air effort would have to be devoted to close support at any given time. USAF planners believed, on the basis of experience, that one tactical wing, or slightly less, per division should be the normal theater complement in a conventional limited war. They thought the Army's larger estimate extravagant.

The Air Force was convinced that multiple capabilities could be achieved in one tactical aircraft and that such a plane would be



<sup>\*</sup> See pp 36 & 37.



the most economical and effective one to buy. It opposed procurement of a new, cheaper aircraft for special purposes. Technology and dollars should be used to develop the most modern weapons that could cope with the whole range of tactical requirements. When special missions could be performed with aircraft of lesser capability, these would always be available in the aging inventory.

Secretary McNamara went part of the way with the Air Force's recommendations. He approved an increase in tactical fighter wings from 16, as of July 1961, to 21 to be fully operational by January 1964.\*

Believing that tactical air forces of the western powers surpassed, at least in quality, those of the Warsaw Pact nations and that Southeast Asia could be defended with resources on hand, McNamara concluded that the United States should devote its efforts toward increasing the combat effectiveness of 21 wings before increasing their number beyond this figure. He also approved procurement of new aircraft, modernization of existing wings, procurement of additional conventional munitions, construction of aircraft shelters in Europe, and an increase in the number of reconnaissance squadrons from 14 in 1961 to 18 by fiscal year 1966 and 20 by fiscal year 1967.

Meanwhile, in November 1962 the Air Force had raised its estimate of the requirement for tactical aircraft to 25 wings. It recognized the necessity for modernizing and protecting the 21 wings recommended by OSD. But it believed large numbers of tactical planes would be needed very early, even in conflicts of low intensity. It



<sup>\*</sup> See Appendix I.



wanted to go ahead with the modernization of the aircraft inventory, the building of shelters, and the increase to 20 reconnaissance squadrons, but more rapidly. Air Force planners argued that expansion to 25 wings could be achieved without sacrificing the modernization program. They noted that the Joint Strategic Objective Plan (JSOP-67) called for 25 wings by 1967 and that recently JCS, because of the reorientation toward conventional warfare, had approved a speed-up to obtain this force a year earlier. USAF planners believed a 25-wing force might enable the United States to wage a sustained nonnuclear war, particularly if there were a sizeable increase in the military production base. They remained unconvinced, however, that a large enough tactical force could be built to sustain indefinitely a nonnuclear conflict of substantial intensity. 7

During 1963 the Air Staff continued to press for the larger fighter force. In April its program change proposal called for 25 tactical fighter wings and modernization of the 12 F-102 interceptor squadrons in Europe with new F-4C's. Secretary Zuckert approved the proposal and submitted it to OSD, at the same time asking his staff to provide greater justification. In September 1963 Secretary McNamara again went part of the way with the Air Force, approving an increase to 24 tactical wings by the end of fiscal year 1966.

This was not as large an increase as it appeared on the surface, since Secretary McNamara proposed to re-equip the theater air defense squadrons with new F-4C's previously programmed for the tactical



<sup>\*</sup> See Appendix II.



fighter wings. The Air Force wanted F-4C's for 14 tactical wings, plus the theater air defense squadrons, currently armed with aging F-102's. The OSD decision delayed retirement of F-100's from the active force until the end of fiscal year 1970, two years later than previously planned. At this time, the Secretary also decided to relieve tactical fighters of their responsibility for theater nuclear quick reaction alert and turn it over to Pershing and Polaris missiles. Although JCS had tentatively approved JSOP-68 calling for a buildup to 28 tactical wings by the end of fiscal year 1968, all members except the Air Force Chief of Staff supported McNamara's position.

The Secretary of Defense based his decision of September 1963 to limit tactical strength to 24 wings and slow down the procurement of new planes principally on the consideration of expense. To purchase all the new aircraft the Air Force and JCS recommended would have cost an extra \$1.6 billion. Repeating his arguments that the West already had tactical superiority over the Communists and that nobody could state accurately how many tactical aircraft were enough, he doubted that a larger force was worth the price. He believed that funds available for general purpose air forces could more profitably be spent on improved conventional munitions and on preparing oversea bases to survive surprise air attacks.

In January 1964 the Air Force raised its objective to 26 wings, partly to modernize oversea air defense squadrons without reducing the offensive power of the tactical fighter force. But by



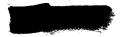
<sup>\*</sup> See pp 15-16.



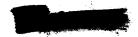
October it had reduced its request back to 25 wings--15 to be F-4's. Meanwhile, in February JCS recommended that the rate of modernization with F-4's be reexamined and that the total not go beyond 14 wings. On 15 October 1964, Secretary McNamara approved continuation of the 24-wing program but postponed achieving it until 1968--a two-year slippage. He also cut the previously-approved 14-wing F-4 force to 12 wings--6 F-4C and three each of the improved F-4D and F-4E. McNamara approved the full 20-squadron reconnaissance force by 1967 with 14 squadrons to have RF-4's. He also approved continued development of the F-111A (TFX) and purchase of 55 aircraft, starting a buildup toward 10 wings. These would begin to enter the active inventory in 1967. The Secretary again restricted the speed of Air Force tactical buildup for the same reasons he had given in September 1963. By October 1964 he was also doubtful about multipurpose tactical aircraft and pressed the Air Force to undertake further work on lower-performance, lower-cost planes specialized for close support of Army ground troops. 10

## Advanced Aircraft

Until the fall of 1961 the Air Force generally regarded the F-105 as the best all-around plane to succeed the F-100 and become the backbone of the tactical force during the 1960's. In March 1961, however, Secretary McNamara questioned the F-105's suitability for



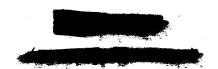
<sup>\*</sup>See Appendix III.



conventional war because it had been developed mainly for delivering tactical nuclear weapons. Nevertheless, in April General Thomas D. White, USAF Chief of Staff, and Secretary Zuckert assured Congress that the plane would significantly improve U.S. capabilities for limited war, for it could attack targets in all kinds of weather, perform exceptionally well in air-to-air combat, and deliver nuclear or nonnuclear munitions against ground targets. They expected the F-105 to add substantially to the Air Force's ability to support the Army in ground battle.

In that month, however, Maj. Gen. Glen W. Martin, Secretary Zuckert's military assistant, reported a belief within OSD that the F-4H, a twin-engine, two-place McDonnell aircraft developed for the Navy, was superior to the F-105, largely because of its shorter take-off. Also, unexpected technical difficulties had arisen in the F-105. By October 1961, Secretary McNamara and Dr. Brown had questioned the effectiveness of the F-105 in relation to its cost, and Senator W. Stuart Symington of Missouri was concerned about its cost. Dr. Brown seemed to want to substitute a slower Navy plane, the A4D-5, but the Air Force successfully averted this because of the plane's low performance.

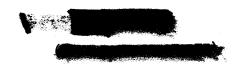
As OSD cost studies continued and technical difficulties multiplied, it became clear that the F-105, of which about 120 were already in the inventory by June 1961, would take second place in the tactical force behind the F-4H. The first conclusive evidence came in December 1961 when Secretary McNamara decided to adopt the





reconnaissance version of the F-4H, and Assistant Secretary of the Air Force Joseph S. Imirie canceled the RF-105 program. On 17 February 1962, Secretary McNamara stated that he would terminate the F-105 program in fiscal year 1963, thereby allowing only seven F-105 wings for the active force and permitting the transfer of two F-105B squadrons to the ANG. This was the prelude to the Secretary's decision to procure 14 wings of the F-4H, henceforth known as F-4C. The last F-105D was accepted by the Air Force in January 1964.

In retrospect, the decision to procure the F-4C rather than depend mainly on the F-105 appeared to be a wise one. The 516 F-105's on hand at the end of 1964 were TAC's highest performance aircraft. The plane had a speed of more than Mach 2, a combat ceiling of about 49,000 feet, a combat radius of 200 nautical miles, and a load-carrying capacity of approximately 12,000 pounds of nuclear or nonnuclear ordnance. But the plane had not achieved the status expected of it. In December 1963 few more than 70 percent of the F-105's were combat ready and the number out of commission for unscheduled maintenance remained high. Deficiencies included yawing, a defective main fuel shutoff valve, and lack of cool air to disperse excessive heat generated by electronic gear. These deficiencies contributed to a high incidence of flameout and an excessive number of accidents--157 mishaps between July 1962 and September 1963. There was some evidence of unsatisfactory supply and engineering support from the producer, Republic Aviation Corporation.



- Between February and July 1963 the Air Force obtained 27 F-4 aircraft on loan from the Navy and used them in an intensive crewtraining program. Before the end of the following June it had received 54 of its own F-4C's, and it planned to obtain another 236 in fiscal year 1965. As early as the fall of 1962 the Air Force and OSD agreed that the F-4C was the best all-around tactical aircraft in the world. It had a speed of Mach 2.16, a combat ceiling of more than 55,500 feet, a combat radius of 380 nautical miles, and a bomb capacity of about 12,000 pounds. Intelligence reports indicated that the Soviet Flipper exceeded it slightly in speed and rate of climb, but the F-4C had much greater range and versatility. It could deliver twice the payload of the F-100, which it was supposed to replace; could operate from a 5,000foot runway, half that required for the F-100; and it promised to be an excellent air superiority and defense fighter. For these reasons, the Air Force was keenly disappointed when OSD reduced the F-4C procurement rate.14
- (s) As fiscal year 1964 opened, the Air Force and OSD announced plans to improve the F-4's ability to operate effectively at low altitudes. Radar systems were being developed to enable the plane to look down on targets from low altitude in all kinds of weather and to intercept enemy aircraft coming in at low levels. One new plane was called the F-4D and another, equipped for low-level interception, the F-4E. Although some congressmen feared that the Air Force had started the



"traditional Christmas tree engineering" that would seriously reduce the plane's performance, Secretary Zuckert assured them that this was 15 not true.

- meet tactical fighter requirements of the three services with one aircraft. For some months before January 1961 the Air Force had tried to get OSD approval to go ahead on the TFX, but had been unsuccessful because the Army and Navy did not accept the theory that one aircraft could perform all tactical missions. They wanted one plane for air superiority and another for close support. In June 1961, Secretary McNamara directed the Air Force to proceed with an air superiority fighter for both the Air Force and the Navy that would eventually replace the F-105 and the F-4. More than a year later he decided the TFX would have an air-to-ground mission as well. The Secretary hoped to save over \$1 billion by standardizing on one plane. He said there had not been much saving in the case of the F-4 because OSD had standardized too late--after the Air Force had already procured the F-105. 16
- (U) The most advanced feature of the TFX was the variable geometry wing, which could be held forward for takeoff and landing at low speeds and swept back for high speeds in flight. This aeronautical development, plus improved engines, made possible a fighter that could operate effectively at high or low speeds from carriers as well from shorter and cruder runways. This two-engine, two-pilot plane

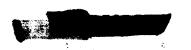




would have a combat operating radius of more than 800 nautical miles, a combat ceiling of 61,500 feet, a speed of Mach 2.5, and be able to dash, fully armed, 200 miles to a target at a speed above Mach 1.2. The TFX was to be developed in three versions: the F-lllA and RF-lllA for the Air Force and the F-lllB for the Navy. The latter would be used as a long-range fleet air superiority weapon. The F-lllA made its first flight from Carswell AFB, Tex., on 21 December 1964 and first moved its wings in flight on 6 January 1965. It was expected to enter the Air Force inventory in 1967.

Many people in the Air Staff and TAC looked forward to V/STOL aircraft to make possible the so-called "infinite base concept." This presupposed operating from so many bases in the combat area that the enemy could not attack them all. Fighters would be based in forward areas and supported by VTOL transports. Some planners believed that tactical fighters could survive in future wars only by operating in this fashion. Others held that VTOL aircraft would not be economically feasible during the foreseeable future. They would be too slow and vulnerable because they would weigh from two to four times as much as STOL aircraft doing the same job. They also argued that the presumed ability of the F-lll and some transports to use short, hastily-prepared fields had delayed indefinitely the day when VTOL planes could be justified on the basis of "cost effectiveness."

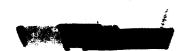
Nevertheless, the military services, OSD, and aircraft manufacturers conducted continuous experiments with V/STOL aircraft.





Curtiss-Wright Corporation had the X-19A; Ling-Temco-Vought had the XC-142A, which flew in February 1965; and Bell Aerosystems Company was experimenting with a third, the X-22A. The United States had also invested money in V/STOL experiments conducted in Britain, France, and West Germany. Both JCS and the Secretary of Defense agreed that none should be produced without further study, and the Secretary allowed \$5 million for continued investigation during fiscal year 1965.

- (U) In February 1964, General LeMay told Congress that, although the Air Force had long been interested in a VTOL aircraft, particularly for the general purpose forces, the state of the art had offered no promise of a useful tool. "But now," he said, "we begin to see that we can have a vertical takeoff plane." The United States would have to go beyond what the British and French had done, but he expected to have a workable plane in about 10 years.
- involved their use of unprepared fields. The jet blast kicked up so much sand, dirt, and other debris that the plane could be seriously damaged and the pilot's vision obstructed. The Air Force tried to solve this problem by spraying a quick-drying, semi-liquid plastic material on a level field to form a hard, smooth surface. To operate in remote areas, an aircraft could drop or spray the material on a field about 15-20 minutes before landing. Experiments conducted at the end of 1964 indicated that such a covering 3/16 to 1/4 inches thick could withstand pressures of 2,500 pounds per square foot and temperatures of 1,000° to 3,000°F. 19



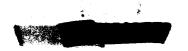


## Nonnuclear Munitions

Spokesmen for the Kennedy administration frequently stated that the emphasis in USAF tactical doctrine on nuclear warfare before 1961 had resulted not only in newer aircraft designed mostly for this mission but in grossly inadequate stocks of modern nonnuclear munitions. Some USAF officials, especially in TAC, admitted this inadequacy but claimed that well before Kennedy's inauguration TAC had made efforts to improve its conventional ordnance. The need became obvious during the Lebanon and Taiwan crises of 1958, when political considerations made it clear that the use of nuclear weapons would be severely restricted. After January 1961, TAC consistently requested action to overcome what it considered an 8- to 10-year lag in USAF conventional munition development. Under OSD pressure the Air Force Systems Command tried to expand the technological base for munition production.

The principal weapons needed were improved air-to-ground guided missiles, jungle-penetrating antipersonnel munitions, air-delivered antitank missiles, and nonnuclear antipersonnel weapons for bombers. Two problems most in need of solution were development of a means of locating enemy troops and fortifications in heavy woods and development of fuzes that would penetrate wooded areas without exploding warheads prematurely. The Air Force was embarrassed because it claimed to be studying these items but had programmed no money for them in the

<sup>+</sup>See Jacob Van Staaveren, Air Operations in the Taiwan Crisis of 1958, (AFCHO, 1962), pp 28-32, 51-58.



<sup>\*</sup>For USAF views on this issue, see Charles H. Hildreth, <u>USAF Logistic Preparations for Limited War</u>, <u>1958-1961</u>, (AFCHO, 1962) pp 27-36.



fiscal year 1962 budget. Provoked by this anomaly, Brockway McMillan, the new Assistant Secretary of the Air Force for Research and Development, noted in the margin of a USAF proposal to use old, simple, and inexpensive weapons and equipment in undeveloped areas, "I can scarely 21 believe it!"

OSD stressed three new nonnuclear weapons that ostensibly possessed unusual power and deadliness as a result of advanced design and unique methods of packaging. The CBU (Cluster Bomb Unit) was a cylindrically-shaped, electrically-fired dispenser that scattered bomblets over enemy-held positions. CBU-lA contained 500 fragmentation bomblets and was used mainly against personnel. CBU-2A and CBU-3A fired larger bomblets against armor, vehicles, parked aircraft, and buildings. Snakeye, in 250-pound and 500-pound versions, was a general purpose bomb with a retardation device that allowed a pilot to deliver it at high speed from a low altitude and get away safely. It was expected to be highly effective in wooded areas. Walleye, a.1,000 pound guided bomb containing a TV camera, could be locked onto a particular point from a distance by the aircraft pilot and then would automatically guide itself to the target. It had a range of several miles and in tests demonstrated surprising accuracy. The missile could be used on all kinds of tactical aircraft but would not be available until 1966. Snakeye and Walleye were developed by the Navy. By January 1965 the CBU weapons and Snakeye were available to American forces in Southeast Asia. 22



Despite OSD pressure, new weapons became available to combat forces rather slowly. As late as December 1963, TAC complained that stocks of six major items of ammunition needed for conventional war were inadequate and that it was still too heavily dependent on the 750-lb demolition bomb left over from the Korean war. Since planning for the Cuban crisis in late 1962 had highlighted shortages of items needed for night attack, the Air Force acquired substantial numbers of flares and launchers and demonstrated their utility in exercises. The Bullpup missile obtained from the Navy was unsatisfactory until technicians solved a fuze problem at the end of 1963, and it therefore did not become significant as a conventional tactical weapon until 1964. TAC believed conventional munitions, except for the CBU, had improved little in quality since World War II and pushed hard for accelerated research and development. Also, the Air Force pressed during 1962-1964 for very small, clean nuclear weapons.

The Air Force was handicapped in the procurement of conventional munitions because it had no facilities for developing nonnuclear weapons except Detachment #4 of the Aeronautical Systems Division (ASD) at Eglin AFB, Fla. Since the Korean War it had done practically nothing in this field and in most respects had to make a fresh start. In June 1962, Headquarters USAF began investigating the problem and made plans to set up a joint Air Force-Navy study group, but results came slowly. General Sweeney of TAC had long been favorably impressed by work done at the Naval Ordnance Test Station (NOTS), China Lake, California, and



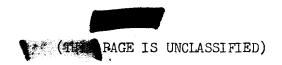
the Air Force made frequent use of weapons tested there. General Sweeney asked General LeMay to arrange for augmenting NOTS with USAF personnel and funds, thereby broadening the Air Force's capacity for prototype production. The Air Staff, however, recommended expanding the Eglin detachment. Secretary McNamara disapproved this request, except for the additional personnel, and directed the Air Force to use other DOD laboratories. In addition to NOTS, the most important test facility was the Army's Picatinny Arsenal at Dover, N.J. TAC consistently urged expansion of the technological base of munition production and maximum use of all DOD development and test facilities. After Secretary Zuckert took special notice of the problem in December 1963, progress accelerated, and in October 1964, Secretary McNamara assured the President that the crisis in nonnuclear weapon development had passed. To illustrate the significance of the new ordnance, he declared that an F-4C armed with CBU-2A could knock out 9.5 times as many trucks per sortie as a fighter-bomber in the Korean War using 750-lb general purpose bombs.





#### V. CONCLUSION

- years of substantial achievement toward the buildup of general purpose forces. Starting with 16 wings of tactical fighters in early 1961, it had grown to 21 and was approaching 22. Perhaps more important, the F-4C was coming into the inventory in significant numbers and the F-4D and F-4E were on the way. Along with the RF-4C, the most sophisticated reconnaissance aircraft yet developed, they greatly increased tactical striking power. A few years ahead lay the advent of the F-111A and RF-111A. These planes, coupled with modern aerial ordnance, raised the firepower, speed, range, and penetrating ability of a modern fighter far above previous levels. A further multiplying factor was the higher degree of accuracy achieved by avionics in navigation, flight control, communications, and fire control.
- (U) Another important improvement was in the Air Force's ability to support the Army. Technological advances in both services and their cooperation through STRICOM had wrought many changes in ground warfare. Air-to-ground combat capability improved steadily through the work of the Tactical Air Warfare Center and Tactical Air Reconnaissance Center. Secretary Zuckert felt confident that the Army and Air Force could find sound solutions to the problem of adequate air support for the Army without diluting the Air Force mission.





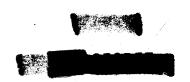
- (U) Development of the ability to deploy tactical forces rapidly over long distances struck General LeMay as a major Air Force achievement. During an exercise in February 1964, STRICOM had deployed three squadrons of fighters and a reconnaissance force to Europe in an average of seven hours per aircraft. General LeMay stated that this kind of mobility would permit the Air Force to reduce oversea units without lessening its ability to meet worldwide commitments. Other achievements cited by Secretary Zuckert and General LeMay were demonstrations of the efficacy and reasonable cost of shelters for fighters at oversea bases and of the USAF ability to meet the challenge of guerrilla warfare through efforts of the Special Air Warfare Center.
- the beginning of 1964, 62 percent of its aircraft was seven or more years old. In November 1963, when TAC sent aircraft to India in Exercise Shiksha, General Sweeney thought it appalling that the outdated F-100 had to be used. This explained TAC's intense interest in modernizing tactical fighter units and, conversely, its dismay at OSD's repeated slowdown of procurement programs. These slowdowns delayed as much as four years the replacement of F-84's, F-100's, F-104's, and other planes. Headquarters USAF shared TAC's desire modernize the tactical force quickly with F-4C's, but a substantially reduced purchasing program in fiscal year 1965, plus the introduction of the new series of F-4's (F-4D and F-4E) hampered the buildup. And McNamara's decision at the end of 1964 to delete two wings of F-4C's

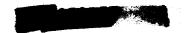


further complicated TAC's job of meeting its defense commitments. The relatively rapid acquisition of F-105's during 1963 and 1964 strengthened the force considerably, but this aircraft only slowly assumed its role as a reliable all-weather fighter.

Although the F-4 began to come into the inventory during 1964, and there would be almost 300 of them by June 1965, the prospects of retiring the aging F-100 were not good. The F-100 would make up a large part of the tactical force through fiscal year 1967 and remain in the inventory through fiscal year 1970. This obligated the Air Force to assume an extensive modification and repair workload that overtaxed its support facilities and sidelined a large percentage of F-100 in January 1963, TAC established a project for the repair, heavy maintenance, and modification of the entire F-100 fleet—the most extensive modernization program ever undertaken for first—line aircraft. What started as an 18-month program stretched into 24 months, and shortages of money and personnel promised further delay. So many F-100 s were worked on or in storage awaiting repair that it was difficult to maintain operational readiness.

At the end of 1964 it appeared that the Air Force might lose its argument in favor of using multipurpose aircraft to perform the whole tactical mission. Dr. Brown believed that the F-lllA was "more aircraft than is needed for close support of ground troops." He acknowledged that, with adequate air-to-ground avionics, the plane could do the close support job well, but he argued that the F-lllA, with its





range, payload, and penetrating ability, would rarely be needed for this mission. He thought it desirable to have an aircraft specialized for close support and attack at shorter ranges, and he believed that the A-7A, a subsonic plane being developed by the Navy "fits that bill." This issue, however, had not yet been settled at the end of 1964. For counterinsurgency or guerrilla warfare, where little or no air resistance would be encountered, Dr. Brown and Secretary McNamara thought in terms of a new COIN-LARA (light assault and reconnaissance aircraft) which could do a limited air-to-air and air-to-ground combat job, as well as provide reconnaissance. \* McNamara had not decided how far to go in this direction as the year ended.

(U) On 22 September 1964, at a meeting of the American Institute of Aeronautics and Astronautics in Washington, D.C., Dr. Brown discussed certain facets of OSD thinking on conventional air war. DOD wanted a minimum number of aircraft types in the inventory but at least one type ready to do each important task well and economically. It would develop experimental aircraft types as necessary but decide on full-scale engineering development only if there was a high probability of military usefulness. DOD, he said, needed aircraft and equipment for better tactical reconnaissance, target location and recognition, and aircraft missiles that could hit the target most of the time, as well as a host of other aeronautical developments—including V/STOL. How well these needs were satisfied, he declared, would decide the future of military aircraft.



<sup>\*</sup>See pp 38 & 50.

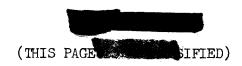


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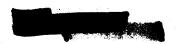
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- 21. Ltr, Lt Gen Roscoe C. Wilson, DCS/R&T to Brockway McMillan, ASAF (R&D), (w/notes by McMillan) 18 Aug 61, subj: Limited War Program; memo, McMillan to DDR&E, 1 Sep 61, subj: Limited War RDT&E Funds, both in OSAF 1639-61.



- 22. Hist, TAC, Jul-Dec 63, pp 479-85; Sup to AF Daily Staff Digest, 28 Jan 65; Pres Johnson's News Conference, 1 Jan 64; Washington Post, 28 Feb 65; Senate hearings before subcmte on DOD approp, 89th Cong, 1st Sess, DOD approp for 1966, Pt I, pp 1208, 1238-39.
- 23. Hist, TAC, Jul-Dec 63, pp 475-85; Hist, D/Plans, Jan-Jun 64, pp 250-54; memo, SOD to Pres, 15 Oct 64 as cited in Note 10.

# CHAPTER V

1. The information for this chapter was based upon Hist, TAC, Jul-Dec 63, pp 47-49, 293-94, 342-43, 352-55, 390-96; Hearings for 1965, 88th Cong, 2d Sess, Pt 4, pp 443-44, 452-53; Hist, D/Plans, Jan-Jun 64, pp 54-56; Sup to AF Plcy Ltr for Cdrs, No 12, Nov 64, pp 5-9, 16-18; Air Force and Space Digest, Feb 65, pp 26-31; Draft memo SOD to Pres, 15 Oct 64, subj: Recommended FY 1966-1970 Air Force Gen Purpose Forces in OSAF 41-64.





APPENDIX I

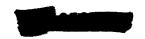
<u>Air Force General Purpose Forces Program, FY 1961-1968, as of December 1962</u>

	FY 61	FY 62	FY 63	FY 64	FY 65	FY 66	FY 67	FY 68
Tactical Acft Ftr Bomber Wgs Tac Bomber Wgs Recon Sqdns Intcp Sqdns (Overseas)	1,826 16 2 14 12	2,338 23 2 18 12	2,071 21 1 14 12	2,045 21 1 14 11	2,009 21 - 14 11	2,100 21 - 18 11	2,136 21 - 20 11	2,124 21 - 20 10
Active Forces Tac Fighters F-84F F-86 F-100 F-101 F-104 F-105 F-4C F-111(TFX) Total Total Wgs	- 910 75 72 122 - 1,179	300 75 860 66 129 265 - 1,695* 23	222 757 66 54 419 - 1,518 21	129 -660 66 54 516 93 - 1,518 21	- 603 66 - 516 315 - 1,536 21	416 - 516 613 - 1,545 21	147 - 498 882 18 1,545 21	- - - 462 1,029 54 1,545 21
Intep Acft F-89 F-102 Total Total Sqdns	12 287 299 12	12 <u>275</u> 287 12	269 269 12	243 243 11	237 237 237 11	231 231 11	- <u>231</u> 231 11	- 219 219 10
Tac Bombers B-57 B-66 Total	48 <u>48</u> 96	48  48	48  48	48 - 48	- 	- 	- <u>-</u>	 - <del></del>
Tac Recon RF-84 RF-101 RF-4C RF-66 Total Total Sqdns	144 - 108 252 14	72 128 - 108 308 18	128 - 108 236 14	128 18 90 236 14	128 72 36 236 14	108 216 - 324 18	108 252 - 360 20	108 252 - 360 20

Total Active

Acft 1,826 2,338 2,071 2,045 2,009 2,100 2,136 2,124 \*Includes ANG called up in Oct & Nov 1961.

SOURCE: Draft memo, SOD to the President, 3 Dec 62, subj: Recommended FY 1964-1968 General Purpose Forces, OSA file 1297-62.





### APPENDIX II

Air Force General Purpose Forces Program, FY 1961-1969, as of September 1963

Active Forces	1961	1962	1963	1964	1965	1966	1967	1968	1969
Tac Fighters F-84 F-86 (ANG) F-100 F-101 F-104 F-105 F-4C F-111	910 75 72 122 -	300 75 860 66 129 265	222 728 66 54 394	144 - 657 66 54 516 72	651 66 18 516 342	- 612 - 504 612	342 - 504 864 18	- 162 - 504 1,008 -54	- - 54 - - 486 1,008 180
Total Acft No. Wings	1,179 16	1,695 <sup>*</sup> 23*	1,464 20	1,509 21	1,593 22	1,728 24	1,728 24	1,728 24	1,728
Interceptors F-89 F-102 Total Acft	12 287 299	12 275 287	269 269	- 203 203	- 98 98	- 12 12	- 12 12		
Tac Bombers B-57 B-66	48 48	48 -	48	- -	<u> </u>	-	• • • • • • • • • • • • • • • • • • •		
Tac Reconn RF-84 RF-101 RF-4C RF-111 RB-66	144 - 108	72 128 - - 108	128 - - 108	- 128 - - 108	128 36 - 72	112 162 - 12	108 252 - 12	108 252 - 12	54 252 54
Total Acft No. Sqdns KB-50 Tankers	252 14 120	308 18 120	236 14 100	236 14 _40	236 14 20	286 17 	372 21 	372 21 	372 20 
Total Active Aircraft	1,946	2,458	2,117	1,988	1,947	2,026	2,112	2,100	2,088
Total ANG Aircraft	729	224	553	698	719	735	791	789	823

(These are only totals for ANG--includes F-86, F-84, F-100, F-101, F-104 (by 1965), F-105 (by 1964), B-57 (by 1964), RB-57, RF-84, RF-101 (by 1969), and KC-97.)

SOURCE: Draft memo, SOD to the President, 13 Sep 63, subj: Recommended FY 1965-1969 Air Force Tactical Aircraft Program, OSAF file 16-63.



<sup>\*</sup>Includes ANG called up in Oct & Nov 1961.



#### APPENDIX III

Air Force General Purpose Forces Program, FY 1961-1970, as of October 1964.

									<del></del>	
Active Force	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Tac Fighters (Wings) Interceptors Tac Bombers Tac Reconn (Sqdns) KB-50 SAW	1,179 16 299 96 252 14 120	1,695 <sup>+</sup> 23 287 48 308 <sup>+</sup> 18 120 64	1,464 20 269 48 236 14 100 106	1,509 21 203 48 236 14 40 184	1,581 22 98 - 236 17 20 253	1,668 23 98 - 289 17 - 253	1,668 23 98 - 354 20 - 253	1,704 24 46 - 372 21 - 253	1,740 24 - 360 20 - 253	1,740 24 - 360 20 253
Total Aircraft	1,946	2,522+	2,223	2,220	2,188	2,308	2,373	2,375	2,353	2,353
Tactical Fighte F-100 F-101 F-104 F-105 F-4 F-111 Total Aircraft	910 75 72 122 - - 1,179	860 66 129 265 - - 1,695	728 66 54 394 - - 1,464	657 66 54 516 54 ———————————————————————————————————	657 66 54 516 288 ——————————————————————————————————	657 - 18 504 489 	453 - 504 693 18	309 - 504 837 -54	219 - 486 837 162	111 - 432 837 324
Wings	16	23+	20	21	22	23	1,668 23	1,704 24	1,740 24	1,740 24

<sup>\*</sup>Table does not include F-84's, F-86's in early years.

# **FXPLANATORY NOTES:**

- F-102 fighter interceptors overseas go down from 287 in FY 61 to 46 in FY 68 and then are eliminated. Air Force wanted to replace them with F-4's (36 in FY 68, 72 in FY 69, and 72 in FY 70) but SOD disapproved.
- 2. Tactical recon--RF-84 eliminated after FY 62. RF-101 gradually declines from 144 in FY 61 to 72 in FY 70. RF-4 starts with 36 in FY 65 and builds up to 252 in FY 70. RF-111 starts with 36 in FY 70. Air Force wanted 54 RF-111's in FY 69 and 108 in FY 70.

# Special Air Warfare Forces-End FY (Air Force Request in Paren)

	1962	1963	1964	1965	1966	1967	1968	1969	1970	
B-26 T-28	16 16	33 29	33 33	33 14	33 14	33 14	33 14	33 ,14	33 14	
AT-28, AT-37, etc.	-	-	-	(29) -	(29) -	(15) (4)	(- )	(- ) - (97)	(-)	
A-1E	-	-	50	68 (50)	68 (50)	68 (50)	(44) 68 (25)	68 (-)	(100) 68 (-)	
C-46	12	12	24	21 (24)	21 (24)	21 (24)	21 (-)	21 (-)	21 (-)	
C-47	6	6	18	16	16	16	16 (11)	16 (10)	16 (-)	
HC-47 U-10	6 8	6 <b>20</b>	6 20	6 20	6 20	6 20	6 20	6 20	6 20	
Turbo-Porter or equiv	-	_	-	-	_	(16)	(-)	(-) -	(-) ·	
Curtiss-Wright 200	-	-	-	-	-	(14) -	(40) -	(40) -	(40) -	
C-123	-	-	-	75	75	75	75	(8) 75 (37)	(8) 75	
C-142 or equiv	-	-	-	-	-	-	(25)	(58)	(-) 	
Total Aircraft	64	106	184	253	253	253	253	253	253	

SOURCE: Draft memo, SOD to the President, 15 Oct 64, subj: Recommended FY 1966-1970 Air Force General Purpose Forces, OSAF file 41-64.



<sup>+</sup>Includes 597 ANG aircraft.

# GLOSSARY

AFCHO ANG ASA ASD ASAF ASN ASOD ASSS	USAF Historical Division Liaison Office Air National Guard Assistant Secretary of the Army Aeronautical Systems Division Assistant Secretary of the Air Force Assistant Secretary of the Navy Assistant Secretary of Defense Air Staff Summary Sheet
CASF CBU Chmn CINCARIB CINCEUR CINCPAC Cmte COIN Compt C/S	Composite Air Strike Force Cluster Bomb Unit Chairman Commander-in-Chief, Caribbean Commander-in-Chief, Europe Commander-in-Chief, Pacific Committee Counterinsurgency Comptroller Chief of Staff
DCS DDR&E  Dep SOD DOD D/Ops D/Plans	Deputy Chief of Staff Director of Defense Research and Engineering Deputy Secretary of Defense Department of Defense Director(ate) of Operations Director(ate) of Plans
JCS JSOP JSSC J-5	Joint Chiefs of Staff Joint Strategic Objectives Plan Joint Strategic Survey Council Plans and Policy Directorate of JCS Light Attack and Reconnaissance Air-
MAP MTT	craft  Military Assistance Program  Mobile Training Team
NATO n.d. NOTS NSC	North Atlantic Treaty Organization No date Naval Ordnance Test Station National Security Council

# GLOSSARY (Contid)

OSAF OSD Office of the Secretary of the Air Force Office of the Secretary of Defense

PACAF P&P POL PSAC

Pacific Air Forces Plans and Programs

Petroleum, Oil, and Lubricants President's Scientific Advisory Committee

R & D

Research and Development

SAW SAWC STOL STRAC STRICOM

Special Air Warfare Special Air Warfare Center Short Takeoff and Landing Strategic Army Corps

STRICOM Subcmte Strike Command Subcommittee

TAC TARC TAWC

Tactical Air Command

Tactical Air Reconnaissance Center Tactical Air Warfare Center

USAFE USCINCSO

United States Air Forces in Europe

Commander-in-Chief, United States Southern

Command

VC/S V/STOL VTOL

Vice Chief of Staff

Vertical and/or Short Takeoff and Landing

Vertical Takeoff and Landing

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- 12. AFCVS
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- 14. AFESS
- 15. AFGOA
- 16. AFIGO
- AFNIN 17.
- 18. AFAAC
- 19. AFODC
- 20. AFOAP
- 21. **AFOAPB**
- 22. AFPDC
- 23. AFRDC
- 24. AFRDQ
- 25. AFSDC
- 26. AFSPD
- 27. AFXDC
- 28. AFXOPX 29. AFXOPFL
- 30. AFXPD
- 31. AFXPDR
- 32. AFXSA
- 33. AFXSAG

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35. SAC

36. TAC

37. MAC

USAFE 38.

# OTHER

39-40. ASI (HAF) 41-49. ASI (HA)

50-70. AFCHO (Stock)