Army-Air Force Relations: The Close Air Support Issue

Alfred Goldberg and Lt. Col. Donald Smith

A Report prepared for

UNITED STATES AIR FORCE PROJECT RAND
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PREFACE

This Report is the culmination of a research project conducted at the request of the Directorate of Doctrine, Concepts, and Objectives, Headquarters, U.S. Air Force. It is a contribution to Rand's continuing program of research on problems and issues of major significance to the Air Force.

The problem addressed in this Report -- the long-term continuing controversy between the Air Force and the Army over the close air support mission -- has great significance for both services and, indeed, for the whole defense establishment. A better understanding of how and why this problem emerged and persisted is obviously desirable at a time when important decisions directly related to the problem are under consideration. The purposes of this study, therefore, are to:

1. Illuminate the nature, direction, and meaning of current disputes by systematic examination and analysis of the origins and progression of the interservice rivalry over close air support within the larger context of roles and missions controversies.

2. Aid in the projection, exploration, and analysis of trends and policies that have future implications of importance for the services.
ACKNOWLEDGMENTS

A great many people in the Air Force and at Rand have contributed in some measure to this study through their comments and criticisms. Special acknowledgment is due Colonel Carl Peterson, Colonel Reubin L. Kingdon, and Colonel David Murane of Headquarters, U.S. Air Force and Felix Koczacka and John Walker of The Rand Corporation for their constructive reviews of the study.
SUMMARY

Tactical air, and especially the close air support function, is the combat element through which the Army and the Air Force achieve their most important and intimate operational connection and relationship. For more than 30 years, the two services have struggled with the "problem" of close air support; for the past 10 years, controversies relating to close air support have been almost continuous. The persistence and intensity of the protracted disputes over close air support reveal the importance that both services attach to the function. All efforts to resolve the close air support issue definitively have been unavailing.

Almost from the beginning of U.S. air operations in World War I, the fundamental issue has been over control of the aviation resources -- the men, the aircraft, and the units. Over the years, the Army has consistently maintained a strong preference for close air support aircraft integrated with ground units and under control of the ground commander. The Air Force has regarded tactical air, including close air support, as a separate and independent Air Force mission available for joint operations with the Army and subject only to joint control at the highest levels of command -- theater and above.

The historical background illuminates the underlying causes of this persistent issue. From the time of separation of the Air Force from the Army in 1947, the Army had a powerful and growing impulse to build up organic aviation resources that it could employ in accordance with its own concepts of joint air-ground operations. The Korean War greatly aided both the impulse and the process; by 1953 the Army was firmly fixed on a course of continuing expansion of and responsibility for its own aviation. Air Force efforts to stem this tide through bilateral agreements with the Army in the early 1950's were unavailing. In 1956-1957, the Secretary of Defense issued directives on the subject of tactical air roles and missions, but these did not resolve the basic differences between the two services.

The continuing expansion of Army aviation alarmed the Air Force, which sought to invoke the roles and missions delineations stated in
the fundamental directives, but with little success. The Air Force did not demonstrate to the satisfaction of the Army, and ultimately the Secretary of Defense, that it could and would meet approved Army requirements. This inability of the Air Force to give the Army all or most of what it wanted stemmed only partly from fundamental differences over the nature of the close air support function. Higher USAF priorities for other missions -- both strategic and tactical -- and what sometimes seemed to the Air Force to be exaggerated, redundant, or overspecialized Army requirements also affected the extent to which the Air Force could respond to Army needs.

After 1957 the Office of the Secretary of Defense became increasingly reluctant to address roles and missions issues, preferring to let its decisions on other issues -- especially weapon systems -- speak for it in interservice controversies. The accelerated buildup of Army aviation after 1961 was made possible by the encouragement of the Office of the Secretary of Defense, which did not permit legalistic considerations of assigned roles and missions to affect its decisions pertaining to Army aviation. Accordingly, the Army extended the scope of its air operations into functional areas that the Air Force had long regarded as exclusively its own. In recent years, the close air support controversy has been symbolized by the competition between the Army's Cheyenne helicopter and the Air Force's A-X attack plane. Once again, roles and missions have been subordinated by OSD in considering the issue.

The prospect for the future seems to be continued resistance by the Air Force to Army acquisition of additional responsibilities and capabilities for close air support. But such resistance can be effective only if the Air Force demonstrates willingness, imagination, and responsiveness to the Army and provides more versatile capabilities to perform the function. At times in the past, the Air Force could, and in retrospect, should, have exercised greater initiative in meeting Army requirements. It will be difficult for the Air Force to recapture exclusive responsibility for the function, largely because the Army
concept of the land battle which, after all, is the basis for tactical air as well as ground forces, will probably prevail, whether the Air Force agrees or not. More likely seems the evolution of a *modus vivendi* for sharing the function between the services.
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ARMY-AIR FORCE RELATIONS: THE CLOSE AIR SUPPORT ISSUE

The persistence and the intensity of the protracted disputes over the close air support mission between the Army and the Air Force* reveal the importance that both services attach to close air support. Almost from the beginning of U.S. air operations in World War I, the fundamental issue has been over control of the aviation resources -- the aircraft, the men, and the units. Other drives and compulsions -- technology, tactical and operational developments, perception of additional potential conflict environments -- have played a part, but underlying all other considerations has been the contest over who should own and control the resources.

The emergence of successively higher air commands, culminating in the establishment of the U.S. Air Force in 1947, inevitably created the command and control issue between the ground and air commanders. The debate over the merits of centralized versus decentralized control of close air support is more than fifty years old and remains unresolved. Most of the other related issues that have occupied the time and attention of the two services are subordinate to and stem from this fundamental divergence.

Before the end of World War I, the American Expeditionary Force in France had found it expedient and desirable to centralize air resources at the field army level. In the years between World War I and World War II, the normal predilection of ground commanders to have control of their air support prevailed, and U.S. Army Air Corps aviation was accordingly parcelled out among corps areas and overseas departments. Ultimately, acceptance by the War Department General Staff of the concept that air power could be organized and employed as a separate entity, an arm with its own distinctive capabilities, led to the establishment in 1935 of the General Headquarters Air Force (GHQAF), with a command structure and combat units concentrated under

*This includes the predecessors of the Air Force -- the Army Air Service and the Army Air Corps.
one head, directly responsible to the War Department General Staff. But this did not mean that the ground forces had changed their belief that air support forces should operate under the control of ground commanders in wartime.

**WORLD WAR II**

By World War II, a natural division was emerging in the functional employment of aerial vehicles, based primarily on the centralized command and employment of tactical and strategic aviation. During the war, the Army Air Forces (AAF) organized most of its combat resources into separate strategic and tactical air forces or into separate components within air forces. The tactical air forces in the various theaters played a vital role in the joint operations that brought about the defeat of Germany and Japan. Organic aviation assigned to ground force units played a lesser, but significant role, one close to the heart of ground commanders and troops.

**AAF Tactical Air**

During World War II, the AAF succeeded in bringing about a complete reversal of the official War Department position on air support of ground forces, even to the point of replacing the term "air support" with "tactical air." For the first eighteen months of the war, official doctrine -- published by the War Department in April 1942 -- subordinated air force capabilities to ground force needs and local situations. The air support commander functioned under the ground force commander, and aircraft might be specifically allocated to support of subordinate ground units. The final decision on priority of targets rested with the local ground commander, and "the most important target at a particular time will usually be the target which constitutes the most serious threat to the operation of the supported ground force."²

The AAF disagreed with this official doctrine but could not bring about a change until it could make a case for its views, based on experience. The nature and scale of operations and the command system in the Pacific did not afford an opportunity for a test of the AAF
concept of how tactical air should operate. The AAF found its opportunity in the North African campaign in 1943, after it formed a combined air command with the RAF to become the Northwest African Air Forces. The British ground and air commanders in North Africa—General Sir Bernard L. Montgomery and Air Chief Marshal Sir Arthur Tedder—attributed much of the success of the drive from El Alamein to Tunisia to the system of centralized control of theater air resources under RAF command. The AAF regarded its experience in Northwest Africa in 1943 as conclusive in demonstrating the effectiveness of its concept of centralized control of all air resources. The ground forces disagreed with this evaluation, holding that close air support (CAS) had generally been neglected in favor of the air superiority and interdiction tasks. But the AAF view prevailed with the War Department General Staff, thanks in part to the AAF's enlistment of the prestigious support of the British leaders, Montgomery and Tedder.3

The revised official War Department doctrine on command and employment of air power—FM 100-20—published without the concurrence of the Army Ground Forces (AGF) in July 1943, stated in capital letters that:

Land power and air power are co-equal and interdependent forces: neither is an auxiliary of the other. The gaining of air superiority is the first requirement for the success of any land operation.... The inherent flexibility of air power is the greatest asset.... Control of available air power must be centralized and command must be exercised through the air force commander if this inherent flexibility and ability to deliver a decisive blow is to be fully exploited.4

The theater commander was forbidden to attach AAF units to the ground forces. Close air support—attacks on ground targets in the "zone of contact"—received third priority among the tactical air missions, ranking behind air superiority and interdiction.

The experience of the North African campaign had hardly been conclusive enough to validate the complete turnabout in doctrine that FM 100-20 represented. The AGF and some of the ground force commanders in the field felt that the Army concept of CAS had not received a fair trial because of the very limited air resources available in the early
stages of the campaign, from November 1942 to March 1943. It was in the last few months of the campaign in the Spring of 1943, when Allied tactical air strength far exceeded that of the enemy, that the Air Force concept had been applied. Nevertheless, FM 100-20 provided the AAF with a charter for the organization and operation of its theater air forces. The experience of the last two years of the war — 1943 to 1945 — was such that the underlying irreconcilability of the air and ground positions on CAS never came to a head. AAF tactical air resources in most theaters proved to be ample for all tasks, including close air support. Success tended to stifle dissent. Moreover, the AAF was a part of the U.S. Army, and the ground force commanders shared in the joint determination of use of tactical air resources at the higher echelons of command — Army—Tactical Air Command and Army Group-Air Force levels.

**Ground Forces Organic Aviation**

Although the AAF's tactical air forces dominated the air support function, it was apparent early in the war that the Army required aviation support working directly with and assigned to the ground units. In June 1942, the War Department directed that light aircraft be organic to field artillery units of the infantry and armored divisions for target spotting and fire adjustment. Initially, ten Piper Cub type aircraft were allocated to each infantry division, eight to each armored division, and varying numbers to each field artillery brigade and group headquarters. The AAF assumed responsibility for procurement and invoice of these aircraft and for provision of spare parts, repair materials, auxiliary flying equipment, and field and depot maintenance.

In directing this arrangement, the War Department intended to supplement, not to supersede, the existing system of air support. The AAF still retained responsibility for adjustment of artillery fire from high performance aircraft, and it continued to maintain and operate liaison squadrons equipped, organized, and trained to provide theater and task force headquarters and Army ground units with liaison, messenger, and courier service. During the course of the war, the
Army Ground Forces greatly expanded its program of organic aviation, at times over the opposition, but finally with the general approval, of the Army Air Forces. Typically, there were approximately 60-75 aircraft per corps, and 200-300 per field army.

Battlefield experience led almost every type of Army ground unit to request the use of light aircraft, chiefly L-4's, which they borrowed whenever possible from the field artillery for a wide variety of prescribed and improvised functions: courier and liaison, photographic and visual reconnaissance, column control, emergency resupply, medical evacuation, and even close-in bombing. As a result, commanders in the field made numerous proposals urging the assignment of light aircraft as organic equipment to other components besides the field artillery.

In early August 1945, the War Department General Staff approved an agreement between the Commanding General, Army Ground Forces and the Deputy Commander, Army Air Forces which provided additional light aircraft to each airborne, armored, cavalry, infantry, and mountain division, and also provided a small number of organic aircraft to certain selected separate units, such as cavalry groups and squadrons, as well as tank and tank destroyer battalions. World War II ended before this agreement could be fully implemented, but the total number of such "organic" aircraft in the Army inventory had increased to about 1,600. By 1947, this number had dwindled to about 200 as a result of demobilization and disposal of surpluses after the war.

Between 1945 and 1947, there was no formal understanding on the organic assignment of aircraft to Army units. A set of guiding principles formulated by the AAF seemed to receive general acceptance by the AGF and the War Department General Staff in actions and decisions pertinent to organic army aviation. The salient principles were as follows:

1. Aircraft organically assigned to the Army Ground Forces should be put to such sustained use as would exploit the AGF's maximum capabilities.

2. Separation of some aircraft from the main body of AAF aircraft should not be allowed to reduce seriously the mass of air power.
3. Capabilities of AAF aviation should not be duplicated without a compensating increase in the ability to wage war.

4. There should be no necessity for separate and extensive airfield, depot maintenance, or training facilities.

The Army preferred, even during this interim period, to seek organic assignment of more light aviation rather than call on the AAF for light aviation support. The AAF had few liaison units for Army support, and on a number of occasions the Army seems to have regarded the AAF as negligent in providing support.

**BASIC ROLES AND MISSIONS DOCUMENTS**

The separation of the Air Force from the Army in September 1947, and the transfer to the Air Force of almost all Army aviation resources left the Army in a position of client dependency on the Air Force for aviation support. The tendency of the Air Force to emphasize its separateness and its enhanced status, coupled with its emerging pre-eminence among the services, disquieted not only the Army but the Navy as well, and led to continual struggles among the services over roles and missions. With the Navy, the prime issue -- the strategic offensive mission -- proved to be an enduring one. Tactical air, especially close air support, which constituted the major nexus between the Air Force and the Army, became the chief focus of long-term controversy between the two services. This, too, was greatly affected by the consistent USAF emphasis on strategic air, at the expense, Army and Navy, critics charged, of tactical air and other missions. Slowly at first but accelerating greatly during times of conflict -- Korea and Vietnam -- and as a result of favorable policy change -- such as flexible response in the early 1960's -- the Army built an impressive aviation capability. The basic roles and missions documents provided it with as much statutory justification as it needed.

**National Security Act of 1947**

The National Security Act of July 26, 1947, created the Department of the Air Force and the U.S. Air Force. This act also provided for
Army organic aviation: "In general, the Army, within the Department of the Army, includes land combat and service forces and such aviation and water transport as may be organic therein." The language of this provision has been subject to varying interpretations by the different services, with the Army supporting a broader interpretation than the Air Force of the meaning of "such aviation" and "organic."

There is no fundamental Congressional statute which specifies the roles, missions, and functions of the services. The National Security Act did not assign functions, roles, and missions to the services; however, it signified in general language that it was the province of Congress to delineate the scope of the functions of the several services. Since 1947, frequent differences in interpretation of assigned functions have occurred among the services. One of the most persistent of these differences has concerned the increasing use of aerial vehicles by the Army.

The first effort to delineate service roles, missions, and functions was President Truman's Executive Order of July 26, 1947, which was intended to implement the provisions of the National Security Act, signed the same day. Here, too, the language was so general that it could not provide adequate guidance for the Joint Chiefs in meeting the intense problems arising from the need to delineate responsibilities for the three services. The struggle among the three services over the new structure of the national defense establishment during 1944-1947 had left its mark on all of them and foreshadowed the pattern of future conflicts among them. By 1948 the roots of inter-service competition were already deep, and the anxieties of the services about their futures were reflected in the struggle for missions and resources.

Key West and Newport Agreements

Secretary of Defense James Forrestal took the initiative in 1948 in seeking agreement among the services on their respective roles and missions, to decide "who will do what with what." In a series of meetings with Forrestal at Key West, Florida in March 1948, the Joint Chiefs of Staff agreed on principles and functions that were approved
by President Truman and issued on April 21 as a Department of Defense directive entitled, "Functions of the Armed Forces and the Joint Chiefs of Staff." At the same time, the President revoked his Executive Order of July 26, 1947. The Agreement reiterated previous language concerning the Army's functions: "The United States Army includes land combat and service forces and such aviation and water transport as may be organic therein."9

It became apparent almost immediately that the Key West Agreement required further clarification, particularly on the land-based versus sea-based air issues between the Air Force and the Navy. Again Forrestal assembled the Joint Chiefs, this time at the Naval War College in Newport, R. I., in August 1948. The Newport Agreement resulted in the publication of a Department of Defense directive which set forth the "exclusive responsibility" of each of the services for programming and planning the primary mission areas assigned to them. However, the capability of the services to perform collateral functions in support of each other's primary missions was to be recognized and accounted for in the annual budget process in order to eliminate duplication and waste.10

JAAAFAR 5-10-1

Between September 26, 1947 and July 22, 1949, a series of forty transfer orders accomplished the transfer of most aviation-associated personnel, functions, and facilities from the Army to the U.S. Air Force. Towards the end of this period, the Army and the Air Force reached agreement on the types of Army aircraft and their employment. Under the authority of the National Security Act of 1947 and Transfer Order No. 1, the two services published on May 20, 1949 an agreement on employment of aircraft for joint operations (JAAAFAR 5-10-1). This document, known also as the Bradley-Vandenberg Agreement, defined

*After General Omar N. Bradley, Chief of Staff of the Army and General Hoyt S. Vandenberg, Chief of Staff of the Air Force.
two types of organic Army aircraft: (1) fixed-wing, not exceeding 2,500 pounds in weight, and (2) rotary wing (helicopter) weighing no more than 3,500 to 4,000 pounds. It provided that the Army's organic aviation would consist of aircraft utilized to expedite and improve ground combat procedures in forward battle areas. Specific functions included:

1. Maintenance of aerial surveillance of enemy forward areas to locate targets, adjust fire, and obtain information on hostile defense forces.
2. Aerial route reconnaissance.
3. Control of march columns.
4. Camouflage inspection of ground force areas and installations.
5. Local courier and messenger service.
8. Limited aerial resupply.
9. Limited front line aerial photography.

The agreement specified that the Air Force would also continue to maintain liaison squadrons to provide most of these same services.

A subsequent agreement between the two services led to the publication of identical regulations on March 23, 1950: Army Regulation 700-50 and Air Force Regulation 65-7, entitled Supplies and Equipment: Army Aircraft and Allied Equipment. The Air Force assumed a wide range of responsibilities including research and development and purchase, inspection, and acceptance of aircraft and allied equipment. The Army retained responsibility for determination of qualitative and quantitative requirements.

KOREAN WAR PERIOD

The operational requirements and experiences of the Korean War intensified Army concern about the tactical air mission, and especially the close air support mission. The Army and the Air Force held divergent views about the nature, scope, adequacy, and effectiveness of close air support during the Korean War. These differences prompted
strong Army representations during 1951 for acquisition of aircraft, especially helicopters, exceeding the weight limits for Army air vehicles established by JAAFR 5-10-1. *

The Army also expressed concern about the responsiveness of USAF tactical air to the needs of the ground units in Korea. Whether close air support resources ought to be centralized under an air commander or divided up among the ground units at division level and below had never been settled to the satisfaction of many Army commanders. Acceptance by the Army of centralized air control under the AAF in 1943 and its application during the remainder of World War II had provided the basis for the tactical air system during the postwar years and the Korean War. But Army opinion remained divided, and although some Army commanders testified to the effectiveness of USAF close air support in Korea, there can be little doubt that the majority would have preferred to see close air support resources assigned to and under the control of division and corps commanders. 12

Pace-Finletter Agreements

After extensive discussions between the two services, the Secretary of the Army, Frank Pace, and the Secretary of the Air Force, Thomas K. Finletter, signed a special Memorandum of Understanding on October 2, 1951. This Pace-Finletter Agreement sought to draw a line between the two services based on functions rather than aircraft weight. It eliminated entirely the maximum weight restriction on Army organic aviation, both airplane and helicopter. It stipulated that the Army would use its aircraft "as an integral part of its components for the purpose of expediting and improving ground combat and logistical procedures within the combat zone; subject, however, to the limitation that such aircraft will not duplicate the functions of the U.S. Air Force in providing the Army, by fixed-wing and rotary-type

* The number of helicopters on hand in the Eighth Army in Korea rose from 40 in June 1951 to 78 in January 1953. The U.S. Marines made the first use of helicopters in a tactical airlift role on September 20, 1951 in Korea.
aircraft, close combat support, assault transport and other troop carrier airlift, aerial photography, tactical reconnaissance and interdiction of enemy land power and communications." The agreement defined Army organic aviation as (1) fixed-wing utility aircraft (light), and (2) rotary-type aircraft, designed and employed for the following functions:

(a) Aerial observation.
(b) Control of Army forces.
(c) Command, liaison, and courier missions.
(d) Aerial wire laying.
(e) Transport of Army supplies, equipment, and small units within the combat zone.

The combat zone was defined as "that part of the theater of operations required for the conduct of war by the field forces." It was understood that the combat zone would not normally exceed 50 to 75 miles in depth.13

Differences between the two services persisted in spite of the new agreement. Growing Army awareness of the potential of the helicopter and continuing acquisition of more and larger helicopters precipitated another round of conferences with the Air Force and consideration of issues by the Joint Chiefs of Staff. Apparently after some pressure from Secretary of Defense Robert A. Lovett, Secretaries Pace and Finletter drew up another Memorandum of Understanding on November 4, 1952. This agreement expanded the list of functions for Army organic aircraft by adding aeromedical evacuation within the battle zone and artillery and topographic survey. It also returned to a weight restriction formula, imposing a limitation of 5,000 pounds on Army fixed-wing aircraft and defining rotary wing aircraft as those in which the total lift and propulsion are achieved solely from rotors. The weight limitation, however, was subject to review by the Secretary of Defense at the request of the Secretary of the Army or the Secretary of the Air Force, as required, to keep the limitation realistic in the light of technical developments and assigned missions. The agreement also included an expanded definition of the combat zone, which was "normally understood to be 50 to 100 miles in depth." It included a
statement that "Nothing contained herein is intended to or shall be construed as modifying, altering, or rescinding any of the assigned functions of the Armed Forces (the Key West Agreement, dated April 21, 1948)."  

Shortly after the second Pace-Finletter Memorandum of Understanding, the Air Force issued a policy statement that the memorandum "was not intended nor is it considered to modify or amend in any way the provision of the Functions Papers nor does it necessarily agree that any function can be more efficiently or economically performed by the Army than by the Air Force. It does mean that if the Army can procure sufficient funds to perform supporting functions, the Air Force will not actively oppose them therein."  

This interpretation permitted and actually encouraged the Army to state requirements for aircraft to carry out support roles, to budget for these aircraft, and to proceed with a buildup of its organic aviation. It also appeared to reflect accurately the prevailing Air Force emphasis on nuclear capabilities for its tactical as well as its strategic air units.

**Army Developments**

The 1952 Pace-Finletter Agreement did not diminish Army pressure for more and larger aircraft and extension of Army air responsibilities. The trend in this direction was reinforced after the Air Force, under pressure to reduce and stretch out its projected buildup, cut back the number of planned troop carrier wings from seventeen to eleven in 1953.

During the years 1951-1956, a series of milestones occurred in Army aviation. Training of some helicopter pilots began in 1953 and by July 1956 the Army had taken over from the Air Force responsibility for both primary and advanced training of fixed-wing and rotary wing pilots. Fort Rucker, Alabama, was established as the Army Aviation Center in 1954. Earlier, in 1951, the Army had taken over from the Air Force responsibility for field storage and maintenance, followed by depot storage and maintenance in 1954, and avionics in 1956. The Army formally acquired a greater voice in the development of all cargo
and transport aircraft. Moreover, it notified the Air Force that it had no requirement for the existing rotary wing assault squadrons maintained by the Air Force for support of the Army. In the absence of an Army requirement, these squadrons were deactivated. Thereafter, the Air Force employed its helicopters in an administrative and logistical supporting role. But shortly after, the Army reinstated a requirement for assault helicopters and proceeded to create its own helicopter assault squadrons.  

At the end of the Korean War in 1953, the Army inventory of air vehicles had increased to about 3,500, most of them fixed-wing. In the years that followed, the national defense policy emphasis on strategic nuclear forces gave the Air Force a much larger share of the defense budget than the other services and led to continuing heavy reductions in Army forces that caused great concern to Army leaders. The Army increasingly looked to concepts that would increase mobility and flexibility and permit more effective use of its limited forces. The search for mobility inevitably turned toward air vehicles, and the Army perceived and stated growing requirements for both fixed-wing and rotary wing aircraft. The number of planes authorized per division rose from 26 to 39 after the Korean War, and subsequently to 50 in the Pentomic division and, in the 1960's, to 103 in the ROAD division. As Army aircraft tended to grow larger in size as well as number, the Air Force became increasingly concerned about the potential duplication and competition with its own tactical air resources.

**DOD DIRECTIVE 5160.22**

Secretary of Defense Charles E. Wilson became the focal center for this and a number of other roles and missions issues that were disturbing relationships among the military services. In November 1956, the Secretary issued a comprehensive memorandum for members of the Armed Forces Policy Council covering five problem areas, including "use of aircraft by U.S. Army." This DoD Memorandum was distributed to Congressional Committees, to the Military Departments, and to the public through press releases. The portion of this memorandum pertaining to "use of aircraft by U.S. Army" was published separately.
on March 18, 1957, as DoD Directive No. 5160.22. It rescinded the Pace-Finletter Memorandum of Understanding of November 4, 1952.\footnote{21}

The directive defined the combat zone as "not more than 100 miles forward of the general line of combat between U.S. and enemy ground forces ... and its extension to the rear of the general line of combat ... normally ... about 100 miles." It established weight limitations at 5,000 pounds empty for fixed-wing aircraft, convertiplanes, and vertical/short take-off and landing aircraft, and 20,000 pounds empty weight for rotary wing aircraft. For specific aircraft and for specific purposes, exceptions to this limitation could be granted by the Secretary of Defense, after consideration of Army requirements and appropriate Air Force functions and capabilities. The limited aircraft capability permitted the Army under these policies was not to be used as a basis for increasing or decreasing Air Force units necessary to support or protect the Army airlift forces. This capability was intended only for the airlift of small combat units and limited quantities of materiel to improve local mobility, and not for an airlift capability sufficient for large-scale movement of sizable Army combat units, which would infringe on the mission of the Air Force. As limited Army aviation airlift capability became available, provision ought to be made for compensating reductions in other forms of Army transportation in the combat zone. The memorandum further stated that the U.S. Army Aviation Program would not provide for aircraft to perform the following functions:

(1) strategic and tactical airlift
(2) tactical reconnaissance
(3) interdiction of the battlefield
(4) close air support.

The directive specifically provided that the Air Force was to meet reasonable requirements specified by the Army and that it must be prepared to devote an appreciable portion of its resources to such support. Finally, 5160.22 admonished the Army to use existing types of Air Force, Navy, or civilian aircraft when suitable, rather than attempt to develop new types.
Although 5160.22 specified that the Army would not develop resources for the close air support function, the directive nevertheless enlarged the overall function of Army aviation, thereby providing an opportunity for the Army eventually to move into close air support. The original prescribed Army aviation functions of World War II had included command and liaison, courier, communication, and observation. To these, 5160.22 added an expansion of reconnaissance and airlift of personnel, materiel, and small units within the combat zone. These added responsibilities provided the Army with a major opportunity to establish requirements and evolve doctrine for using organic aviation as a medium of adding new dimensions to ground mobility, thereby leading to an expansion of its aviation resources. Thus, as with previous efforts (the Pace-Finletter Agreements) to clarify responsibilities for aviation between the Army and the Air Force, this one led to increases in Army aviation capabilities.

**Functions Documents**

The Department of Defense Reorganization Act of 1958 was implemented by DoD Directive 5100.1, issued on December 31, 1958 and JCS Pub 2, Unified Action Armed Forces (UNAAF), issued in November 1959. With reference to Army functions, the DoD directive repeated the phrases present in all DoD functions documents since the National Security Act of 1947: "the Army ... includes such aviation ... as may be organic therein." JCS Pub 2 repeated the functions statements from DoD Directive 5100.1 and included the statement about Army organic aviation. 22

**Joint Air-Ground Operations Manual**

In 1957, after a year of negotiations, the Army and the Air Force reached agreement on close air support doctrine and published a TAC/CONARC* Manual, Joint Air-Ground Operations. A "Joint Training

* Tactical Air Command/Continental Army Command.
Directive" had been published in 1950, but it had been little more than a repetition of Army Field Manual 31-35, published in 1946. Thus, the 1957 manual represented the first post-World War II and post-Korea joint agreement on close air support request techniques and procedures. From an Army point of view, it represented "the peak of Air Force success in 'selling' its total centralization doctrine," but according to the same source, neither CONARC nor TAC was completely satisfied with the manual.  

**Interservice Relations**

The deemphasis of conventional war capabilities that had characterized most of the post-Korean War period abated during the last year or two of the Eisenhower Administration. It had become clear by this time that nuclear forces and a professed policy for employing them could not deter crises at lower levels of the warfare spectrum. Thus, the Lebanon and Quemoy crises in 1958 had revealed some of the U.S. deficiencies in conventional capabilities and suggested the need for provision of more readily available forces for such incidents. The Air Force particularly took steps to redress the shortages in conventional munitions that had been revealed during the 1958 crises.  

Meanwhile, the Army had increased its inventory of air vehicles by almost 2,000 between the end of 1955 and the end of 1959 -- from 3,495 to 5,472. Moreover, before 1960, the Army had not only secured a waiver of the weight limitation in DoD Directive 5160.22 that permitted it to procure five OV-1 (Mohawk) planes and five CV-28 (Caribou) planes for serviceability and air worthiness testing, but it had begun to program them into the inventory at a rate permitted by appropriations.  

During 1960-1961, the Army conducted studies of close air support that reached familiar conclusions:

1. Close air support resources ought to be adequate to meet requirements.
2. Air units allocated to the close air support mission must be under operational control of the supported Army force commander.
3. Air units designated to support close air support tasks must be equipped with aircraft designed for ground attack as a primary mission.

4. Army-Air Force close air support joint operational planning should be decentralized to the field Army/tactical air force level or to the independent corps.27

Seeking to further broaden its aviation base, the Army asked OSD in August 1959 for authority to perform its own engineering and procurement of air vehicles. It pointed out that it was already procuring nearly 50 percent of the dollar value of its air items. The Air Force opposed the Army request. Studies and negotiations involving the two services and several OSD offices took place over a period of almost a year before the Deputy Secretary of Defense denied the Army request in July 1960 with certain qualifications which permitted the Army greater participation in the development and procurement process and a limited authority to procure "off-the-shelf" directly.28

RENEWED EMPHASIS ON GENERAL PURPOSE FORCES

The Kennedy Administration undertook a reappraisal of U.S. defense strategy almost immediately after taking office in 1961. Secretary of Defense Robert S. McNamara recognized and stated the need for finding other than nuclear forms of power to deter political and military aggression that could not be deterred by superior nuclear power. These other forms of power "would range from counterinsurgency forces up to superior tactical air power, airlift capability, and ground forces and Navy power." Thus, the strategy of flexible response with its call for "multiple operations" became the basis for much military planning and programming in subsequent years and provided the Army with greater opportunities for diversification of its weapon systems than it had enjoyed for many years.29

The renewed emphasis on general purpose forces played an important part in influencing the final Army response to a significant proposal in 1961 from the Air Force Chief of Staff, General Thomas D. White. In late 1960 and early 1961, budget constraints confronted the Air Force with the probability that it would have to reduce its combat force structure. Since Administration and Air Force
policies gave highest priority to the strategic offensive forces, the cutbacks fell most heavily on other components of the Air Force than the Strategic Air Command, and particularly on tactical air, which, it appeared, might lose up to fifteen squadrons of fighters during fiscal year 1963. This damaging prospect impelled the Air Force Chief of Staff, General Thomas D. White, to propose to the Army in February 1961 that it cooperate with the Air Force to retain eleven of these squadrons in active service. He pointed out that since the Army could be substantially affected by the loss of air resources intended primarily for its support, it ought to support the retention of the squadrons. In return, the squadrons would be trained for maximum responsiveness to the Army. Furthermore, the Air Force offered the Army the privilege of selecting from eight possible candidates the planes with which the squadrons would be equipped. General White regarded all of these concessions to stated Army close air support requirements as preferable to inactivating the squadrons.30

The initial Army reaction was favorable to retention of the squadrons but deferred response on selection of aircraft. Later, in May, the Army Chief of Staff, General George H. Decker, rejected the opportunity to select the planes for the squadrons, affirming that the "selection of the aircraft was not the major problem" from the Army point of view. He stressed that the Army requirement was for close air support under a system of control that would make it responsive to Army needs.31

In time, the problem was overtaken by events. The Kennedy Administration had announced its intention of expanding rather than diminishing the general purpose forces. Accordingly, the Air Force could look forward not only to retaining the eleven fighter squadrons, but acquiring still more. Before the end of the year, the Secretary of Defense had approved an increase in tactical air wings from 18 to 23. Under these circumstances, the Army refusal to specify a particular aircraft for close air support made little difference, except that it served to confirm the Air Force in its preference for multipurpose rather than specialized tactical aircraft.
The generally cautious Army reaction to the Air Force proposal may have been influenced by several considerations. First, and perhaps foremost, was the problem of where the money for the retention and equipment of the eleven squadrons would come from. The prospect of some or much of it coming out of Army funds could not have had much appeal. Second, the eight candidate aircraft proposed by the Air Force were all high performance planes, and apparently none of them corresponded with the Army's concept of a close air support plane. Finally, the Army may have preferred not to imply endorsement of any Air Force fighter plane as a close air support system by selecting any one of the eight candidates. This would leave it with more options for the future, including selection of its own potential candidates for the mission.

The basic difference between the Air Force and the Army on quantitative requirements for close air support was revealed in a study prepared by the Air Force for the Secretary of Defense in November 1961. Secretary McNamara had asked the Air Force, with Army participation, to study tactical air force requirements for the period FY 1963-1967. The Army agreed on most of the recommendations in the study with the exception of quantitative requirements. In contrast to the Air Force recommendation of three air squadrons per Army division for all tactical air functions, the Army asked for three squadrons per division for the close air support function alone, a requirement the Air Force considered excessive. In the end, the Army did not pursue this point any further and agreed to support the Air Force request for 23 tactical fighter wings.32

One of the earlier expressions of the greater interest in general purposes forces was the establishment of the U.S. Strike Command (USSTRICOM) in September 1961. In addition to its command functions, involving Army units and USAF tactical air units, USSTRICOM had responsibility for developing recommendations for the JCS "regarding doctrines and techniques for the joint employment of forces assigned." In 1962, USSTRICOM adopted the DASC (Direct Air Support Center) concept to provide for close air support to corps-sized joint task forces.33
Secretary of Defense McNamara paid continued attention to tactical air capabilities from 1961 onward. In October 1961, he directed the Air Force to study tactical air power needs and composition. He had previously expressed his belief that a larger force of tactical aircraft than that proposed by the Air Force was needed, and that it should include close air support-type aircraft.  

Secretary of the Air Force Eugene M. Zuckert responded in November, suggesting an increase in tactical air capabilities and recommending use of multipurpose aircraft. In commenting on Zuckert's letter, Secretary of the Army Elvis J. Stahr, Jr., expressed concern about multipurpose aircraft and reiterated the Army requirement for "close support aircraft of a proper type" and "under a system of operational control which makes them responsive to Army needs."  

After consideration of the proposed Army aviation procurement program, McNamara initiated in April 1962 a chain of actions and circumstances affecting tactical air, and particularly close air support, that has been continuous until the present. In two critical memoranda to the Secretary of the Army on April 19, he expressed his dissatisfaction with Army plans for tactical mobility and urged a reexamination that would explore technology for making a revolutionary break with traditional means of surface mobility. He urged a bold "new look" at land warfare mobility and called for "fresh and perhaps unorthodox concepts" of mobility. McNamara directed the Army to carry out a comprehensive study of its quantitative and qualitative requirements for aviation. McNamara's challenging words provided the Army with a charter for making far-reaching recommendations about its aviation that would also have important implications for the Air Force.  

The Army quickly set up the Army Tactical Mobility Requirements Board at Fort Bragg, N. C., under Lt. Gen. Hamilton H. Howze. The Howze Board submitted its final report on August 20, 1962. The report recommended the formation of several types of new aviation and airmobile units and a five-year program to increase ground strength to eleven ROAD (Reorganization Objective Army Division) divisions and
five air assault divisions. From the Air Force point of view, it was most significant that the air assault divisions would employ large numbers of helicopters, equipped with anti-tank or anti-personnel weapons, to provide close-in fire support to ground and airborne elements. This raised fundamental issues about Army organic aviation and Air Force tactical air capabilities and functions.

To analyze the Howze Board Report, the Air Force convened a Tactical Air Support Requirements Board, commonly called the Disosway Board, after its chairman, Lt. Gen. Gabriel P. Disosway. Reporting in September 1962, the Disosway Board took issue with the Howze Board on the close air support function, particularly the ability of piston-engine fighters and armed helicopters to perform close air support in a hostile air environment. In general, the basic issues over close air support disturbing the two services came to the surface in these two reports and set the stage for further intensive investigations of Army aviation and USAF tactical air support.

Tests of Air Mobility Concept

The two issues of Army air mobility and close air support were obviously intimately related and had important implications for tactical air roles, missions, and functions. Underlying the air mobility thesis was the unfolding Army concept of land warfare. The battlefield of the future would be like a checkerboard -- it would have no clearly defined battle line, the forward and rear areas would not be well-defined, and overall it would be much larger than in the past. Greatly increased fire power, including the possible use of nuclear weapons, would make for much more rapid concentration and dispersal of forces, placing the highest premium on quick reaction by both forces and weapons. The order of magnitude advance in mobility that would be needed could come only through use of air resources.

The projected expansion of the Army -- both the number of divisions and organic aviation -- highlighted the issues between the services and led to consideration of tactical air roles and missions as well as to tests of tactical organizations and tactics. In 1962, the Army raised the aircraft authorization per infantry division from
50 to 101. For the airborne division, the Howze Board specified a strength of 459 aircraft, most of them helicopters, including attack helicopters. 40

When the Army tested its air mobility concept in 1963, the Air Force objected to it as a unilateral test of the concept which failed to afford consideration to existing and programmed Air Force capabilities. Secretary McNamara directed the Commander-in-Chief of the U.S. Strike Command to conduct joint tests which would evaluate the service concepts. CINCSTRIKE established the Joint Test and Evaluation Task Force (JTETF) to conduct the tests. In preparation for CINCSTRIKE's test program, each service conducted unilateral preparatory exercises during the summer and fall of 1964: the Indian River series by the Air Force and the Air Assault series by the Army. These unilateral tests were to be followed by joint test and evaluation of the two service concepts by the JTETF in Gold Fire I and II. 41

JTETF actually conducted Gold Fire I in October-November 1964 as a test of the Air Force mobility concept. At approximately the same time, it evaluated for the JCS, but did not conduct, Air Assault II, which was a unilateral Army test of the Army mobility concept. Gold Fire II, intended as a joint test exercise of the two concepts was cancelled in January 1965. Thus, the only joint test conducted was of the Air Force concept. 42 The final JTETF report (June 30, 1965) validated the Air Force concept, but it also supported certain portions of the Army concept, although the Army concept had not been subjected to a joint evaluation. After pointing out that an assessment of the Army concept in a joint field test environment was fundamental to development of firm conclusions about the suitability of the Army concept in joint operations, General Paul D. Adams (U.S.A.), CINCSTRIKE, asserted that:

As revealed to USSTRICOM, the Army reflects overriding interests in air mobility as a unilateral rather than a joint matter. Emphasis within the Army program appears to be on exploitation of organic aviation as opposed to exploitation of the mutually supporting capabilities of the Army and the Air Force. I have had the impression, in this connection, that the Army views its concept and that of the Air Force as involving two
different things. On the one hand, the Army desires fullest support by the Air Force, and acknowledges need for appropriate coordination and control measures to make such support possible when Army forces are part of a joint force. The Army air-ground system conforms to this philosophy by providing necessary interface with the tactical air control system. On the other hand, the Army, from our viewpoint, looks upon development of airmobile units as an internal undertaking largely divorced from joint considerations.

... in the air assault division, the Army has created a specialized, limited purpose unit that raises to five the types of major ground combat divisions to be supported, and to three the number of specialized divisions.... This approach does not, in my estimation, contribute to an Army posture designed to simplify joint operations and facilitate their support....

Related to my concern expressed above is a disappointing lack of emphasis on provision of adequate helicopter lift within the ROAD division, and on development of corps and field Army helicopter support for the ROAD establishment at large.\textsuperscript{43}

The final JTETF report was sent to the Joint Chiefs in July 1965 and forwarded by them to the Secretary of Defense with no significant comments. Meanwhile, the Army had gone ahead with the formation of its air assault division, which was subsequently approved by the Secretary of Defense in June 1965, before receipt of the final JTETF report.\textsuperscript{44}

Close Air Support Boards

Previously, in February 1963, Secretary McNamara had asked the Secretaries of the Army and the Air Force to "jointly examine the problem of improving close air support of ground operations in non-nuclear warfare to prepare proposals for maximizing its effectiveness." The two services established the Army and Air Force Close Air Support Boards at the OONARC/TAC level in April 1963. The Final Report, submitted in August 1963, comprehensively examined the Army's quantitative and qualitative requirements for close air support, effectiveness improvement factors, and deficiencies, and recommended improvements.\textsuperscript{45}
The two Boards made divergent recommendations in three areas which drew, with one important exception, conflicting reactions from the Army and the Air Force in their subsequent reviews:

1. **Quantity** - How much close air support does the Army require?
2. **Operational Control** - Who shall exercise operational control over aircraft available for close air support?
3. **Aircraft Characteristics** - Is a specialized aircraft required exclusively for the close air support role?

The crystallization of these three major issues between the two services revealed clearly the depth and the persistence of the controversy over close air support. The important exception pertained to the recommendation of the Army Board that consideration be given to adoption of a specialized aircraft for close air support missions. In reviews of the Report, not only the Air Force, but the Army as well, disagreed and stated a preference for high-performance multipurpose aircraft for the whole range of tactical air missions. This represented a reversal of the position taken by the Secretary of the Army in 1961.*

One of the key actions taken by the two services in response to the U.S. Army Close Air Support Board recommendations was the development of an improved joint air-ground coordination system, known as the Concept for Improved Joint Air-Ground Coordination, and approved by the services in March and April 1965. This concept provided for improved responsiveness to the Army's immediate air requests by the following actions: (a) the Air Force assumed the responsibility for the required communications; (b) the Air Force provided Tactical Air Control Parties (TACP's) down to battalion level; and, (c) the TACP was given authority for direct access to the Direct Air Support Center (DASC) for immediate requirements. In addition, specific stipulations provided for the apportionment and allocation of resources to accommodate both preplanned and immediate air missions.47

* See above, p. 20.
Roles and Missions Issue

While the various boards and committees were conducting studies and tests during 1963, the JCS undertook an examination of tactical air roles and missions. This grew out of competition between the Air Force and the Army in the development of TARABS -- Tactical Air Reconnaissance and Aerial Battlefield Surveillance. Army advances in airborne sensor systems by 1962 had created requirements for advances in Army aircraft to carry the new equipment. A Joint Task Group report to the JCS in August 1962 led to further consideration of the problem by the JCS during 1962 and 1963 and a decision on May 31, 1963 to broaden the problem to consider the responsibilities of the Army and Air Force for all uses of aerial vehicles. At a subsequent meeting of the JCS with the Secretary of Defense on July 1, 1963, it was agreed that "the roles and missions of the Departments of the Army and Air Force regarding air vehicles should be reviewed with the end in view of revising, if necessary, and bringing up to date DoD Directive 5160.22, dated March 18, 1957."  

Although the Joint Staff, with the participation of the military services, prepared a substantial study on the subject for them, including draft Department of Defense directives, the JCS preferred to have the Chiefs of Staff of the Army and the Air Force attempt, in bilateral discussions, to identify the basic issues involved prior to further consideration. The two Chiefs of Staff held a number of meetings but failed to reach agreement because of their fundamentally divergent views on the proper role and composition of aviation organic to the Army. In an effort to overcome this impasse, the Chairman of the Joint Chiefs of Staff, General Maxwell D. Taylor, addressed a memorandum to the Secretary of Defense in May 1964 proposing an alternative approach. He suggested that limits on Army aviation be expressed in terms of design and functional characteristics rather than in terms of weight limitations and scope of the battle zone. These limitations could be enforced by budget decisions on specific vehicles by the Secretary of Defense, and it would thus be possible to avoid doctrinal arguments and determine specific issues on individual merit. There would probably still be some overlap between Army and Air
Force aircraft, but this could be accepted. Taylor attached a draft defining Army organic aviation and recommending positions on the principal issues. 51

The Chief of Staff of the Air Force, General Curtis E. LeMay, disagreed with General Taylor's memorandum, and his paper was forwarded to the Secretary of Defense along with Taylor's. General LeMay considered Taylor's proposals neither feasible nor supported by an adequate evaluation of the issues. He asked instead that the Air Force be made a single manager for the greater part of the aerial vehicles used in the combat zone. 52 This would have required the transfer of most of Army aviation to the Air Force. Neither the Secretary of Defense nor the JCS acted on this memorandum.

Previously, in 1963, General LeMay had directed his staff to prepare a single manager concept and plan for integrating into the Air Force all Army aviation resources and related support functions. In 1964, General LeMay proposed to the Army that "the Air Force take over all aerial vehicles presently owned and operated by the Army and provide all of the Army's air support now and in the future." The Army Chief of Staff rejected the proposal. 53

In March 1965, Secretary of the Air Force Zuckert once again raised the overall issue with the Secretary of Defense. He recommended that the Air Force own and operate all major combat support fixed-wing and cargo-coded rotary wing resources in direct support of the Army. This memorandum was referred to the JCS, who decided to let the two services deal with the matter themselves. 54 In April 1965, Zuckert also recommended to the Secretary of Defense the consolidation of Army aviation logistic and research and development activities with those of the Air Force in the interest of greater economy. 55 Both of these memoranda were quickly overtaken by events. On June 15, Secretary McNamara approved the Air Cavalry Division and supported Army employment of armed helicopters. He directed that the Army's airmobile division be brought to combat-ready status as soon as possible. 56 The JCS had split on the issue of the airmobile division, with the Air Force dissenting. The division which had been conducting the Army tests of airmobility was redesignated the 1st Cavalry Division in July
1965 and began deployment to Vietnam in August 1965. These actions effectively invalidated Zuckert's March proposals and caused the Air Staff to review the situation and seek a new and different Air Force position.

Pressures on the Army and Air Force to settle at least some of their outstanding differences grew stronger as the war in Vietnam grew in intensity and attracted increasing attention from Congress. On August 17, 1965, Chairman L. Mendel Rivers of the House Armed Services Committee, concerned over recurring questions about the adequacy of close air support in Vietnam, constituted a special subcommittee to conduct hearings on close air support. The subcommittee, headed by Representative Otis G. Pike (N. Y.), conducted its hearings during September and October of 1965 and published its findings on February 1, 1966. The report criticized Army-Air Force close air support efforts in the areas of air-ground communications, types of aircraft available for close air support missions, and response times. The report also stated that because of the desire on the part of both services to avoid irritating service rivalries over the roles and missions issue, essential questions had gone unanswered and essential problems had been swept under the rug.57

**Growth of Tactical Air Capability**

In response to the Kennedy/McNamara renewed emphasis on general purpose forces beginning in 1961, both the Army and the Air Force expanded and improved their aviation capabilities. From a strength of 5,263 air vehicles (almost evenly divided between fixed-wing and rotary wing) at the end of 1960, Army aviation grew to 7,600 at the end of 1965, almost two-thirds of which were rotary wing aircraft. These included Caribou transports, heavy lift helicopters, armed helicopters, and Armed Mohawk aircraft. Meanwhile, by the middle of 1964, the Air Force had built up the Tactical Air Command from seven to fifteen
fighter wings* and more than doubled the number of fighter aircraft -- from 600 to 1,400. Tactical airlift and air reconnaissance also experienced a substantial growth, and the overall personnel strength of TAC increased from 43,000 in June 1961 to almost 75,000 in June 1965. Relatively new aircraft, such as the F-105 (operational in 1958) and the F-4 (operational in 1963), came into the inventory in numbers along with improved airlift aircraft.\(^{59}\)

**VIETNAM PERIOD**

In 1965, the large-scale U.S. involvement in the war in Vietnam revived old and surfaced new issues between the Army and the Air Force pertaining to air support. Most of the issues concerned the provision of aircraft for a wide and growing variety of functions in the combat zone. Since 1965, there has been a continuing succession of controversies between the two services that were resolved by joint agreement or by decision of the Secretary of Defense or his deputy. Other differences remained unresolved and constituted the basis for continuing study, argument, and negotiation.

**Helicopter Issue**

The approval of the Air Cavalry Division for the Army in June 1965 led to expanded aviation requirements throughout the Army, with special emphasis on employment of helicopters for a variety of purposes. The effect was to diminish still further the role of the Air Force in the use of helicopters in the combat zone, and to raise doubts about the future of helicopters in the Air Force. The trend in this direction became increasingly apparent and specific, as evidenced in an important memorandum from Secretary of Defense McNamara to the Secretary of the Air Force on September 11, 1965, concerning the arming of Army aircraft, particularly helicopters. McNamara stated that any aircraft of any service which might operate in battle should be armed whenever necessary

\(^*\) Overall, the number of tactical fighter wings reached 23, including those assigned to United States Air Forces in Europe and Pacific Air Command.
not only for self-defense but also to contribute to the success of U.S. forces in the manner most appropriate to the aircraft's mission. In addition, McNamara declared that he considered the work in progress toward development of anti-tank and other medium armament for Army helicopters to be quite appropriate.  

At the same time (September 15), Deputy Secretary of Defense Cyrus R. Vance authorized the Air Force to deploy 25 CH-3C (rescue) helicopters to Southeast Asia, but made the deployment contingent on further clarification of the CH-3C mission or transfer of the units to the Army, since the unit's mission appeared to be an Army mission. The Air Force Chief of Staff, General John P. McConnell, stated that the mission was in support of Air Force combat activities and that he did not consider it appropriate to transfer the unit to the Army.  

The uncertainties about USAF ownership and use of helicopters led to an informal understanding between General McConnell and Deputy Secretary of Defense Vance on September 21. The Air Force agreed that it would not attempt to deliver supplies to the Army by other than fixed-wing aircraft and that USAF helicopters would be used only for support of Air Force units. This represented a withdrawal from the Secretary of the Air Force's position in the memorandum of March 18, 1965, to the Secretary of Defense and a realistic accommodation to the consistent disapproval by the Secretary of Defense of Air Force efforts to obtain CH-3C helicopters for tactical airlift.  

April 6, 1966 Agreement  

Other continuing pressures predisposed the Army and the Air Force to seek resolution of some of their outstanding differences. The most immediate difference in March-April 1966 involved airborne radio direction finding (ARDF) and fixed-wing tactical airlift. On March 25, Deputy Secretary of Defense Vance asked the JCS to advise him on proposals made by the Secretary of the Air Force for the assignment to the Air Force of responsibility for ARDF and fixed-wing tactical airlift.  

This action hastened negotiations between the Chiefs of Staff of the two services, who reached an agreement on April 6 that was accepted by the JCS and the Deputy Secretary of Defense.
The April 6 agreement has special importance because it recognized the Army's primary claim on helicopter capabilities and the Air Force responsibility for fixed-wing aircraft designed for tactical airlift. Thus, the Air Force agreed to relinquish all claims for helicopters and follow-on rotary wing aircraft intended for intra-theater movement, fire support, and resupply of Army forces and those Air Force control elements assigned to the Direct Air Support Center (DASC) and subordinate thereto. The Air Force would retain rotary wing aircraft employed for special air warfare, search and rescue, and administrative mission support. The Army relinquished all claims for the CV-2/CV-7 and future fixed-wing aircraft designed for tactical airlift. The two services also agreed that vertical takeoff and landing (VTOL) aircraft would continue to be developed jointly. Methods of employment and control for VTOL aircraft would be matters for continuing joint consideration. On ARDF, the services agreed that there was a requirement for both direct support and general support ARDF aircraft in Southeast Asia. This, in effect, provided a role for both services in the ARDF function.

Before the helicopter issue came to a head in 1966, the Air Force had initiated steps to improve its close air support capability. During 1965, it decided that there would be a critical need for a new tactical fighter plane to perform the close air support mission in the period 1969-1977. It became increasingly apparent that the attrition being experienced in Vietnam would diminish the projected size of the fighter force. Moreover, most of the planes available or scheduled to be available for close air support were technologically old. 65

During the summer and fall of 1965, the Air Force participated in a joint study with OSD of the cost effectiveness of alternate means for meeting the USAF requirement. The normal USAF preference for a high performance aircraft was tempered by a number of considerations, including cost and Army requirements for close air support. As a result, the Air Force recommended the A-7D -- a modified version of an existing Navy plane that was expected to be low cost (about $1.5
million) and quickly obtainable. The A-7D was conceived as a general purpose light attack aircraft, single-place, single engine, subsonic, with a capability for a wide variety of armaments. Early in 1966, the Secretary of Defense authorized the Air Force to procure the A-7D. The Air Force awarded a contract in October 1966.66

Meanwhile, the Tactical Air Command had notified Headquarters USAF that the existing configuration of the A-7D would not provide adequate capability for the tasks intended for it. TAC proposed changes in the plane, particularly its avionics, that would permit it to perform more in accordance with TAC's performance preferences.67 Headquarters USAF initially resisted the proposed changes, which would clearly be expensive.68 In December 1966, OSD asked the Air Force and the Navy to study the best improved avionics for the A-7. The joint study group recommended an improved system that was approved by Secretary of Defense McNamara. The new system gave TAC essentially what it wanted.69

The substantial changes in the configuration of the A-7D, which included a new engine as well as avionics, delayed the establishment of firm specifications until March 1968, and therefore set back the whole program by two to three years. The first flight with the new engine occurred in September 1968. The increase in unit program cost by 1971 was from the original $1.5 million to about $3.4 million. The quantity to be procured varied over the years and was gradually reduced from the originally contemplated 500-600 as the cost of the aircraft increased. As of June 30, 1970, the program called for purchase of 387 aircraft. The number of wings planned was reduced from five to three. The Initial Operational Capability lagged by two years or more. The first A-7D squadron became operational in March 1971 and 110 A-7D's had been accepted through April 1971.70

Cheyenne and A-X

The April 6 agreement between Generals McConnell and Johnson* did not resolve the basic problem of the close air support function -- the

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* General Harold K. Johnson, Chief of Staff of the Army.
The growing role of Army helicopter gunships in providing fire support for ground units. In justifying development and employment of helicopter gunships for close air support, the Army coined the term "direct aerial fire support" (DAFS) which it defined as "fires delivered by aerial vehicles organic to land forces against surface targets and in support of land operations. Such fire support supplements, is integrated with, and is controlled similarly to Army surface weaponry." Such fires are intended to "complement, rather than substitute for ground-based fire or close air support." The principal weapon system for this purpose, the attack helicopter, engages in "offensive, defensive and other operations which contribute to the location and destruction of hostile targets to include self-protection, escort, fire suppression, reconnaissance, security, raids, screening, and anti-tank operations."  

The Army apparently intended to establish DAFS as a function distinguishable from CAS, distinctive enough to be recognized and accepted by the Secretary of Defense, if not the Air Force, as a function that could and ought to be performed by the Army. It seems reasonable to infer from the record that the Army resorted to the term "direct aerial fire support" to circumvent the restrictions placed on it by DoD Directive 5160.22 of March 18, 1957. In this way, it might avoid or minimize major challenges from the Air Force over the roles and missions issue. This view of Army behavior seems to be borne out by its abandonment of use of the term in favor of "close air support" after the recision of 5160.22 by the Secretary of Defense in March 1971.  

The expanded employment of the armed helicopter in Vietnam became the prime tactical air issue between the Army and the Air Force. As the two services perceived the implications for their future interests, the issue grew increasingly acute. Growing Army expenditures for procurement of UH-1H (later redesignated AH-1G) Cobra helicopter gunships impelled General McConnell to direct in June 1966 that a study be made to determine: (1) areas of close air support not being fulfilled to the satisfaction of the Army, and (2) steps that ought to be
taken to develop, test and procure the type of equipment which would satisfy this requirement if it were proven that a gap existed.

The study, completed on August 14, 1966, concluded that:

1. All available evidence indicated that in South Vietnam the Air Force was fulfilling the close air support responsibilities levied on it to the apparent satisfaction of the Army.

2. Available evidence indicated that the Army was withholding some categories of close air support for fulfillment by organic Army aerial vehicles.

3. There was an actual gap in USAF aircraft capabilities to perform the helicopter escort and suppressive fire roles. The Army had abridged this gap by arming helicopters to provide suppressive fire which, even without accuracy, could force the enemy to remain under cover until the air assault party had landed. The Air Force recognized that unsophisticated armed helicopters could perform in a complementary role with fixed-wing aircraft in support of airmobile operations in low-intensity warfare environments.

The analysis recommended, among other things, that: (1) the Air Force take steps to highlight in official USAF doctrine, tactics, and procedures publications the methods for accomplishing those missions for which the armed helicopters were provided and which the Air Force considered part of the close air support function; and (2) to fulfill the requirements for the 1970 plus time period, the Air Force should take immediate and positive steps to obtain a specialized close air support aircraft, simpler and cheaper than the A-7, and with equal or better characteristics than the A-1.73

On September 8, 1966, General McConnell, after reviewing the study, directed the development and procurement of a new specialized close air support aircraft, which was to become the A-X.74

In the meantime, Secretary of the Air Force Harold Brown was observing the actions which resulted in the approval of 494 AH-1G Cobras to replace 737 UH-1B's and the letting of the Army contract to Lockheed for the procurement of ten Advanced Aerial Fire Support System (AAFSS) prototypes. The AAFSS, or Cheyenne, was designed as a large, composite (fixed-wing and rotary) aircraft with highly sophisticated
avionics and a greatly increased capacity for attacking ground targets, especially tanks. In July 1966, Brown informed the Secretary of Defense that it appeared that both the AH-1G and the AAFSS were weapon systems armed to the extent that the delivery of fire power constituted their principal function. Therefore, he felt, they should compete with other aircraft for effectiveness in the fire support function.  

Deputy Secretary of Defense Vance replied on August 27, 1966, disagreeing with Brown. He stated that the armed helicopters were a very useful adjunct to the Army commander's forces, providing him with an appropriate mix of ground and air fire power and mobility that he could use to influence the course of battle. Vance further stated that the concept of armed helicopter operations was effective and successful and did not create unacceptable interface problems with USAF strike aircraft.  

In 1968, the close air support issue between the Army and the Air Force grew sharper with Department of Defense approval of the following: (1) procurement of 375 AAFSS-type AH-56 Cheyenne helicopters, and (2) the Development Concept Paper (DCP) for the Air Force's A-X, a specialized close air support aircraft.  

On May 19, 1969, the Army terminated the production phase of the AH-56 contract because of default by the contractor (Lockheed). The Army had concluded that aircraft delivered in accordance with the contracted schedule would fail to meet a number of significant specified performance characteristics. In particular, the speed and maneuverability of the aircraft fell far below contract specifications because of the problem of rotor stability and control. Even though the production contract was cancelled, work continued on the AH-56 under the research and development phase of the contract.  

OSD continued to support the advanced armed helicopter in spite of this setback. In a memorandum to the Secretary of the Army and the Secretary of the Air Force in January 1970, Deputy Secretary of Defense David L. Packard, stated that he was convinced that the ground forces required a spectrum of fire support systems ranging from artillery and armed helicopters (organic) to heavier systems operating from rear areas, and that these systems possessed overlapping capabilities in
certain respects. In addition, he stated that it had been charged that the Cheyenne and A-X performed a common role with a resultant implication that the role could be performed by one of these systems and that the other would not be needed. Therefore, it was necessary that the complementary nature of these systems be highlighted and that there be a general agreement between the services on the need for these systems. Packard requested, as a matter of urgency, that the Army and the Air Force reach an agreement on this matter and document the requirements and the complementary roles of the systems. 79

In response, the Secretary of the Army and the Secretary of the Air Force forwarded a memorandum on March 26, 1970 to the Deputy Secretary of Defense which stated that:

1. The AAFSS and the A-X were competitive because they operated in the same mission.
2. The AAFSS and the A-X were complementary because they had different flight characteristics which influenced the degree of suitability for specific missions.
3. Agreement had not been reached on the degree to which the two systems were competitive and/or complementary.
4. Research and development should continue for both the A-X and AAFSS at least through prototype development. 80

By this time also, the Army and Air Force had clearly modified their traditional attitudes towards development of a specialized Air Force plane for close air support. In January 1970, General William C. Westmoreland, Chief of Staff of the Army, forwarded to the Air Force an Army review of requirements for close air support. The document recognized the importance of the other tactical air functions — air superiority, long-range reconnaissance, airlift, etc. — and that priorities among them would vary with combat situations. It took the position that the Air Force should develop and improve tactical aircraft "which can perform effectively a wide range of air support missions." Army priorities for improvement of tactical air support were listed in the following order: air superiority, interdiction, long-range aerial reconnaissance, close air support, and fixed-wing tactical airlift. And finally, "development and improvement of Air Force tactical air weapon systems should emphasize multi-mission capabilities." 81
The reply to General Westmoreland from General John D. Ryan, the Air Force Chief of Staff, took strong exception to the Army position:

We believe that only by optimizing an aircraft for close air support can we provide the capabilities outlined in your memorandum. Our experience has shown that a multi-mission design must sacrifice too many of the characteristics desirable in a close air support aircraft in order to meet the requirements of its other roles. We fully appreciate the flexibility afforded by our multi-mission aircraft; the introduction of the A-X into our force will tend to permit greater concentration by the multi-mission aircraft in accomplishing the functions of air superiority and interdiction. Those aircraft not so engaged may also provide close air support, one of their demonstrated capabilities.\textsuperscript{82}

The Secretary of Defense received copies of this correspondence.

The Army leadership attached the utmost importance to the Cheyenne in its plans for the future. Secretary of the Army Resor identified to Deputy Secretary of Defense Packard in June 1970, "eight major systems or capability objectives on which the Army placed first priority." Resor listed an advanced helicopter as the first item on the list and stated that "the Cheyenne is our current candidate and we are prepared to fund the Cheyenne Program."\textsuperscript{83}

Packard Committee

During 1970, the Department of Defense requested Congress to fund not only the AAFSS and the A-X, but also the Marine Corps Harrier, a fixed-wing V/STOL capable aircraft. Since there was a serious question as to whether or not future defense budgets could support the development and/or procurement of three separate aircraft weapon systems designed to perform essentially the same mission, the House of Representatives' Committee on Appropriations reviewed the close air support requirements of the military departments. The Committee requested the Department of Defense to reevaluate the roles and missions and aircraft options available for close air support before recommending substantial procurement of any close air support aircraft. It also
requested the Secretary of Defense to provide the appropriate committees of Congress with the results of the evaluation, along with his decision on the aircraft best suited to meet the close air support need in sufficient time for the fiscal year 1972 budget to reflect this determination. At the same time, the Committee provided sufficient funds to maintain the Harrier, Cheyenne, and A-X aircraft programs at appropriate levels of effort, pending a decision by the Secretary of Defense. 84

To respond to the Committee's report, Deputy Secretary of Defense Packard established a working group on February 26, 1971 to review various aspects of close air support. Because of the importance of the issues involved, Packard assumed chairmanship of the working group. 85 The group met for the first time on March 29, 1971 and discussed a study outline and schedule, which provided for a DoD report to be submitted to Congress in June 1971. 86

In a directly related action, Department of Defense Directive 5160.22, "Clarification of Roles and Missions of the Departments of the Army and Air Force Regarding Use of Aircraft," dated March 18, 1966, was cancelled by OSD. The Army favored, and the Air Force opposed, this action. Secretary of the Air Force Seamans urged retention of the directive as "consistent with the policy of having OSD provide the broad guidance and the Military Departments the decentralized decision-making and management." He considered this approach "much more efficient and effective than the addressal of Service responsibilities, without enunciated guidelines, on a case-by-case basis when a Service development program is submitted." Air Force efforts to secure revision rather than rescission of the directive were rejected by Deputy Secretary of Defense Packard. However, in cancelling DoD Directive 5160.22, DoD Directives System Transmittal 71-6 stated that it had served the purpose for which it was issued. 87 This action could open the door to controversy in all tactical air support mission areas, most immediately and particularly, close air support. The subsequent effects on the roles and missions of both the Army and the Air Force could have great significance for national defense.
The Packard Committee submitted its report to Congress on June 23, 1971. At the direction of its Chairman, Deputy Secretary of Defense Packard, the Committee did not consider roles and missions, dismissing the issue in the report as being "really secondary" in its review of close air support. This did not represent the consensus of the Committee, since the Air Force member, General William W. Momyer, Commander, Tactical Air Command, held the view that the roles and missions issue was not only pertinent but fundamental to consideration of close air support. The report stated the primary issues to be "what capabilities are needed and how to obtain them in the most cost-effective manner."

Accordingly, the Committee focused attention on "the estimated requirements for close air support and the capabilities and costs of both current and projected close air support systems."  

The current inventory of systems platforms and weapons was adjudged inadequate to meet increased requirements for close air support, both in quantity and quality, anticipated for the late 1970's. The Committee concluded that all of the new candidate CAS aircraft offered sufficiently different capabilities to justify continuation of their programs. It recommended that the Harrier procurement program for fiscal year 1972 proceed as planned, that the Cheyenne and A-X development programs be continued, and that tests be made to resolve the uncertainties uncovered during the study.  

The exclusion from the study of roles and missions as a significant factor was in keeping with past OSD practice in dealing with this and similar problems. The deliberate decision to narrow the scope of the study and confine it to questions of hardware and cost-effectiveness with a minimum of reference to service responsibilities reflected the prevailing OSD view that the hardware decisions were paramount and obviated the need for consideration of roles and missions. It also reflected the concern to avoid pursuing interservice problems that were likely to become public controversies. In the past, such controversies have had important, sometimes unpleasant, political consequences for the Defense Department and, indeed, the Government as a whole. Nor have they resulted in lasting settlements of the roles and missions problems
at issue. Accordingly, OSD has tended to avoid or delay dealing with the broad, general roles and missions problem. The particular problems of weapon systems and cost-effectiveness can be resolved much more readily and with much less stress and strain.

THE ISSUES

The foregoing survey provides a perspective from which it is possible to examine in context the underlying forces and issues that have shaped Army-Air Force relationships on close air support. There has existed for more than thirty years a "problem" of close air support, which has varied in form and emphasis over the years, but has been constantly with the services. For the past ten years, controversies relating to close air support have been almost continuous. Since close air support is the point where the Army and the Air Force have their most intimate and important operational connection and relationship, it is perhaps inevitable that the problem exists, that it is a source of great concern, and that it now receives prompt and thorough scrutiny from both services. Nevertheless, or perhaps therefore, all efforts to resolve the close air support issue have been unavailing.

Underlying the close air support issue have been a number of inherent forces that have had a broad and continuing influence on the thinking and behavior of the military services since World War II. The most important of these forces have been (1) the great technological impulse, and (2) the changes in the international environment and their effects on U.S. strategy.

Technological Impulse

The technological impulse has contributed much to the shaping of service roles and missions over the years, tending to blur the lines between them. The mightiest innovations -- nuclear energy, jet propulsion, advanced electronics, missiles -- have brought about changes in kind as well as degree, so that military services have been affected to their very foundations. Thus, the combination of the atomic bomb and the jet airplane gave the Air Force a paramount position within the
U.S. defense establishment from its very inception as an independent service, and made it seem imperative to the Army and the Navy that they seek the technology that would restore the balance among the services. Because the Navy had a large and modern air arm, it could and did compete with the Air Force for the great air missions -- strategic and tactical. But the Army, alone among the services without a major air mission, had to seek to create or acquire such a mission or turn elsewhere. Thus, during most of the first decade after World War II, it conducted a larger and more expensive missile development program than did the Air Force. Although it was eventually excluded from the strategic air mission, the Army did succeed, as a result of its diligent emphasis on missiles, in securing the primary and near-exclusive role in employment of ground-to-air missiles for air defense.\* Here, as with other technological developments, such as the Polaris, the service that developed a weapon system had an excellent chance to get to be the user, whether it had the mission or not. In the postwar era, the Army experience with the Jupiter IRBM was the exception.

In aviation, the technological impulse was especially strong, and the inherent versatility of airplanes and helicopters permitted a proportionate increase in capabilities for performing additional missions. The tendency to develop larger, faster, more complex aircraft contributed to an increase in capabilities as well as the creation of issues between the services. One example is the development by the Army of helicopters that could perform tasks, such as air assault and some close air support operations, formerly provided for it entirely by the Air Force. Continuing technological development of still more advanced helicopters, convertiplanes, and avionics will provide the Army with capabilities to perform additional close air support and perhaps other tactical air functions not presently assigned to or conducted by the Army.

Strategic Environment

Changes in the international environment during the past quarter of a century have also greatly influenced service thinking, planning, and

\*The Air Force still operates the ground-to-air Bomarc cruise missile.
actions relating to roles and missions. The dominance until the 1960's of the idea of a big nuclear war caused the Air Force to concern itself chiefly with preparations for such a war, in some measure to the detriment of preparations for lesser wars, and greatly influenced the attitudes and programs of the Army and the Navy, which had to find justifications for their capabilities in a changing strategic environment. The Army, too, subscribed to the notion of a big war in Europe with the Soviet Union, but it always maintained that there would be a major and prolonged ground phase of any such conflict. The requirements for such a conflict, including tactical air support, provided the Army with a basis for development and maintenance of much, perhaps most, of its structure and strength.

It became increasingly evident during the 1950's and 1960's that the typical conflict of the nuclear era was, in fact, a limited war elsewhere than in Europe, and that it required capabilities that might be considerably different from those required for a big war in Europe. Korea and Vietnam seemed to bear out this view. But the reactions of the services to this condition and to the prospect of more such conflicts were mixed and ambiguous. The Army seemed to be more strongly affected and influenced by this experience than were the other services.

Thus, a combination of circumstances -- technology, strategy, and service interest -- led to the evolution of an Army concept of land warfare that increasingly stressed independent actions by small units sustained by air mobility. The anticipated demands of a future nuclear battlefield, or even of a large conventional battlefield in Europe, seemed to require rapid concentration and dispersal of land forces. According to the Army concept, limited conventional conflicts such as Korea and Vietnam also seemed to call for air mobile forces. Consequently, Army requirements for aviation to perform a wide variety of tasks grew steadily during the 1950's and 1960's in response to the elaboration of its air mobility concept. Sometime in the 1970's, the Army will probably have more aircraft than either the Air Force or the Navy.
Tactical Air Mission

The tactical air mission is actually a very broad one, and close air support is only one of the elements of the mission. The other major tactical air tasks include air superiority, interdiction, reconnaissance, and tactical air transport. The Army has always put the greatest emphasis on the provision of close air support for its ground forces, and, until recently, when General Westmoreland deemphasized it as a priority requirement, Army statements of tactical priorities to the Air Force listed it as second only to air superiority.

The evolution of the tactical air force mission, essentially an expansion of tasks from the original and only task of observation in the early days of World War I, was made possible by technological advances in aeronautics and required by the increasing demands of the ground battle. During and since World War II, the Air Force inclination has normally been to give first priority in both aircraft design and force allocation to air superiority, second to interdiction, and third to close air support, with tactical air reconnaissances and tactical air transport at lesser levels of priority. This inclination has been supported by rationales that emphasize the interdependence of the close air support tasks. Without air superiority, interdiction and close air support are severely handicapped, and perhaps even rendered impossible. From the Air Force standpoint, this has justified placing first priority on air superiority.

It is the predilection of ground commanders to achieve maximum independence and initiative through the command and control of all resources, including air, involved in ground operations. Similarly, it is in accord with the natural preference of airmen to engage in air battle and to perform tasks that are independent and self-initiated, not tied directly to the needs and wishes of the ground forces. Because it views air operations as an integral whole, the Air Force has tended to define the close air support task in terms of the overall tactical air mission, while the Army has defined it in terms of the mission of

*See above, pp. 35-36.
the ground forces engaged in battle. This is a fundamental divergence which has always existed and defies resolution because it is instinctive, rooted in the experience and psychology of the respective services.

Central Roles and Missions Issue

The basic issue between the Army and the Air Force which has emerged is, who is to do what with what? This is essentially a roles and missions question of the kind that has continually plagued the military services since 1947 and indeed, even before. It is an organizational or institutional issue, involving the interests, preferences, and basic concepts and doctrines of the two services, and the command arrangements in the battle area.

The various roles and missions edicts did not discourage the Army from carrying out expansion of its aviation programs, even when they seemed to conflict with the edicts. The Army has consistently supported a broad interpretation of the language in the roles and missions declarations pertaining to Army aviation: "In general, the Army, within the Department of the Army, includes land and service forces and such aviation and water transport as may be organic therein." The terms "such aviation" and "organic" became a basic justification for expansion of Army aviation and air functions after 1947.

Over the years, qualitative and quantitative Army requirements stimulated development of a variety of small conventional aircraft, and especially of advanced helicopters. The acquisition of these aviation capabilities provided the Army with an entree into the CAS mission area that manifested itself in the actual performance of some CAS tasks. Employment of these Army capabilities thus brought about de facto changes in missions and functions while the basic missions and functions directives remained unchanged.

Since 1950, Air Force opposition to particular Army aviation programs and concepts has generally been based on the provisions of the key roles and missions pronouncements, but Air Force efforts to treat the fundamental causes of controversy were unsuccessful because both the Army and the Secretary of Defense apparently preferred not to deal
with the overall issue. The latter presumably saw little reason to promulgate additional directives that might restrict or complicate future freedom of decision and action. In the single effort since 1948 to settle the overall close air support issue, DoD Directive 5160.22, issued in 1957, forbade the Army to engage in close air support operations. But the Secretary of Defense reserved to himself the right to grant dispensations to the directive, and did so by approving Army development of aircraft that permitted expansion of Army tactical air capabilities -- the Mohawk, Caribou, Cobra, etc.

Until the 1960's, the roles and missions directives prompted the Army to be cautious and circumspect in expanding its aviation, especially for CAS, but, as noted above, the Secretary of Defense, rather than the roles and missions directives, was the final court of appeal. The Army normally avoided the overall roles and missions issue, preferring to support its position on other grounds, such as requirements for specialized tasks that the Army believed it could perform better than the Air Force; lack of responsiveness by the Air Force; new concepts of air mobility; and non-availability of USAF capabilities for performing CAS. The defense establishment has made no important changes in service roles and missions papers since 1957. Since then, issues with important implications for roles and missions have been decided on a narrow basis rather than within a context of roles and missions. This compartmentalized approach has permitted evasion of the larger issues and spared OSD and the services the pain and uncertainties of a major roles and missions struggle, such as was precipitated by the "Revolt of the Admirals" in the late 1940's.

Accordingly, the close air support problem has rarely been examined overall; the issues that have actually been dealt with have been symptoms rather than basic causes of controversy. Thus, decisions have been made on weapon systems, logistics, specific tactical tasks, development responsibilities, training, testing, and a host of other aspects of the aviation function. This piecemeal approach has served to effect de facto changes in the missions that were never incorporated in roles and missions declarations. The cumulative and accelerating
effect of these decisions has been to foster the growth of Army aviation quantitatively, qualitatively, and functionally. And from the Air Force viewpoint, these decisions enhanced Army aviation and tended to diminish USAF tactical air.

To the Air Force, close air support has always been an Air Force task, an integral part of the overall tactical air mission. It believes that it performed this task successfully for the Army in every war in which aircraft have participated. Accordingly, the Air Force maintains that close air support is a traditional, appropriate, and integral element of the USAF mission and should remain so.

World War II seemed to settle the issue of whether ground commanders in the field or the air commanders would control the use of tactical air; the establishment of the independent Air Force in 1947 seemed to confirm this mandate in favor of the air commanders. But the instinctive Army desire to control all resources contributing to the conduct of the ground battle persisted strongly, and Army aviation experienced a remarkable growth from about 200 puddle jumpers in 1947 to more than 12,000* aircraft of various types in 1971. The existence of this large and growing Army air force is often interpreted as indicative of the Army's lack of confidence in the Air Force's willingness and ability to meet Army requirements for close air support. Army critics, and some in the Air Force too, have held that the Air Force has paid too little attention to close air support and accorded it too low a priority. By contrast, the ground forces have always given it a high priority.

The Army has frequently supported its case for acquiring its own aviation by making a case against the USAF close air support performance in combat operations. Even stronger than complaints of inadequate support have been criticisms of Air Force delivery accuracy in close support. There are critics in both the Army and the Air Force who maintain that USAF tactical bombing accuracy has not improved since

*Total inventory, including more than a thousand National Guard and Reserve aircraft.
1944, and that it was not good enough even then. Moreover, Army critics often compare USAF wartime tactical air performance unfavorably with Marine air performance. This comparison is not entirely valid because the Marines are organized primarily for amphibious operations and prefer to rely on aviation and naval gunfire support rather than field artillery for most of their close fire support. By contrast, the Army division prefers to provide a larger share of its close fire support with its own organic artillery, and therefore ordinarily does not have as large a requirement for close air support.

The remarkable growth of Army aviation has dramatized and focused the roles and missions issue between the services. The question which now faces them, and the defense establishment as a whole, is, what should be the future of Army aviation? The answer to this question is of paramount importance to the future of USAF tactical air.

Central to the roles and missions issue is the question of whether the close air support capabilities of the Army and the Air Force are and will be duplicative or complementary, and the amount of overlap which may be acceptable and desirable. The Army has argued that its helicopter gunships are performing operations that cannot be done as well by USAF fighter aircraft because they can fly at lower altitudes and in lesser visibility than can the fighters. Accordingly, the gunships have succeeded in extending close air support capabilities rather than duplicating existing capabilities. The Air Force, while conceding the utility of helicopters in a variety of roles, expresses concern that the continued extension of Army close air support capabilities can only be into areas which are already the province of the Air Force, and that the result will be duplication and inefficient use of service resources, including underutilization of Air Force capabilities. From this standpoint, the logic of the Army aviation development could well result in the acquisition of capabilities for performance of other tactical air functions, ranging from reconnaissance to interdiction and perhaps even some forms of counterair operations. The extent of duplicating capabilities into the whole area of tactical air could create complexities, confusions, and problems that might detract from the effective performance of the fighting forces.
Specific Issues

A number of specific issues inherent in the overall roles and missions issue have been the focus of much of the disagreement between the Army and the Air Force. One of the foremost of these has been command and control of CAS aviation. Although the Air Force concept of centralized control of tactical air resources has prevailed since World War II, the Army has continually criticized the adequacy, effectiveness, and responsiveness of the Air Force to the CAS needs of the ground commanders. The Army preference for assignment or dedication of CAS resources to commanders of ground units at division level and below has been frequently and forcefully stated. This Army position on CAS, including the implicit and explicit expressions of dissatisfaction with the Air Force, has been a consistent Army rationale for justifying the overall growth of Army aviation, and its CAS capabilities in particular. But this rationale appears to have a diminishing sanction because of the increased centralization of control of operations, including aviation, within the Army structure.

On the particular issue of centralized vs. decentralized control of aviation resources, with specific reference to organic aviation at division level and below, the Army appears to have reversed, or at least greatly modified its position. In Vietnam, for most of the period since 1963, the greater part of Army aviation -- perhaps 80 to 90 percent -- has been assigned to and controlled at levels higher than the division. Accordingly, the infantry division commander has normally had under his own immediate control only the limited aviation organic to his division. This has normally consisted of about a hundred or fewer assorted small aircraft rendering command and control, reconnaissance, and logistical support to the division. At the same time, the Army air cavalry division in Vietnam has had a large and powerful aviation component, numbering more than 450 aircraft. The 101st Airborne Division in Vietnam has been converted into an airmobile division and provided with a similar complement of aircraft. But even these divisions have received additional combat support from Army combat aviation controlled from higher levels. Virtually all of the combat aviation support for the infantry division
has come from aviation resources concentrated at the equivalent of corps level and above. Thus, the Army has apparently subscribed, at least in part, to the doctrine that the most effective and flexible use of limited air resources can be best realized by centralization of control at higher levels of command.

Also part of the responsiveness issue, aside from the command and control of the aviation resources, has been the extent to which the Air Force has met the Army's stated and actual requirements for close air support. Here the Army has been critical of what it regards as inadequate initiative by the Air Force in providing forces for the task. The Army points to the steady decline in USAF budgets for tactical air after Korea, in contrast with the steady and substantial increases in the Army budget for aviation. Furthermore, the Army cites the failure of the Air Force to develop and procure a tactical fighter of its own since Korea; most of the Air Force tactical fighter inventory is composed of Navy-developed aircraft. Of the two new aircraft currently being planned for the tactical air mission -- the A-7 and the A-X -- the former is a Navy-developed plane. And until recent years, the Air Force has consistently opted for multi-purpose aircraft that could be used for all of the tactical air functions, rather than only for specialized ones. The Army, for a long time, desired that a specialized plane be developed for close air support.

The Air Force gained the impression over the years that the Army used its statements of requirements for close air support and related tactical air functions for ends other than the putative ones. It seemed that at times the requirements, both qualitative and quantitative, were intended to create a situation of at least partial default by the Air Force that would produce a gap between requirements and capabilities. This would provide the Army with an opportunity to fill the gap, or part of it, by creating capabilities designed for the purpose. The Air Force viewed the Army record in developing and using helicopters as an example of this tactic. The recent Army abandonment of a historic requirement for a USAF specialized close air support plane in favor of a USAF multi-purpose plane* seems to indicate that the Army prefers to provide an

*See above, pp. 35-36
increasing portion of the close air support capabilities, as against a diminishing portion for the Air Force.

Implicit in the growth of Army aviation and its role in the close air support mission has been the continuing development of unilateral capability for air-ground operations that is contradictory to the basic team concept of joint operations established by the National Security Act of 1947 and frequently reaffirmed by the Congress and the Department of Defense. This unilateral capability might conceivably be extended to include other functions -- reconnaissance, interdiction, some forms of air counter air operations -- in the combat area and beyond, thereby duplicating and competing with established USAF functions. Moreover, such a development would probably create greater problems in the interface between Army and USAF tactical air operations, particularly affecting integration of command and control of air resources. These problems would have to be satisfactorily resolved if combat operations are to be effective.

Thus, the close air support issue manifests itself in a variety of differences between the Air Force and the Army. It is central to the establishment and maintenance of an effective relationship between air and ground elements in combat operations. The two services consider close air support an essential part of their missions and an essential element in their structures and capabilities. There can be little doubt that the Army has established a de facto role for itself in close air support and that this role is permanent. Nevertheless, the prospect for the future seems to be continued resistance by the Air Force to Army acquisition of additional responsibilities and capabilities for the function. But such resistance can be effective only if the Air Force demonstrates willingness, imagination, and responsiveness to the Army, and provides more versatile capabilities to perform the function.

At times in the past, the Air Force could, and in retrospect should, have exercised greater initiative in meeting the Army's requirements for tactical air support. More recently, since 1966, the Air Force has demonstrated its increased concern for close air support through its initiative in acquiring the A-7 and developing the A-X. It
will be difficult for the Air Force to recapture exclusive responsibility for the function, largely because the Army concept of the land battle will probably prevail and provide the basis for tactical air requirements, whether the Air Force agrees or not. More likely seems the evolution of a modus vivendi for sharing the function between the two services. Clear-cut resolutions of roles and missions issues between the services are the exception rather than the rule.
NOTES


2. War Department Field Manual 31-25, Aviation in Support of Ground Forces, April 9, 1942.


5. For the ground force viewpoint, see Kent R. Greenfield, Army Ground Forces and the Air-Ground Battle Team, Including Organic Light Aviation, Study No. 35, Historical Section, Army Ground Forces, 1948, pp. 45-50.

6. Greenfield, Army Ground Forces, pp. 1-3, 13-17, 23-29, 57-69, 87-115; R. Earl McClendon, Army Aviation, 1947-1953, Air University Documentary Research Study, 1954. This section on Army Aviation is based on these two sources.


9. Joint Army and Air Force Bulletin No. 13, "Function of the Armed Forces and the Joint Chiefs of Staff," May 13, 1948; Executive Order 9950, April 21, 1948. The joint bulletin was published as of May 13, but Forrestal signed and dated it as of April 21.

10. Joint Army and Air Force Bulletin No. 36, September 14, 1948. It was signed and dated by Forrestal as of August 21.


14. "Memorandum of Understanding Relating to Army Organic Aviation," November 4, 1952. This was signed by the Chiefs of Staff of the two services as well as by the two Secretaries.

15.

18. Memorandum For Record, "Aircraft Inventory," Mr. Donaldson, March 1, 1965. This record has been brought up to date as of December 31, 1970.


27. A Short History of Close Air Support Issues, p. 56.


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42. See sources in note 41.

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44. Army-Air Force Divergencies with Respect to Close Air Support, Part I, Background Information.

45.

46.
47. Ibid, pp. 1-6.

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54. Memorandum, Col. George Loving to AFXDOD, cited in note 53, pp. 5-6.

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84. Letter, George Mahon, Chairman, Committee on Appropriations, House of Representatives to Secretary of Defense Melvin R. Laird, September 15, 1970.


89. Ibid.

90. This report has been cleared for open publication by appropriate authorities, Directorate for Freedom of Information and Security Review (OASD-PA), on July 16, 1979. References to publications which may still be classified have been deleted.