Survey and revision of the structure of Fleet Marine Force aviation requires detailed consideration of a variety of important factors. Of overriding importance is the mission and character of the Fleet Marine Force as a whole, and any organization forming a part of it must be tailored to reflect the changing concepts for discharging that mission.

The concept of helicopter mobility influences all Fleet Marine Force structure. Many of the changes in the Division are permitted by reliance on the helicopter as a transportation and reconnaissance means. Other changes are feasible because of the capability of the Marine air-ground team to employ its organic air attack capability in the heavy fire support role. Further, wide frontages and basic combat unit separation owe their ready acceptance, in large measure, to expanded and more efficient employment of aerial reconnaissance. In sum, it is apparent that the concept of vertical assault places greatly increased requirements upon FMF aviation to provide direct tactical support.

Attempts to provide increased tactical air support are at present categorically limited by two external factors—aircraft and personnel ceilings. Aircraft are in a category quite apart from other military equipment. Not only are they expensive and complex, but they have a relatively short useful life, they require extensive lead time in development and production, and they require highly trained personnel for operation and maintenance.

In this era of restricted budgets and rising costs, the Department of Defense places certain limits on Naval aviation with regard to total and operating aircraft inventories. The air component of the Marine Corps is in turn affected by these restrictions, and for the foreseeable future, authorized aircraft allowances cannot be increased.

In a similar manner, the more familiar limits on authorized personnel are essentially rigid, nor does it seem reasonable to alter to any appreciable degree the current allocation of Marine Corps personnel between air and ground. Thus, certain inflexible guidelines circumscribe the size of FMF aviation.

FMF aviation cannot be drastically altered in character, for the Marine Corps is responsible for performing certain combat air functions. Inherent within the roles and missions assigned the Marine Corps is that of providing combat forces, both ground and air, to achieve the initial accretion ashore of combat power transferred from the sea. Landing forces with fleet assistance, therefore, must be capable of seizing and defending, against ground and air resistance, the designated objective area ashore. Obviously, this view of the landing force carries with it the requirement for an appreciable capability to repel enemy air attack.

This capability must be truly expeditionary. By so specializing, the Marine Corps fills a distinct slot in the defense structure of the country. Recommended changes in lower echelon units of the Marine Aircraft Wing are pointed toward reduction of weight and cube of squadron equipment with this idea in mind.

The Fleet Marine Force aviation structure discussed below provides a maximum capability to meet the requirements for tactical air support imposed by the vertical assault concept. At the same time it maintains sufficient combat air capability to provide a reasonable landing force contribution to the overall offensive and defensive air effort.

FMF LEVEL

No essential change is made at the AirFMF command level. A Headquarters and Headquarters Squadron for the support of each AirFMF headquarters is provided. The AirFMF commander will command the FMF units assigned, will be responsible for their training and readiness, and will co-ordinate naval aeronautical logistic and administrative requirements with the respective fleet air commander.

Subordinate to the AirFMF in recent years have been the Force Aviation Headquarters Groups and the Marine Aircraft Wings. Designation of certain units as Force Aviation serves no useful purpose, and the title of Force Aviation Headquarters Groups will be changed to Marine Training Groups with the primary mission of training and refreshing pilots and other personnel in new equipment and techniques.
Two such Groups are provided, one for each Air FMF; each to be composed of a Headquarters and Maintenance Squadron, a Marine Fighter Training Squadron, a Marine All-Weather Fighter Training Squadron, a Marine Attack Squadron and a Marine Instrument Training Squadron.

**WING ORGANIZATIONAL PHILOSOPHY**

The squadron is the basic unit for operation of aircraft; it is the basic unit for structuring an air organization. It is a T/O type unit. Each squadron is designed to carry out a specific function, that is, attack, intercept, reconnaissance, transport, control and service-support.

Combining squadrons into groups for specific purposes, and further combining groups into wings is sound organizational practice, either for administrative or operational purposes. Such combinations permit centralized control of training in the functions to be carried out and at the same time provide a flexible framework for transfer of squadrons between groups and groups between wings to permit the air commander to accomplish any particular mission. In this sense, groups and wings closely resemble task organizations designed for a specific purpose.

A wing, composed of either functional or composite groups, is the smallest air unit with the capability of command and control of subordinate elements in the execution of air and direct air support operations.

**THE MARINE AIRCRAFT WING**

Despite the fact that rarely do two Marine Aircraft Wings resemble each other in detail, a Marine Aircraft Wing is a distinct entity. As indicated by the organizational chart, the typical wing is composed of functional groups which provide a balanced aviation force capable of executing all essential air support tasks for an air-ground task force of wing-division size.

**THE MARINE WING HEADQUARTERS GROUP**

The Wing Headquarters Group is composed of a Headquarters and Headquarters Squadron, one Marine Air Support Squadron and 3 Marine Air Control Squadrons. This group contains all the essential elements of the wing command echelon and the air control system. The Marine Composite Photographic Squadron is no longer included in this group in order that the group need not be established at or near an air base. It can, therefore, land early in an amphibious operation to establish the means to command and control landing force aviation and such other air units as may operate in the area.

The capabilities of the Marine Air Support Squadron of this Group are enhanced by an additional Air Support Radar Team. Essentially the best
current means of providing all-weather air support, 3 such teams in a Marine Aircraft Wing add valuable flexibility to its combat employment.

MARINE WING SERVICE GROUP
An essential element of the wing is the Service Group which is normally established at a rear base within supporting distance of the objective area. It consists of a Headquarters and Headquarters Squadron, a Marine Air Base Squadron and a Marine Aircraft Repair Squadron. These subordinate elements of the Group provide wing-level service for all squadrons and groups of the wing. Principal among these service responsibilities are centralized control of supply (H&HS), wing-level aircraft maintenance (MARS) and operation of the rear area air base (MABS). Normally the Transport Group operates out of this base.

TRANSPORT CAPABILITY
Approximately 30 per cent of the assigned aircraft of the wing are in the transport category. Two helicopter groups and one fixed-wing transport group are provided. The light helicopter transport group, in addition to a Headquarters and Maintenance Squadron and an Air Base Squadron, contains a Marine Observation Squadron (VMO), a Marine Helicopter Reconnaissance Squadron (HMO), and 2 Marine Light Helicopter Transport Squadrons (HML(L)).

The VMO is a small squadron to operate 12 light fixed-wing observation aircraft of the OE type. It is the only squadron in the group that requires anything at all approximating a prepared runway.

The HMO is a composite squadron of 12 HUS/HRS types and 12 HOKs. This squadron is designed specifically to provide tactical support for the new Division Reconnaissance Battalion in the conduct of reconnaissance operations. In addition, it can provide air evacuation for all division units, and perform such miscellaneous tasks as courier service and wire laying by helicopter.

The 2 HMR(L) squadrons are composed of 24 HUS helicopters each.

The total complement of the light helicopter group is 64 HUS type aircraft, 12 HOKs and 12 OEs. Its mission is oriented explicitly to fulfill division requirements.

The medium group contains a Headquarters and Maintenance Squadron, an Air Base Squadron and 2 HMR(M) squadrons, each of 15 HR2S aircraft.

The total lift capability of the 2 groups at one time is on the order of 1,500 personnel, or the approximate equivalent of a Battalion Landing Team.

The longer range transport function is handled by the Marine Transport Group. It consists of a Headquarters and Maintenance Squadron and 2 fixed-wing aircraft squadrons of 15 aircraft each. These squadrons will be capable of providing in-flight refueling interchangeably with cargo and personnel transport when aircraft are available to the Marine Corps with the potential for carrying out that dual role.

COMBAT CAPABILITY
The combat power of the typical wing is contained in 3 functional groups: one fighter group, one all-weather fighter group, and one attack group. The command, support and maintenance capability of each group is compartmented into 2 squadrons: a Headquarters and Maintenance Squadron and a Marine Air Base Squadron. Each Marine Aircraft Group is designed to command and support 2 to 4 tactical squadrons. Under the assumption that short of a general war, not more than 2 Marine Aircraft Wings will be simultaneously deployed, the best functional balance of combat aircraft types for the typical wing is set in the ratio of 3 fighter squadrons, 2 all-weather fighter squadrons and 4 attack squadrons. This balance, adjusted as necessary between the 3 Marine Aircraft Wings, provides optimum flexibility in task regroupment for strategic deployment and operational needs.

RECONNAISSANCE
The Composite Reconnaissance Squadron (VMCJ) is a separate squadron with a distinctive functional capability. In actual operations it will be based on an airfield with one of the combat groups and receive its group level logistic support from that group. It is equipped with 10 photo reconnaissance aircraft and 10 configured for electronic reconnaissance.

This squadron, together with the VMO and HMO represent the Marine Aircraft Wings’ contribution to the overall reconnaissance system which has been formed in the division-wing team.

MANNING LEVELS
The typical wing will operate slightly less than 400 aircraft of all types. Personnel are provided in the proposed T/Os to operate and maintain them at an aircraft utilization factor of approximately 65 flight hours per aircraft per month. Because peacetime budgets for operating expenses usually preclude realization of such high utilization factors, it is neither necessary nor desirable to actually man the wings at full strength.
The recommended overall FMF aviation structure, manned at approximately 80 per cent for pilots, 65 per cent for aviation ground officers and 90 per cent for Marine enlisted, is adequate for employment short of general war. It should be adequate at such manning levels to meet force-in-readiness requirements and limited combat employment.

SUMMARY
The essential differences between this wing and the current L Series T/Os are summarized as follows:

a. Squadron level.
1) Reduced maintenance, supply and supporting personnel in VMF/VMA squadrons, caused partially by the reduction in aircraft from 24 to 20, and partially by movement of some service functions to higher echelons.
2) Reduced number of pilots due to lowering of pilot/seat ratio in combat squadrons and reduction in aircraft from 24 to 20.
3) Consolidation of S1 and Adjutants’ sections accomplishing a reduction in administrative personnel.
4) Increase in the VMCJ squadron from 18 aircraft to 20.

b. Group level.
1) Elimination of all Exchange and Special Services personnel except for a special staff section at wing level; elimination of all barbers, and reduction of security personnel in VF/VA Groups.
2) Addition of communications personnel in helicopter groups to permit those units to operate air control teams in embarkation and landing zones during tactical and logistical air lifts.

c. Wing level.
1) Addition of one ASRT to the MASS with no increase in number of personnel.
2) Increase in responsibilities of the Marine Wing Service Group to provide pool-type motor transport resources to operating groups and squadrons.
3) The formation of the Helicopter Reconnaissance Squadron as the air counterpart to the Division’s Reconnaissance Battalion.

In summary, the results of this reorganization provide a closer balance between air capabilities for direct tactical support and for air defense operations. They, in addition, accomplish significant personnel savings. Finally, by further centralizing servicing capabilities in the Wing Service Group, squadrons and operating groups have been lightened to promote early establishment ashore of operating units.