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DEPARTMENT OF THE NAVY PUBLICATION

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DEPARTMENT OF THE AIR FORCE MANUAL

AFM 160-27

MEDICAL SERVICE IN JOINT OPERATIONS

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DEPARTMENTS OF THE ARMY, THE NAVY, AND THE AIR FORCE

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FIELD MANUAL
No. 31-8
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DEPARTMENTS OF THE ARMY,
THE NAVY, AND THE AIR FORCE
WASHINGTON, D.C., 12 September 1968

MEDICAL SERVICE IN JOINT OPERATIONS

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CHAPTER 1

GENERAL

Section I. GENERAL

1-1. Purpose

The purpose of this manual is to familiarize Armed Forces command and staff officers with the general doctrine, organizations, and practices of the medical services of the Army, the Navy, and the Air Force. It outlines the employment of these medical services in unified and/or joint operations. The information provided is applicable to both nuclear and non-nuclear warfare.

1-2. Scope

An initial synopsis of the overall mission of military medical service is followed by an individual consideration of each of the medical services. The material concerning the unilateral employment of each medical service

provides background information and delineates certain responsibilities. Finally, the technique of employment of a unified medical service is covered from the aspects of the estimate, the plan, and the operation.

1-3. Review and Changes

Users of this manual are encouraged to submit comments or recommendations for its improvement. Comments should be keyed to the page, paragraph, and line in which the change is recommended. Reasons should be provided for each comment to insure complete understanding. Comments should be forwarded to the Commanding Officer, United States Army Combat Developments Command Medical Service Agency, Fort Sam Houston, Texas 78234.

Section II. MEDICAL SERVICE, GENERAL CONSIDERATIONS

1-4. Mission

The primary mission of the medical services of the Armed Forces is to conserve military manpower.

1-5. Scope of Mission

The medical mission is divided into three major functions: physical standards, preventive medicine, and medical management of patients. The accomplishment of these functions requires the development and fulfillment of coordinated plans and programs to provide the necessary medical personnel and material resources.

1-6. Physical Standards (Personnel Selection)

The physical standards function is threefold. It includes formulating and recommending physical and mental standards for accepting individuals into the military service; screening individual candidates by these standards to determine their suitability for military service; and identifying those individuals who, after entering the Armed Forces, fall below the standards for retention on active duty.

1-7. Preventive Medicine

Preventive medicine encompasses all the measures necessary to maintain the individual

in optimum mental and physical condition. Principal measures include the following:

- a. Control of communicable disease by such measures as prophylaxis, immunization, and isolation of the sick.
- b. Maintenance of appropriate standards of environmental sanitation and personal hygiene.
- c. Use of preventive psychiatry in maintenance of the mental health of the command.
- d. Training of nonmedical personnel in essential elements of sanitation and personal hygiene including measures to reduce the incidence of dental disease.
- e. Use of the principles of aviation medicine to minimize hazardous conditions associated with flying to include measures to insure the health of flight personnel for maximum performance.
- f. Acquisition of medical information concerning disease prevalence, disease vectors, and climatic and geographic conditions affecting the health of troops.

Section III. MEDICAL SERVICE IN UNIFIED COMMANDS

1-9. Authority of Commander of a Unified Command

The commander of a unified command has the specific authority to coordinate logistic and administrative support of component forces including medical service of the unified command (JCS Pubs 2 and 3). This is in addition to his vested authority as a commander including his strategic and operational responsibilities.

1-10. Unified Command Surgeon

In order to insure joint coordination and review of medical support plans and effective coordination of medical operations, a permanent medical staff authority is designated in each of the established unified commands. Liaison is established between the medical staff

1-8. Medical Management of Patients

Medical management of patients involves two basic measures: evacuation and treatment.

a. Evacuation is the process of moving patients from the point of injury to initial treatment facilities, and subsequently of movement between treatment facilities as necessary. Through timely and orderly evacuation procedures, prompt, adequate, and continuous treatment is insured.

b. Treatment is that phase of medical management which provides professional care of patients and may include hospitalization and rehabilitation.

(1) The purpose of hospitalization is to provide a treatment capability at the proper place for early, definitive patient care without interfering with the tactical mission of the command.

(2) The purpose of rehabilitation is to prepare hospital patients for return to military duty. The program has as its objective return of patients to full duty at the earliest possible time. When patients are not returned to full duty status, the medical service recommends limits of assignments and duties.

authority and each component command surgeon. The duties of the unified command surgeon are normally advisory, planning, and supervisory, as they pertain to the overall medical support of the command. The general responsibilities of the unified command surgeon normally include the following:

a. Insure that hospitalization and evacuation facilities provided under paragraph 1-11d meet medical support requirements of the command and that overlap between component commands is minimized.

b. Recommend the command evacuation policies and priorities. The Joint Chiefs of Staff monitor and coordinate the transportation aspects involved in implementation of the evacuation policy during periods of emergency or joint combat operations. The evacuation

policy to the continental United States* as specified in JCS Pub 3 is the planning and programing objective in all unified commands for each of the components. Commanders of unified commands may adjust the operational policy as required.

c. Supervise the activities of the joint medical regulating office (JMRO) when established.

d. Coordinate component services preventive medicine activities to include—

(1) Investigation and study of epidemic or abnormal incidence of disease, unusual diagnostic problems, and patients resulting from unusual weapons or disease agents.

(2) Conduct of necessary investigations regarding environmental conditions inimical to health.

(3) Maintenance of liaison with and among preventive and treatment medical facilities and agencies within the theater of operations.

(4) Provision, within the command, of a system of collection, evaluation, and dissemination of information pertaining to medical findings and remedial actions of significance concerning the health and well-being of the Armed Forces and the civil population. This information will also be disseminated to The Surgeons General of the Military Services.

(5) Provision for interchange of significant preventive medicine information with allied military forces associated with the command.

e. Make provisions for medical assistance to civilians by—

(1) Defining health standards in occupied areas of jurisdiction.

(2) Insuring their health, welfare, and living conditions do not adversely affect combat readiness and effectiveness of U.S. Forces.

(3) Establishing liaison with civil affairs authorities.

* Wherever in the manual evacuation to the continental United States is indicated, this will not preclude evacuation to the other states or the territories in accordance with applicable regulations.

(4) Making maximum utilization of non-U.S. medical practitioners, supplies, and facilities in the care and treatment of civil population casualties.

(5) Providing advice and assistance in the development and/or conduct of civic action programs or projects.

f. Prepare medical portions of support annexes to unified command plans.

g. Coordinate joint utilization in such medical areas/facilities as convalescent facilities, casualty staging units, laboratory support, dental service, veterinary service, preventive medicine survey and support, aeromedical evacuation, all cross-service medical arrangements, and others as appropriate.

h. Obtain copies of consolidated medical reports from component commands to monitor utilization of all medical resources within the command and provide the unified commander with timely recommendations.

i. Coordinate and supervise the whole blood program when established. Normally, the command will establish a joint whole blood coordinating committee or appoint a blood program officer. The committee or officer will allocate all whole blood received from sources outside the command and will formulate plans for collecting and allocating whole blood from sources within the command.

j. Establish medical training policies for joint operations.

k. Plan and supervise the medical portions of joint exercises.

l. Prepare patient estimates based upon the casualty planning factors established by the components. These estimates will be the basis for other aspects of medical planning by the unified command surgeon (e.g., aeromedical evacuation requirements and overall bed requirements).

m. Monitor medical supply procedures of the component commands.

1-11. Hospitalization in Support of Joint Operations

a. Hospitalization.

(1) Each military department operates its portion of the overall military hospitalization system and determines requirements in accordance with service policy.

(2) Joint utilization by two or more components of hospital facilities of a single component is accomplished when appropriate. The policy of jointly staffing Armed Forces hospitals as a corollary to joint use is not essential and is determined by the affected services. Staffing of hospital facilities by the operating service in no way precludes the interservice or joint utilization of specialist personnel, irrespective of service affiliation, in treatment and diagnostic centers where required.

(3) In those instances where one component utilizes the services of personnel from another component, the personnel function under the operational control of the component temporarily employing them, but such personnel remain under the administrative control of their respective service. The administration and operation of each facility will be governed by and in conformity with the regulations of the operating service.

(4) Medical care of military patients in civilian and allied military medical facilities in unified commands is restricted to emergencies.

(5) Medical care of prisoners of war will be provided in accordance with the provisions of the Geneva Convention Relative to the Treatment of Prisoners of War.

(6) Medical care of civilian casualties in occupied areas will be in accordance with the provisions of the Geneva Convention for the Protection of Civilian Persons in Time of War.

(7) Component commands will forward a consolidated copy of basic morbidity data reports to the unified command.

b. Evacuation.

(1) Policy.

(a) It is the policy of the Department of Defense that, in both peace and war unless indicated otherwise, the transportation of patients of the Armed Forces will be by aircraft when air transportation is available and feasible. Requirements will continue however for hospital ships, ambulance trains, and other surface medical transportation.

(b) Evacuation within a component service is the responsibility of the service commander. Requirements for medical evacuation that cannot be met from resources available to the service commander will be reported to the unified commander who will establish priorities and allocate transportation as required.

(c) Component service commanders will coordinate the evacuation of patients with JMRO.

(d) Procedures for evacuation of prisoners of war and civilian patients will be issued by the unified commander.

(e) In evacuation from the unified command, JMRO will furnish to the J4, transportation division, or joint military transportation board (JMTB) the medical evacuation requirements of the unified command. Based on these requirements, the transportation priorities and means will be allocated.

(f) Evacuation to the unified command from areas outside the unified command will be coordinated by JMRO. Requirements for transportation from points of debarkation (air, water, and ground) will be furnished to the J4, transportation division, JMTB, or (when short trips of small groups are involved) to the component service commander having area responsibility at the point of debarkation.

(2) *Aeromedical evacuation airlift allocations.* Component service commanders will identify estimated aeromedical evacuation requirements (except those provided within combat areas by the component force) in their overall airlift needs to the JMTB of the unified command. In keeping with unified command policies regarding relative priority of aeromedical evacuation, the JMTB will allocate airlift for the estimated requirements.

c. Joint Medical Regulating Office (JMRO). The JMRO will function under the supervision of the unified command surgeon. The staff of JMRO will normally consist of one medical service representative from each component service in the unified command and other personnel, as may be determined necessary. Subarea JMRO will be established as necessary. The JMRO will regulate the movement of the sick and wounded within existing policies. Specified duties of the JMRO are to—

(1) Develop and recommend to the command surgeon overall policies, procedures, and guidance for reporting medical evacuation requirements.

(2) Maintain direct liaison with Armed Services Medical Regulating Office (ASMRO), Washington, D.C. 20315, medical regulating offices of component services, transportation agencies which furnish evacuation transportation, and component services medical commanders and staff surgeons.

(3) Coordinate with the unified command surgeon in determining bed availability.

(4) Obtain periodic reports of available beds from the surgeons of component services.

(5) Obtain, consolidate, and disseminate current and projected estimates of evacuation requirements within the unified command and to the continental United States.

(6) Advise the command surgeon on evacuation portions of the unified or joint plans.

(7) Review for the command surgeon evacuation portion of component service plans.

(8) Take action within the established theater regulating policy, receive bed credits from the component services and, based on such bed credits, select hospitals to receive patients within the communication zone (COMMZ).

d. Responsibilities of Component Medical Service.

(1) Each of the services is responsible for providing or arranging for the provision of the logistic means required to accomplish

the hospitalization and evacuation responsibilities as outlined below.

(2) None of the specific responsibilities promulgated herein limits action by any of the services in arranging for logistic support by another service when mutually agreeable.

(3) Each component is responsible for providing sufficient medical facilities to meet requirements for its individual service(s) and for all hospitalization and evacuation support in an area occupied or used exclusively by that component.

(4) Each component and unified command is responsible for maintaining internal departmental and command blood programs (DOD Directive 6480.5).

(5) Unified and component commanders through their surgeons are responsible for technical supervision over all medical matters necessary for proper patient care, records, disease prevention, training, both unit and personnel, budgeting for medical activities, and determination of requirements for and requisitioning, procurement, storage, distribution, and maintenance of medical materiel.

(6) Dental service responsibilities are as shown in (a) and (b) below.

(a) Optimum joint use may be made of dental facilities and services including inpatient and outpatient treatment.

(b) Isolated individuals and groups of military personnel will obtain dental care from civilian dentists, as authorized by the individual military service when such procedures are more economical and efficient than sending patients long distances to military dental facilities or requesting mobile dental units.

(7) The veterinary services of the Army and Air Force will be utilized by all services to meet veterinary requirements by —

(a) Inspection of food products and sanitary inspections of establishments supplying food products to Department of Defense agencies and publication of a directory of sanitary-approved food establishments for Armed Forces procurement.

(b) Laboratory examination of food products.

(c) Control of animal diseases communicable to man.

(d) Veterinary care for DOD-owned animals.

e. Responsibilities of Individual Service Component. In joint operations, the primary responsibilities for medical service of each service component are as follows:

(1) *Army.* It is the responsibility of the Army component commander to provide—

(a) All hospitalization and medical surface evacuation personnel and facilities required for the support of the Army.

(b) Care, treatment, and hospitalization of prisoners of war and civilians in occupied areas when such responsibility is assigned to the Army.

(c) All medical evacuation by land and inland water transportation.

(d) Aeromedical evacuation within the Army combat zone to include battlefield pickup of patients (except those from an airhead or airborne objective area which is supported by Air Force airlanded logistic support), air transport to initial point of treatment and any subsequent moves to hospital facilities within the Army combat zone.

(e) Medical supply of Army forces.

(f) Medical holding units for the interim care and treatment of Army patients and others, as required.

(g) Operation and support of joint-use facilities when assigned to the Army.

(2) *Navy.* It is the responsibility of the Navy component commander to provide—

(a) All hospitalization and medical evacuation personnel and facilities required for the support of the Navy.

(b) Operation and support of joint-use facilities when assigned to the Navy.

(c) Care, treatment, and hospitaliza-

tion of prisoners of war and civilians in occupied areas when such responsibility is assigned to the Navy.

(d) Sea transportation as required to evacuate patients from overseas areas to the continental United States.

(e) Aeromedical evacuation within the Navy area of responsibility to include battlefield pickup of patients (except those from an airhead or airborne objective area which is supported by Air Force airlanded logistic support), air transport to initial point of treatment, and any subsequent moves to hospital facilities within the Navy area of responsibility.

(f) Medical supply for Navy and Marine Corps forces.

(3) *Air Force.* It is the responsibility of the Air Force component commander to provide—

(a) All hospitalization and medical evacuation personnel and facilities required for the support of the Air Force.

(b) Hospitalization and evacuation of prisoners of war and civilian casualties for occupied areas where responsibility is assigned to the Air Force.

(c) Operations and support of joint-use facilities when assigned to the Department of the Air Force.

(d) Operation of an aeromedical evacuation composed of casualty staging, aeromedical evacuation control centers, and medical crews to support the entire U.S. force structure. To provide this support, the Air Force will operate an intratheater and inter-theater evacuation system. Aeromedical evacuation will be performed from an airhead or airborne objective area where airborne operations include airlanded logistical support by the Air Force (DOD Directive 5160.22).

(e) Medical supply for Air Force units.

CHAPTER 2

ARMY MEDICAL SERVICE IN AN AREA OF OPERATIONS

Section I. GENERAL

2-1. Mission

The mission of the Army Medical Service is to conserve fighting strength through maximum reduction of medical noneffectives and to provide the highest possible standards of health services. These services include preventive medicine, evacuation, hospitalization, veterinary and dental support, and the timely support of medical equipment and materiel in the quantities required for the forces supported.

2-2. Echelons of Army Medical Service

a. Functional Levels of Army Medical Service. The Army Medical Service in an area of operations is organized into four functional levels. These levels are unit medical service, division medical service, field army medical

service, and the communications zone medical service. These levels generally correspond to their counterpart command levels.

b. Area Medical Service. In addition to or as part of the four functional levels, medical service is provided on an area basis to units which have no organic medical service personnel. This concept of medical service involves the delineation of support responsibility by geographical area. It includes providing unit and required higher level medical service to organizations which have no organic medical service personnel. The area service concept is normally followed in supporting the non-divisional forces of the combat zone and all forces of the communications zone. Medical units are allocated on the basis of troop strength, troop density, and medical requirements.

Section II. UNIT MEDICAL SERVICE

2-3. General

a. Unit medical service normally is provided by medical service elements organic to units the size of a battalion/squadron or larger. Units without such organic medical elements are furnished medical service on an area basis (para 2-2b) or by the attachment of medical service personnel.

b. Descriptive information contained in this section is limited to the unit medical service of the infantry division. The mission and capabilities of organic medical service elements of the other type divisions are similar to those of

the infantry division; however, the organization of these elements is not identical in all instances.

2-4. Unit Medical Service in the Infantry Division

a. General. Unit medical service in the infantry division is provided by a medical platoon organic to each infantry, armored, and mechanized infantry battalion, and each cavalry squadron; and by medical sections which are organic to division headquarters, to division artillery headquarters, and to the

engineer, aviation, field artillery, and missile battalions.

b. Battalion Medical Platoon. The medical platoon is organic to the headquarters and headquarters company of the infantry, armored, and mechanized infantry battalion, and to the cavalry squadron. The medical platoon has the mission of providing unit medical service to include emergency medical treatment of patients; collecting patients and evacuating them to aid stations; establishing and operating aid stations for receiving, sorting, and temporary treatment of patients; operating a dispensary for the routine care and

treatment of the sick and wounded; and providing technical control of sanitation to include insect and rodent control and communicable disease control within the battalion area of operation. The medical platoon consists of a headquarters, a treatment section, an aidman section, and an evacuation section. The platoon leader, a Medical Corps officer, also acts as staff surgeon for the battalion.

c. Medical Sections. Each organic medical section provides unit medical service to its organization similar to that provided by organic medical platoons (*b* above).

Section III. DIVISION MEDICAL SERVICE

2-5. Medical Service for the Brigades of a Division

a. There are no medical units organic to the brigades of a division. Medical support is provided by the division medical battalion and is tailored to the mission, composition of the force, and to the geographical area of operations. Normally, one medical company supports one brigade. The company commander works in close coordination with the brigade surgeon in planning medical support of the mission and in responding to the varying needs of the supported combat elements.

b. When the brigade is engaged in an independent operation, a medical company and other appropriate personnel are normally attached. The brigade surgeon then assumes functions similar to the division surgeon.

c. As the principal medical staff officer, the brigade surgeon advises the commander and his staff on medical aspects of matters affecting combat operations. He is responsible for maintaining current and accurate information regarding the health of the command and the medical support situation.

2-6. Division Surgeon

The division surgeon is a division special staff officer. He is responsible for the technical supervision of the entire medical serv-

ice of the division. The division medical section is organized into preventive medicine, psychiatric, aviation medicine, and medical administrative elements. Officers trained in these fields are authorized in this section, which is an element of division headquarters and headquarters company. The division surgeon coordinates routine dental service for the division with appropriate field army dental support units.

2-7. Division Medical Battalion

The division medical battalion, an organic element of the division support command, consists of a headquarters and support company and three medical companies. The battalion provides division level medical service to a division base and 11 or fewer combat battalions. The division medical battalion has the mission of providing division level medical services which include evacuating patients from unit aid stations, operating division clearing stations, optometric service and furnishing medical supply and emergency dental service. In addition, the battalion commander acts as staff surgeon on the support command commander's staff.

a. Headquarters and Support Company. The headquarters and support company provides division level medical service to all division

units not attached to brigades and to non-divisional units operating in the division rear area. It also provides unit level medical service on an area basis to rear areas units with no organic medical element and temporary reinforcement to division medical companies operating in support of brigades. The company is 100 percent mobile.

b. Medical Company. Each of the three battalion medical companies normally supports one brigade. Medical company organization, capabilities, and resources are identical to those of the support company. Each company provides division level medical service to units organic or attached to the brigade or operating within the brigade area; provides unit medical service on an area basis to units with no organic medical element; and reinforces unit medical service of supported units as required. The company is 100 percent mobile.

2-8. Airmobile Division Medical Service

In the airmobile division, air evacuation in organic aircraft is the normal means of medical evacuation. This capability is provided primarily by the helicopter-equipped air ambulance platoon of the division medical battalion. This substitution of air evacuation for ground evacuation represents the most significant difference between airmobile medical service and medical service in other divisions.

a. The division surgeon monitors the air evacuation operations carried on by the medical battalion and insures that operational priorities are in consonance with the tactical situation. When the organic and supporting air evacuation resources are exhausted, the surgeon coordinates with the assistance chief of staff, G4, to obtain assistance from the field army support command. As an interim

measure, he may also request the use of other division aircraft.

b. The air ambulance platoon provides both air ambulance service and air crash rescue service. Its normal range of operation is from the forward edge of the battle area to the division rear boundary. However, it can also penetrate enemy-held territory to perform rescue missions. The medical battalion commander usually retains operational control of the air ambulance platoon, including elements in direct support of brigades. This provides the flexibility necessary to support rapidly changing airmobile combat operations. To support isolated task force operations, however, elements of the air ambulance platoon may be attached. In such cases, the task force commander exercises operational control.

c. In airmobile operations, seriously wounded patients and certain categories of nonbattle patients are evacuated directly to the division clearing station without passing through a battalion aid station. Although the role of the battalion aid station in the usual chain of evacuation is thus reduced, there is no reduction in the importance of unit medical service. Assault companies and platoons may be committed in several locations, and the battalion surgeon may be required to operate several company aid stations to provide the necessary support.

d. Because evacuation is possible either directly to the division clearing station or to the battalion aid station, the responsibilities of platoon and company aidmen for sorting patients are increased. They are responsible for insuring that seriously wounded or ill patients are evacuated to the division clearing station and that lightly wounded patients and others who can be treated adequately by unit level medical service are evacuated to the battalion aid station.

Section IV. FIELD ARMY MEDICAL SERVICE

2-9. Concept of Army-Level Medical Service

The field army medical service evacuates patients from forward medical service units in order to enable such units to maintain

maximum mobility. It furnishes all required levels of medical service within the limitations of professional staff and facilities. Specific missions of field army medical service include

patient management, medical supply, medical equipment maintenance, optical service, veterinary service, dental service, medical laboratory service, whole blood supply, medical support for prisoners of war, and, when appropriate, medical support to civil affairs organizations. In many ways the organization and employment of the elements of the field army medical service parallel that of the division. There is an army surgeon who, with his medical section, performs functions at the army level similar to the division surgeon at that level. As the division medical battalion is organic to the division support command, so the army medical brigade is organic to the field army support command (FASCOM). Within the medical brigade are medical groups which normally support army corps in a manner similar to that in which medical companies of the division medical battalion support the combat brigades.

2-10. Medical Service in the Corps

a. Normally, there are no separate medical units organic to a corps. Medical support is specially tailored to the mission, composition of the force, and to the geographical area of operations. The field army medical brigade, FASCOM, usually provides a medical group with appropriate attached medical units to meet support requirements. These units also provide medical service to the corps headquarters and attached nondivisional units. The medical group commander works in close coordination with the corps surgeon in planning and implementing medical support of the mission.

b. When the corps is engaged in an independent operation, a medical group with appropriate medical units normally is attached. The corps surgeon assumes responsibilities and functions similar to those of the Army surgeon. A tailored medical group is attached as part of a corps support command. The commander assumes responsibilities and duties comparable to those of a medical brigade commander, but on a reduced scale. In both cases, personnel augmentation is required to accomplish added staff functions.

c. As the principal medical staff officer, the corps surgeon advises the commander and staff on medical support operations and on all medical professional and technical matters. He is responsible for maintaining current and accurate information regarding the health of the command and the medical support situation.

2-11. Medical Section, Field Army Headquarters

This section includes the field army surgeon and his commissioned and enlisted assistants. The field army surgeon is a special staff officer of the field army commander. His duties consist of keeping the field army commander and staff informed with regard to the medical service. He must develop the medical plans necessary to carry out the commander's decisions, initiate measures for the prevention of disease and injury in the command, supervise medical supply and maintenance activities, and exercise staff supervision of medical service to include medical training.

2-12. Medical Brigade

The medical brigade is a part of the field army support command. Its mission is to provide medical support to the field army through command and control of the operating units of the field army medical system; to develop, refine, and carry out medical plans; to control, direct, and integrate medical service system operations; to reinforce the medical service of the Army divisions; and to accomplish the overall medical service mission to include area medical service. All field army level medical units are assigned to the medical brigade. The medical brigade commander also acts as the FASCOM surgeon just as the division medical battalion commander acts as the division support command surgeon. The brigade normally consists of a headquarters and headquarters detachment, several medical group headquarters, several medical battalion headquarters, and nondivisional medical service operating units of the field army.

a. Brigade Headquarters. The brigade headquarters provides command, control, and plan-

ning support to the four attached medical groups. It includes the commander and his normal staff and, in addition, a dental surgeon, a veterinary staff officer, and a staff chaplain.

b. Medical Service Command and Control Units. Command and control units are provided the medical brigade to enable the brigade commander to maintain a reasonable span of control and to provide intermediate elements to which varying numbers and mixes of operational medical service units may be attached. This procedure permits maximum flexibility and responsiveness of medical support for the field army.

(1) *Medical groups.* The medical group is the primary operating element of the medical brigade. These units normally are allocated on the basis of one per corps, and for field army rear (army service area) as required. By attachment of operating medical service units, the group can be tailored to support the combat forces of a corps or army rear in much the same manner as the medical companies of the divisional medical battalion support combat brigades and the division base.

(2) *Medical battalion.* This unit normally is attached to a medical group, and is allocated on the basis of one per three to seven medical companies. The organization and functions are similar to those of the medical group but at a lower echelon.

c. Evacuation Units. Ambulance companies (air and ground), collecting companies, and holding companies evacuate, collect, and hold patients from the divisions and from the corps rear and army service areas.

d. Hospitalization Units. Field army hospitalization units are mobile army surgical hospitals and evacuation hospitals. These units provide medical care in conformance with field army evacuation policy. Depending upon the established policy and local circumstances, the care provided ranges from early definitive treatment through convalescence to return to duty. Normally, one mobile army surgical hospital and two evacuation hospitals are allocated per division. Thus, a medical

brigade supporting a 12-division field army includes a total of 12 mobile army surgical hospitals and 24 evacuation hospitals.

(1) *Mobile army surgical hospitals.* The mission of the 60-bed mobile army surgical hospital is to provide resuscitative surgery and medical treatment necessary to prepare critically injured or ill patients for further evacuation.

(2) *Evacuation hospitals.* This semimobile 400-bed facility is designed to provide hospitalization for all classes of patients within the combat zone and to prepare patients for further evacuation as necessary.

e. Convalescent Center. This unit provides facilities for the convalescent care and physical reconditioning of patients evacuated from other medical treatment facilities in the combat zone. Normally, this unit is capable of providing facilities in the field army for the physical reconditioning and convalescent care of 1,500 patients.

f. Other Medical Service Units.

(1) *Army medical depot.* This unit receives, stores, and issues medical materiel; performs direct and general support maintenance of Army Medical Service equipment; and fabricates and repairs spectacles.

(2) *Medical laboratory.* This unit is a broad capability laboratory providing clinical and anatomical pathology services; laboratory support of epidemiologic studies; medical research investigations; technical inspections; manufacture and distribution of special diagnostic reagents; and the collection, storage and distribution of whole blood to medical facilities. It normally is allocated on the basis of one per field army or major combat force. Fragmentation of laboratory sources may be required to meet special situations.

(3) *Preventive medicine service unit, field.* This unit provides facilities for the field study, evaluation and control of environmental and other factors affecting the health and morale of troops in the field.

(4) *Cellular units.* Cellular units from

TOE 8-500 provide or augment various functions including command, evacuation, treatment, supply and maintenance, dental,

veterinary, preventive medicine, laboratory blood transfusion, aircrash rescue service, and other specialized professional capabilities.

Section V. COMMUNICATIONS ZONE MEDICAL SERVICE

2-13. General Organization

The medical organization in the COMMZ varies with size, location and type of operation. The COMMZ for a theater is not divided geographically. The combat service support for a theater is not divided geographically. The combat service support for the theater army is the responsibility of the theater army support command (TASCOM), to which are assigned six type commands that perform all operational functions. These are—area support command; engineer command; personnel command; supply and maintenance command; transportation command; and medical command.

2-14. Medical Command

a. The medical command provides COMMZ level medical support within a theater of operations. All medical units within COMMZ are assigned to the medical command. The number and size of the units assigned are subject to wide variation depending on such factors as the size and location of the forces to be supported, the type operations involved, the evacuation policy, and other important considerations. In general, the medical command consists of a command headquarters, medical units, and detachments concerned with command and control, evacuation, hospitalization, preventive medicine, laboratory service, dental service, veterinary service, medical supply, and specialized miscellaneous units and detachments required for the COMMZ medical service mission. The mission is accomplished through centralized control of decentralized operations. The medical command headquarters exercises control of all COMMZ medical resources through its major subordinate units, the hospital center, and medical group headquarters. The composition of hospital centers and medical groups, as well as the

specific operational missions assigned to each, are determined by the medical command commander. Missions encompass the provision of necessary medical service functions in support of both the field army and COMMZ.

b. The major functions of the medical command are to—

(1) Relieve the field armies in the combat zone of their patients.

(2) Provide for the hospitalization and treatment of further evacuation of those patients received from both the combat zone and the COMMZ in accordance with established policies.

(3) Retain for treatment those patients who may be restored to duty in the theater within the time specified in the theater evacuation policy.

(4) Provide medical service to troops within the COMMZ.

(5) Procure, store, and distribute medical materiel to both field army and COMMZ within established policies.

(6) Conduct an active preventive medicine program within the COMMZ and make prompt recommendations regarding the maintenance of the health of all troops.

(7) Compile medical statistics pertaining to the COMMZ and for all Army forces within the theater when directed.

2-15. Evacuation

The evacuation of patients from the combat zone and their movement within the COMMZ is the responsibility of the medical command.

a. Patients are moved by train, aircraft, ship, and motor vehicles. Since the availability of such transportation determines the extent of adequate evacuation, it is imperative that

the TASCOM surgeon continually forecast requirements for ground, air, and sea evacuation.

b. During amphibious operations, evacuation by ships, helicopters, and landing craft is used to the utmost and is supported by other air evacuation when landing strips become available.

c. Medical holding units are established to insure the maximum use of evacuation means and to provide limited medical care for patients while awaiting surface or air transportation. These holding elements are initially established and operated by the medical service of the field army, except that the Air Force provides this capability at Air Force terminals. However, as soon as practicable, the medical command relieves the field army of the responsibility for such installations.

d. The FASCOM medical brigade notifies the medical command of its evacuation requirements, and the medical command arranges the required evacuation means. Evacuation by air transport from the combat zone to the COMMZ is a responsibility of the theater air force commander.

e. Requirements for interzonal (combat zone to communications zone) medical evacuation are placed with the appropriate military transportation agencies by the medical regulating element of the medical command. The preferred evacuation method is by air. The Air Force provides the aircraft, personnel, equipment, and any necessary local ground transportation (e.g., transfer between aircraft) required in connection with Air Force aeromedical evacuation. It is the Army responsibility to provide ground evacuation. Ground evacuation is provided with motor ambulances and ambulance trains. Ambulance trains are normally reserved for long distance haul, and their movement is controlled by the TASCOM transportation command.

f. Patients to be evacuated out of the theater by air transportation are transferred to Air Force casualty-staging facilities at the aerial port of embarkation. The Air Force provides aircraft and medical attendants for

the aeromedical evacuation of patients from the theater to the continental United States.

g. Military Sea Transportation Service (MSTS) provides for water transportation of patients from the oversea area to the continental United States. Medical holding facilities in the vicinity of sea transportation terminals are operated by the medical command as required.

h. The responsibility of the TASCOM commander for movement of Army patients ceases when patients are delivered to an Air Force casualty-staging facility or received on board a ship for transportation to the continental United States.

2-16. Medical Regulating

In coordination with surgeons of supported field armies and in consonance with theater medical regulating instructions issued by the Joint Medical Regulating Office, the medical command establishes effective Army medical regulating procedures to promote rapid, orderly flow of Army patients from the combat zone to the COMMZ, and from the COMMZ to the continental United States or to a non-U.S. haven.

2-17. Hospitalization

The TASCOM provides hospitalization for Army patients originating in the COMMZ or received from the combat zone. Hospitalization of patients of other services is provided as directed. Hospitalization requirements must be forecast so that construction of hospital facilities can begin well in advance of the time they are to be occupied. Except when located in existing hospital plants, general and station hospitals require many weeks for development before they can function normally. They are dependent upon the availability of engineer technical assistance, labor, and supplies. Once established, they can be moved only with difficulty, time-consuming effort, and a loss of available fixed beds within the theater. COMMZ hospitals are classified and organized on the basis of bed capacity, type and extent of medical care performed, and primary mis-

sion for which they are responsible. Two or more general hospitals and other supporting medical units may be grouped under a hospital center headquarters. Such hospital centers are employed to facilitate the evacuation and/or specialized treatment of patients and to provide economy in the use of personnel and equipment. Types of hospitals are as shown in *a* through *c* below.

a. General Hospitals. Fixed installations designed for extensive treatment of all types of patients from field army and/or COMMZ. During emergency periods of short duration, the patient capacity of general hospitals may be expanded through use of augmentation medical assemblages.

b. Station Hospitals. Fixed hospitals having capacities of from 100 to 750 beds. Normally, they are designed to provide medical and surgical treatment on an area basis for Army patients originating within the COMMZ. During emergency periods of short duration, the patient capacity of these hospitals also may be expanded through use of augmentation medical assemblages.

c. Field Hospitals. Hospitals which have a normal 400-bed capacity when operating as complete units. These units are designed to provide hospitalization to concentrations of troops in the COMMZ when temporary hospital facilities are required. Field hospitals are considered more mobile than station hospitals, since they are equipped with field-type equipment in lieu of the bulkier and less movable station-type equipment. The

field hospitals may be divided into three separate hospitalization units of 100-bed capacity, each of which is capable of separate operation. These hospitals also may be used to perform a variety of functions such as special facilities for the handling of neuro-psychiatric cases, communicable disease, or other diseases of command importance.

d. Convalescent Centers. These centers provide convalescent facilities for recuperating patients who require additional reconditioning before they are returned to duty. A convalescent center may be augmented to provide similar facilities for an additional 1,500 patients.

2-18. Medical Supply

a. The TASCOT medical command determines the requirements for and procures medical materiel, within established policies. Subordinate medical depots provide the storage, distribution, issue, and documentation of medical materiel; provide medical maintenance and repair facilities; fabricate and repair optical spectacles and lenses; and process captured medical supplies.

b. The commander of the medical command is further responsible for coordinating and integrating medical supply planning with all other planning of his service and with that of other interested services. A knowledge of the overall theater troop basis and future plans is essential to developing a proper supply plan.

CHAPTER 3

NAVY MEDICAL SERVICE IN AN AREA OF OPERATIONS

3-1. General Considerations

a. In an area of operations, the Navy maintains naval operating forces comprised of Navy and Marine Corps organizations and the bases from which these forces operate. The medical and dental services must be organized to provide—(1) adequate medical and dental support for Navy personnel afloat and ashore; (2) evacuation of patients by land, sea, and air; (3) medical and dental service to the Marine Corps; and (4) adequate preventive medicine support to Navy personnel ashore and afloat and to the Marine Corps.

b. To accomplish the mission afloat, all but the smallest craft have medical personnel and facilities aboard. In general, the medical capability of combatant ships is designed primarily for support of the ship's complement, with the larger ships capable of providing medical support to the smaller ships which have limited facilities. Amphibious ships provide medical support for troops when embarked and are augmented with medical personnel and material for patient-handling tasks in amphibious assault operations. Auxiliary ships, such as tenders and repair ships, have more complete medical facilities to provide medical care to the personnel of the ships they support. Hospital ships provide definitive medical care.

c. To accomplish the medical support mission ashore, Navy hospitals and dispensaries are maintained in the normal areas of fleet operations. In general, hospitals and dispensaries are established to support personnel of the command where they are located. The larger U. S. Navy hospitals (comparable to Army class II hospitals) provide definitive hospital support to all Navy and Marine Corps per-

sonnel, afloat and ashore, and to personnel of the Army, Air Force, and Coast Guard as required.

d. These capabilities afford flexibility in providing medical support and allow the Navy to concentrate medical service where and when it is required in support of joint operations.

e. The Navy is responsible for planning and providing such sea transport support as may be required to evacuate patients from overseas areas to the continental United States and also within and between overseas areas.

f. In planning Navy medical support in joint operations, it is imperative that liaison be established between the Navy force surgeon and the surgeons of the other services participating in the operation concerning the facilities that the Navy will be called upon to furnish.

g. Command channels vary slightly for Navy forces ashore and afloat. For forces ashore, the channel is from the area of operations naval component commander through area subordinate commanders and island commanders (when applicable) to advance base commanders. These commanders have medical and dental officers on their staffs to plan requirements and coordinate medical and dental logistics at their respective levels. For forces afloat, the chain of command stems from the area of operations naval component commander through fleet commanders and type commanders to individual units or ships. These commanders, in turn, have their staff medical and dental officers to coordinate medical and dental logistic requirements.

3-2. Medical Services Afloat

a. The number of medical and dental personnel and the amount of medical materiel in a ship are generally based on the size, complement, and mission of the vessel. In consonance with the size and mission, the most complete medical facilities that can be incorporated into a combatant ship are provided. Modern aircraft carriers of the fleet have approximately 86 hospital beds, with modern clinical spaces and dental facilities. In contrast, the smaller ships have very limited but adequate facilities. Other ships, such as submarine tender (AS) and destroyer tender (AD), have complete medical facilities capable of supporting the smaller ships.

b. The ships that are most capable of caring for patients are (1) hospital ship (AH), (2) attack transport (APA), (3) amphibious assault ship (LPH), (4) amphibious transport dock (LPD), (5) attack aircraft carrier (CVA), (6) ASW support aircraft carrier (CVS), (7) submarine tender (AS), and (8) destroyer tender (AD).

c. The hospital ship is the floating hospital of the Navy. It can be compared to a 560-bed hospital with all attending medical and dental personnel and equipment. In the present concept of use, the hospital ship will remain in the area of operations to provide the highest level of patient care and will transfer the convalescent cases to other units leaving the area.

d. The attack transport, when augmented with medical personnel and materiel, can serve as a patient-receiving ship and can handle approximately 250 patients. It can also be used as a patient evacuation transport capable of evacuating 500 ambulatory patients or 250 litter patients to the rear area or CONUS.

e. The amphibious assault ship is augmented to afford evacuation for 500 wounded. These patients normally will be derived from troops who are debarked on an assault and returned by helicopter or small surface craft.

f. The amphibious transport docks have patient-handling facilities similar to the attack transports. Their design enables them to re-

ceive patients via helicopter using the flight deck and via landing craft using the well deck.

g. Detailed employment of the medical facilities in joint amphibious operations is discussed in chapter 7.

h. It should be borne in mind that any of the larger type Navy ships are limited in their emergency patient-handling capacities by the materiel and number of medical personnel aboard. If these ships are augmented by surgical teams or additional personnel and supplies, their capacities for patient handling are greatly increased.

3-3. Medical Services Ashore

In keeping with the Navy mobile support concept, only a limited number of overseas bases are maintained. To provide the capability to augment overseas bases or to establish bases in the forward operating area, the Navy has developed the advanced base functional component system. An advanced base functional component is a grouping of personnel and materiel designed to perform one of the specific tasks of an advanced base. An advanced base can be developed and established by the selection and use of functional components to provide the facilities required. It may be a repair base, a supply base, an airfield, an airbase, an all-purpose naval base, or any type of naval shore establishment at an overseas location. In each of the bases, medical and dental components vary from a first aid dispensary to a 1,000-bed hospital; from a small mobile dental unit to a large dental clinic and preventive medicine units. (See table of Advanced Base Functional Components: OPNAV INSTR P4040:22-series.)

3-4. Medical Augmentation of the Operating Forces

To provide the necessary capability to augment the operating forces, surgical teams and patient evacuation teams are maintained to provide support in combat or disaster situations.

a. *Surgical Teams.* Surgical teams are established to provide direct support to the oper-

ating forces by augmenting the personnel and materiel of existing medical facilities when it is anticipated that the number of patients requiring surgical care may exceed the capabilities of medical support elements organic to the combat units or operating forces. A secondary mission is to provide surgical support in national emergencies, disasters, or other situations which require rapid movement of men and materiel necessary to provide a surgical capability. Each surgical team consists of 3 medical officers, and 10 hospital corpsmen. These teams are organized and maintained ready for deployment at Navy hospitals. The materiel to outfit and support surgical teams is assembled in blocks. The supply blocks are functionally packed and provide the equipment and consumable materiel for 10 days operations. Resupply blocks that provide an additional 10 days of supply are also maintained in readiness.

b. Casualty Evacuation Teams. Casualty evacuation teams consisting of 1 medical officer and 10 hospital corpsmen are organized, trained, and kept ready for deployment. The mission of these teams is to provide general nonsurgical augmentation to ships designated as patient-receiving ships. Their work is intended to be primarily in triage,* pre- and postoperative care, and care of nonsurgical patients. These teams are not equipped with medical materiel, but use the materiel organic to the unit which they augment.

3-5. Evacuation

In general, aeromedical evacuation by the Navy is limited to the routes of sole interest to the Navy and Marine Corps where facilities of the Air Force cannot provide the required service.

a. Tactical Aeromedical Evacuation. In Navy and Marine Corps areas, Navy and Marine Corps aircraft, including helicopters, may transport patients from the combat area or initial point of treatment to hospital facilities in the rear areas.

* The sorting out and classification of patients brought to a hospital.

b. Surface Evacuation. The Military Sea Transportation Service provides sea transportation required to evacuate patients from overseas areas to the continental United States and, when required, within and between overseas areas. Seaward evacuation during amphibious operations is also a Navy responsibility.

3-6. Medical Service of the Marine Corps

Medical service in a Marine Corps division differs from that in an Army infantry division mainly in the organization of the division medical battalion. This battalion is the backbone of medical support to a marine division. When operating as a unit, it can establish and maintain a 240-bed hospital. (Refer to U.S. Marine Corps publication FMFM 4-5, Medical and Dental Support.)

a. Unit Medical Service. The service performed by the unit medical service of a marine division is similar to that of an Army infantry division.

b. Division Medical Service. The medical battalion is composed of a headquarters and service company and four collecting and clearing companies. The latter companies are staffed and equipped to give full resuscitative (lifesaving) care and definitive surgical care.

(1) *Headquarters and service company.* The headquarters and service company of the medical battalion contains a battalion and company headquarters, division preventive medicine section, two shock and surgical teams, medical records section, motor transport section, and a utilities section. The shock and surgical teams may be employed wherever necessary to augment medical facilities.

(2) *Collecting and clearing companies.* Each company consists of a company headquarters, two clearing platoons, and one collecting platoon. Normally, one collecting and clearing company is assigned in direct support of a regimental landing team. The collecting platoon accomplishes the evacuation from supported aid stations. The clearing platoons are capable of establishing a complete 60-bed surgical installation or two 30-bed surgical facilities and normally confine their

activities to giving full resuscitation and definitive surgical care to those cases classified as nonevacuable. Each company, less its heavier vehicles, is helicopter transportable.

c. Division Preventive Medicine Section. This section provides personnel trained in sanitation, communicable disease control, and vector control measures. They plan, supervise, and perform timely protective measures for control of disease common to field operations.

d. Hospital Company, Fleet Marine Force. The mission of the hospital company is to provide resuscitation and definitive surgical facilities; to establish a 100-bed hospital for the relatively minor wounded, sick, and injured; and to evacuate patients requiring prolonged hospitalization. Its secondary mission is to augment division medical facilities either as a complete unit or by deployment of provisional detachments organized within the company. The hospital company consists of a company headquarters and a hospital platoon with a total of 9 officers and 60 enlisted men (Navy).

e. Numbered Separate Surgical Companies, Fleet Marine Force. The organization and equipment of this company are identical with those of the Army evacuation hospital except for the replacement of nurses by corpsmen and a reduction in the number of trucks. The company has the same capability as its Army counterpart, and the two can be used interchangeably in a theater of operations.

(1) Because there are no separate corps organizations in the Marine Corps, their counterparts are included in "force troops". When required, these troops may be assigned in support of a landing force of one or more divisions.

(2) During the assault phase of amphibious operations, personnel of force troops may be assigned to reinforce the medical department of the forces afloat.

f. Aeromedical Evacuation in a Marine Division. A marine aircraft wing normally supports a marine division. When a wing is committed to combat, medical allowances pro-

vide for ordinary sick call, flight physical examination, supportive care of casualties in preparation for evacuation, surgical care, air evacuation, and preventive medicine programs. Provisions are made to support such independent tactical employment of various echelons of the wing as might be anticipated. Marine aircraft group medical sections are part of marine airbase squadrons and have sufficient personnel to operate a 20-bed medical-surgical facility. Each marine wing service group has sufficient medical personnel in its airbase squadron to care for group personnel, plus personnel of aviation units operating from an airbase which are not authorized medical sections. Personnel requiring extensive surgery or hospitalization must be evacuated to supporting force units, division units, or facilities afloat. In addition to other functions, it is capable of providing both fixed-wing transports and helicopters for the evacuation of patients.

(1) While none of these aircraft are set aside specifically for patient evacuation, first priority is given to evacuation requirements whenever possible. Control of evacuation is through command channels after the initial request is made by the medical department.

(2) Air evacuation to facilities outside the division area is normally accomplished, as required, by the Air Force.

g. Dental Service to the Marine Corps. Dental service is provided to the fleet marine forces and to the Marine Corps supporting establishment as follows:

(1) Each fleet marine force is provided dental service by dental companies organic to the force.

(2) Dental companies are attached to the major elements of the force. Military command and coordination control of the dental companies are passed to these commands; however, they continue to be responsive to directives of the force commander.

(3) The force dental officer is a member of the force commander's special staff and is responsible for recommending the most efficient employment of the dental support.

(4) The dental company, commanded by a dental officer, is capable of providing dental support to a marine division, marine aircraft wing, or force troops. The headquarters and service platoon contains the platoon headquarters, the mobile dental clinic section, and the motor transport section. These sections provide administrative and logistical support for the company. The clinic platoon provides for the surgical and operative dentistry requirements. The prosthetic platoon provides for the prosthetic requirements. The dental company is organized to provide for flexibility and mobility. The company may operate in its entirety or be utilized in small detachments dispersed over a wide area. The

dental company or detachments can be used to reinforce other dental companies.

(5) The company is capable of providing for total dental administrative and dental technical requirements. However, it is not completely self-sustaining logistically and is assigned to the subordinate unit of a major Fleet Marine Force organization for logistical and administrative support. The dental company commander is on special staff of the commanding general.

(6) Dental service to the non-Fleet Marine Force organizations is provided in the same manner as for Navy shorebased facilities.

CHAPTER 4

AIR FORCE MEDICAL SERVICE IN JOINT OPERATIONS

Section I. GENERAL

4-1. Introduction

In joint operations, the Air Force component commander commands the allocated Air Force elements and retains authority or delegates it to his subordinate commanders as the situation dictates. The composition of the Air Force component and the types of combat and support elements assigned to it are based on the mission to be performed. The Air Force elements of a joint task force are capable of operating in the geographic areas and climates which will be encountered, and they can be employed from either permanent or temporary bases as required by the situation.

4-2. Air Force Medical Service Mission in Support of Joint Operations

The medical mission of the Air Force forces (AFFOR) is to provide to participating forces the medical support necessary to maintain the highest degree of combat readiness and effectiveness and to provide aeromedical evacuation as outlined in JCS Pub 3. Medical support is furnished by operation of—

a. A fixed medical treatment facility at a main operating base (MOB) capable of furnishing complete medical care to include medical and surgical service, flight medicine, military public health, and veterinary and dental services for the personnel of all satellite, tenant, and assigned units, including tactical combat elements. This facility may have the capability of furnishing hospitalization on an area basis.

b. A fixed medical treatment facility at a dispersed operating base (DOB) that has a

limited capability of furnishing complete medical care.

c. Field medical units at forward operating bases (FOB) are organized and supplied to meet expected situational requirements.

d. An aeromedical evacuation system—(1) using resources of tactical airlift for movement of patients from the combat zone (and airheads within the theater of operation) to and within the communications zone; and (2) using Military Airlift Command (MAC) airlift for movement of patients from evacuation or area hospitals to non-U.S. havens or to the continental United States.

4-3. Medical Operations

a. Responsibilities of the AFFOR Surgeon. Technical supervision over the AFFOR medical service is assigned to the AFFOR surgeon as a member of the special staff reporting directly to the AFFOR commander. The AFFOR surgeon, in addition to being the advisor to the AFFOR commander on medical service matters, has the following responsibilities:

(1) Exercises management of assigned medical (to include dental and veterinary) resources.

(2) Develops, monitors and insures the implementation of medical policies supporting joint task force (JTF) and AFFOR operations.

(3) Reviews medical plans of subordinate units to insure that a medical capability is available to support contingencies.

(4) Makes recommendations concerning the requirement for and the movement and assignment of medical units and personnel to subordinate echelons.

(5) Develops and technically supervises the AFFOR hospitalization system, medical supply system, aerospace medicine, and aeromedical evacuation activities.

(6) Supervises and consolidates health reports.

(7) Inspects operating locations and bases to insure the adequacy of medical support and maintenance of sanitary standards.

(8) Coordinates medical planning with unified command or JTF surgeon, appropriate command surgeons, and directors of base medical service.

b. Responsibilities of the AFFOR Dental Surgeon: The AFFOR dental Surgeon will—

(1) Advise the AFFOR surgeon and staff on technical and professional matters pertaining to dental service activities in joint operations.

(2) Implement policies and plans pertaining to the dental service.

(3) Advise on, plan and review requirements for dental facilities, materiel and funds.

(4) Coordinate and recommend on manpower requirements and personnel utilization.

(5) Determine compliance with plans and programs. Assist in eliminating deficiencies and difficulties.

(6) Review and analyze dental service reports.

(7) Advise on programing changes involving the dental service.

(8) Advise on dental service requirements for deployed tactical Air Force units and bare base operations.

c. Responsibilities of the AFFOR Staff Veterinary Officer. The AFFOR veterinary officer will—

(1) Advise the surgeon and staff on all professional and technical matters pertaining to veterinary service activities in joint operations.

(2) Advise on requirements for and the qualifications of veterinary personnel needed to support joint operations.

(3) Provide recommendations for and review all veterinary requirements for facilities, materiel and funds to support joint operations.

(4) Provide for attending veterinary service at installations where military veterinary officers are not regularly assigned.

(5) Coordinate and supervise the veterinary sanitary inspection of establishments and the procurement inspection of subsistence items required for joint oversea operations.

(6) Implement plans and policies applicable to the veterinary service.

(7) Review, evaluate and consolidate pertinent veterinary reports.

Section II. MEDICAL SERVICE FOR DEPLOYED TACTICAL AIR FORCE UNITS

4-4. Support Concept

a. The nature of wartime missions and the dispersion of Air Force units have contributed to the development of the concept of a director of base medical services who manages all medical resources on or near an Air Force base and provides medical support to Air Force units in a given area without regard to their command assignments. Normally, the director of base medical services will be the

senior Air Force physician present for duty with the base medical unit.

b. In the theater of operations, established Air Force medical facilities must plan to take care of Air Force and other patients.

c. To be responsive to the medical support requirements of the AFFOR in joint operations, the following types of Air Force medical capabilities are available:

(1) Fixed facilities at both main and dispersed operating bases. (Augmentation of the medical capability may be required.)

(2) Nonfixed medical facilities at FOB (normally considered to be a bare base operation).

(3) Air transportable dispensary with each tactical flying squadron.

(4) Aeromedical evacuation systems to include casualty staging to support entire joint force structure.

4-5. Fixed Medical Facilities

a. Within the continental United States and overseas, each MOB has a fixed medical treatment facility established by the Chief of Staff, USAF. These facilities are established on a basis of total beds authorized rather than in terms of medical units assigned or employed at the installation. Establishment and adjustment of bed authorizations are the responsibility of the major command except for specialized treatment hospitals which are determined by The Surgeon General, USAF. Authorizations are determined on the basis of geographical location, proximity to other U.S. medical facilities, mission of the base, strength served, and extent of professional care to be furnished.

b. At DOB overseas, a small housekeeping force is provided to maintain the installation facilities in readiness to receive a tactical unit deployed in support of a contingency plan or limited war operations. When a tactical unit is deployed there, the medical unit at the base must be augmented with personnel resources from the host or deploying command. The nature of the augmentation will depend upon the size of the force deployed and the projected length of the operation. Augmentation of the medical unit operating the medical service is necessary so that the required base level medical care can be made available for assigned base forces.

c. Fixed medical facilities are responsible for providing the following:

(1) Treatment for all personnel authorized medical care.

(2) Support of tactical squadrons through squadron medical elements.

(3) Base medical support including aeromedical, dental, military public health, and veterinary services.

(4) Tactical hospital support for tactical wing deployments or dispersal operations.

(5) Emergency and disaster assistance in accordance with the base disaster control plan.

4-6. Nonfixed (Field) Medical Units

a. For the support of deployed tactical units, the USAF Medical Service provides two types of units to operate in the field:

(1) *Air transportable dispensary (ATD)*. This type of unit is also known as a tactical squadron medical support element. One ATD is deployed with each tactical squadron to provide squadron medical support.

(2) *Air transportable hospital (ATH)*. The primary mission of the ATH is to provide more definitive care to a larger population than is available in an ATD. These hospitals, like the dispensaries, are staffed and equipped to operate under field or combat conditions.

b. The functions and capabilities of field medical units are as follows:

(1) The ATD is authorized one flight surgeon and three medical airmen. Each dispensary is responsible for providing medical service for a tactical squadron or equivalent unit to include—

(a) Aerospace medicine services to insure the operational efficiency of aircrews.

(b) Military public health surveillance to reduce overall personnel noneffectiveness.

(c) Clinical medicine directed toward the treatment of squadron personnel and their prompt return to duty.

(d) Screening the flow of patients to definitive medical support facilities.

(2) The ATH can operate up to 36 beds and is responsible for providing either limited care in support of a wing deployment or back-up support for several ATDs. The ATH is staffed and equipped to provide basic medical services to a force composed of two or more squadrons to include—

(a) Aerospace medicine and military public health service.

(b) Outpatient service.

(c) General medicine and surgery directed toward early treatment of patients and prompt return to duty.

(d) Dental service.

(e) Veterinary service (primarily food inspection).

(f) Screening flow of patients to definitive medical support facilities.

(g) Food service for patients and assigned personnel.

Section III. BARE BASE CONCEPT

4-7. General

The ability of the Air Force to conduct tactical air combat operations anywhere in the world is dependent upon its capability to place "bare bases" in operation rapidly. A bare base is an installation with a runway, taxiways and ramp, but may or may not have any other supporting facilities. USAF Strike Command (USAFSTRIKE), as the Air Force component of the United States Strike Command (USSTRICOM), has developed and maintains in readiness logistic support packages designed to staff and operate bare bases in support of tactical airlift, fighter, and tactical air reconnaissance units. Special ATH and housekeeping sets have been developed to support these packaged forces. The size and contents of these packages can be modified as required to support a given base. Upon implementation of an order or plan directing Air Force units to operate from a bare base, a combat support unit (group or wing, provisional) is normally designated and organized to provide administrative and logistical support for the tactical units, specialized units, and tenant units occupying the base. The assignment of the combat support unit will vary, depending upon the particular order or plan. Medical support may be organized in various ways, depending upon the situation. Normally it is included within the combat support unit.

4-8. Medical Support for a Bare Base

a. The medical support required for a bare base depends on the population to be supported, availability of other medical care sources, and the type unit being deployed.

b. An ATD is available to each deployed flying squadron and must be considered when determining the extent of additional medical support required. Consideration must also be given to the projected length of stay, the distance to more definitive medical facilities, and the availability of aeromedical evacuation service. After these factors and the number of ATDs available at a given base are considered, the ATH may be used to provide the required additional support.

c. The ATH is adaptable to provide support for several small units as well as rather large units, up to 3,500 personnel. The ATH capability can be tailored by varying the numbers of assigned personnel and the quantities of supplies and equipment. A small unit of a few beds can be deployed, or the full 36-bed unit can be used.

d. Dental service will be provided by a mobile dental team or by other authorized means, as determined by the staff dental officer.

Section IV. AEROMEDICAL EVACUATION

4-9. Air Force Responsibility

The U.S. Air Force responsibility for aeromedical evacuation is assigned by DOD Direc-

tive 5160.22 and is discharged by three systems: strategic (intertheater) and tactical (intratheater) and domestic aeromedical evacuation.

4-10. Aeromedical Evacuation Systems

a. The strategic aeromedical evacuation system for joint operations is provided by MAC. This type of support normally operates between theaters (i.e., from an oversea area to the continental United States or from an oversea area to definitive medical treatment facilities which are located well in a rear area). Normally, strategic aeromedical evacuation is accomplished from a rearward permanent base to another permanent base with a well-staffed fixed medical facility.

b. Tactical aeromedical evacuation system operates under the technical supervision of the AFFOR surgeon and is assigned to and under the command of the airlift task force commander. The tactical aeromedical evacuation system utilizes much the same technique as the strategic system, but its airlift capability is provided by backhaul transport aircraft. Usually this system is confined to a specific theater of operations and provides evacuation from combat zone and airheads to communications zone and between medical facilities in the communications zone. This system is provided patient workload estimates, plans, standards of professional care, and special allocations of personnel and equipment by the AFFOR surgeon.

c. Domestic aeromedical evacuation system is operated by MAC in CONUS and provides for the movement of patients from aerial ports to hospitals of final destination and between medical treatment facilities within the United States.

4-11. Components of Aeromedical Evacuation Systems

Responsibilities and functions of the components aeromedical evacuation system are as follows:

a. *Aeromedical Evacuation Control Center (AECC)*. This center controls and monitors the evacuation of casualties; coordinates the selection of aircraft for aeromedical evacuation; coordinates the issuance of "frag" orders for flights; provides operational guidance and information to other elements of the system;

maintains casualty evacuation status charts and records; and provides casualty status information to the appropriate surgeons, higher headquarters, receiving facilities, liaison officers, and other agencies as required.

b. *Casualty Staging Units (CSU)*. These medical units, operating transient patient beds, are located on or in the vicinity of an enplaning or deplaning airbase or airstrip. They provide reception, administrative processing, ground transportation, feeding, and limited medical care for patients entering, en route, or leaving the aeromedical evacuation system. CSUs vary in capacity from 25 to 250 beds.

c. *In-Flight Aeromedical Teams*. These teams provide patients with in-flight care and are composed of specially trained nurses and aeromedical technicians with appropriate equipment. Normal composition of a tactical aeromedical evacuation team is one nurse and two technicians. Strategic aeromedical evacuation in-flight teams are composed of two nurses and three technicians. A medical corps officer augments these teams if required.

d. *Liaison Officers/Teams*. Liaison officers or teams conduct the necessary coordination with the appropriate receiving hospitals, hospitals generating patients, area and local surgeons, the aeromedical evacuation control center, and other elements of the system as necessary.

e. *Support Element*. The functions of this element are primarily associated with resupply activities for the various units of the aeromedical evacuation system. These functions may be accomplished by this type of unit or maybe incorporated in some other element or functional area of the system.

4-12. Patient Movement Priorities

Three classifications or priorities of movement are designated for patients being reported to Aeromedical Evacuation Control Center (AECC) or Joint Military Regulating Office (JMRO) for aeromedical evacuation:

a. *URGENT*. Emergency cases which must be moved immediately either as a lifesaving measure, or because the tactical situation demands it, are classified urgent.

b. *PRIORITY*. Cases which must be evacuated within a short period of time (normally a few hours) are classified priority.

c. *ROUTINE*. Cases which will be transported by planned or scheduled airlift (normally within 24 hours) are classified routine.

CHAPTER 5

JOINT MEDICAL PLANNING

Section I. GENERAL

5-1. General

The tactical mission assigned to the combat forces must be the basic consideration of all medical planning. Medical preparations and planning must be initiated early and must be specifically designed to support the tactical operation.

5-2. Factors

Certain basic factors and premises must be used for sound medical planning. The following are among the most important:

- a. A careful medical estimate is of primary consideration in medical planning.
- b. The efforts of the medical services of the component forces must be coordinated for maximum use of resources available.

Section II. MEDICAL ESTIMATE

5-3. General

The process followed in preparing a medical estimate of the situation is the same as that followed in preparing an operational estimate. The medical estimate is an examination of all factors which will influence the accomplishment of the mission. The object is to arrive at a sound decision as to the proper course of action to be adopted. In preparing the medical estimate the fundamental steps which are taken to arrive at a conclusion include—

- a. Consideration of the command mission.
- b. Consideration of the medical situation and all factors affecting the medical service, assumptions for completing the estimate, an analysis of workload, requirements and means available, and the development of medical courses of action.
- c. Evaluation of the various courses of action by listing the outstanding medical elements of each and their controlling limiting features,

then comparing one with another by listing comparative advantages and disadvantages.

5-4. The Situation

The extensive information required before a proper medical estimate can be made makes it essential that the staff surgeon and dental surgeon be thoroughly informed on all operations under consideration by the commander and his staff. The information required includes medical intelligence. Some of the more important items are outlined in *a* through *d* below.

- a. *Enemy Capabilities.* From the medical planner's viewpoint, this is the enemy's potential for inflicting physical damage upon friendly personnel and for impeding or prohibiting their evacuation. Enemy capabilities are related to his strength, combat efficiency, position, weapons, and probable movements. Enemy health conditions should be considered because our own forces may be affected. Poor health among the enemy is also a potential

source of patients, and medical service must consider requirements for the care of prisoners of war and civilians.

b. Friendly Capabilities. Under friendly capabilities are considered strength, combat efficiency, position, weapons, and plan of action. When these factors are considered in relation to the capabilities of the enemy, a preliminary estimate of medical workloads can be made.

c. Environment.

(1) *Terrain.* The type of terrain over which operations are to be conducted directly influences the medical workload. In the problem of patient evacuation, the availability and condition of road nets, landing strips, railroads, harbors, other geographic features, and climatic conditions must be considered. If the operation is amphibious, transfer of patients from shore to ship may be largely dependent on the condition of the sea.

(2) *Climate.* Climate causes such conditions as frostbite, snow blindness, trench foot, sunburn, and heat prostration. In addition, excessive precipitation interferes with land and air evacuation and high humidity speeds the deterioration of drugs and medical equipment.

(3) *Population, customs, and disease prevalence.* Public health measures to be instituted among civilians in connection with civil affairs must be based upon a knowledge of the population, customs, and prevalent diseases. Disease control measures among friendly troops will also be influenced by these factors. Medical statistics for the area should be considered in making an estimate of the nonbattle patients which may be expected. Such statistics should include information about types of diseases, sources, frequency, severity, and current result of preventive measures and treatment. Also, the civilian medical facilities and personnel in the area must be known. This information is needed not only for planning public health measures and civilian medical care, but also for evaluating the assistance which may be furnished to or required from friendly military medical service.

(4) *Insects, animals, and vegetation.* A considerable knowledge of these potential sources of disease is necessary for establishing safeguards against them and determining methods of treatment. Insects are particularly important because of their disease-carrying capabilities. Detailed information regarding types, numbers, distribution, and habits is essential.

d. Food and Water. Veterinary units of the medical service provide complete inspection service of foods from the time of procurement to the time of issue to troops. The medical service is also responsible for supervision of the sanitary aspects of preparing, handling, and serving food and for similar supervision of water supplies from source to consumer.

5-5. Casualty Estimate

Information of the type described in paragraph 5-4 permits a preliminary analysis of the situation. A preliminary estimate can then be made of the probable number of patients, the types of patients, their distribution in time, and the areas of greatest patient density.

5-6. Medical Requirements and Means Available

From preliminary patient estimates, a calculation is made of the number and types of medical units and the amount and kinds of medical supplies which will be required. The available medical means should then be evaluated. These include medical units organic to the combat forces involved, medical units which are available through supporting elements, supply agencies, the amount of supplies on hand, and the capability for replenishment. Similar estimates, based upon the anticipated health situation, will be required for preventive medicine units and for their supplies and equipment.

5-7. Evaluation of Courses of Action

After the estimate has been made, the staff surgeon must—

a. Determine the various courses of action which are open to him.

b. Determine the probable effect of each enemy capability on the success of each possible course of action.

c. Weigh the advantages and disadvantages of each course of action.

5-8. Conclusion and Recommendations

a. Determine which course of action promises to be the most successful in accomplishing the mission.

b. Recommend medical service requirements to the commander and where, when, and how medical units should be employed.

Section III. PLANNING FACTORS

5-9. General

Basic planning for medical service in joint operations involves four major considerations: first, plans pertaining exclusively to each of the medical services; second, plans of each medical service which require coordination with other elements of the same armed service; third, plans involving joint action among the three services; and fourth, plans involving coordination with allied forces. All these plans must be based upon component planning factors which are used to develop the workload and requirements in the medical estimate.

5-10. Personnel Strength by Type

One of the prerequisites for sound medical planning is an accurate estimate of patients, derived by applying admission rates to personnel strengths. Because admission rates differ between the individual services it is not sufficient to know only the total strength of the forces to be employed. Personnel strength must be broken down into individual services for which admission rates have been determined. These different admission rates can then be applied to each service total for estimation of patients.

5-11. Admission Rates

Admission rates are numerical expressions of the relative frequency with which patients are admitted to hospitals from a specified population over a designated period of time. The particular admission rates used in medical planning represent average rates derived from similar experiences in similar operations. The primary types of patients for which admission

rates are used in an area of operations are wounded (battle) patients and disease and nonbattle injury patients. The admission rates usually are expressed as the number of admissions to hospital per thousand average strength per day. Thus, a hospital admission rate of 2.0 per thousand per day for wounded patients would mean that for every thousand men involved, two would become hospital patients each day from battle causes.

a. The admission rate for battle casualties normally is broken down according to the individual service involved in the operation. The more detailed the breakdown, the more accurate will be the estimate, provided the number of groupings is not so great as to destroy the validity of the individual average rates.

b. The variation in disease and nonbattle injury rates between the services is not so marked. However, due to differences in service deployments and concepts of medical support, nonbattle admission rates require a service breakout in order to accurately project requirements.

5-12. Evacuation Policy

a. To plan and operate a medical service effectively in joint operations, it is necessary to designate a maximum number of days for the allowable period of treatment at a given level of medical service. This designated period, in days, is called the evacuation policy for that particular echelon and determines which patients will be evacuated to the next higher echelon of medical care. Thus, patients who cannot be returned to a duty status within the period prescribed should be evacuated to the

next higher level of medical service as soon as possible.

b. Command decision is involved in the establishment of an evacuation policy. Every commander has a natural and understandable desire to retain in his area as many seasoned and experienced personnel as possible. Such a practice not only maintains a high experience level among his forces, but diminishes the load on the replacement system and decreases the requirements for evacuation.

c. In some instances, conditions may develop which cause the medical treatment facilities at a given level of medical service to become overcrowded. On occasion, therefore, the surgeon may reduce the evacuation policy at that level for the purpose of making additional beds available. This procedure has a significant effect upon the requirements of the next higher level of medical service, not only from the standpoint of hospital facilities, but also in evacuation means. This is particularly true in joint operations in which more than one armed force is providing hospitalization means. For this reason, the evacuation policy for an area of operations or in a unified operation is established by the Secretary of Defense with the advice of the Joint Chiefs of Staff and upon the recommendation of the theater commander.

5-13. Experience Factors for Accumulation of Patients

a. Accumulation factors represent the rate of patient census increase in hospitals under specified evacuation policies. There are two separate types normally used—

(1) Accumulation factors which indicate how many patients will have accumulated at specified periods of time based on a constant admission of one patient per day and a constant fixed evacuation policy.

(2) Remaining factors which show, for the number of patients admitted on any one day, the proportion which will still remain on each day thereafter.

b. These experience factors usually are presented in tables for each service of the two

major categories of casualties, battle and non-battle, separately. When accumulation factors applicable to the individual services are used in conjunction with other elements (daily hospital admission rates, troop strength, and dispersion factors) in a prescribed formula, an overall estimation of hospitalization and evacuation requirements in an area of operations can be projected. Tables of factors, other details, and series of formulas are presented in FM 101-10-1, FM 8-55, AFM 168-4, and NWIP 11-21-series.

5-14. Dispersion Allowance and Dispersion Factor

a. At all times, some proportion of hospital beds are unavailable. This is due to the necessary movement of hospitals, segregation of patients of different sexes, separate wards for contagious diseases, the furnishing of complete hospital units for smaller troop units operating some distance from the main body of troops, and other factors. This proportion of empty beds due to such causes is called the dispersion allowance.

b. Factors applied to the number of patients to convert to the number of beds required are called dispersion factors. In the case of a 20-percent dispersion allowance, the dispersion factor is 1.25. A table of dispersion factors under various specified dispersion allowances is included in FM 101-10-1, FM 8-55, AFM 168-4 and NWIP 11-21-series.

5-15. Evacuation Transportation

Evacuation plans are greatly influenced by the amount of transportation available to the medical service and the degree of control the medical service will have over it. In both peace and war, it is a policy of the Department of Defense that the transportation of patients of the Armed Forces will be accomplished by aircraft when air transportation is available and conditions are suitable for its use. However, the Armed Forces have a continuing requirement for motor ambulances, ambulance trains, and hospital ships as supplemental and alternate

means for handling medical evacuation. The amount and types of transportation required for evacuation purposes are determined to a

large extent by the geography of the area, the tactical situation, the expected casualty rate, and the evacuation policy.

Section IV. MEDICAL PROCEDURES

5-16. General

The next step in medical planning is a determination, based on the medical estimate, of what medical practices, procedures, and policies are best adapted to the specific area of operations or to the joint operation. In many instances, existing standing operating procedures can be used with little or no modification. In other instances, entirely new procedures will have to be devised. The broad scope of the medical procedures phase of medical planning is discussed in paragraphs 5-17 through 5-23.

5-17. Selection

The selection procedures which must be considered deal with the type and timing of physical and mental examinations and inspections necessary to insure that personnel in an area of operations or entering upon a joint operation will be fit for such duty.

5-18. Preventive Medicine

Under this heading there are considered such diverse procedures as—

- a. Types and timing of immunizations.
- b. Types and uses of protective clothing.
- c. Types and location of preventive medicine units.
- d. Troop indoctrination and morale measures.
- e. Water purification measures and the processing of local foods.
- f. Medical control of venereal disease.
- g. Prevention of malaria, typhus, and other diseases.
- h. Insect and rodent control procedures.
- i. Protection against injuries due to climate or geography.

j. Medical aspects of construction of shelter and quarters.

k. Instruction of troops in specific individual or group disease prevention measures applicable to the area concerned.

l. Determination of the requirements for supplies to support the preventive medicine program.

m. Planning for and supervision of measures to insure an adequate nutritional status.

n. Determination of the medical aspects of biological, chemical, and nuclear operations.

5-19. Evacuation

All available forms of transportation must be considered together with the details of patient handling. The routing and controlling of evacuation movements and the location of evacuation facilities must be planned. Thorough investigation of all the available lines of communication is an essential prerequisite to such planning.

5-20. Hospitalization

Considerations associated with this aspect of medical service involve professional care and location and employment of the various types of hospitals. Data studied include times of hospital openings and closings, movement, changes in hospital personnel and equipment, and method of administrative control.

5-21. Medical Supply

Here the medical planner determines such matters as types of medical supplies needed, supply procedures to be followed, stock levels to be maintained, and the sizes and locations of the medical supply installations needed. These determinations must be based on the medical estimate of the situation. The storage

and distribution of whole blood, blood derivatives, and plasma expanders require special consideration and procedures to insure a coordinated effort and maximum use of communications, storage facilities, and transportation.

5-22. Records and Reports

No practice, procedure, or policy can be effective unless adequate control is exercised. Control necessitates records and reports. The medical planner must determine the amount of information essential to the controlling agencies and make provisions to gain this information through the use of a minimum number of medical records and reports. In making this determination he must be familiar with the records and reports required by the services involved in the operation and must recognize that these records and reports may serve several purposes. Thus, the medical record requirements imposed by the regulations of the separate services provide that adequate records of treatment will be available not only for sub-

sequent medical care but also to serve a variety of administrative, legal, and research purposes. Similarly, the records and reports required have a usefulness to higher headquarters, including the departmental level, in terms of longer range planning, in determining patient rates, evacuation policy, and accumulative factors, and in estimating the situation from the preventive medicine standpoint. The planner should determine how best to supplement or modify existing reports and records to provide essential additional information.

5-23. Training

Planning adequate medical service in an area of operations also involves determining the amount and type of medical training required for both medical and nonmedical troops. The nature of the proposed area of operations and the limiting factors of time and facilities available are important influences on this aspect of medical planning.

Section V. DEVELOPMENT OF THE MEDICAL PLAN

5-24. Medical Requirements

After the above planning factors applicable to the individual service are established, the hospital bed requirement for a specific operation can be computed by the following formula:

$$\begin{array}{ccccccc} \text{Daily Adm} & & \text{Average} & & \text{Applicable} & & \\ \text{Rate} & \times & \text{Strength} & \times & \text{Accumulation} & & \\ & & \text{(000)} & & \text{Factor} & & \\ & & \text{Dispersion} & & \text{Bed} & & \\ & \times & \text{Factor} & = & \text{Requirement} & & \end{array}$$

For more detailed estimates based on changing conditions of any of the above elements of the problem, other experience factors and formulas must be used. Various tables of experience factors and detailed methods for their use are recorded in the applicable service manuals.

5-25. Allocation of Responsibility

At this stage of medical planning, it has been determined what the mission will be (medical

estimate of the situation), the techniques to be employed (medical procedures), and the tools needed (medical requirements). The final step is fixing responsibility. After considering the medical personnel and facilities available to each component service and the various tasks to be accomplished, an allocation of these tasks is made to the agency best suited to perform the mission. This specific fixing of responsibility is the generally accepted form in which a medical plan is presented.

5-26. The Medical Plan

There are a number of ways in which a medical plan may be formally written. It may be incorporated as a paragraph in the operation or administrative plan, or may appear as an annex to either plan. Normally it is associated with the administrative plan. If extensive, as in a large amphibious or airborne operation,

it may be broken down into separate plans such as a medical embarkation plan and a medical service plan. For a complete and detailed

planning guide for medical service planning, see FM 101-10-1, FM 8-55, AFM 168-4, NWIP 11-21-series, and FMFM 4-5.

CHAPTER 6

MEDICAL SERVICE IN AIRBORNE OPERATIONS

6-1. General

The principles that govern operations of the combat medical service of forces engaged in ground operations also apply to the combat medical service of forces engaged in airborne operations. After a linkup has been made between the elements of the airborne division and the troops making the main ground effort or after the establishment of air evacuation from the airhead, the medical service of the airborne division does not differ materially from that of the infantry division in ground operations.

6-2. Planning

a. Responsibilities. Certain medical responsibilities are uni-service, while others are joint. A clear delineation of these responsibilities should be incorporated in the medical plan accompanying the directive for the airborne operation. Normal division of responsibilities are as follows:

(1) The Army will provide—

(a) Medical service to Army personnel in mounting areas prior to emplaning.

(b) Evacuation of patients within the airhead.

(c) Medical service to all personnel landed in the objective area until the condition in (3)(c) below is fulfilled and to all Army troops thereafter.

(d) Casualty staging capabilities at airlanding facilities within the airhead when such facilities are not provided by the Air Force under (3)(e) below.

(2) The Navy will provide—

(a) Assistance in the medical aspects of air/sea rescue service in airborne operations over water.

(b) Aeromedical evacuation as provided in paragraph 1-11e(2).

(3) The Air Force will provide—

(a) Medical service to Air Force personnel in mounting areas.

(b) Medical care to all evacuees while airborne in the Air Force aeromedical evacuation system.

(c) Medical care for Air Force units in the airhead as soon as tactically feasible after an operational airstrip is established.

(d) Evacuation of patients by tactical airlift and other aircraft from landing strips or landing zones in the airhead as soon as tactically feasible until ground linkup is achieved.

(e) Casualty staging at airstrips in the airhead as required by the airborne force commander when aeromedical evacuation is used.

(f) Medical aspects of air rescue service.

(g) Casualty-staging facilities on airbases in the mounting areas for processing patients returning by air from the airhead.

b. Procedures. The general techniques involved in medical planning for joint airborne operations are the same as those given in chapters 4 and 5. However, the nature of the transportation involved introduces certain complications in planning which require special consideration. The four principal aspects of the medical service in airborne operations which present particular difficulties are (1) as-

sembly and loading; (2) aeromedical problems in flight; (3) air evacuation from the airhead; and (4) medical resupply.

(1) *Assembly and loading.* Because of the wide dispersion between departure airfields, fragmentation of division medical personnel to divisional units, and because all organic medical supplies and equipment are packaged for aerial delivery (airdrop), it is difficult to carry out the normal division medical service during this period. Under some circumstances, organic units must provide medical service to the airborne force during the period just prior to enplaning. This should be held to a minimum. Usually local medical installations are requested by the unified command to provide medical service during this period. Since the actual loading of aircraft must conform to the loading plan and air movement tables, the medical planner should make his recommendations early enough for the loading of medical personnel and equipment to be considered in the formulation of these tables. Medical units should not, as a rule, be delivered into drop zones or landing zones until the zones have been cleared of small arms fire.

(2) *Aeromedical problems in flight.* If the duration, speed, and altitude of the flight warrant the use of aeromedical preventive measures, the airborne personnel are indoctrinated in the specific measures required for their particular flight. Such indoctrination usually is accomplished during the briefing. However, if the techniques are complicated, it may be necessary to incorporate them in the schedule of training and rehearsals for the specific operations.

(3) *Aeromedical evacuation.* Detailed coordinated planning is required for effective use of return airlift from the objective area for the evacuation of patients. When required by the airborne force commander, the Air Force will establish a casualty staging unit at airstrips in the objective area for the reception of patients to be evacuated by air. Air Force medical liaison and coordinating personnel will be provided in the airhead to facilitate aeromedical evacuation until casualty staging is established. When Air Force casualty staging

is required in the airhead, plans must provide for establishment as soon as practicable after delivery of the assault echelon into the airborne objective area.

6-3. Training

In airborne operations, the success of the medical service is especially dependent upon the development of individual initiative in medical personnel and units. Such initiative can be developed only if all personnel concerned are thoroughly trained in both the theory and the practice of airborne medical service. In addition, for each new projected operation, individual, unit, and joint rehearsals must be held until smooth functioning under all circumstances is assured. Rehearsals, while time consuming, compensate for any delay by permitting plan adjustment as indicated. To be of value, rehearsals must be as realistic as possible and should include the use of simulated patients. Airborne troops should be thoroughly indoctrinated in self-aid and first aid during the rehearsal period. Particular emphasis should be placed upon providing first aid to patients requiring splints and tourniquets. Rehearsals are particularly important for medical replacements and medical support units who may lack airborne experience. Normally, such nondivisional units will be moved into the airhead by assault transport aircraft; hence, they must be trained in the expeditious loading and unloading of personnel and equipment from these carriers. They must be trained also in assembly after landing.

6-4. Medical Service of the Airborne Division

a. General. The medical service of the airborne division is organized and functions in a manner similar to that of the infantry division. Only those aspects which are different will be discussed herein. These include aspects concerned primarily with medical service during the initial assault phase.

b. Unit Level Medical Service.

(1) *Loading of personnel.* Key medical personnel are loaded into several different assault aircraft in order that the loss of one aircraft will not paralyze the medical service of the combat battalions. Company aidmen are loaded in the aircraft with the units to which they are attached.

(2) *Medical service during the initial assault phase.* During the initial phases of the attack, medical care must be provided promptly and efficiently despite the inherent difficulties. In addition to patients caused by enemy fire, there may also be jump injuries or crash victims to be treated in the drop or landing zone.

(a) Company aidmen treat patients in their zone and move out with the units to which they are attached. The location of the wounded must be well marked and, if possible, they should be assembled in small groups at collecting points located near suitable airlanding facilities in order to expedite subsequent evacuation.

(b) Evacuation of patients from the site where wounded or from collecting points to aid stations is accomplished by personnel of the evacuation section of the medical platoon.

(c) The battalion aid station is located initially in the combat battalion assembly area. The aid station moves out of the assembly area with the battalion in accordance with the tactical situation.

(d) During the initial assault phase, patients requiring evacuation from the airhead are assembled in the vicinity of landing strips in the division or brigade area. The patients are evacuated by tactical airlift aircraft from the airhead directly to medical treatment facilities in the combat or communications zone as feasible. The division surgeon coordinates this activity with the brigade surgeon; however, the brigade surgeon may arrange such evacuation if required during early phases.

(3) *Medical service during the later phases.* With the arrival of vehicles and additional equipment by air delivery, air-landing, or ground linkup, the medical service of the battalion becomes similar to that in any ground operation.

(4) *Contact and communications.* To

expedite patient evacuation, the combat battalion surgeon must insure that the evacuation section of the battalion medical platoon makes early contact with the company aidmen or rifle company command posts. Communications must be established at the earliest possible time to insure early division level medical support.

6-5. Division Level Medical Service of the Airborne Division

a. The limited capability of the combat battalion medical platoons to treat and hold their patients makes it imperative that the airborne division medical companies be delivered into the airhead as soon as possible. In special missions involving an airborne task force of one reinforced airborne brigade, it may be necessary to attach elements of the division medical company which supports the brigade in order to reinforce the medical platoons of the airborne combat battalions.

b. Detailed advanced plans for the loading of the medical battalion should be rehearsed during the training phase which precedes the mission. Elements of the medical battalion are divided into several aircraft serials so that loss of one serial will not cause the loss of all key personnel and equipment. If the entire battalion is to be parachute-delivered, accompanying equipment is rigged employing standard air delivery kits and containers and is airdropped into the airhead.

c. Establishment and maintenance of contact between the medical battalion and the medical company supporting each brigade are responsibilities of the medical battalion. The normal procedure used to facilitate early contact is the designation of liaison agents from ambulance platoons of the supporting medical companies. The liaison agents report to the designated combat battalion surgeons prior to take-off and make the airborne assault with the medical platoon to which attached.

d. Most elements of the division medical battalion normally are introduced into the airhead during the airlanded phase of the assault. All battalion units may be parachute-delivered if necessary. One medical company

usually is initially attached to each committed brigade. The balance of the battalion is committed at the time and place exercising decisive influence on total division level medical support operations. To insure effective use of the limited medical resources available in the airhead, medical battalion headquarters resumes control of subordinate companies supporting the brigades as early as possible. Medical companies supporting brigades are scheduled for deployment early in the airlanded phase to provide prompt relief for battalion aid stations. Unless the brigade mission requires offensive action over extended distances, the supporting medical company establishes a clearing station near a landing zone centrally located in the brigade sector. When significant delay is anticipated between its deployment and the scheduled arrival of the Air Force casualty-staging elements in the airhead, the medical company is reinforced by division or by field army medical resources to provide capabilities for holding patients and for assisting in loading them aboard aircraft. Reinforcement of medical company ambulance resources is provided to insure the capability of simultaneous support to battalion aid stations and evacuation of patients from the clearing station to the landing zone embarkation point.

e. Evacuation of the division clearing station(s) may be accomplished by one or a combination of the following methods:

(1) Aeromedical evacuation from the airhead. (Casualty-staging facilities are provided as indicated in paragraph 6-2).

(2) Evacuation to airlanded field army medical units in the airhead.

(3) Evacuation through normal channels after ground linkup.

f. Because medical support is provided initially by dispersed units supported by tenuous lines of communication, the accompanying medical supplies are widely disseminated to battalion medical platoons and to elements of the division medical battalion. In addition, it may be necessary to provide medical resupply to individual brigade sectors directly from departure airfields during the early assault period of widely dispersed operations. A division medical supply liaison agent may remain at a departure airfield to coordinate dispatch of followup medical supply to the division airhead.

g. In an airborne operation the seizure and operation of airfields are normal operating procedures. In such operations, field army medical units are airlanded early in the operation. Patients from the divisions may be evacuated to hospitals established by such units and later evacuated by air, or the patients may be evacuated from divisional medical installations to nearby airfields or landing areas and evacuated by air therefrom. The division medical service becomes identical with that of any ground operation with the advent of normal evacuation of the division clearing stations.

CHAPTER 7

MEDICAL SERVICE IN JOINT AMPHIBIOUS OPERATIONS

7-1. General

Before embarkation of a joint amphibious force, the medical services of the component elements operate as described previously. In addition, these normal procedures are returned to as soon as the landing forces are suitably established ashore. There are three phases of an amphibious operation, however, during which medical service is modified. These are—(1) the mounting; (2) the water movement; and (3) the landing. Most of the problems in amphibious operations arise in making the transition from uni-service to joint medical service during the phases indicated and in returning to uni-service medical service subsequent to the landing.

7-2. Special Problems

The general principles of medical service in joint operations were discussed in chapter 1. The application of these principles to medical service in joint amphibious operations requires a knowledge of those special problems encountered in such operations.

a. Mounting. The problems associated with mounting a joint amphibious operation arise from two conflicting requirements: First, to preserve tactical flexibility, it is desirable that vessels be so loaded that, upon reaching the objective area, any type of unit, piece of equipment, or group of supplies is readily available for landing to meet battlefield developments. Second, limitations of shipping require that the available capacity of vessels be used as economically as possible. The medical service, like other units of the amphibious force must plan its mounting to reconcile these two requirements as far as possible. Therefore, the medical

operation involve detailed logistical planning problems in mounting a joint amphibious based on the predicted requirements of the landing.

b. Care of Troops Afloat. The limitations of space aboard troop-carrying vessels introduce medical problems not encountered ashore. It is the Navy responsibility to provide medical services and reporting for embarked troops, and plans must be made to provide these services effectively. During water movement, sanitation and preventive medicine are major concerns of all medical personnel.

c. Landing. During the landing phase the greatest numbers of patients occur, and the facilities of the landing force medical service are least prepared to handle them. The burden of patient care in this phase, therefore, falls almost entirely on the forces afloat. The success or failure in adequate patient care in this phase depends primarily on two factors: First, adequate planning must assure that sufficient facilities are available afloat. This requires the presence of sufficient hospital ships and the reinforcement of ship medical services by surgical teams, various specialist, and medical personnel of the landing force who are not to be committed ashore during this phase. Second, there must be equitable distribution of patients to the vessels offshore to insure that some facilities are not overloaded while others are not fully utilized. This distribution cannot be accomplished by any organization functioning in an area of heavy combat but must be done by employing a patient evacuation control ship. The landing ship tank (LST), reinforced by surgical teams and then designated a "landing ship tank (casualty evacuation)" (LSTH), is

best suited for this distribution function. In addition to its distribution function, such a ship can provide limited immediate patient care when required. The greatest problem during the assault phase is that landing and evacuation of casualties must be accomplished over wide stretches of open water in small boats, amphibians, and helicopters.

(1) *Land-based medical services.* The more promptly the land-based medical services are established ashore, the more promptly each medical service can resume its normal functioning. However, this return to normal procedure is entirely dependent upon the secured land space available in the objective area. Since the amphibious assault is essentially a phased commitment of forces, the establishment of medical service ashore must likewise be phased. The phasing of medical personnel, supplies, and equipment in landing must conform to the phasing of the combat elements and to the needs for medical care ashore.

(2) *Medical supply.* Most medical supplies, particularly in the early phases of an assault landing, must be handcarried and must be packed in waterproof container. While the additional problems of assembling and distributing supplies ashore must be solved, they are not special problems of amphibious operations. The combat loading of unit vehicles increases the amount of initial medical supplies landed with forward supporting units, thereby increasing capabilities.

7-3. Admission Rates

As in any other type of operation, admission rates in amphibious operations are estimated on the basis of experience in similar operations, modified in accordance with expected differences. Nonbattle injuries incident to the landing, while not so numerous as those in airborne operations, will occur in amphibious operations and must be considered. They will be influenced by the degree of training of the troops, weather conditions, and characteristics of the landing area. Battle injuries in amphibious operations will, in the early phases, usually run much higher than those for overland assaults. Of those occurring in the first

few days, roughly 90 percent will require evacuation from the beachhead area. Of those occurring during the first 3 weeks, approximately 70 percent will have to be evacuated from the combat zone. For battle injury and wound admission rates during beachhead operations in World War II, see FM 8-55 and FM 121-10-1.

7-4. Planning

Because of the many details which must be specified in connection with the landing of a joint force, it has become the practice to publish an embarkation plan separately from the operations plan. However, the two plans are so closely dependent that their preparation should be accomplished by a single group of planners. The same applies to the medical paragraphs or annexes of each of these plans.

a. Responsibilities. Normally, in joint amphibious operations, the commander designates the number and type of medical units and equipment which each service will furnish to the amphibious force. The commander also directs the appropriate command to furnish evacuation, hospitalization, and medical supply facilities to the mounting area or areas. To receive patients from the beachhead, certain bed-credits in hospitals in the rear areas must be established by the commander for the joint force. Determination of these quantities and of the location of routine reserve and emergency medical supplies, including whole blood, must be included in the operation medical plan. The normal division of responsibilities is as follows:

(1) The Army will provide—

(a) Medical service to Army personnel prior to embarking.

(b) Assistance to Navy medical personnel for medical service to Army personnel while afloat.

(c) Evacuation of all Army patients from the forward battle area to designated collecting points in the beachhead area prior to establishment of hospitalization in the area.

(d) Medical service to all personnel ashore during the assault phase (with the assistance specified below).

(e) Augmentation of shore-to-ship evacuation means.

(2) The Navy will provide—

(a) Medical service to all embarked personnel while afloat.

(b) Assistance in the medical service in the immediate beachhead area.

(c) Seaward evacuation and hospitalization afloat until aeromedical evacuation is established.

(d) Aeromedical evacuation as directed by proper authority.

(3) The Air Force will provide—

(a) Medical service to Air Force personnel prior to embarkation.

(b) Assistance to Navy medical personnel for medical service to Air Force personnel while afloat.

(c) Aeromedical evacuation from the beachhead area (when air-landing facilities are established ashore) by assault or other transport aircraft to designated rearward ground medical facilities in accordance with established evacuation plans or as directed by appropriate authority.

(d) Emergency air transportable medical facilities for medical service of Air Force and other designated personnel as soon as an airstrip is established in the target area.

(e) Augmentation of the shore-to-ship evacuation means provided by Navy forces.

(4) In amphibious operations the assault beaches are areas of joint medical operations and it is essential that joint medical plans be prepared in each instance to delineate detailed responsibilities of each service. Further, such plans must be approved by the appropriate commander and must be disseminated promptly through command channels to insure necessary support.

b. Mounting Phase. There are two main steps in medical service planning for mounting. The first is to compute accurately the medical personnel, supplies, and equipment which will be required and the amount and location of vessel space needed to transport them. The second is to request the allocation of the space

required in vessels of the force and to provide sufficient justification to insure that such space will be made available. The medical planner must be intimately familiar with medical logistics and with the cargo capacity and loading characteristics of the vessels involved.

c. Landing Phase.

(1) The assault is executed in stages by successively higher echelons. In the case of the Army, the infantry or armored division assault is initiated by battalion landing teams (BLT). These teams are then followed by the division landing force. Each of these units includes a shore party furnished by the engineer amphibious brigade. Each of these shore parties has a medical platoon/section which supervises the medical service in the beach area under its control. The shore party medical platoon/section constitutes the link between the medical service ashore and medical service afloat. The functions of the shore party medical platoon/section are further discussed in paragraph 7-6.

(2) The classifying and sorting of patients in accordance with existing policies are particularly difficult to accomplish on an assault beachhead. Because of the distribution of medical and surgical specialists among the attack transports and other patient-carrying ships of the amphibious task force, it is essential that such sorting be accomplished prior to delivery of the patients to these ships. The casualty evacuation control ships (para 7-2c) perform this mission. Control ships sort patients in landing craft returning from the beach; direct aircraft and landing craft to specific ships having appropriate medical services and, when circumstances require, receive patients for the performance of emergency lifesaving surgery.

(3) The necessity for moving patients from shore-to-ship by small boats, landing craft, or amphibian vehicles presents a considerable problem in patient handling. Unlike the land ambulance, none of these means of transportation is constructed specifically to carry patients. Therefore, the process of load-

ing and unloading patients is complicated and requires close attention.

(4) To solve the problem of medical supply ashore during the early phases of the landing, medical supplies packed in waterproof containers are carried ashore by the early assault waves and left on the beach. They are subsequently collected by the shore party medical platoon/section when it comes ashore to establish the initial medical supply point ashore.

7-5. Training

Because of the complex nature of joint amphibious operations, it is essential that intensive training of all personnel precede any actual operations. The medical services are concerned particularly with three kinds of training for joint amphibious operations. All participating personnel must receive training in first aid and field sanitation. Selected personnel, such as crews of landing craft and amphibian vehicles, must also have special training in the handling of patients whom they may be called upon to transport from shore to ship. All medical personnel must be trained in their specific duties for the contemplated operation. All training must culminate in joint patient-handling exercises conducted in conjunction with other joint training and rehearsals.

7-6. Evacuation System

Because the landing in joint amphibious operations is a phased commitment of forces, the evacuation system must be adapted to suit each successive period. In discussing the evacuation system by periods, it must be clearly understood that the transition from one period to the next is a gradual but continuous process, governed by tactical developments.

a. The Battalion Landing Team Period. During this period of the amphibious assault phase, the first medical personnel ashore are the aidmen who accompany their respective platoons in the assault. They are followed shortly by aid-evacuation teams. The next element of medical support consists of the battalion aid station. As the battalion supporting units move into the objective area, they are accompanied by the forward elements of the

medical company supporting the brigade. Included in the early on-call waves will be a section of the medical support platoon which is organic to the engineer amphibious brigade. Upon landing, this unit establishes the shore party beach evacuation station. The station receives patients from the battalion aid stations and loads them on designated surface and air vehicles or craft for transportation to the patient evacuation control ship. At the patient evacuation control ship, further treatment is given if required, and the patient is then further evacuated to a designated patient-carrying ship via small boat or helicopter. The evacuation system employed at the end of the battalion landing team period is from the battlefield to battalion aid station, to division clearing station, to battalion shore party beach evacuation station, to patient evacuation control ship, to appropriate patient-carrying ship.

b. The Division Period. During this phase of the landing, the remaining elements of the division medical battalion come ashore together with a mobile army surgical hospital (collecting and clearing companies of the division medical battalion in case of Fleet Marine Force divisions), and a medical support element of the engineer amphibious brigade. With the establishment of a division clearing station and the mobile army surgical hospital, the surgeon of the engineer amphibious brigade establishes the division shore party beach evacuation station. This is accomplished by the consolidation of two or more of the shore party evacuation stations which have been withdrawn from their original support mission for this purpose. After the battalion shore party beach evacuation station has been relieved of its original support mission, the evacuation system at the end of the division period is through the normal evacuation system from the battlefield to the division clearing station. From the division clearing station, or when appropriate, from the mobile army surgical hospital, the patient is evacuated to the division shore party beach evacuation station, then by designated patient-carrying ship.

c. The Corps/Army Period. Nondivisional supporting medical units, such as evacuation

hospitals, are established ashore during this period. With the commencement of operation by the evacuation hospital, the shore party beach evacuation stations begin to accept patients from the evacuation hospitals and terminate reception of patients from division clearing stations. Subsequent evacuation to the patient-carrying ship is continued.

d. Theater Army Support Command (TASCOM) Period. With the arrival of additional

combat service support elements, the army base is established. At this time the shore party beach evacuation system phases out, and the normal patient evacuation system is established. The army base is expanded by further addition of units and by expansion of the area of geographical responsibility. At an appropriate time, a communications zone is established under command of a TASCOC, which completes the final step in creation of the normal theater of operations.

APPENDIX A

REFERENCES

A-1. Field Manuals

FM 1-100	Army Aviation Utilization
FM 8-5	Medical Service Units, Theater of Operations
FM 8-10	Medical Service, Theater of Operations
FM 8-15	Division Medical Service, Infantry, Airborne, Mechanized, and Armored Divisions
FM 8-16	Medical Service, Field Army
FM 8-55	Army Medical Service Planning Guide
FM 31-11/NWP 22 (series)/ AFM 2-53/LFM 01	Doctrine for Amphibious Operations
FM 57-1/AFM 2-51	U.S. Army/U.S. Air Force Doctrine for Airborne Operations
FM 61-100	The Division
FM 101-10-1	Organizational, Technical, and Logistical Data—Unclassified Data
FM 101-10-2	Organizational, Technical, and Logistical Data—Extracts of Tables of Organization and Equipment
(S) FM 101-10-3	Organizational, Technical, and Logistical Data—Classified Data (U)

A-2. Air Force Manuals

AFM 2-4	Tactical Air Force Operations—Tactical Airlift
AFM 2-50/FM 100-27	U.S. Army/U.S. Air Force Doctrine for Tactical Airlift Operations
AFM 3-4	Tactical Air Operations—Tactical Airlift
AFM 28-3	USAF Guide for Wartime Planning
AFM 168-4	Administration of Medical Activities
AFR 0-series	Indexes
AFR 164-1/AR 40-535/ OPNAVINST 4630.9- series/MCO P4630.9	Worldwide Aeromedical Evacuation

A-3. Navy and Marine Corps Publications

OPNAV INST P4040.22-series	Advanced Base Functional Components
FMFM 4-5	Medical and Dental Support
LFM-16	Medical Service
NAVPERS 10819-B	Combat and Field Medicine Practice

A-4. Joint Publications

JCS Pub 1	Dictionary of United States Military Terms for Joint Usage (JD)
JCS Pub 2	Unified Action Armed Forces (UNAAF)
(C) JCS Pub 3	Joint Logistics and Personnel Policy and Guidance (U)

A-5. Pamphlets

DA Pam 310-series

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Official:

KENNETH G. WICKHAM,
*Major General, United States Army,
The Adjutant General.*

W. C. WESTMORELAND,
*General, United States Army,
Chief of Staff.*

R. B. BROWN,
*Vice Admiral, MC, U.S. Navy
Chief, Bureau of Medicine and Surgery*

Official:

JOHN F. RASH, *Colonel, USAF
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