

COMMON SUBJECTS AND REFERENCE DATA FOR ARMY AVIATION IN THE FIELD ARMY JANUARY 1968



**UNITED STATES ARMY AVIATION SCHOOL
FORT RUCKER, ALABAMA**

The information contained in this booklet was compiled by the United States Army Aviation School, Fort Rucker, Alabama. Comments or recommendations for improvement or requests for additional copies of the booklet should be forwarded to the Commandant, United States Army Aviation School, ATTN: AASPI, Fort Rucker, Alabama 36360.

TABLE OF CONTENTS

ARMY AVIATION IN THE FIELD ARMY (JANUARY 1968)*

	<u>Page</u>
Introduction - ARMY AVIATION IN THE FIELD ARMY	1
Part One - ARMY AVIATION - GENERAL	
Section I - Mission and History -----	12
II - Organizational Concepts -----	15
III - Employment -----	17
IV - Tactical Employment -----	19
V - Aviation Special Staff Responsibilities -----	23
VI - Army Landing Areas -----	26
VII - Communications -----	38
VIII - Low-Level Flight Operations -----	38
Part Two - DIVISIONAL AVIATION	
Section I - Airmobile Division Aviation -----	43
II - Infantry Division Aviation -----	128
III - Airborne Division Aviation -----	184
IV - Aviation of Mechanized and Armored Divisions -----	209
Part Three - NONDIVISIONAL AVIATION	
Section I - Aviation Group -----	223
II - Aviation Company, Separate Brigade -----	268
III - Armored Cavalry Regiment Aviation Units -----	273
IV - Corps Artillery Aviation Battery -----	290
V - Aviation Units (Field Army Support Command) -----	300
VI - Medical Air Ambulance Units (FASCOM) -----	311
VII - Aviation Company (Army) -----	321
VIII - Aviation Air Traffic Control Company -----	321
IX - Transportation Aircraft Maintenance and Supply Activities -----	331
Part Four - ARMAMENT SUBSYSTEMS -----	366
Part Five - SURVIVAL AND EVASION AND ESCAPE	
Section I - Survival -----	388
II - Evasion and Escape Training -----	401
APPENDIX A - REFERENCES -----	409
B - ARMY AVIATION SUPPORT PLAN ANNEX -----	415

*Supersedes this booklet of January 1967.

	<u>Page</u>
APPENDIX C - ARMY AIRCRAFT DESIGNATION (AR 700-26) -----	417
D - PLANNING GUIDANCE FACTORS FOR EMPLOYMENT OF ARMY AIRCRAFT AVAILABILITY -----	420
E - METHODS FOR DETERMINING AIRCRAFT REQUIREMENTS ---	421
F - AERIAL ARTILLERY ADJUSTMENT -----	429
G - ARMY AVIATION MOS STRUCTURE -----	436
H - ARMY AIRCRAFT CHARACTERISTICS -----	441
I - AIRBORNE SURVEILLANCE EQUIPMENT -----	443
INDEX -----	447

ARMY AVIATION IN THE FIELD ARMY

PURPOSE AND SCOPE

This instructional booklet presents the missions, organizations, capabilities, major items of equipment, and concepts of employment of Army aviation units in a type field army. In accordance with Annex Q to USCONARC Training Directive Common Subjects, Army Schools, dated 18 May 1965, a common subjects instructional syllabi has been prepared to be issued in conjunction with this booklet.

This entire text should be used to supplement required hours of Army Aviation instruction of the Officer Candidate Course, Branch Orientation Course, Branch Officer Career Course, or appropriate extension courses.

The Army aviation units organic to the type field army, as outlined in this common subjects and reference data booklet, may be used to supplement instruction in either general or limited warfare, in active or nonactive nuclear situations, and for counterinsurgency instruction. The apportionment of units found herein does not necessarily conform with the bases of allocation found in FM 101-10-2.

The type field army (figs. 1 and 2) is based on three identical corps (fig. 3), each containing four divisions including one infantry (fig. 5), two mechanized (fig. 7), and one armored (fig. 8). Because of the specialized nature of airborne and airmobile operations, the type field army does not have a continuing requirement for these troops. Therefore, the airmobile division (fig. 4) and the airborne division (fig. 6) are normally assigned to theater Army or Army Group headquarters, and further attached to the field army as required. For instructional purposes, these aviation units organic to the aforementioned divisions are discussed in Part Two, Divisional Aviation. The recapitulation of aircraft organic to units of the field army is shown in figure 9.

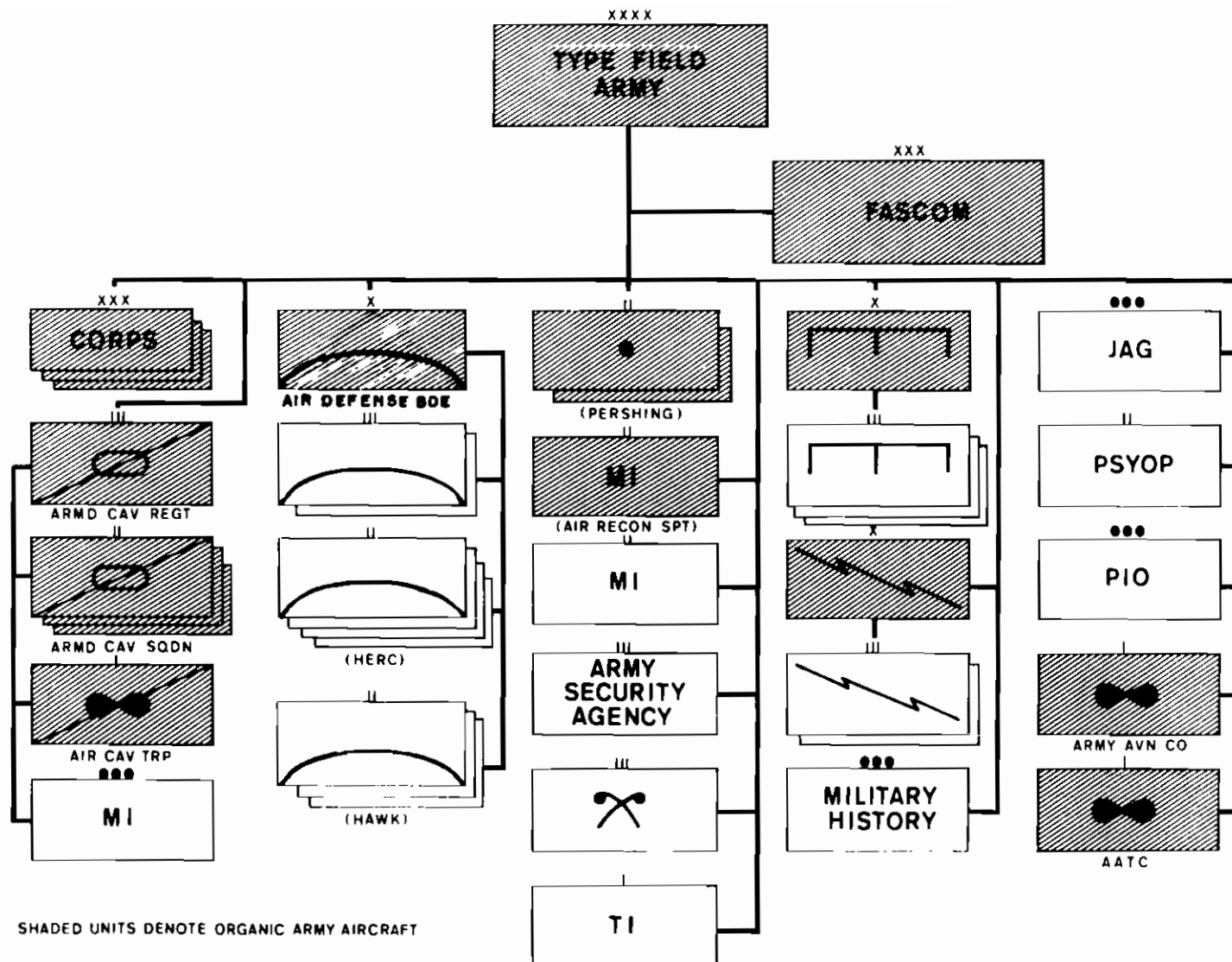


Figure 1. Type field army.

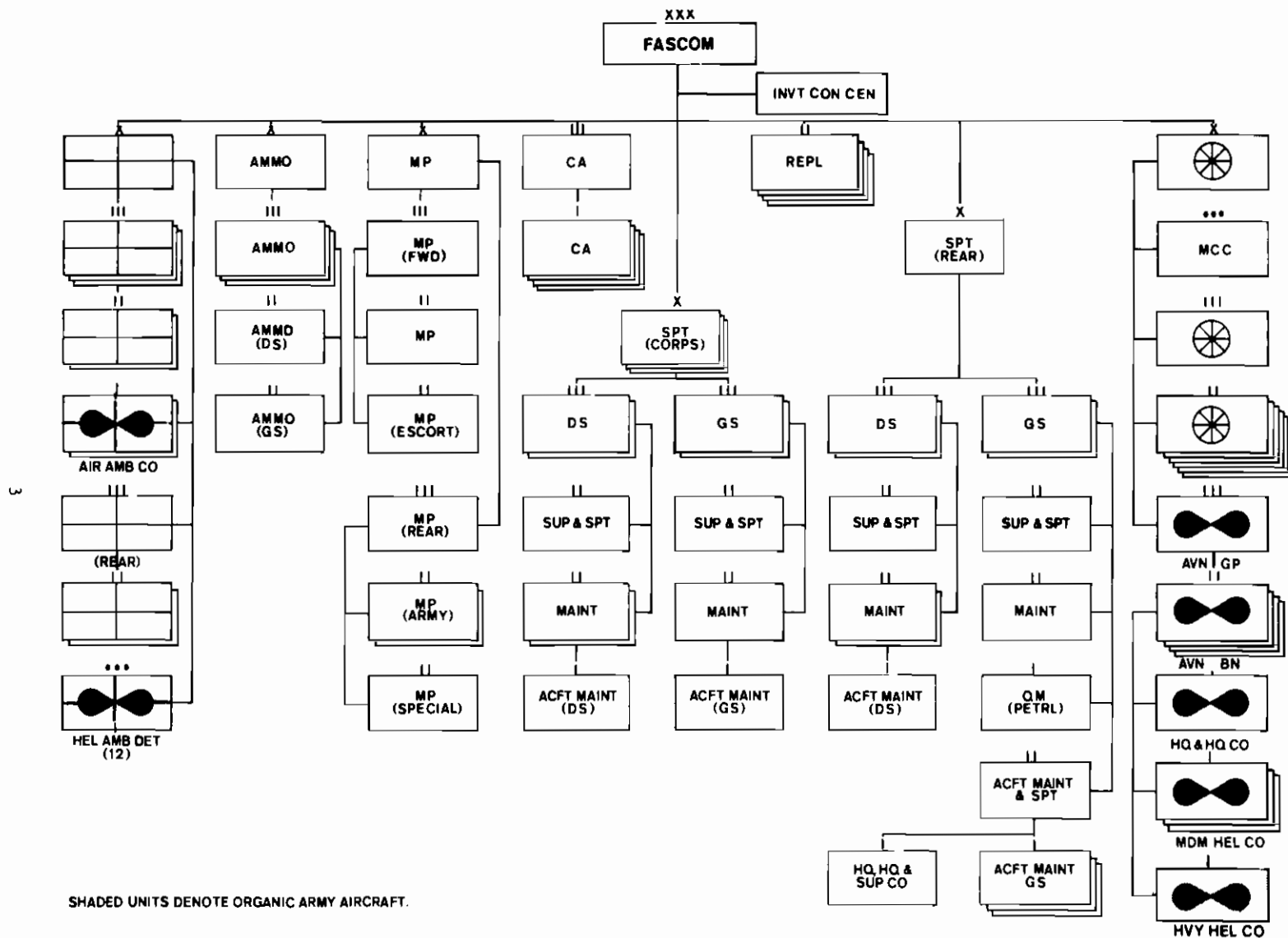


Figure 2. Field army support command (FASCOM).

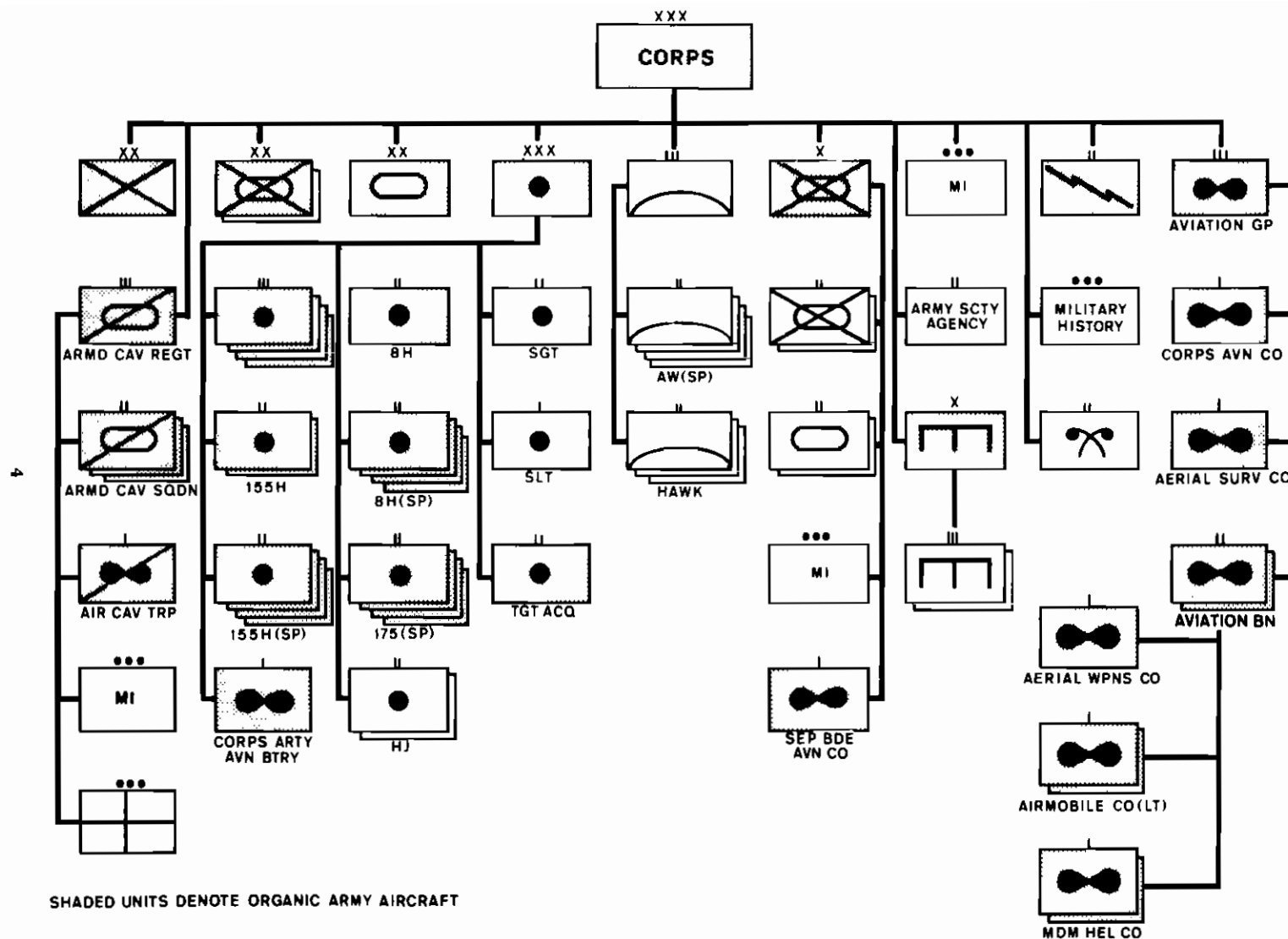


Figure 3. Type corps.

5

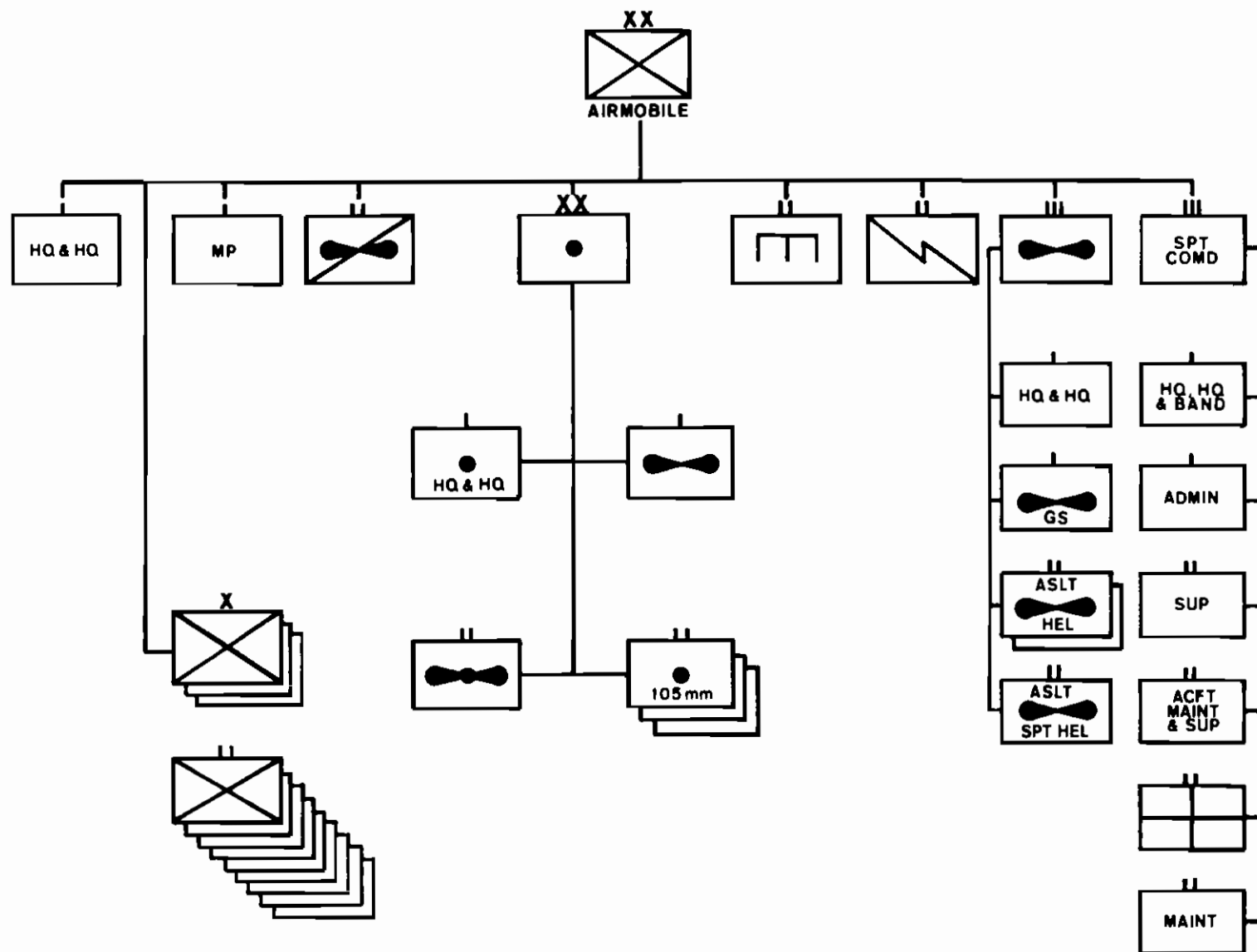


Figure 4. The airmobile division (TOE 67T).

9

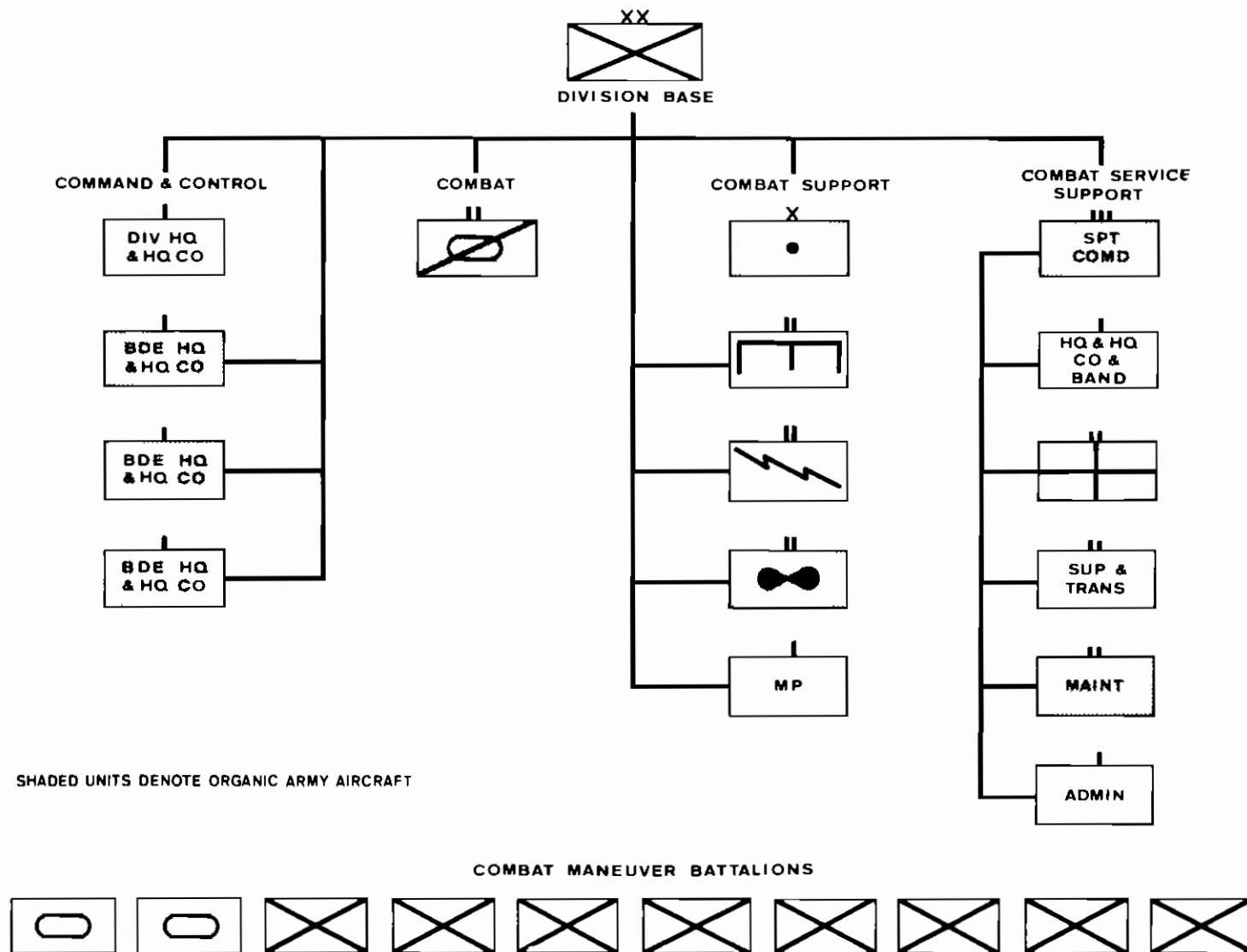


Figure 5. The infantry division (TOE 7G).

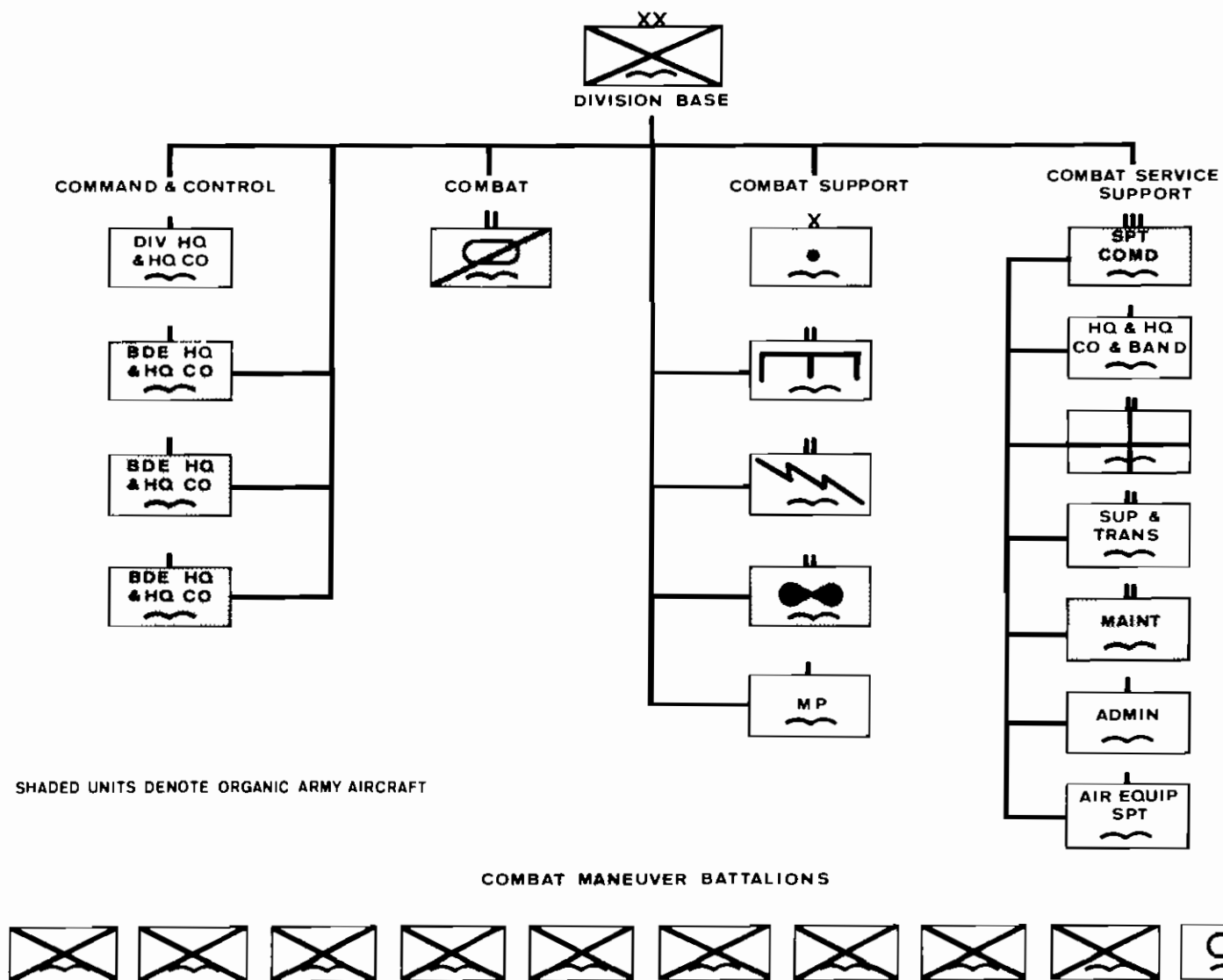


Figure 6. The airborne division (TOE 57G).

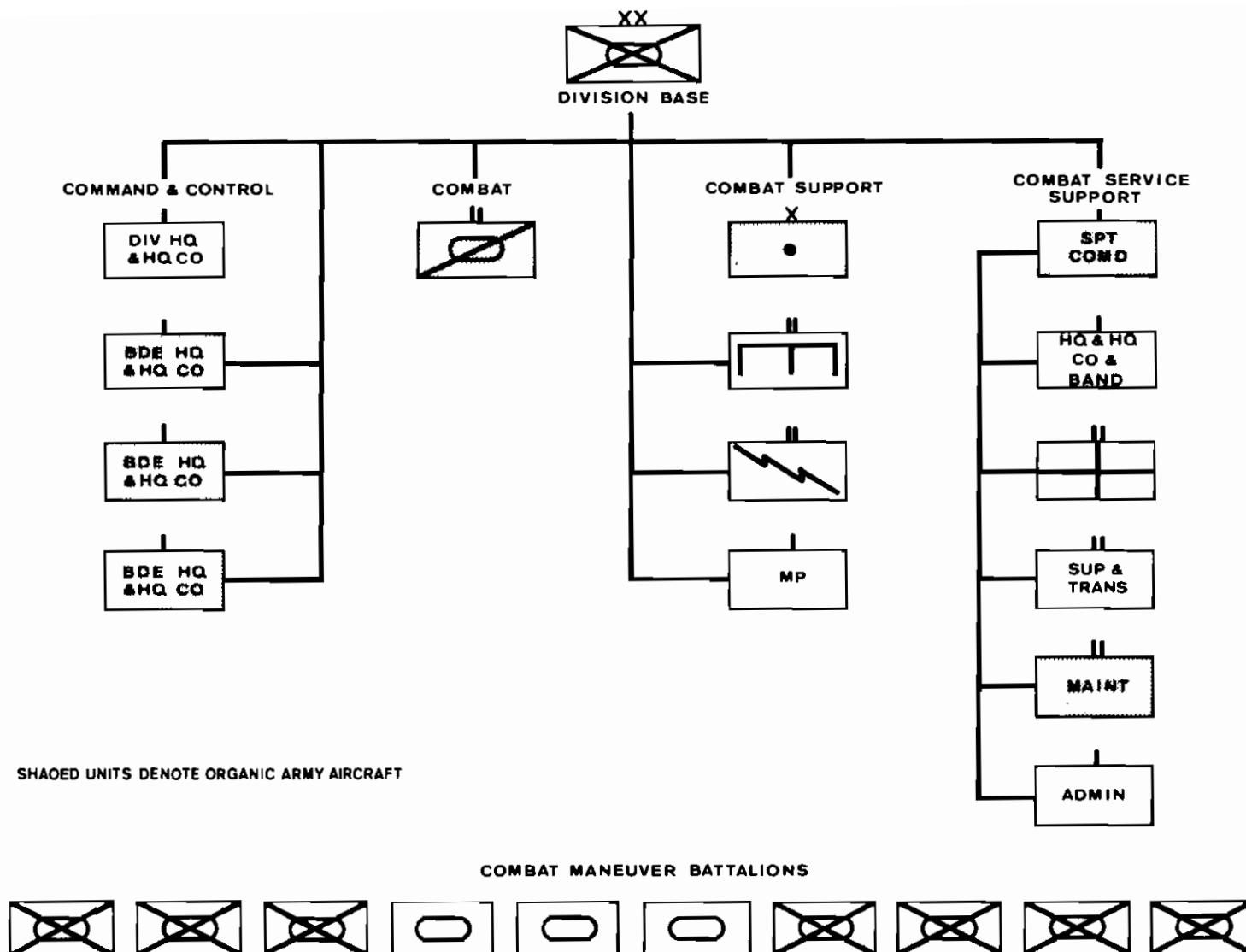


Figure 7. The mechanized division (TOE 37G).

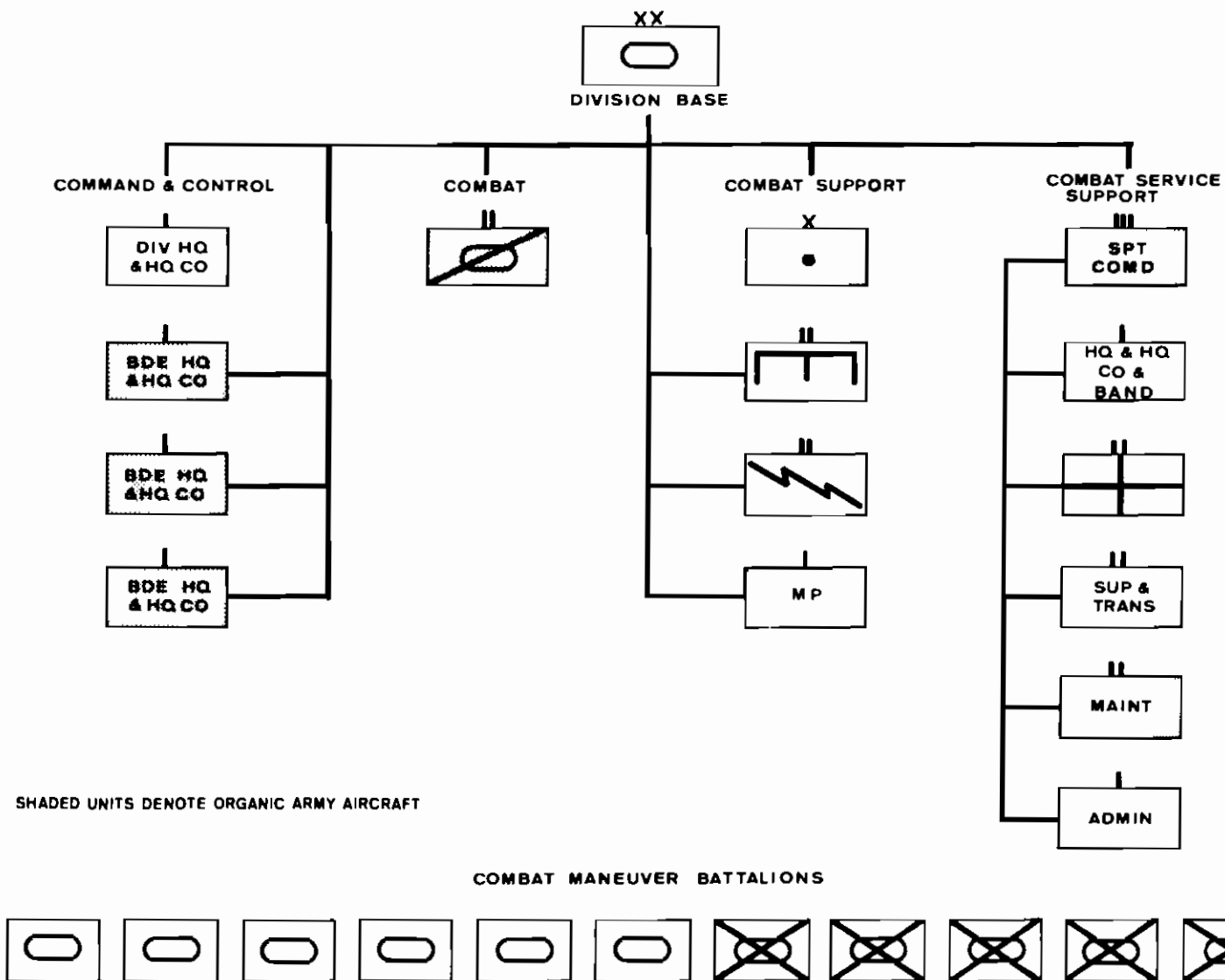


Figure 8. The armored division (TOE 17G).

		FIXED WING				ROTARY WING							
UNIT DESIGNATION	TO&E NO.	OBSN	MDM OBSN	COMD	UTIL	LT OBSN	UTIL	MDM TRANS	HVY TRANS	TOTAL ACFT	UNITS IN FLDN ARMY	UNITS IN FASCOM	TOTAL ACFT
Avn Bn (Inf Div)	1-75G					4	33			37	3		111
Hq & Hq Co Bde (Inf Div)	7-42G					4				4	9		36
Hq & Hq Btry, Div Arty (Inf Div)	6-302G					9	2			11	3		33
Air Cav Trp (Inf Div)	17-108G					9	17			26	3		78
Trans Acft Maint Co (Inf Div)	55-89G						2			2	3		6
HHC Mech Div	37-4G					4	2			6	6		36
Hq & Hq Co Bde (Mech Div)	37-42G					4				4	18		72
Hq & Hq Btry, Div Arty (Mech Div)	6-302G					9	2			11	6		66
Air Cav Trp (Mech Div)	17-108G					9	17			26	6		156
Trans A.Ft Maint Co (Mech Div)	55-42-G						2			2	6		12
HHC Armd Div	17-42G					4	2			6	3		18
Hq & Hq Co Bde (Armd Div)	17-42G					4				4	9		36
Hq & Hq Btry, Div Arty (Armd Div)	6-302G					9	2			11	3		33
Air Cav Trp (Armd Div)	17-108G					9	17			26	3		78
Trans A.Ft Maint Co (Armd Div)	55-42+G						2			2	3		6
Hq & Hq Co Avn Gp	1-252G					3				3	3	1	12
Avn Co (Corps)	1-127D	6			6	10	6			29	3		87
Aerial Serv. Co (Corps)	1-128T		18							18	3		54
Hq & Hq Co Avn Bn	1-256G					3				3	6	4	30
Airmobile Co (Lt)	1-77G						25			25	12		300
Aerial weapons Co	1-111T						20			20	6		120
Avn Med Hel Co	1-258G					2		16		18	12	12	432
Avn Hvy Hel Co	1-259G								9	9	3	1	36
Sep Bde Avn Co	1-47G					18	1			32	3		96
Corps Arty Avn Btry	6-517T		6			6	9			21	3		63
Hq & Hq Trp (Armd Cav Regt)	17-52G					2	2			4	4		16
Hq & Hq Trp (Armd Cav Sqdn)	17-56G					2	2				12		48
Air Cav Trp (Armd Cav Regt)	17-58G					9	17			26	4		104
Hq & Hq Btry ADA Gp	44-12E			(1)		(2)					5		
Hq & Hq Btry Arty Gp	6-401G					6				6	12		72
Hq & Hq Co Engr Bde (Cbt) (Corps)	5-101E						2			2	3		6
Hq & Hq Co Engr Gp (Cbt)	5-52E						8			12	9		108
FA TAB	6-575E					(3)					3		
Sig Bn (CO)	11-95G			3		2	1			6	6		36
Avn Co (Army)	1-137D			3		6				13	1		13
Avn Co (AAIC) (Army)	1-207E												
FA Msl Bn (Pershing)	6-615G						4				2		8
Hq & Hq Co Engr Bde (Cbt) (Army)	5-101E						2			2	1		2
Engr Bn (Iopo) (Army)	5-305E						3			3	1		3
Med Co (Air Amb)	8-137G						25			25		3	75
Med Det (Air Amb)	8-500G (RA)						6			6		12	72
Hq & Hq Co Sig Bde (Army)	11-102G					6	2			8		1	8
Hq & Hq Co Sig Bn (Army)	11-96G			3		2	1			6		1	6
Trans Co (A.Ft) (DS)	55-457G						2			2		16	32
Acft Maint Co (GS)	55-458G						2			2		12	24
Hq & Hq Bn ADA Bde	44-2E				(1)	(4)					2		
MI Bn (Air Recon Spt)	30-5G				6					6	1		6
TOTAL BY TYPE		22	72	27	24	802	1,279	384	36	GRAND TOTAL			
TOTAL BY CATEGORY		145				2,501				2,646			
() Indicates augmentation, but not included in totals.													

Figure 9. Recapitulation - Army aircraft in the type field army.

"Never has the Army shone so brightly as she shines today. There are no people who contribute so much to that brightness as the men of Army Aviation. The Army has found that it has a new degree of mobility. The expansion of Army Aviation in the future, after Vietnam is over, will not be pushed by aviators, but by the non-aviators who followed aviation in Vietnam—the young captains and majors of Infantry and Artillery who are serving in Vietnam today, recognizing the importance of aircraft in support of ground operations, are the ones who are going to keep aviation going in the Army."

Delk M. Oden, Major General, USA

PART ONE

ARMY AVIATION - GENERAL

Section I. MISSION AND HISTORY

I. MISSION OF ARMY AVIATION

a. The mission of Army aviation is to augment the capability of the Army to conduct prompt and sustained combat incident to operations on land. Organic Army aviation is immediately responsive and adaptable to the demands of the commander so that it will best accomplish the mission.

b. The use of the aircraft is not a new means of warfare. It merely provides the commander with a faster, more flexible means of moving men and equipment in the combat area. When a brigade is moved by air in an airmobile assault, the supporting troops must move just as rapidly. Commanders must learn to take full advantage of the flexibility of present aircraft and of the improved aircraft which will become available in the future.

c. Aircraft can be used in the same manner as their ground equivalent. Their missions are parallel. If there is a requirement for a 2 1/2-ton truck, but no road to use or bridge to cross, the equivalent aircraft should be used. The number and type of support missions which can be performed by Army aircraft are almost limitless.

2. USES OF ARMY AVIATION

Army aviation supports the Army's ground combat functions in the following areas (fig. 10):

a. Command and Control. This includes courier and liaison missions, control of vehicular columns, message drop and pickup, and laying wire.

b. Intelligence. Army aviation is an important means of gathering intelligence. It provides the aerial "eyes" over the battlefield and conducts missions in support of aerial survey operations, aerial radiological survey, and target acquisition.

c. Maneuver. By airlifting troops and combat equipment, Army aviation provides an additional means of maneuver to the ground commander. Weapons may be emplaced rapidly and troops may be carried quickly over obstacles using Army aviation's airmobile capability.

d. Firepower. Army aviation, which provides aerial adjustment of indirect fires, is expanding the use of Army aircraft as weapons platforms to fill the gap between the support provided by conventional ground fire support and close air support.

e. Logistics. Army aviation supports logistical operations by providing retail delivery of troops and equipment, evacuation of casualties, and damaged equipment within the Army combat zone.

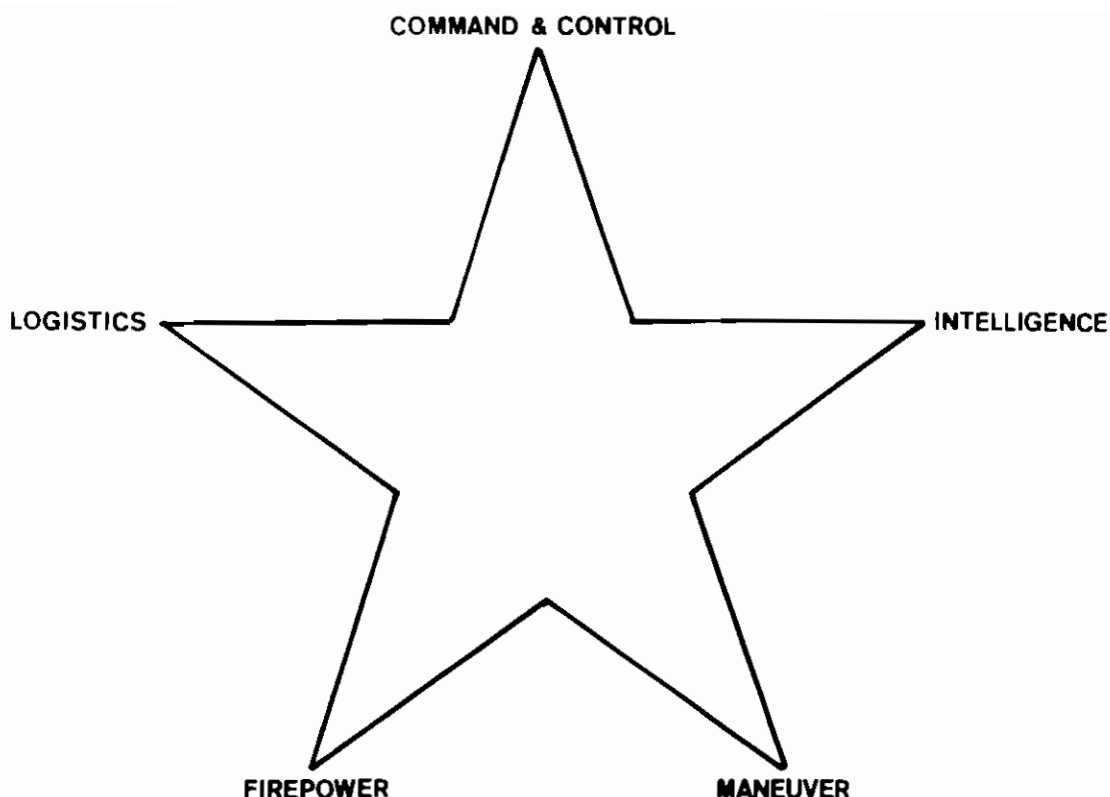


Figure 10. Army aviation support of the Army's ground combat functions.

3. HISTORY

a. On 6 June 1942, the War Department approved organic aviation for the field artillery. This action was the result of evaluation tests of light aircraft during the Louisiana maneuvers of 1941.

b. The Army Air Corps Training Command and Field Artillery School were directed to initiate a training program for pilots and mechanics. Primary flight training was conducted under Army Air Corps supervision at various civilian schools. Technical and tactical training was given by the Department of Air Training at the Field Artillery School, Fort Sill, Oklahoma. The first four classes consisted of field artillery lieutenants who possessed civilian private pilot licenses and staff sergeant pilots who had been transferred to the field artillery from Army Air Corps liaison squadrons. Limited training in short field landings and takeoffs, aerial observation, and aerial adjustment of artillery fires qualified these personnel to assignment to units scheduled for the invasion of North Africa.

c. The first combat action of Army aviation took place on 9 November 1942. Three L-4 airplanes ("Piper Cubs") took off from the aircraft carrier U.S.S. Ranger (fig. 11) and were used to adjust artillery fire during the invasion of North Africa.

Army aviation continued to support the ground forces throughout World War II, both in the European and Pacific theaters. Missions flown by L-4 and L-5 type airplanes included the adjustment of artillery, mortar, and naval fires; aerial reconnaissance; aerial photography; message drop and pickup; guiding patrols through dense jungles; dropping supplies to isolated units; and courier missions.



Figure 11. A "Piper Cub" preparing to take off from the U.S.S. Ranger in November, 1942.

d. On many occasions during World War II, other combat arms very successfully used artillery aircraft for observation, reconnaissance, and tactical control missions. This effective combat use led to Department of the Army authorization, in 1948, for organic aviation sections within all combat arms units and several of the technical services - the criterion being a demonstrated and continuing need for Army aviation support. Within the armored division, separate aviation sections were organized at division headquarters, combat command, reconnaissance battalion, and division artillery. While the division contained a total of 28 aircraft, the decentralized supervision and control

often precluded effective maintenance and full utilization of the aircraft. These problems were further complicated by inadequate numbers and types of aircraft in view of the rapidly expanding Army aviation capabilities.

e. During the Korean War, Army aviation missions included dropping flares, artillery adjustment, resupply of troops, courier missions, and evacuation of wounded (fig. 12). Two major changes occurred during the Korean campaigns - the introduction of the helicopter into the Army inventory and the formation of provisional aviation companies within each division. The primary benefits that accrued from this centralized system of organization included adequate supervision and control of aircraft maintenance and supply, the development and implementation of an effective integrated training program, and coordination and control of aircraft utilization, with the result that Army aviation support was weighted in favor of those tactical units having the major combat mission. The Department of the Army recognized the need for a general reorganization of the land forces, and embarked upon a long-range program wherein the ATFA (atomic type field army) concept was a first transitional step to the ultimate goal of a universal division that would be capable of sustained combat under nuclear or nonnuclear conditions. The ATFA program included many of the changes that had been battle-tested in Korea. Army aviation elements were consolidated into company-size units at division, corps, and field army levels. In the division organization, organic aircraft were almost doubled in number. The total for the division was increased to 50.

f. Today, ROAD (Reorganization Objective Army Divisions) contains an aviation battalion plus three brigade aviation sections, a division artillery aviation section, an air cavalry troop, and an aviation section in the transportation aircraft maintenance company. There are 101 aircraft in this organization.

g. The future appears optimistic for Army aviation. It has been battle-tested and its doctrine makes it an established force in being, ready for employment under any conditions. The results of the air assault concept tests and the widespread use of aviation in Vietnam further amplify the need for airmobility and increased Army aviation.

Section II. ORGANIZATIONAL CONCEPTS

4. GENERAL

a. The initial expense and maintenance requirements of the current family of Army aircraft have resulted in the concept of organizing aviation elements into functional, company-type units. This was manifested in the ROAD division aviation battalion and, more recently, in the ARCSA (Aviation Requirements for the Combat Structure of the Army) division aviation companies of the aviation battalion. This type organization permits good maintenance with limited resources and the attainment of a high degree of training and technical proficiency when properly coordinated and supervised.

b. Although it provides for the effective use of Army aviation, the consolidated-type organization may not always provide the immediately responsive aviation support which is required. Accordingly, there has been a trend, consistent with availability of equipment, to assign aircraft to lower echelon units where the needs are habitual. An example of this is the aviation section of the brigade's headquarters and headquarters company.



Figure 12. An L-4 airplane taking off on a liaison mission in Korea, 1951.

5. ORGANIZATIONS

Army aviation organizations can be divided into two general categories as follows:

- a. Divisional. Divisional Army aviation (discussed in Part Two of this booklet) consists of the organic aviation and aviation support units of the airmobile, infantry, airborne, mechanized, and armored divisions.
- b. Nondivisional. Nondivisional Army aviation (discussed in Part Three of this booklet) is that aviation which is assigned within the structure of the field army, excluding divisions.

Section III. EMPLOYMENT

6. PRINCIPLES

In the employment of Army aviation, three principles to be constantly practiced are immediate availability, freedom of utilization, and economy of utilization.

a. Immediate availability is achieved by the assignment of aviation units down to brigade level, plus the flexibility of organization inherent to all aviation units. This flexibility allows the decentralization of aviation elements for combat operations with the units which they are designed to support.

b. To gain freedom of utilization, the commander is normally given operational control of the aviation unit supporting his efforts. Attachments are made below division level only when required by the mission.

c. Although the field army has a large amount of aviation support, there is never enough to satisfy all justifiable demands. Aircraft should not be used when surface means are equally effective. Therefore, economy must be practiced and missions assigned on a priority basis. Proper coordination and control will insure the most effective use of Army aviation.

7. COMMAND RELATIONSHIPS

Military operations require that certain units, or their elements, be placed in support of other units. The flexibility required for this supporting role demands a common understanding of the relationship of one unit to another. Although basically simple in meaning, these terms when loosely used have often created confusion and misunderstanding between commanders. This has resulted in critical loss of time, or, in extreme cases, has prevented actual delivery of the required support. The following definitions will clarify the degree of command and control involved, and the logistical and administrative responsibilities implied by each of the four methods of employment most commonly used. Army aviation is normally employed by attachment, operational control, direct support, and general support. For detailed information, refer to FM 1-100, Army Aviation Utilization.

a. Attach (attachment). The placement of units or personnel in an organization where such placement is relatively temporary. A unit or part of a unit may be detached from its parent command and attached to another unit or command for rations, quarters, supply (specify class), administration, training, and operations. However, unless limited by one or more of the foregoing or similar qualifications, attachment implies full responsibility for the unit's service support, administration (to include military justice), training, and operations. Subject to limitations imposed by the attachment order, the commander of the organization receiving the attachment will exercise the same degree of command and control over the attached unit(s) as he does over units and persons organic to his command. An exception is the responsibility relating to the transfer and promotion of personnel, which is retained by the command to which the unit is assigned. Attaching one unit to another imposes an administrative and logistical burden that some units are not capable of adequately accepting. As a general rule, company and battalion size units, other than aviation units, do not have personnel qualified to plan and supervise aviation employment and provide full service support to attached aviation units. However, armor missions of deep penetrations, exploitation, and pursuit may require that aviation elements be attached at battalion level. Such operations may prevent the

parent aviation unit from furnishing adequate service support because of distances involved and speed of the operation. In cases where attachment is necessary for short durations, but relief of all or a part of the gaining commander's planning and service support requirement is desired, attachment may be made at a time and date following completion of the planning phase to last for the duration of the operation only, limiting service support to commonly used classes of supply, e.g., classes I, III, and V.

Note. The above amplification of the term "attach" applies to actual combat or field training situations and is not necessarily applicable to relationships that exist in peacetime between strategically deployed U. S. Army units, where the organization of forces is relatively static and permanent.

b. Operational Control. Operational control comprises those functions of command involving the composition of subordinate forces, the assignment of tasks, designation of objectives, and the authoritative direction necessary to accomplish the mission. It does not include responsibility for service support, administration, military justice, and unit training except when a subordinate commander requests such assistance. Operational control is possibly the most misused and least understood term denoting command relationship. It gives the gaining commander the authority to tailor or group forces and position subordinate units as he deems necessary. It also provides him the command authority to direct the efforts of those units. Service support responsibility is not imposed on the force commander exercising operational control unless, as a result of the nature of the operation, units become divorced from habitual service support channels. Service support assistance may be requested of the force commander only to the extent necessary to accomplish the mission. Operational control is a flexible term imposing considerable authority, as well as responsibility, and should, as a general rule, be delegated only to those individuals within a specific branch, arm, or service that are capable, both professionally and technically, of assuming such responsibility. For example, the division transportation officer is not normally given operational control of nondivisional engineer units in the command; this would not be a logistical or practical delegation of authority. However, it is acceptable for an aviation staff officer, above division level, to be given operational control over aviation in the command since he is the best qualified individual in the organization to exercise authority over the command and supervise the command's aviation effort. Consequently, discretion should be used in delegating operational control and should be based upon the degree of control required and the ability of designated individuals to effectively exercise this authority.

c. Direct Support. A relationship requiring one unit to support another specific unit, answering directly the supported unit's requests for assistance. The supporting unit commander responds directly to the desires of the supported unit commander rather than through his next higher headquarters. When direct support is delegated by higher headquarters to a unit of a subordinate command, the parent unit commander of the unit in support does not have the authority to change or revise the mission, or alter the force structure without the approval of the headquarters which directed the support. This support role provides for a direct mission request channel between units, with the supporting unit retaining certain prerogatives. Where aviation units are involved, the aviation unit commander is the final authority on technical and flight aspects of the operation; i.e., aircraft capabilities, weather contingencies, suitability of flight routes, and landing areas. These prerogatives do not extend to denying support where diverse viewpoints exist between the supporting and supported commanders concerning the tactical soundness or military worth of the support being requested. The supported unit commander does not exercise the authority to position or tailor the supporting aviation unit to his own desires without the concurrence of the aviation unit commander concerned. Such action, however,

must be coordinated with and approved by the parent unit or next higher headquarters commander of the aviation unit in support, whichever is applicable. Preparation of plans and orders for the aviation portion of an operation, as well as establishing liaison between units, is the responsibility of the supporting aviation unit commander. Command and service support responsibility remains with the parent organization of the unit in support with service support obtained through habitual support channels; whereas, responsibility for what the unit accomplishes or fails to accomplish rests with the command of the unit in support. The distance involved between the unit and its parent organization, existence of defined lines of communication and supply, and the speed of maneuver of the supported force must be considered in assigning a direct support mission to a subordinate.

d. General Support. That support which is given the supported force as a whole and not to any particular subdivision thereof. The parent organization of the unit in general support or the next higher headquarters, whichever is applicable, monitors and establishes priorities on mission requests from supported units and positions the unit as necessary to accomplish the support requirement. Liaison need not be established with supported units unless specified by higher headquarters. Command and service support responsibility rests with the parent organization or next higher headquarters. The commanders involved must rely heavily on cooperation between units for complete success under this relationship. A general support mission is usually given an aviation unit when there is no specific task to be performed at the moment requiring aviation assistance of large proportions.

e. Assignment Considerations. These definitions demonstrate that the methods of employing supporting units provide a wide range of selection in the degree of control and responsibility given the supported commander. Commanders may assume no greater degree of control than has been delegated by a senior headquarters. The combined use of operational control and attachment, in an attempt to describe a particular method of control, is improper. Each has a separate meaning and purpose; neither complements the other. For example, it is incorrect to attach for operational control or to be attached for operational control in support of a unit. This is contradictory and confusing. It is important to determine just what requirements would be necessary to best support the mission. The foremost consideration should always be the degree of control necessary; the accompanying logistical burden is of secondary importance. However, the ability of the controlling unit to furnish the required support may impose a need to qualify the method of employment selected by delineating areas of responsibility; i.e., operations, training, and service support for both supported and supporting units.

Section IV. TACTICAL EMPLOYMENT

8. GENERAL

Tactical employment of Army aviation is dependent upon the nature of the operation and the capabilities of the aviation units concerned.

9. OFFENSIVE OPERATIONS

Offensive operations include advance to contact, penetration, envelopment, infiltration, and exploitation and pursuit. In offensive operations, Army aviation will perform the following type missions:

- a. Command and control.
- b. Observation.
- c. Reconnaissance by fire.
- d. Flank, point, and rear area security.
- e. Airlift of personnel and equipment.
- f. Retail delivery of supplies.
- g. Air evacuation of casualties within the Army combat zone.
- h. Conduct of deceptive operations.
- i. Aerial fire support.
- j. Adjustment of artillery and mortar fire.
- k. Radiological survey.
- l. Night illumination.

10. DEFENSIVE OPERATIONS

Defensive operations include area defense and mobile defense. In defensive operations, Army aviation will perform the following type missions:

- a. Command and control.
- b. Observation.
- c. Reconnaissance by fire.
- d. Outpost, flank, and rear area security.
- e. Airlift of reserves.
- f. Retail delivery of supplies.
- g. Air evacuation of casualties within the Army combat zone.
- h. Aerial fire support.
- i. Adjustment of artillery and mortar fire.
- j. Camouflage inspection.
- k. Radiological survey.
- l. Night illumination.

11. RETROGRADE OPERATIONS

Retrograde operations will generate the following type missions:

- a. Command and control.
- b. Observation.
- c. Armed reconnaissance to delay the enemy.
- d. Flank security.
- e. Airlift of personnel and equipment.
- f. Retail delivery of supplies.
- g. Movement of reserves.
- h. Movement of supply installations.
- i. Air evacuation of casualties within the Army combat zone.
- j. Traffic control.
- k. Aerial fire support.
- l. Adjustment of indirect fires.
- m. Radiological survey.
- n. Night illumination.

12. AVIATION IN SUPPORT OF SPECIAL OPERATIONS

Some of the special operations that Army aviation may support are airborne, amphibious, guerrilla, and counter guerrilla operations.

- a. Airborne Operations. Army aviation will provide the following type support:
 - (1) Airlift of patrols and outposts to key terrain on the perimeter of the airhead.
 - (2) Aerial observation, especially during the initial assault.
- b. Amphibious Operations. Aircraft may be flown into the area, but normally they are transported by surface vessels. Army aviation will provide the following type support:
 - (1) Transfer of troops and equipment from ship to shore.
 - (2) Adjustment of naval gunfire.
 - (3) Aeromedical evacuation from the beachhead.

c. Guerrilla Operations. Army aviation support of guerrilla operations would normally be characterized by small aviation sections being attached to the guerrilla force. Missions flown would be varied and independent of major land forces.

d. Counter guerrilla Operations. Operations in support of counter guerrilla forces include all types of missions for the military units and for the civilian populace. Detailed examples of this support may be found in FM 1-100.

13. FACTORS AFFECTING EMPLOYMENT

Many variables affect the tactical employment of Army aviation. These variables range from the weather to those imponderables of the battlefield that arise at the last possible moment to tax the commander's flexibility. The mission of the supported unit is the most important factor to remember while judging the variables of employment. All decisions of an aviation commander are based upon the ultimate aim of the mission of the supported unit.

a. Mission. Army aviation support must be integrated into the scheme of maneuver and fire support plan of the supported units.

b. Enemy. The location, disposition, and capabilities of the enemy, especially air defense units, must be considered.

c. Weather. This is an important consideration in combat. Low ceilings and limited visibility restrict air and ground action. Marginal weather can be an advantage because aircraft, particularly helicopters, can use the weather as a shield. Limited visibility reduces enemy visual detection.

d. Terrain. Terrain is a consideration when planning locations of airfields, navigational aids, routes, and communications.

e. Training. Proficiency of aviation personnel results from an adequate training program. Aviators must be able to fly instruments, use aerial weapons, and be proficient at short field landings and takeoffs. Mechanics and operators of technical equipment must be trained to perform their duties efficiently.

f. Availability. Aviation officers are responsible for advising commanders regarding the allocation of available aviation support. Future missions and plans must be kept in mind. Maintenance should be flexible enough to insure maximum availability of aircraft to support an operation.

g. Vulnerability. Vulnerability of Army aircraft is reduced by taking advantage of the principles of surprise, maneuver, and security. The aircraft may be armed for self-protection. In addition, support from the artillery aircraft armed for direct fire support and tactical air reduces vulnerability. Aircraft are extremely vulnerable to the effects of nuclear weapons.

h. Logistical Support. POL, maintenance, and ammunition are primary logistical considerations when planning a mission. The length and character of an operation determine the amount of logistical support required.

i. Coordination and Control. Detailed planning and positive control are mandatory in all aviation tactical operations to insure that the required complex schedules of delivery of troops and supplies are met. Minute coordination with supporting ground fire

support, aerial fire support, and tactical air is demanded to obtain maximum support from these elements with minimum restrictions upon the operation.

14. RELATED OPERATIONS

Related operations include survey operations (both topographical and radiological), search and rescue, column control, courier service and liaison, radio relay, wire laying, propaganda dissemination, camouflage inspection, and decontamination.

a. Survey Operations. Helicopters are better suited to conduct survey operations than airplanes. Army aviation provides support to both topographic and radiological survey operations. In topographic survey operations, Army aviation provides aerial reconnaissance for survey planning, movement of survey teams and equipment by aircraft, low-altitude intersection, angle-of-site and resection operations, high-altitude photographic operations, and radar operations. Aviators and observers of the Army aviation units are also trained to conduct aerial radiological surveys of residual radiation.

b. Search and Rescue. Search and rescue operations conducted by Army aircraft assist in returning personnel to their units, thus aiding morale and depriving the enemy of possible sources of information. Good visibility aids in search and rescue operations. Success in this type of operation usually depends on rapid, accurate response to the mission request supported by workable operating procedures.

c. Column Control. Aerial observation gives the commander better control over his forces because he can observe the overall progress and can maintain radio contact with them. A helicopter is the best aircraft for this type mission since it permits the commander to land when necessary.

Section V. AVIATION SPECIAL STAFF RESPONSIBILITIES

15. GENERAL

Army aviation special staff sections at division, corps, and army supervise Army aviation matters within the command, including technical aspects of administration, training, and operation. The aviation staff officer on the special staff may, when directed by the commander, exercise operational control of all organic or attached aviation units within the command. The aviation staff section maintains liaison with the staff sections of higher and lower levels of command and with adjacent units. At the proper level, it coordinates Army aviation operations with other Arms and Services, including air traffic control and air defense agencies. The aviation staff section assists the general and special staff sections in preparing the Army aviation portions of estimates, plans, orders, and reports. It also supervises unit aviation training.

16. STAFF DUTIES

Army aviation staff duties are similar at division, corps, and army level; the only difference is in the scope of operation. The duties of an Army aviation special staff include -

- a. Inspecting personnel flight records and flight rating and status orders.
- b. Supervising aircraft accident investigation and reporting.

- c. Supervising flying evaluation boards, suspensions from flying, and restoration to flying duty.
- d. Coordinating qualification and procurement of aviation personnel.
- e. Prescribing and examining requirements for aviator flight qualification and proficiency.
- f. Establishing technical training programs and conducting unit schools.
- g. Insuring compliance with standardized operational and organizational maintenance procedures for new aircraft and equipment as established by heads of technical services.
- h. Supervising training procedures for traffic control, navigation, communication, identification, and safety.
- i. Supervising flight proficiency and aviation tactics training.
- j. Advising, supervising, and directing, where appropriate, the employment of aviation, including airplanes and helicopters.
- k. Monitoring the employment of aviation within the command and integrating the aviation effort.
- l. Developing evasion and escape plans and techniques with recommendations for their implementation.
- m. Advising the commander and his staff on Army aviation doctrine, tactics, and techniques; on technical aspects concerning capabilities, limitations, and operational characteristics of Army aircraft; and on establishment and improvement of airfields.
- n. Coordinating the use of common aviation facilities, such as airfields, night lighting, and navigational aids.
- o. Prescribing in-flight control at his level of coordination with other services.
- p. Developing, coordinating, and disseminating essential flight information.
- q. Preparing recommendations to the appropriate technical service on requirements for and the distribution of aircraft and allied equipment.

17. STAFF ESTIMATES AND RECOMMENDATIONS

The aviation staff officer continuously estimates the tactical situation. He formulates plans for the use of available aviation and makes recommendations to the tactical commander. His estimate is based on the following factors:

- a. Tactical situation - includes friendly and enemy dispositions, with emphasis on the location of opposing front lines, known locations of artillery and air defense installations, and recent enemy air activity.
- b. Mission of the unit - includes assigned mission of the tactical unit.

- c. Plan of maneuver - considers the plan of the force as a whole.
- d. Terrain and weather - includes locations available for airfields, cover and concealment for aircraft and personnel, probable effect of weather on flying, and conditions of visibility.
- e. Status of the aviation unit - includes strength in personnel and equipment, state of training, and supply status (especially fuel, lubricants, and spare parts).
- f. Observation and reconnaissance - considers maximum and minimum requirements.
- g. Capabilities of assigned aviation - ability to discharge anticipated missions.
- h. Courses of action - the manner in which capabilities can best be exploited, including alternate courses of action.
- i. Enemy capabilities - interference with the aviation unit's ground installations or with its aircraft in flight.
- j. Other factors - include requirements for courier and liaison service, and use of aircraft for radio relay, wire laying, and supply and evacuation missions.

18. STAFF COORDINATION

In small units, the activities of the aviation section are coordinated with other elements of the command by the unit commander or his executive officer. In larger units, the aviation officer coordinates directly with general staff sections and other special staff sections. Detailed staff coordination on specific matters is accomplished by direct contact between the aviation officer and other members of the staff. Following is a list of staff officers with the types of coordination they provide.

- a. G1 and G3 - procurement of personnel.
- b. G2 - collection, evaluation, and dissemination of information.
- c. G2 Air - aerial surveillance.
- d. G2 and engineer - maps and photographs.
- e. G2, G3, and artillery officer - survey.
- f. G3 - training, tactical movement of troops and supplies, and aerial fire support.
- g. G3, executive officer, or headquarters commandant - selection and defense of landing areas.
- h. G3 and artillery officer - observation and adjustment of fire.
- i. G4 - procurement of aviation supplies and maintenance of aviation equipment.

Section VI. ARMY LANDING AREAS

19. GENERAL

Army landing areas range in size and complexity from temporary airfields and heliports to permanent installations, and are classified according to the degree of improvement. The selection of a landing area depends on both tactical and technical considerations. Selection and development are the responsibility of the aviation unit commander. He coordinates location of a landing area with the ground commander responsible for the tactical area in which it is included. For units without organic aviation, such as frontline companies and battalions, the supported unit commander will select and mark landing areas, using any experience he has available.

20. TYPES OF LANDING AREAS

There are basically two types of landing areas - airfields and heliports.

a. Airfields. Airfields are established primarily for airplanes, but can also accept helicopters.

b. Heliports. Heliports are designed for helicopter traffic and cannot normally accept airplanes.

21. CLASSES OF LANDING AREAS

Airfields and heliports are further classified according to their degree of improvement based on surface conditions and existing hazards to flight; i.e., pioneer, hasty, and deliberate.

a. Pioneer. A pioneer landing area is a field with an unimproved surface, normally good for fair weather operations only.

b. Hasty. A hasty landing area, although not surfaced permanently, has been improved. It has an operable margin of safety; obvious obstacles have been removed. Normally, it is not usable during prolonged periods of poor weather. Most pioneer landing areas, after a period of occupation, will progress to this stage.

c. Deliberate. A deliberate landing area has a well-made, flexible or rigid pavement over a good subgrade. It is constructed to meet established standards and has an all-weather capability.

22. TERMINOLOGY

The following terms are used to designate the types of landing areas. The first four are most often associated with airmobile operations and are more fully explained in FM 57-35.

a. Landing Zone. A landing zone is a specified zone within an objective area used for landing aircraft. It is selected on or near the objective of an airmobile force and contains any number of landing strips and/or landing sites. Normally, the landing zone will be capable of handling a complete airmobile unit.

- b. Landing Strip. A landing strip is a predesignated area within a landing zone large enough to accommodate a number of airplanes.
- c. Landing Site. A landing site is a predesignated area within a landing zone large enough to accommodate one or more helicopters.
- d. Landing Point. A landing point is that specific point within a landing site where a helicopter will set down. A landing site may contain any number of landing points.
- e. Primary Landing Area. The primary landing area is the focal point from which a unit operates. The unit's headquarters, including operations section and maintenance facilities, will normally be located at the unit's primary landing area.
- f. Satellite Landing Area. A satellite landing area serves as an auxiliary to the primary landing area. One or more of these areas may be used to handle overflow traffic from the primary area and to provide added dispersion. To facilitate command, control, and support, a satellite airfield/heliport is normally located within 6 kilometers of the primary landing area, or no farther than 15 minutes by ground vehicle.
- g. Alternate Landing Area. The alternate landing area serves as a substitute for the primary area should this area become untenable or unusable for any reason. At least one alternate is selected for each primary landing area. In a fluid situation, several alternates may be required to provide continuous support. An alternate landing area is reconnoitered as soon as practical and area organization will be planned. The alternate area will not be occupied unless displacement from the primary area is required.

23. SELECTION OF LANDING AREAS

a. Considerations. Considerations are based on tactical and technical factors. Many of these factors are interrelated; many are conflicting. An area that fits the tactical situation is not always suitable from a technical standpoint, and an area that has outstanding technical characteristics may not satisfy tactical requirements. The relative importance of the following considerations will vary in relation to the situation; in most cases a compromise will be necessary.

- (1) Tactical. These factors are similar to those influencing any tactical operation - mission, enemy, terrain and weather, and troops available - with emphasis on the following:
 - (a) Mission. Will the area facilitate accomplishment of the mission? This is the most important of all considerations. All other factors must be measured by their affect on the mission.
 - (b) Security. Requirements will vary according to the situation, but security is usually critical for two reasons: (1) Aviation units have vulnerable items of equipment and (2) they lack combat power. Aviation units can provide some local security, but they cannot adequately and habitually defend themselves against ground attack. Passive defensive measures are aided by selection of an area which offers concealment and room for dispersion, but security against ground attack must be obtained by locating the area near a ground unit - preferably within the perimeter of the supported unit.

- (2) Technical. Technical requirements and factors are demanding in aviation operations.

- (a) Size of landing area. The minimum size required for a landing area will depend on the types and numbers of aircraft that are to use the area, and the loads the aircraft will carry. The surface condition and approach barriers will affect the size requirement. Barriers reduce the usable landing area. Wet or slippery surfaces increase the landing roll. Wind, precipitation, and density altitude also affect the size requirement.
- (b) Surface of landing area. The surface of the landing area must be smooth enough to preclude damage to landing aircraft. It must be firm enough to support the anticipated traffic, and drainage should be adequate for forecast rainfall. The slope of the surface should be within limits - normally 15° maximum for helicopters and 10° maximum for airplanes.
- (c) Approaches. The terrain surrounding the potential landing area must be surveyed from the standpoint of traffic patterns. In a tactical situation, stereotyped approaches are avoided; still, there are only so many ways to get into an area. Are these approaches free of obstacles? This is particularly important for night operations and for an area that is going to be instrumented. The approach should be concealed from enemy observation, and should allow a final approach and landing into the wind. A choice will often have to be made between these last two features. If the landing area is close to the FEBA, a concealed approach may be most important; while, if the winds are very high, an approach into the wind may be the overriding need.
- (d) Space. Adequate space is required for taxiways, parking, refueling, and dispersion of the aircraft. In addition, space is required for the command post and for the bivouac area of the unit.
- (e) Navigational aids. Locations for navigational aids and instrument approaches are of prime concern if all-weather operations are to be conducted.
- (f) Weather. Under some conditions, weather phenomena such as persistent fog or smoke in valleys and drifting snow or sand will dictate location of landing areas.

b. Reconnaissance. A reconnaissance is performed to obtain information on which to base a selection of a landing area. The most complete picture of an area is obtained by a combination of the following three types of reconnaissance:

- (1) Map and aerial photographs. A study of maps and aerial photographs is sometimes the only possible method of selecting a landing area - as when entering an area where access has previously been denied. This type of reconnaissance usually precedes the other two. By use of maps, obviously unsuitable areas can be eliminated and likely areas located. The map also gives a general idea of the terrain. Aerial photographs show recent changes in terrain and furnish more information on surface conditions such as vegetation.

- (2) Aerial. This reconnaissance usually follows a study of maps and aerial photographs and is instrumental in determining whether use of an area is tactically feasible and operationally safe. The size and shape of an area, the presence of concealment and room for dispersion adjacent to the area, and the availability of covered and concealed landing approaches can all be determined from the air. Some idea of surface conditions, barriers, and obstacles can also be obtained from this reconnaissance, but better information can be obtained by conducting a ground reconnaissance.
- (3) Ground. When time and conditions permit, a ground reconnaissance should be performed to examine the area more thoroughly for surface conditions, obstacles, and drainage. This reconnaissance will determine the minimum improvements that must be made before the area is usable. When time is limited, an advance party can travel by helicopter to the area selected, perform an aerial reconnaissance, and then land and perform a ground reconnaissance. If the area is suitable, they can begin organization and improvement.

24. ORGANIZATION, OCCUPATION, AND DISPLACEMENT

a. Organization. The aviation unit commander must coordinate the establishment of a landing area with the ground commander. He should also insure that security measures are coordinated for active defense. He is responsible for local area organization, which begins during the ground reconnaissance. While varying for different landing areas, local area organization will usually include the establishment of -

- (1) Aircraft parking area. A parking area is established near the landing area to provide dispersion and concealment of aircraft with minimum ground movement. In helicopter operations, this area is used mainly for transient aircraft; in airplane units, it also serves as a ready area. Servicing and minor maintenance are performed in the parking area.
- (2) Aircraft maintenance area. This is the area where major maintenance is performed. The area must be readily accessible to aircraft and motor vehicles. The maintenance area may be contiguous with the parking area, or it may be located further from the landing area in order to obtain better concealment and adequate space for dispersion. Helicopter units usually combine the functions of parking, servicing, and maintenance in a single dispersal area.
- (3) Refueling facilities. POL storage areas are dispersed and concealed in locations separate from, but convenient to, the parking and maintenance areas. Refueling vehicles deliver fuel to parked aircraft.
- (4) Ammunition storage area. Ammunition should be separated from POL. The storage areas should be concealed, protected, and separated from other activities.
- (5) Bivouac area. The bivouac area should be located close to the landing area. It should be large enough to accommodate all administrative activities and afford adequate concealment and dispersion.

- (6) Operations area. The operations area includes all facilities for control of the unit, and should be centrally located. Communications, situation maps, operating publications, and airfield control are located in this area.
- (7) Command post. The aviation unit commander locates his headquarters where he can best control the unit. This will usually be in the vicinity of the operations area. For smaller units, the command post may be combined with operations.

b. Occupation. An aviation unit has the ability to occupy a new area on short notice and with little prior preparation. The preferable method, however, is for an advance party to move to the area by ground vehicle in sufficient time and with sufficient equipment to make minor improvements and mark the area. The advance party continues the area organization begun during the reconnaissance; and, upon the arrival of the main body, controls landing traffic and directs elements of the unit from the landing area to their proper locations. If an area is to be occupied soon after it is selected, the group that makes the ground reconnaissance may remain in the area and function as an advance party. If time is short, the advance party may move by air just ahead of, or actually in, the van of the main body. Organization of the area will have to be completed concurrently with the occupation. This hasty occupation of an area should only be attempted during daylight, while the more deliberate method may be planned for day or night.

c. Displacement. Displacement is the actual movement of the aviation unit from one landing area to another. In planning the move, the commander must consider the conflicting requirements of security and control. Maximum security is obtained when the move is made under the cover of darkness. Control, on the other hand, is advanced by a move during daylight. A workable compromise is to displace at dawn or dusk. Twilight offers some aid to control, while reduced visibility promotes security. When displacing at dawn, the unit has darkness in the old area to cover preparations for the move; when moving at dusk, darkness serves to conceal activity in the new area. To maximize security, displacement may be effected by infiltrating elements; or, formations may be used to facilitate control and to expedite the move. During the displacement, the unit must continue its support mission. Some aircraft may depart the old area on a mission, and, upon completion of that mission, be directed to the new area. Other aircraft, such as the OV-1 Mohawks, may have to use alternate facilities (perhaps the instrumented airfield of an adjacent division, or the one at corps) until the new area is completely operational. In most cases, uninterrupted support of the supported unit will be essential.

25. MARKING AND LIGHTING OF TACTICAL LANDING AREAS

A standardized method for marking and lighting of Army landing areas is covered in this paragraph. Since deliberate landing areas usually have installed lighting, and by their very nature do not require marking, it is anticipated that these systems will be used to mark and light hasty and pioneer landing areas. When additional equipment is available, these basic markings can be developed further.

a. Marking Airplane Landing Areas. Tactical marking of airplane landing areas must be based on the mission, capabilities, and situation of the unit concerned. Pioneer and hasty airplane landing areas are normally marked to aid the aviator in identifying the area and to facilitate landing. Marking is normally accomplished by using ground-to-air signal panels which are issued to all units, company size or higher. Marking is standard

for all airplane landing areas and can vary from minimum marking (fig. 13) to optimum marking (fig. 14). These markings are only a guide and can be altered, as required, for special situations. The markings should always include the length of the usable area and a wind indicator (or direction of landing).

(1) Marking airplane landing area by panels.

- (a) First, place two panels on the left side of the usable landing area as follows:
 - 1. At the departure end, place one panel perpendicular to the direction of landing (fig. 13).
 - 2. At the touchdown end, place the other panel parallel to the direction of landing (fig. 13).
- (b) At the touchdown end of the landing area, use two additional panels to make a wind "T" to indicate direction of landing and wind information (fig. 13). Point the tail of the wind "T" into the wind. If the tail is on the left side, this indicates right-hand traffic; if on the right side, this indicates left-hand traffic; if centered, right or left traffic is indicated.
- (c) If a code letter or identity panel is used, center it on the left side of the landing area (fig. 13).
- (d) Remove panel marking after all aviators become familiar with the area. For security, remove panels as soon as practicable as they are easily seen by the enemy.

Caution: Anchor panels securely against both propeller and rotor wash. Exercise extraordinary care in securing panels to ground. Use firmly driven stakes to secure panels tautly; rocks piled on the corners are not adequate.

- (2) Marking airplane landing area by smoke. If the tactical situation permits, smoke used at the proper time will readily identify the exact location of the landing area; it will also indicate wind direction and velocity. Smoke is normally used in the same area designated for wind indicator (fig. 13). It must be of a color authorized by the signal operation instructions (SOI).
- (3) Obstructions. If the situation permits, plainly mark all major obstructions such as telephone wires, powerlines, snowbanks, etc.

b. Lighting of Airplane Landing Areas. An airplane landing area has certain minimum lighting requirements. Basically, lights replace each panel used in day marking of landing areas. Landing to a minimum lighted area requires maximum aviator proficiency. Figure 15 is an example of minimum lighting required for an airplane landing area; figure 16 is an example of optimum lighting.

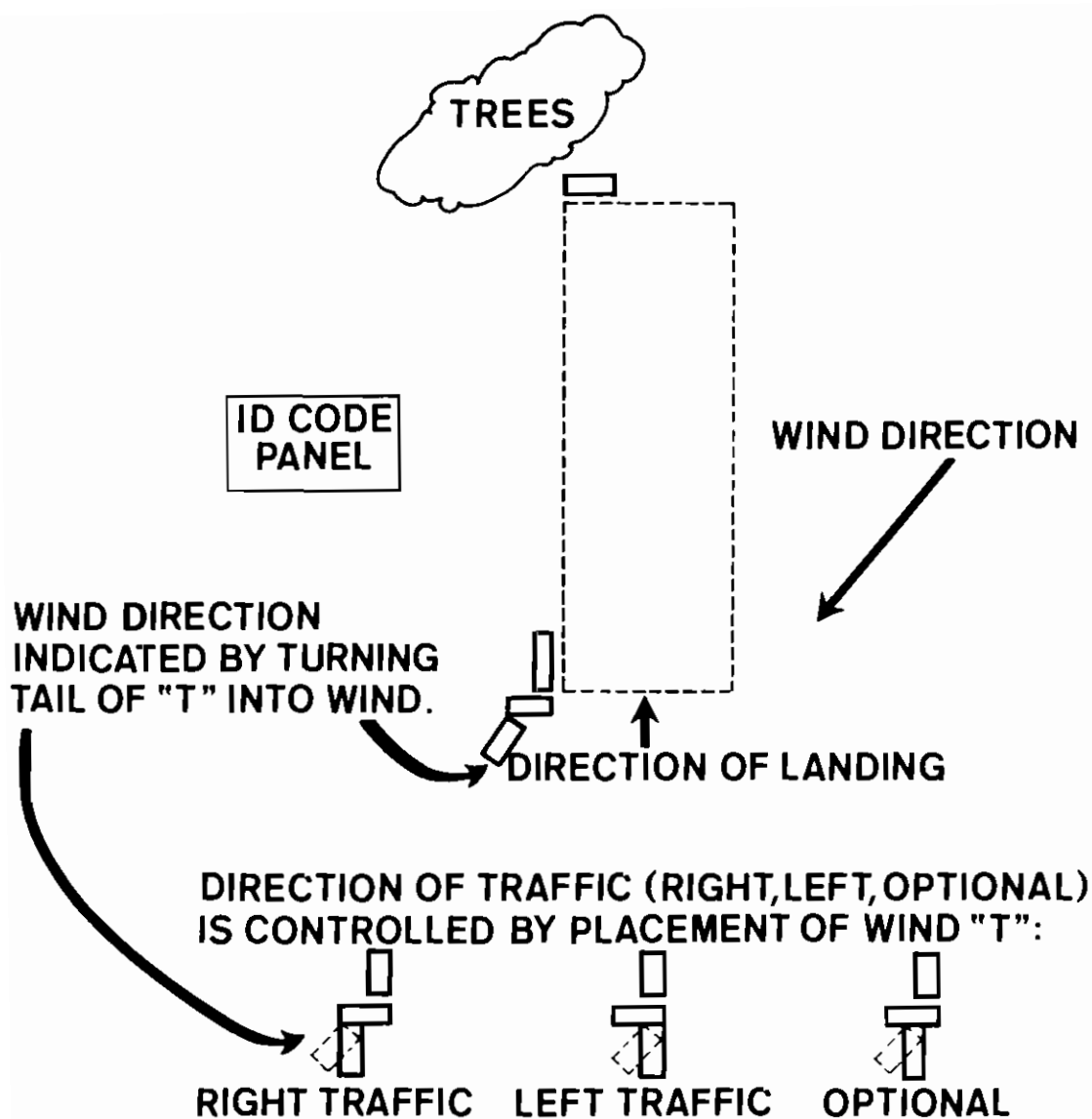
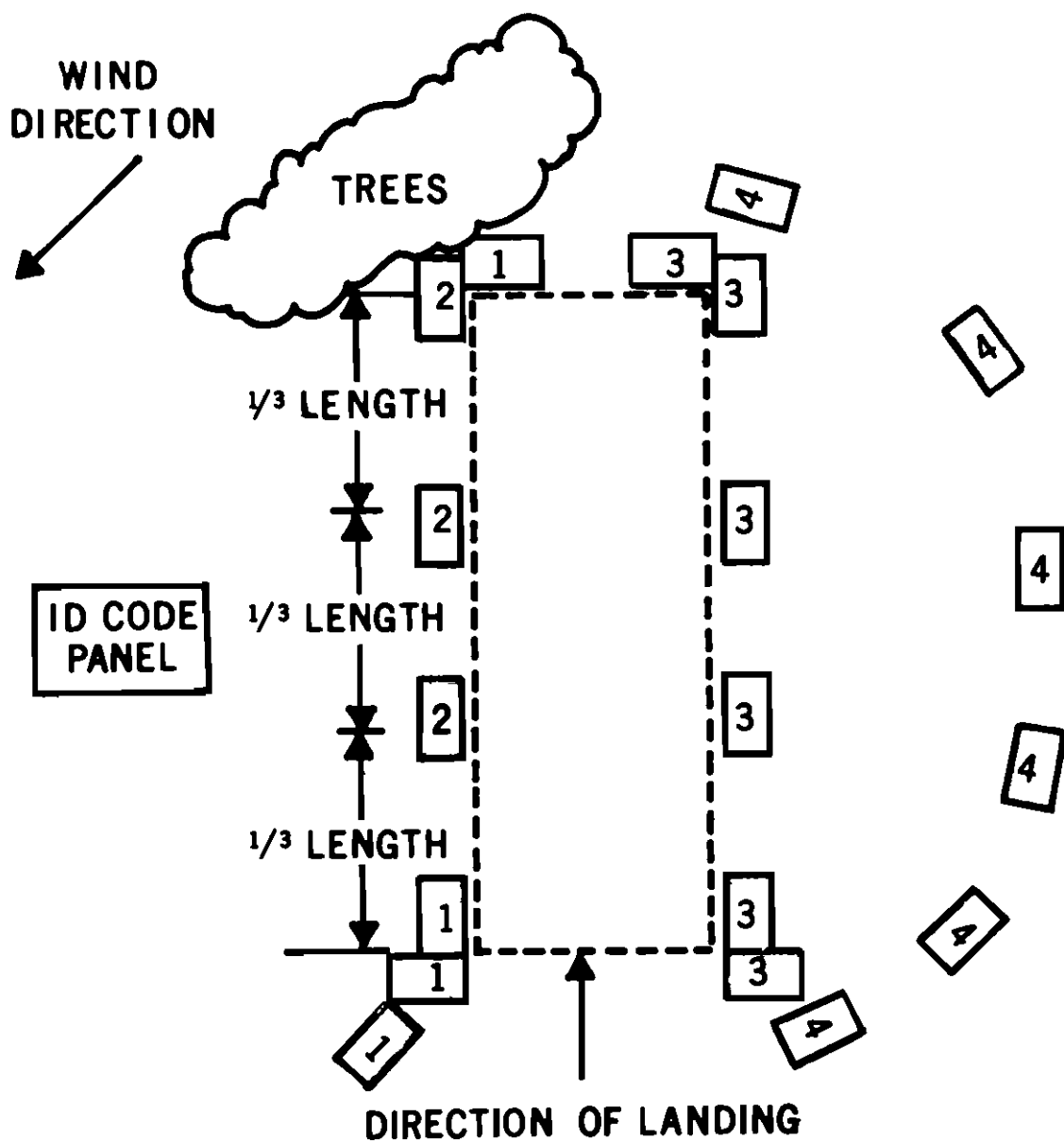


Figure 13. Minimum marking for airplane landing area.

- (1) Light Set No. 6. Light Set No. 6, augmented by auxiliary light Set No. 24, contains all the necessary equipment to light a tactical landing area. It contains its own generator and can light a runway 200 feet wide and 2,000 feet long, plus lighting obstructions, taxi lights, etc. Set No. 6 is equipped with hoods over the lights so that they are visible only on final approach; they can be removed when the tactical situation permits. It also has a glide angle indicator that can warn an aviator if he is too high or too low on his approach.



**PANEL NUMBERS INDICATE PRIORITY OF EMPLACEMENT.
THE NUMBER 4 PANELS INDICATE TAXIWAY WHEN APPLICABLE.**

Figure 14. Optimum marking for airplane landing area.

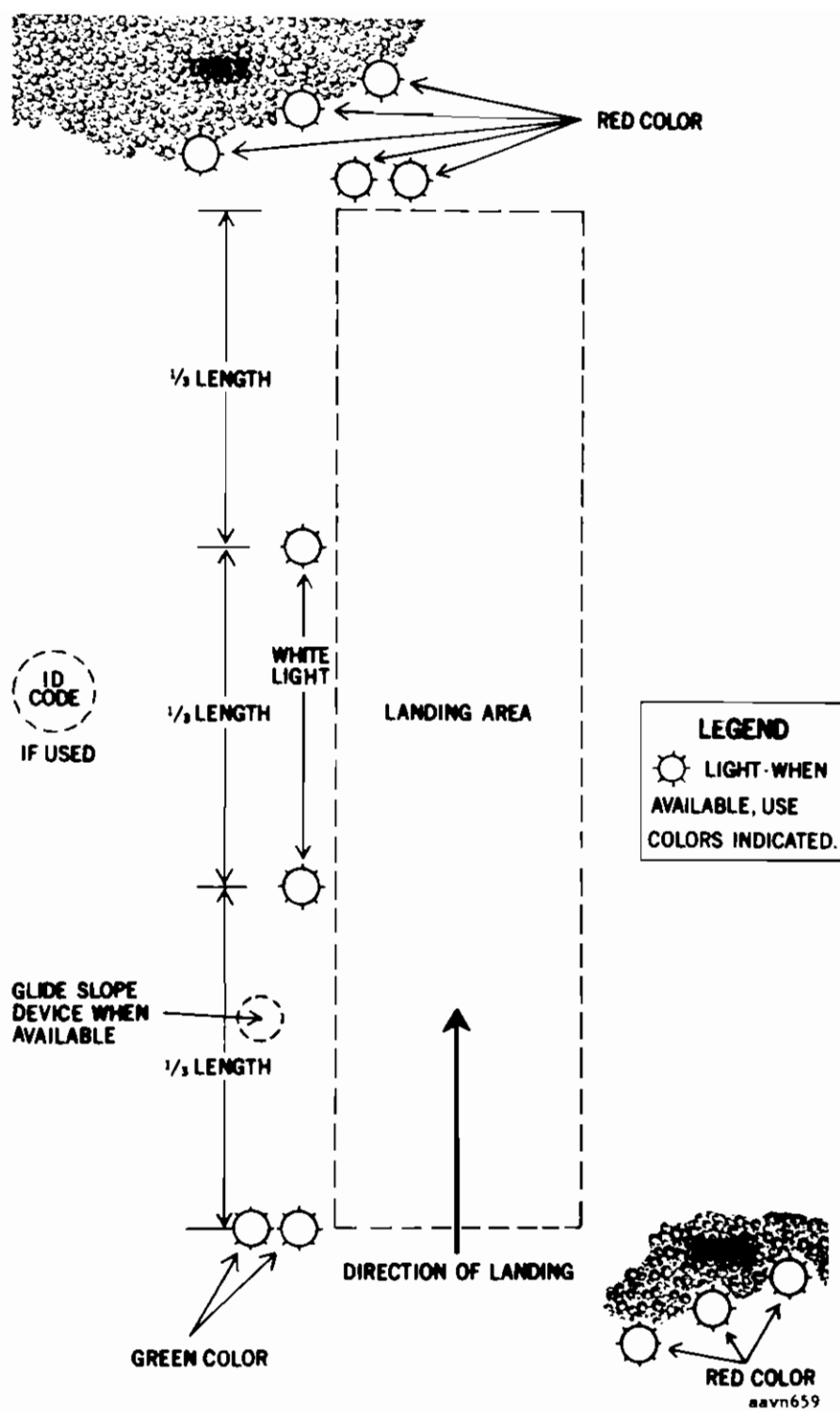


Figure 15. Minimum lighting for airplane landing area.

- (2) Emergency light set marker. When Set No. 6 is not used, use the battery-operated emergency light set marker or any field expedient.
- (3) Obstructions. The lighting of obstructions (any object which penetrates the approach zone) is desirable to increase air safety. This lighting must be held to a minimum in tactical areas.

c. Marking of Helicopter Landing Areas. Tactical marking must be based on the mission, capabilities, and situation of the unit concerned. Pioneer and hasty helicopter landing areas are marked to aid the aviator in identifying the area and to facilitate landing. Marking is normally accomplished by using ground-to-air signal panels which are issued to all units, company size or higher.

- (1) Panel marking of helicopter landing area. The helicopter landing area is designated by a wind "T". The helicopter should approach parallel to the stem of the "T" and land with the panel directly to the right of the right wheel or skid (fig. 17). No landings should be made directly on panels.
- (2) Preparation of landing area. Reconnoiter and prepare an area 50 meters by 50 meters for landing to the left of the touchdown point (fig. 17).
- (3) Simultaneous landings. When simultaneous landings are required, prepare additional touchdown points. The basic pattern can be altered as the situation requires (A and B, fig. 17).
- (4) Panel removal. Remove panel markings after all aviators become familiar with the landing area. For security, remove panels as soon as practicable as they are easily seen by the enemy.

Caution: Anchor panels securely against rotor wash. Exercise extraordinary care in securing panels to ground. Use firmly driven stakes to secure panels tautly; rocks piled on the corners are not adequate.

- (5) Marking helicopter landing area by smoke. If the tactical situation permits, smoke used at the proper time will readily identify the exact location of the landing area; it will also indicate wind direction and velocity. Use on the downwind side of the landing area. Smoke must be of a color authorized by the SOI.
- (6) Obstructions. If the situation permits, plainly mark all major obstructions such as telephone wires, powerlines, snowbanks, etc.

d. Lighting of Helicopter Landing Areas.

- (1) Light Set No. 7. Tactical lighting for a helicopter landing area is provided by light Set No. 7, augmented by auxiliary light Set No. 25. This set contains the same glide angle indicator as Set No. 6. It has its own generator and two small floodlights mounted approximately 12 inches above the ground facing each other at a distance of about 100 feet. The light emitted from the floodlights is controlled so that it cannot be seen from above; only the ground immediately between the

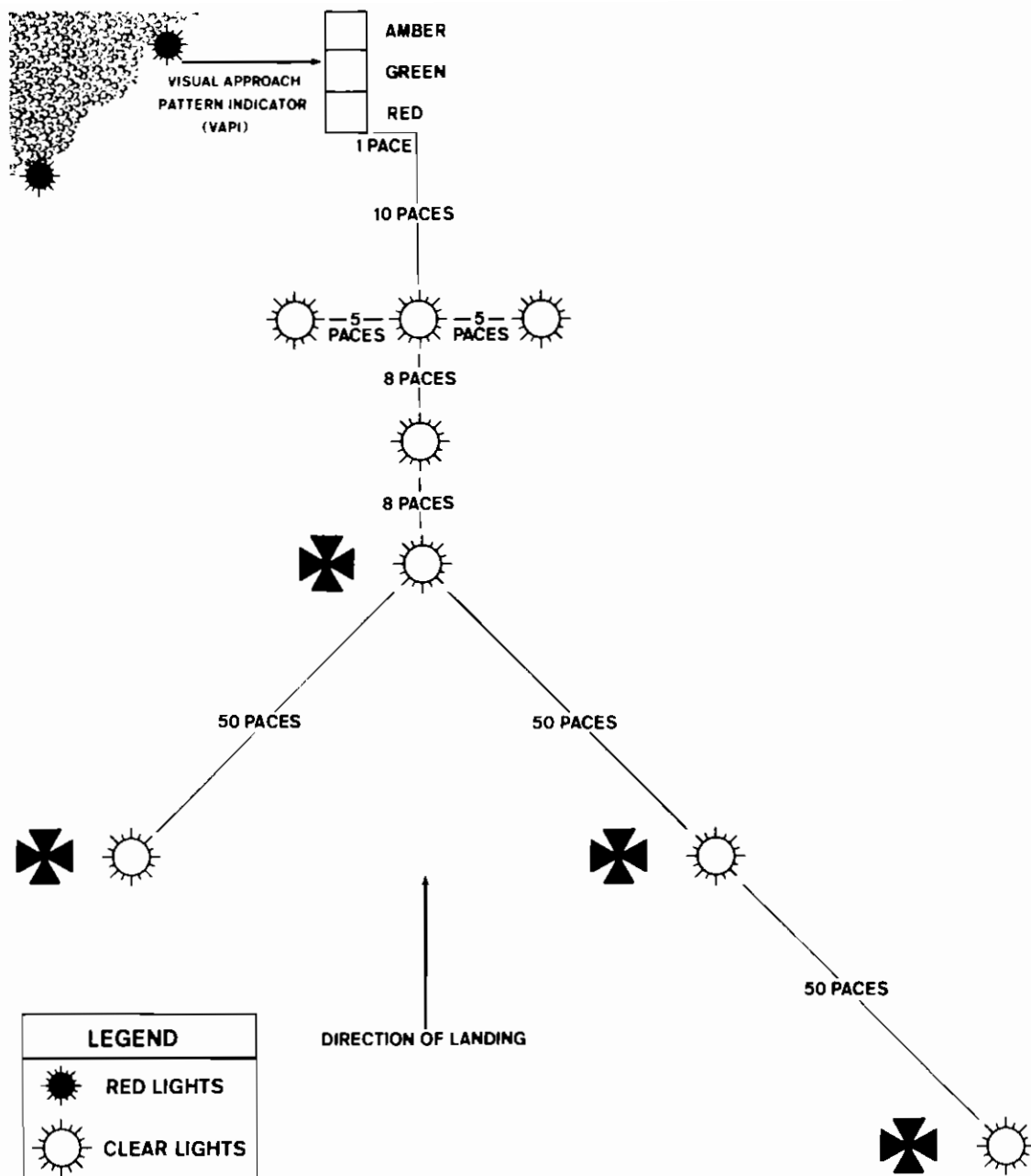


Figure 17. Helicopter landing area marking.

lights is illuminated, and then only enough to enable helicopters to land. When Set No. 7 is used, place the glide angle indicator to the right front of the two floodlights.

- (2) Expedient lighting methods. When light Set No. 7 is not used, use the battery-operated emergency light set marker or any field expedient to provide a lighted "T" for the lead helicopter (fig. 18). Use single lights as needed for landing additional helicopters. Mark obstacles as required.

Section VII. COMMUNICATIONS

26. GENERAL

a. Communications is the heart of the highly mobile Army of today. Mechanization, airmobility, and nuclear capabilities require a sophisticated, reliable communications capability.

b. The scope of the subject "COMMUNICATIONS" has led to an extensive reference publication "A Communications Reference Handbook for Army Aviators," published by the U. S. Army Aviation School. This publication is recommended as a source of reference data and study. No attempt will be made to duplicate this material in this publication.

27. TYPE EQUIPMENT AND FREQUENCY SPECTRUM

Figures 19 and 20 show the frequency spectrum of the presently authorized radios in the Army structure today.

Section VIII. LOW-LEVEL FLIGHT OPERATIONS

28. GENERAL

The mission of Army aviation requires operating in relatively close proximity to the enemy. If Army aircraft are to survive on the battlefield, it is imperative that aviation operations be oriented, so as to take maximum advantage of natural and manmade features on the ground as a means of concealment and protection. Low-level flight operations conducted to achieve surprise and increase the probability of survival are dependent upon the location and disposition of both friendly and enemy forces, the restrictions imposed as a consequence, and the nature of the terrain in the area of operation. The conduct of low-level flight operations may vary from a low-level technique at altitudes of up to 500 feet absolute, along direct preplanned routes, to a "nap-of-the-earth" technique at close proximity to the earth, in river beds, valleys, wooded areas, taking maximum advantage of cover and concealment offered by vegetation and relief. Low-level flight operations using either technique reduce the possibility of visual and/or electronic detection and limit the effectiveness of enemy air defense.

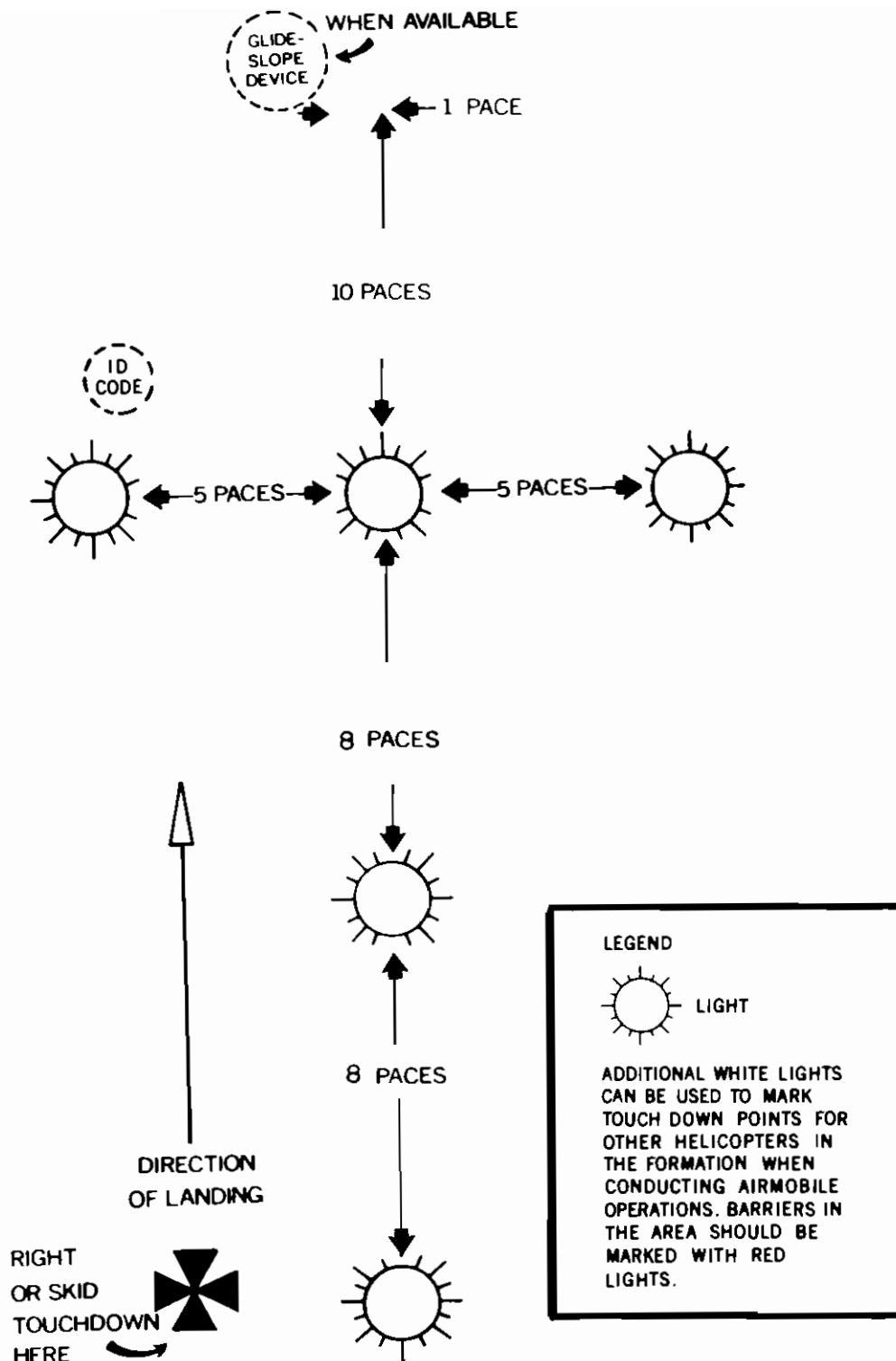


Figure 18. Helicopter landing area lighting.

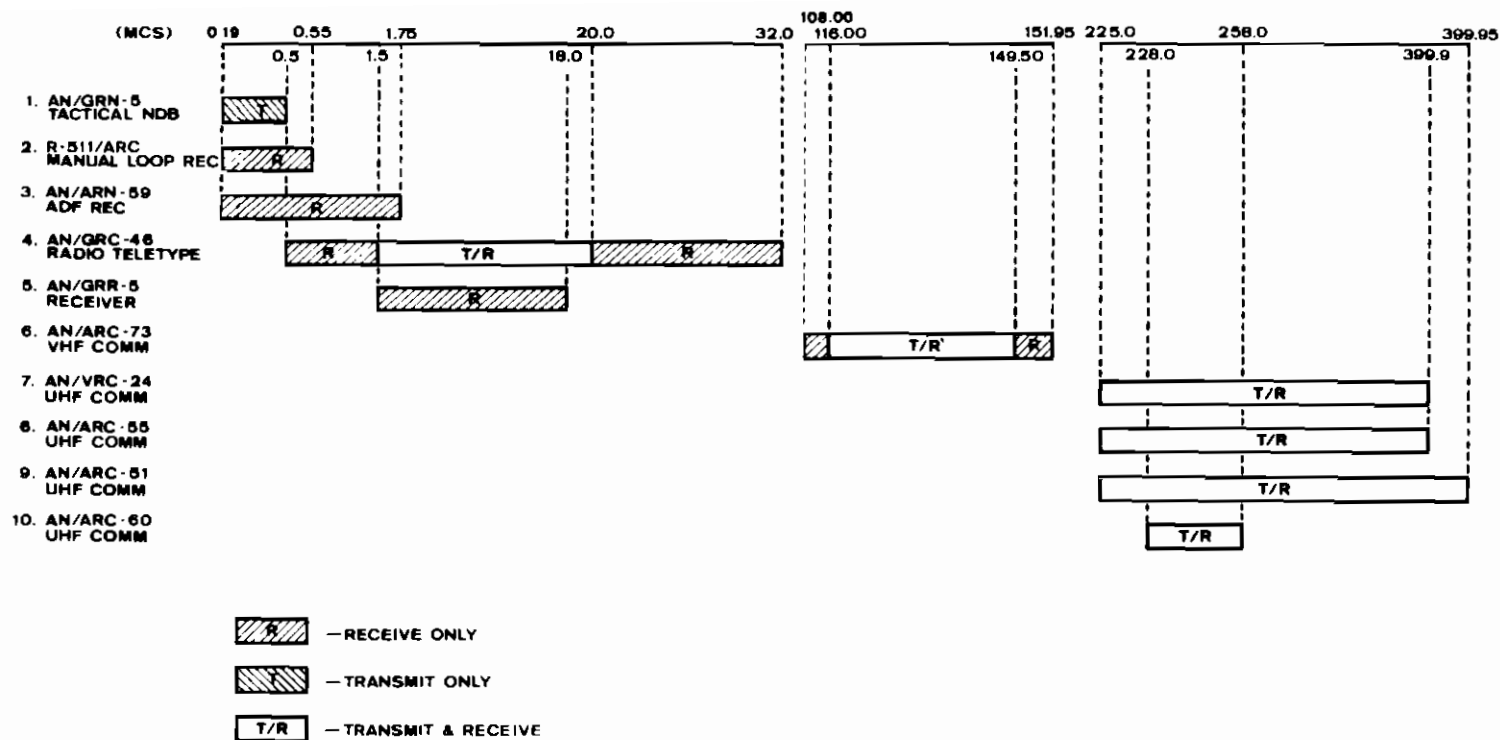


Figure 19. Frequency spectrum of tactical AM radios. (For full description of radios, see the Communications Reference Handbook for Army Aviators.)

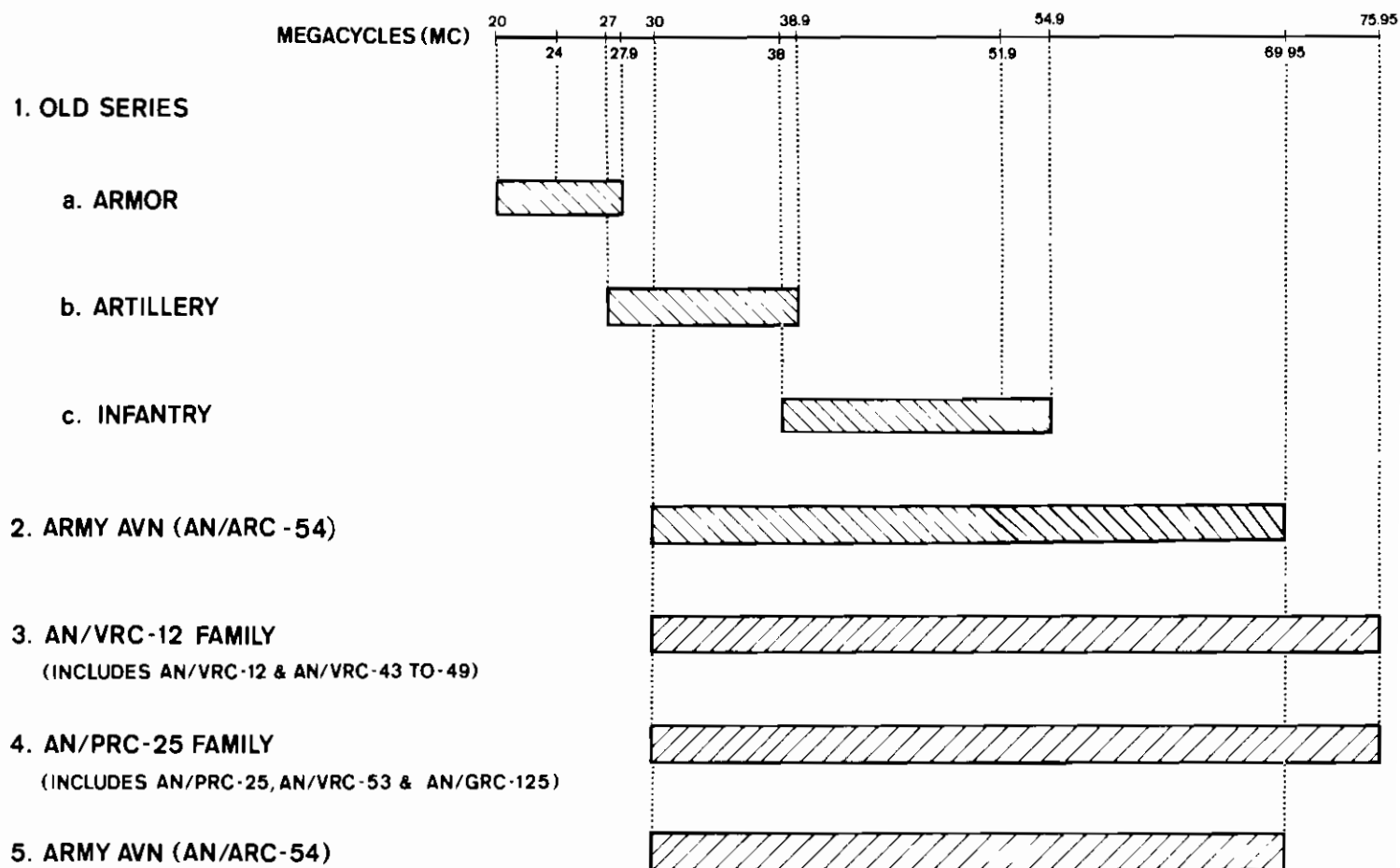


Figure 20. Frequency spectrum for tactical FM radios.

29. DEFINITIONS

a. Low-Level Flight Operations. The operation of Army aircraft at optimum altitudes which afford cover and concealment from ground visual and electronic detection in order to exploit surprise to the fullest. Low-level flight operations encompass low-level flight and nap-of-the-earth flight.

b. Low-Level Flight. Flight conducted at an altitude to avoid long-range detection or observation of an aircraft or the points from and to which it is flying. The route is preselected and conforms generally to a straight line. This method is best adapted to flights conducted over extended distances or periods of time.

c. Nap-of-the-Earth Flight. Flight as close to the earth's surface as vegetation and obstacles will permit. Based on known terrain features, the pilot preplans a broad corridor of operations which has a longitudinal axis pointing toward his objective. In flight, the pilot uses a weaving and devious route within his preplanned corridor while remaining oriented along his general axis of movement in order to take maximum advantage of the cover and concealment afforded by terrain, vegetation, and manmade features. By gaining maximum cover and concealment from enemy detection, observation, and firepower, nap-of-the-earth flight exploits surprise and allows for evasive actions.

d. Low-Level Navigation. The technique of navigating an aircraft along a desired course at low altitudes (generally below 500 feet absolute) by using pilotage, dead-reckoning, and electronic navigational aids in such a manner that the position of the aircraft is known at any time.

30. PILOT, COPILOT RELATIONSHIP

The success of a low-level flight will depend largely on the ability of the observer (or copilot) to navigate while the pilot focuses attention on flying the aircraft. The observer should keep the map and flight log and make any computations necessary to adhere to the flight plan, pointing out checkpoints and prominent landmarks to the pilot as the flight progresses. In this manner, the pilot is free to correct heading and airspeed with a minimum of in-cockpit activity.

PART TWO

DIVISIONAL AVIATION

Section I. AIRMOBILE DIVISION AVIATION

31. GENERAL

- a. Composition. The composition of the airmobile division is shown in figure 4.
- b. Mission. The mission of the airmobile division is to provide reconnaissance and security for larger units, to participate in stability operations, and low- and mid-intensity operations, and to control an area, including its population and resources.
- c. Assignment. The airmobile division is assigned to field army, corps, or separate task force.
- d. Capabilities. The capabilities of the airmobile division are enhanced in comparison to the capabilities of other U.S. Army divisions. This division is capable of -
 - (1) Rapidly maneuvering to gain surprise and tactical advantage.
 - (2) Operating in difficult terrain, and without the usual restrictions caused by surface obstacles.
 - (3) Providing firepower by direct air-to-ground fire-supporting weapons.
 - (4) Fighting simultaneously in more than one direction or area.
 - (5) Raiding, harassing, and interdicting the enemy rear, thus forcing the enemy to divert combat power to the protection of his supporting installations and units.
- e. Basic Organizational Concepts. Basic organizational concepts include -
 - (1) Substitution of helicopters in the place of traditional equipment such as trucks, armored combat vehicles, and ground fire support systems.
 - (2) Elimination of heavy equipment from the combat and combat support elements of the airmobile division to insure the operational airmobility of these elements by aircraft organic to the division.
- f. Basic Employment Concepts.
 - (1) Organic airmobility systems enable the airmobile division to respond immediately and to maneuver rapidly over large areas. These organic aircraft provide an increased ability to (1) find, surprise, and fight the enemy; and (2) bypass obstacles and strongpoints. Combat and combat support elements are moved by aerial units into, and are recovered from, the battlefield area by the use of assigned aircraft. The division,

then, accomplishes maneuver of its combat battalions through use of assigned aircraft rather than through the use of slower traditional surface vehicles. Supporting artillery and other combat support elements of the division are emplaced and subsequently displaced by air, as the situation may dictate.

- (2) Armed aerial escort, air-to-ground fire support, and resupply of combat forces of the division are provided by aerial weapons systems and transport aircraft organic to the division.

Note. The armament systems at the time of publication were the XM27 (LOH), XM16 (being replaced by the XM21); XM3, M5, and M22 (UH-1B/C); M23 (UH-1D); and M24 (CH-47).

- (3) Surface movement and employment of the combat elements within the battlefield area (exclusive of airmobile operations) are essentially the same as that of infantry division units.

Note. The following pages show organizational charts for all units of the airmobile division which possess organic aircraft, and the reference data which pertains to each such unit.

32. CAVALRY SQUADRON

a. Description. The cavalry squadron, airmobile division, is a combat force with combat elements mounted completely in organic aircraft or in conventional surface vehicles. The unit combines the characteristics of tactical three-dimensional mobility and highly destructive firepower from both surface and aerial systems in the performance of reconnaissance and security for the division.

b. General.

- (1) Composition. The composition of the cavalry squadron, airmobile division, is shown in figure 21.
- (2) Mission. The mission of the cavalry squadron is to perform reconnaissance and to provide security for the division or its major subordinate combat elements; to engage in combat as an economy-of-force unit; and to provide limited air and ground antitank defense for the division.
- (3) Assignment. The cavalry squadron is organic to the airmobile division, TOE 67T.
- (4) Capabilities. The cavalry squadron has the following capabilities:
 - (a) Performs air and ground reconnaissance and provides security for the unit to which assigned or attached.
 - (b) Conducts offensive, defensive, or delaying combat operations as required.
 - (c) Provides limited air and ground antitank defense for the unit to which assigned or attached.

- (5) Organization. The cavalry squadron organization includes a headquarters and headquarters troop, three air cavalry troops, and one cavalry troop. This is the opposite of the organization of the ROAD cavalry squadron - it has three armored cavalry troops and one air cavalry troop. Equipment TOE to the cavalry troop of the airmobile division is similar to that in cavalry troops of the airborne division. The cavalry squadron has 88 helicopters.
- (6) Concept of employment. The cavalry squadron is not normally fragmented, but is employed as a unit with air elements and ground elements in close conjunction so that their respective capabilities are fully exploited and complementary. The squadron conducts ground and air reconnaissance and security operations over large areas for the division, and may conduct offensive, defensive, or delaying combat operations as required.

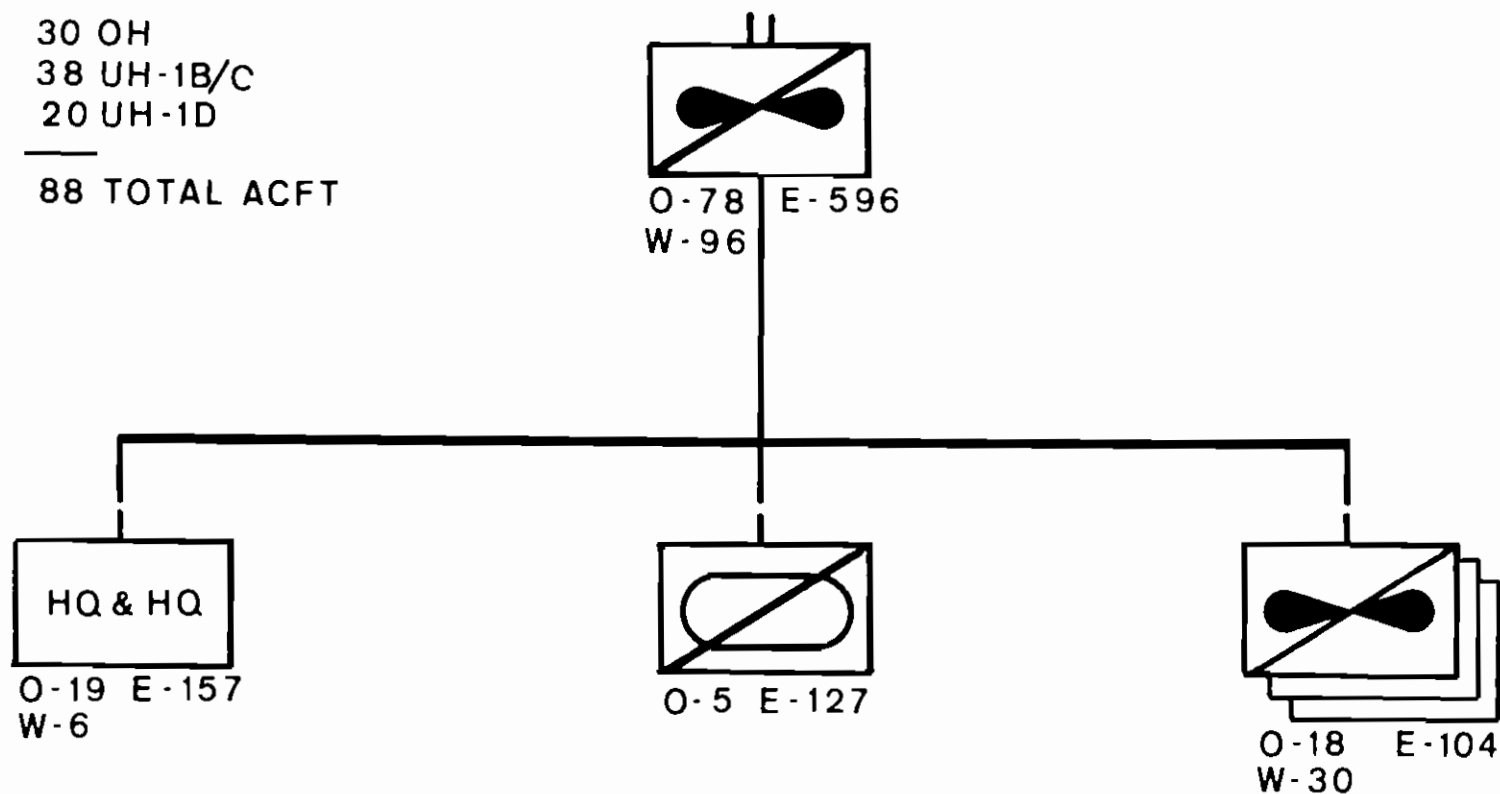
c. Headquarters and Headquarters Troop, Cavalry Squadron.

- (1) Composition. The composition of the headquarters and headquarters troop, cavalry squadron, airmobile division, is shown in figure 22.
- (2) Mission. The mission of the headquarters and headquarters troop is to furnish command, administration, supply, mess, and squadron-level maintenance for the cavalry squadron, airmobile division.
- (3) Assignment. The headquarters and headquarters troop is organic to the cavalry squadron, airmobile division, TOE 17-95T.
- (4) Capabilities. The troop has the following capabilities:
 - (a) Commands, controls, provides staff planning, and furnishes communications and supervision of operations for organic and attached units.
 - (b) Furnishes supply, mess, transportation, and organizational maintenance for organic and attached units.
 - (c) Provides unit-level medical service to include medical care and evacuation for the cavalry squadron. The medical section establishes a squadron aid station and provides aidmen to organic troops.
 - (d) Provides aircraft for command, control, and liaison by the commander and his staff.
- (5) Organization. The organization of the headquarters and headquarters troop (fig. 22) includes a maintenance platoon and an aviation platoon.
 - (a) Maintenance platoon. Two UH-1D helicopters located in the platoon headquarters are used to move parts and maintenance crews to downed aircraft, and for general support of the maintenance effort.

30 OH
 38 UH-1B/C
 20 UH-1D

 88 TOTAL ACFT

9*



NOTE: OH ARMED WITH XM 27.
 UH-1B/C ARMED WITH XM 16.
 UH-1D ARMED WITH M 23.

Figure 21. Cavalry squadron, airmobile division (TOE 17-95T).

DATA FOR FIGURE 21

RECAPITULATION

VEHICULAR

Trk cgo 3/4-ton 4x4	36
Trk cgo 2 1/2-ton 6x6 LWB . .	11
Trk util 1/2-ton 4x4 mule . . .	10
Trk tk FS 2 1/2-ton 6x6	4
Trk util 1/4-ton 4x4	53
Trk wkr lt 2 1/2-ton 6x6	1
Trk amb frontline 1/4-ton . . .	2
Tlr cgo 3/4-ton 2 wheel	33
Tlr amph cgo 1/4-ton 2 wheel . .	29
Tlr cgo 1 1/2-ton 2 wheel . . .	6
Tlr tk water 1 1/2-ton 2 wheel	5

ARMAMENT

Lchr gren 40mm	215
Gun mach lt flex	37
Mortar 81mm with mount	3
Rifle 5.56mm M16E1	270
Pistol auto cal .45	307
Revolver cal .38 PPS	193
Rifle 106mm on mount	6

COMMUNICATION

Elec tt sec equip TSEC/KW-7 . .	3
Rdo set AN/URC-10	88
Rdo set AN/GRC-106 mtd in trk 1/4-ton	4
Rdo set AN/GRC-106 mtd in trk 3/4-ton	1
Rdo set AN/GRC-125 mtd in trk 1/4-ton	9
Rdo set AN/GRC-125 mtd in trk 3/4-ton	9
Rdo set AN/PRC-25	63
Rdo set AN/PRC-47	12

COMMUNICATION

Rdo set AN/VRC-24 mtd in trk 3/4-ton	4
Rdo set AN/VRC-46 mtd in trk 1/4-ton	22
Rdo set AN/VRC-46 mtd in trk 3/4-ton	4
Rdo set AN/VRC-47 mtd in trk 1/4-ton	8
Rdo set AN/VRC-47 mtd in trk 3/4-ton	1
Rdo set AN/VRC-49	3
Rdo set AN/VRC-49 mtd in trk 1/4-ton	11
Rdo set AN/VRC-49 mtd in trk 3/4-ton	4
Swbd tel manual SB-22/PT . . .	6
Tel set TA-1/PT	24
Tel set TA-312/PT	29
COMMEN AN/ASC-5	1
RATT set AN/VSC-2	3
Set mbl data tcr with rdo SSB .	1

AIRCRAFT

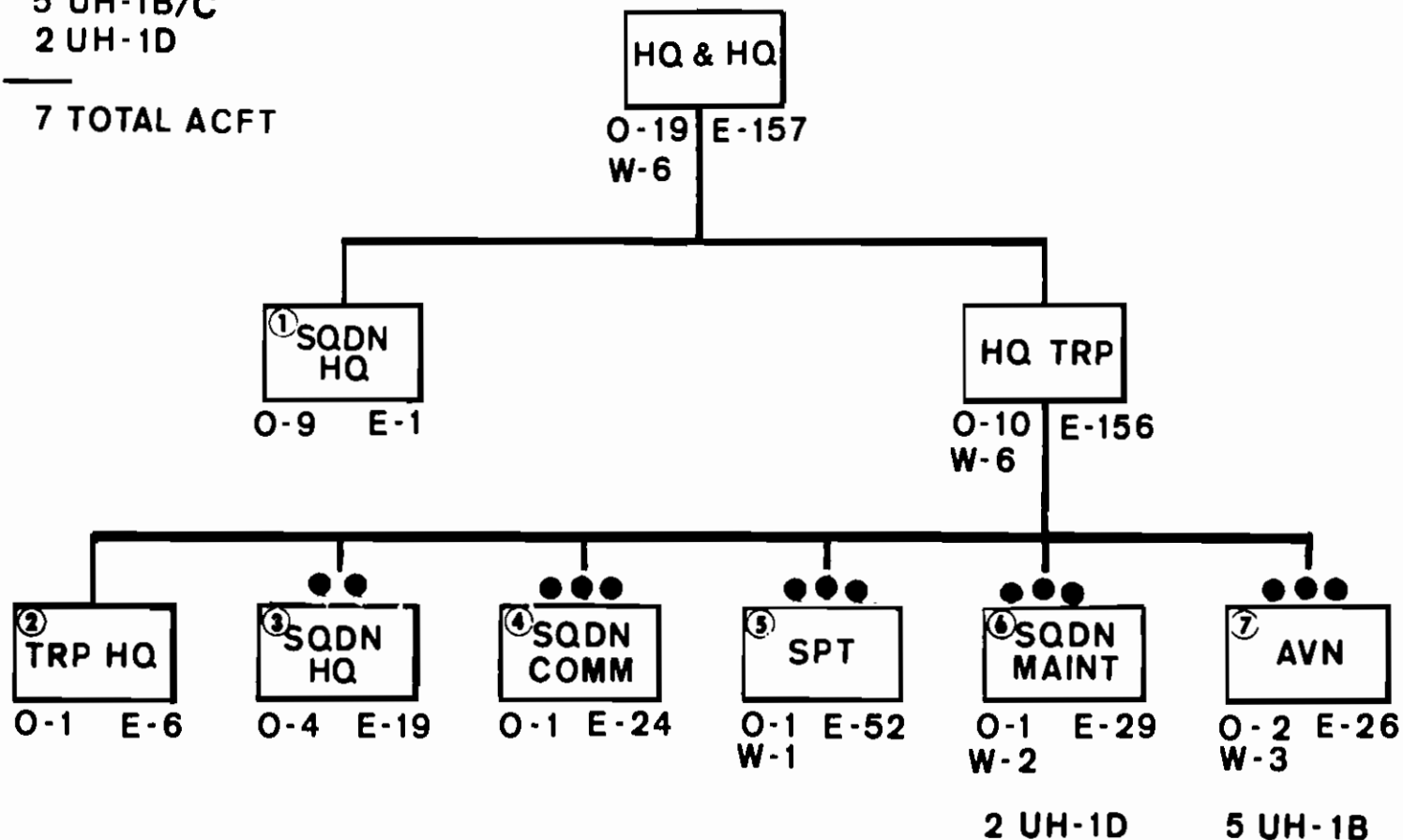
Hel util UH-1B/C	38
Hel util UH-1D	20
Hel obsn lt (LOH)	30

AIRCRAFT ARMAMENT

Armt subsystem hel 7.62mm mg dr mtd wt M23 w/equip (UH-1D)	20
Armt subsystem hel 7.62mm XM27	30
Wpns subsystem XM16	38

5 UH-1B/C
2 UH-1D

7 TOTAL ACFT



NOTE. UH-1B/C ARMED WITH XM16.
UH-1D ARMED WITH M23.

Figure 22. Headquarters and headquarters troop, cavalry squadron, airmobile division (TOE 17-96T).

DATA FOR FIGURE 22

① SQUADRON HEADQUARTERS

1 LTC	Sqdn Comd	61204
1 MAJ	XO	61204
1 MAJ	S3	62162
1 CPT	S1	2110
1 CPT	S2	9301
1 CPT	S4	64020
1 CPT	Surge	3610
1 CPT	Maint Off	64823
1 CPT	Aviation Safety Off	7423
1 SGM	Sgt Major	11D50

Rifle 5.56mm M16E1	1
Pistol auto cal .45	3
Revolver cal .38 PPS	6

② TROOP HEADQUARTERS

1 CPT	Trp Comd	2900
1 1SG	1SGt	11D50
1 SSG	Sup Sgt	76K40
1 SP4	Armorer	76K30
1 SP4	Trp Clerk	71H20
1 PFC	Lt Trk Dvr	11D10
1 PFC	Sup Clerk	76A10

Trk cgo 3/4-ton 4x4	2
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	2
Tlr amph cgo 1/4-ton 2 wheel	1
Lchr gren 40mm	3
Rifle 5.56mm M16E1	3
Pistol auto cal .45	4
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	1
Tel set TA-312/PT	1

③ SQUADRON HQ SECTION

1 CPT	Asst S3	62162
3 LT	Ln Off	61204
1 MSG	Intel Sgt	11D50
1 MSG	Op Sgt	11D50
1 SFC	Flt Op Sgt	71P40
1 SFC	Perp Staff NCO	71H40
1 SSG	Cml NCO	54E40
1 SGT	Op Asst	11D20
3 SP4	Clerk Typist	71B30
1 SP4	Draftsman	81A10
1 SP4	Flt Op SP	71P29
3 SP4	Ln Agent	11D20
4 PFC	Lt Trk Dvr	11D10
1 PFC	Mail Dlv'r Clerk	71A10

Trk util 1/4-ton 4x4	9
Tlr amph cgo 1/4-ton 2 wheel	9
Lchr gren 40mm	10
Rifle 5.56mm M16E1	8
Pistol auto cal .45	11
Revolver cal .38 PPS	4
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	2
Rdo set AN/VRC-49 mtd in	
trk 1/4-ton	6
Tel set TA-312/PT	3

④ SQDN COMM PLATOON HQ

1 CPT	Sig Off	0210
1 PSG	Comm Sgt	31G40
Trk util 1/4-ton 4x4	1	
Tlr amph cgo 1/4-ton 2 wheel	1	
Pistol auto cal .45	2	
Rdo set AN/VRC-49 mtd in		
trk 1/4-ton	1	

REPAIR SECTION

1 SSG	Aviation Elct Equip	
	Rpmn Supv	31Q40
6 SP4	Aviation Elct Equip	
	Rpmn Mech	31Q20
Trk cgo 3/4-ton 4x4		1
Tlr cgo 3/4-ton 2 wheel		1
Lchr gren 40mm		1
Rifle 5.56mm M16E1		5
Pistol auto cal .45		2

RADIO SECTION

1 SSG	Sec Sgt	05C40
3 SGT	RATT Tm Chief	05C40
6 SP4	RATT Op	05B20
1 SP4	Sr Rdo Op	05B20
1 PFC	Rdo Op	05B20
Trk cgo 3/4-ton 4x4		1
Trk util 1/4-ton 4x4		3
Tlr cgo 3/4-ton 2 wheel		1
Tlr amph cgo 1/4-ton		
2 wheel		3
Lchr gren 40mm		3
Rifle 5.56mm M16E1		8
Pistol auto cal .45		4
Elec tt sec equip TSEC/		
KW-7		3
Rdo set AN/GRC-106 mtd		
in trk 1/4-ton		1
Rdo set AN/PRC-47		2
Tel set TA-312/PT		4
RATT set AN/VSC-2		3

DATA FOR FIGURE 22 - (continued)

MSG CEN AND WIRE SEC

1 SP4 Sr Msg Clerk 36A10
1 SP4 Swbd Op 36A10
2 PFC Msg Clerk 36A10

Trk cgo 3/4-ton 4x4 1
Tlr cgo 3/4-ton 2 wheel 1
Lchr gren 40mm 1
Rifle 5.56mm M16E1 3
Pistol auto cal .45 1
Swbd tel manual SB-22/PT 2

5 SUPPORT PLATOON HQ

1 LT Plat Ldr 4000
1 PSG Plat Sgt 76K40

Trk util 1/4-ton 4x4 1
Tlr amph cgo 1/4-ton 2 wheel 1
Lchr gren 40mm 1
Pistol auto cal .45 2
Rdo set AN/VRC-46 mtd in
trk 1/4-ton 1

TROOP MESS TEAM (5)

1 SSG Mess Sgt 94B40
2 SP5 First Cook 94B20
2 SP4 Cook 94B20
1 PFC Cook's Helper 94A10

Trk cgo 2 1/2-ton 6x6 LWB 1
Tlr tk water 1 1/2-ton
2 wheel 1
Lchr gren 40mm 1
Gun mach lt flex 1
Rifle 5.56mm M16E1 1
Pistol auto cal .45 5

MEDICAL SECTION

1 SSG Sec Sgt 91B40
1 SP6 Med Asst 91C20
2 SP5 Sr Aidman 91B30
2 SP4 Amb Dvr 91B20
6 SP4 Med Aidman 91B20

Trk cgo 3/4-ton 4x4 1
Trk amb frontline 1/4-ton 2
Tlr cgo 3/4-ton 2 wheel 1
Lchr gren 40mm 2
Pistol auto cal .45 12
Rdo set AN/VRC-46 mtd in
trk 3/4-ton 1
Tel set TA-312/PT 1

SUPPLY SECTION

1 WO Sec Ldr 761A0
1 SSG Asst Sup Sgt 76K40
1 SP4 Ammo SP 11E20
2 SP4 Sup SP 76K20
3 PFC Ammo Handler 11E10
2 PFC Sup Clerk 76A10

Trk cgo 2 1/2-ton 6x6 LWB 5
Trk cgo 1/2-ton 4x4 mule 1
Tlr cgo 1 1/2-ton 2 wheel 5
Lchr gren 40mm 5
Gun mach lt flex 5
Rifle 5.56mm M16E1 5
Pistol auto cal .45 5
Tel set TA-312/PT 1

6 MAINT PLATOON HQ

1 LT Plat Ldr 64803
1 WO Hel Pilot 062B0
1 PSG Plat Sgt 67R40
2 SP5 Crew Chief 67N20

MAINT PLATOON HQ

1 SP4 Shop Clerk 71B20
1 PFC Lt Trk Dvr 11D10

Trk util 1/4-ton 4x4 1
Tlr amph cgo 1/4-ton
2 wheel 1
Lchr gren 40mm 2
Pistol auto cal .45 3
Revolver cal .38 PPS 4
Rdo set AN/URC-10 2
Rdo set AN/VRC-47 mtd in
trk 1/4-ton 1
Tel set TA-312/PT 1
Hel util UH-1D with armt
subsystem 7.62mm M23 2

WHEEL VEHICLE MAINT SEC

1 SSG Sec/Maint Sgt 63B40
1 SP5 Sr Wheel Veh Mech 63B20
1 SP4 Powerman 63B20
1 SP4 Vehicle Rept Clerk 71B20
1 SP4 Welder 44C30
4 SP4 Wheel Veh Mech 63B20
2 PFC Mech Helper 63A10

Trk cgo 3/4-ton 4x4 1
Trk cgo 2 1/2-ton 6x6 1
Trk util 1/2-ton 4x4 mule 1
Trk wrkr lt 2 1/2-ton 6x6 1
Tlr cgo 3/4-ton 2 wheel 1
Tlr cgo 1 1/2-ton 2 wheel 1
Lchr gren 40mm 3
Rifle 5.56mm M16E1 5
Pistol auto cal .45 6

AIRCRAFT MAINT SECTION

1 WO Acft Maint Off 671C0

DATA FOR FIGURE 22 - (continued)

AIRCRAFT MAINT SECTION

1 SP6	Tech Insp	67W20
1 SP5	Sr Hel Mech	67W20
1 SP4	Acft Armorer	45J20
1 SP4	Rec Clerk	71B20
1 SP4	Trans Parts SP	76H20
1 SP4	Hel Mech	67N20

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1
Trk util 1/2-ton 4x4 mule . . .	2
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel .	1
Lchr gren 40mm	2
Rifle 5.56mm M16E1	4
Pistol auto cal .45	2
Revolver cal .38 PPS	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	1
Tel set TA-312/PT	1

TECH SUPPLY SECTION

1 SFC	Ord Sup Sgt	76D40
1 SP4	Ord Parts SP	76D20
1 SP4	Sig Parts SP	76G20
2 SP4	Trans Parts SP	76H20
2 PFC	Sup Clerk	76A10

Lchr gren 40mm	2
Rifle 5.56mm M16E1	5
Pistol auto cal .45	2

7 AVIATION PLATOON HQ

1 CPT	Plat Comd	61204
1 PSG	Plat Sgt	67R40
1 PFC	Lt Trk Dvr	67A10

AVIATION PLATOON HQ

Trk cgo 3/4-ton	1
Tlr cgo 3/4-ton 2 wheel	1
Lchr gren 40mm	1
Pistol auto cal .45	2
Revolver cal .38 PPS	1
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-47 mtd in	
trk 3/4-ton	1

AVIATION SUPPORT SEC

1 SSG	Sec Sgt	93B40
2 SP5	Sr Air Tfc Con	93B20
4 SP4	Acft Fuel Handling SP	56C20
2 SP4	Air Tfc Con	93B20
8 PFC	Afld Svc Crewman	67A10
2 PFC	Air Tfc Con Helper	93B20

Trk cgo 3/4-ton 4x4	3
Trk tk FS 2 1/2-ton 6x6	4
Tlr cgo 3/4-ton 2 wheel	3
Lchr gren 40mm	3
Rifle 5.56mm M16E1	13
Pistol auto cal .45	6
Rdo set AN/PRC-25	3

COMD AVIATION SECTION

1 LT	Sec Ldr	61204
3 WO	Hel Pilot	062B0
5 SP5	Crew Chief	67N20

Revolver cal .38 PPS	9
Rdo set AN/URC-10	5
COMMCEN AN/ASC-5	1
Hel util UH-1B/C with wpns	
subsystem XM16 mtd	5

- (b) Aviation platoon. The aviation platoon is organized into a platoon headquarters, an aviation support section, and a command aviation section. Located in the command aviation section are five UH-1B's /C's armed with the XM16 weapons system. These helicopters are used by the squadron commander and his staff for command, control, and liaison.

d. Air Cavalry Troop, Cavalry Squadron (Three Per Cavalry Squadron).

- (1) Composition. The composition of the air cavalry troop, cavalry squadron, airmobile division, is shown in figure 23.
- (2) Mission. The mission of the air cavalry troop is to perform reconnaissance and to provide security for designated major combat elements, to engage in combat as an economy-of-force unit, and to provide limited air antitank defense for elements of the division.
- (3) Assignment. The air cavalry troop is organic to the cavalry squadron, airmobile division, TOE 17-95T.
- (4) Capabilities. This unit has the following capabilities:
 - (a) Performs air and ground reconnaissance and provides security for the unit to which assigned or attached.
 - (b) Conducts offensive, defensive, or delaying combat operations, as required.
 - (c) Provides limited air antitank defense for unit to which assigned or attached.
- (5) Organization. The troop consists of a troop headquarters, scout platoon, rifle platoon, and a weapons platoon.
 - (a) Troop headquarters. The troop headquarters has an aviation section equipped with one UH-1B /C and one UH-1D helicopter. The UH-1B /C is armed with XM16 and the UH-1D is armed with the M23 weapons system. These two helicopters are used for command, control, and liaison.
 - (b) Scout platoon. The scout platoon has 10 OH's divided into two sections of 5 helicopters each. These helicopters are armed with the XM27 weapons system and are the reconnaissance element of the troop.
 - (c) Rifle platoon. The rifle platoon is organized into a platoon headquarters, a lift section, and four rifle squads. Five UH-1D helicopters are assigned to the lift section. All are armed with the M23 weapons subsystem, and are the primary means of transportation for the rifle platoon.
 - (d) Weapons platoon. The weapons platoon consists of a platoon headquarters and two weapons sections. Each section has 5 UH-1B /C

helicopters for a total of 10 in the platoon. All 10 helicopters are armed with the XM16 weapons subsystem.

- (e) Helicopters. Each of the three air cavalry troops has 27 armed helicopters (10 OH's, 6 UH-1D's, and 11 UH-1B's/C's).

e. Cavalry Troop, Cavalry Squadron. The cavalry troop is a ground combat unit organic to the cavalry squadron and performs ground reconnaissance and security, normally in conjunction with the three air cavalry troops. It is organized into a troop headquarters, a maintenance section, and three cavalry platoons. The cavalry troop does not have any organic aircraft.

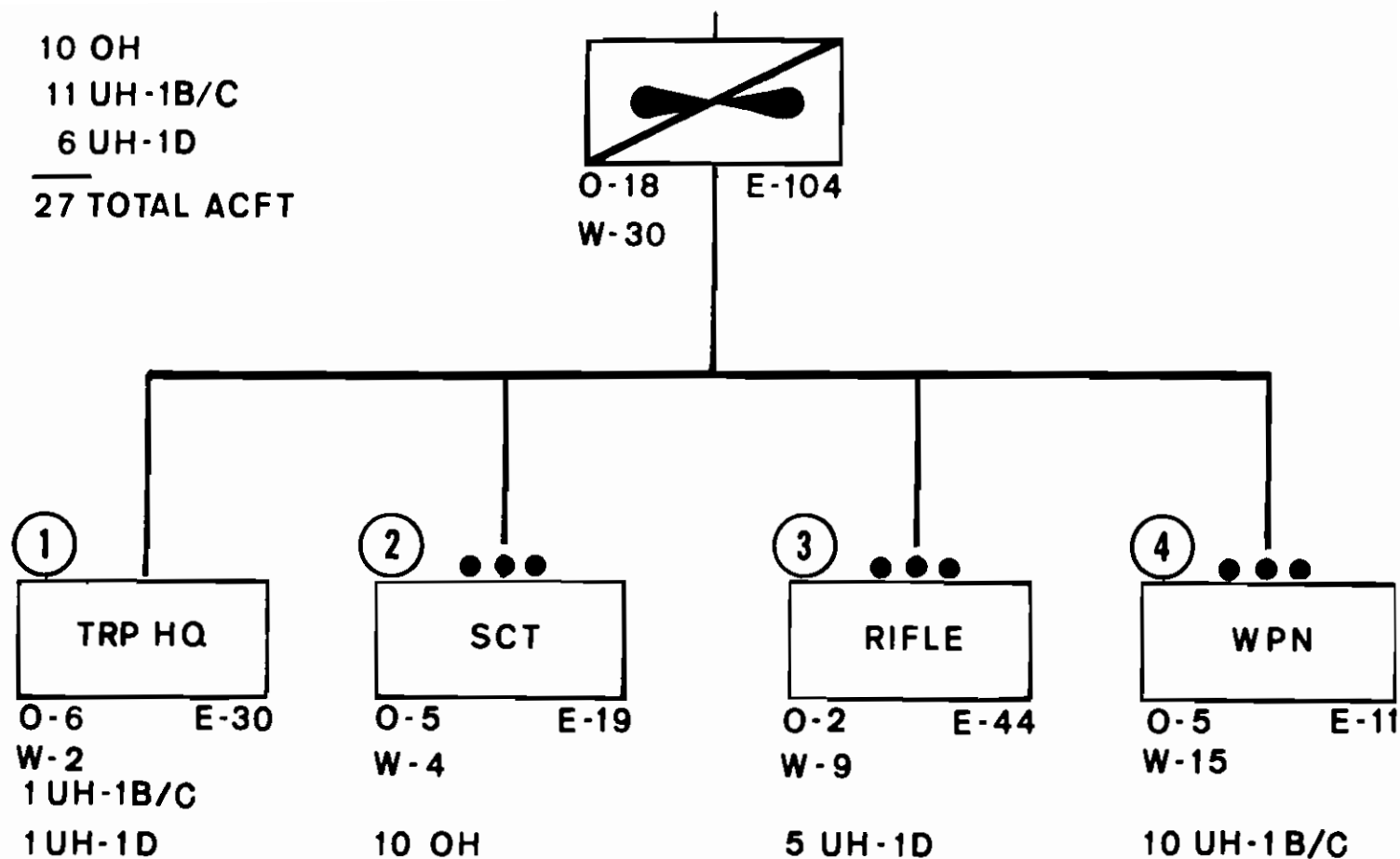
33. DIVISION ARTILLERY

a. General.

- (1) Composition. The composition of the airmobile division artillery is shown in figure 24.
- (2) Mission. The mission of the airmobile division artillery is to provide direct and general artillery support for the airmobile division.
- (3) Assignment. The airmobile division artillery is organic to airmobile division, TOE 67T.
- (4) Capabilities. The capabilities of the airmobile division artillery include -
 - (a) Providing conventional artillery support to include communications, target acquisition, and survey.
 - (b) Establishing the fire support element of the division tactical operations center.
 - (c) Providing command and control of additional attached artillery units.
 - (d) One field artillery battalion, 105mm, participating in airborne operations when organized as an airborne field artillery battalion.
- (5) Organization. The division artillery organization includes a headquarters and headquarters battery, an aviation battery, three 105mm field artillery battalions, and one field artillery battalion, aerial artillery.
- (6) Equipment. The three field artillery battalions utilize the light towed 105mm howitzer. Other equipment in airmobile division artillery is correspondingly light and all elements are one-hundred percent air transportable. Fifty-nine helicopters are organic to division artillery; 20 of these are assigned to the aviation battery, and 39 are assigned to the field artillery battalion, aerial artillery.

10 OH
 11 UH-1B/C
 6 UH-1D

 27 TOTAL ACFT



NOTE. OH ARMED WITH XM27.
 UH-1B/C ARMED WITH XM16.
 UH-1D ARMED WITH M23.

Figure 23. Air cavalry troop, cavalry squadron, airmobile division (TOE 17-98T).

DATA FOR FIGURE 23

1 TROOP HEADQUARTERS

1 CPT	Trp Comd	61204
1 LT	XO	61204
1 LT	Op Off	61204
1 LT	Maint Off	61204
1 LT	Ln Off	61204
1 ISG	ISgt	11D50
1 SFC	Flt Op Sgt	71D40
1 SSG	Sup Sgt	76K40
1 SGT	Comm Chief	31G40
1 SGT	Ln Sgt	11D40
1 SGT	RATT Tm Chief	05C40
1 SP4	Sr Rdo Op	05B20
1 SP4	Trp Clerk	71H20
1 SP4	Op Clerk	71P20
1 SP4	Unit Sup SP	76K20
2 PFC	Lt Trk Dvr	11D10
2 PFC	Rdo Op	05B20

Trk cgo 3/4-ton 4x4	1
Trk util 1/2-ton 4x4 mule	1
Trk util 1/4-ton 4x4	3
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	3
Lchr gren 40mm	4
Rifle 5.56mm M16E1	7
Pistol auto cal .45	7
Revolver cal .38 PPS	5
Rdo set AN/GRC-106 mtd in	
trk 1/4-ton	1
Rdo set AN/GRC-125 mtd in	
trk 3/4-ton	1
Rdo set AN/PRC-47	2
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	2
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1

TROOP HEADQUARTERS

Rdo set AN/VRC-49 mtd in	
trk 1/4-ton	1
Swbd tel manual SB-22/PT	1
Tel set TA-312/PT	4

AVIATION SECTION

1 LT	Sec Ldr	61204
1 WO	Hel Pilot	062B0
2 SP5	Crew Chief	67N20

Lchr gren 40mm	2
Pistol auto cal .45	2
Revolver cal .38 PPS	2
Rdo set AN/URC-10	2
Rdo set AN/PRC-25	1
Rdo set AN/VRC-49	1
Hel util UH-1B/C w/XM16	1
Hel util UH-1D w/armt sub-	
system 7.62mm mg dr	
mtd lt wt M23	1

MAINTENANCE SECTION

1 WO	Sec Chief	671C0
1 SFC	Maint Supv	67R40
2 SP6	Tech Insp	67W20
3 SP5	Hel Mech	67N20
1 SP5	Sr Acft Armorer	45J20
2 SP4	Acft Armorer	45J20
1 SP4	Parts SP	76H20
1 SP4	Rdo Mech	31C20
1 SP4	Veh Rec Clerk	71B20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Lt Trk Dvr	63A10

Trk cgo 3/4-ton 4x4	3
Trk util 1/2-ton 4x4 mule	1
Trk util 1/4-ton 4x4	1

MAINTENANCE SECTION

Tlr cgo 3/4-ton 2 wheel	3
Tlr amph cgo 1/4-ton	
2 wheel	1
Lchr gren 40mm	4
Rifle 5.56mm M16E1	2
Pistol auto cal .45	12
Revolver cal .38 PPS	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	1
Tel set TA-1/PT	2

SCOUT PLATOON HQ

1 LT	Plat Comd	61204
1 PSG	Plat Sgt	13370

Rifle 5.56mm M16E1	1
Revolver cal .38 PPS	1
Rdo set AN/PRC-25	2

2 SCOUT SECTION (2)

1 LT	Sec Comd	61204
1 LT	Tm Ldr	61204
2 WO	Hel Pilot	062B0
1 SSG	Scout Ober	11D40
2 SGT	Scout Ober	11D40
5 SP5	Crew Chief	67N20

Lchr gren 40mm	5
Pistol auto cal .45	5
Revolver cal .38 PPS	8
Rdo set AN/URC-10	5
Rdo set AN/PRC-25	2
Hel obsn lt (LOH) w/armt	
subsystem 7.62mm	
XM27	5

DATA FOR FIGURE 23 - (continued)

③ RIFLE PLATOON HQ

1 LT	Plat Comd	61204
1 PSG	Plat Sgt	11B40
2 PFC	Rdo TP Op	11B10

Rifle 5.56mm M16E1	3
Revolver cal .38 PPS	1
Rdo set AN/PRC-25	2
Tel set TA-1/PT	5

LIFT SECTION

1 LT	Sec Comd	61204
9 WO	Hel Pilot	062B0
5 SP5	Crew Chief	67N20

Lchr gren 40mm	5
Pistol auto cal .45	5
Revolver cal .38 PPS	10
Rdo set AN/URC-10	5
Rdo set AN/PRC-25	1
Hel util UH-1D w/armt subsystem 7.62mm mg dr mtd lt wt M23 w/equip . .	5

RIFLE SQUAD (4)

1 SSG	Sqd Ldr	11B40
2 SGT	Tm Ldr	11B40
2 SP4	Grenadier	11B20
2 SP4	Sr Rifleman	11B20
2 PFC	Rifleman	11B10

Lchr gren 40mm	2
Gun mach lt flex	1
Rifle 5.56mm M16E1	7
Pistol auto cal .45	2
Rdo set AN/PRC-25	1

④ WPN PLATOON HQ

1 LT	Plat Comd	61204
1 PSG	Plat Sgt	67R40

Rifle 5.56mm M16E1	1
Revolver cal .38 PPS	1
Rdo set AN/PRC-25	2

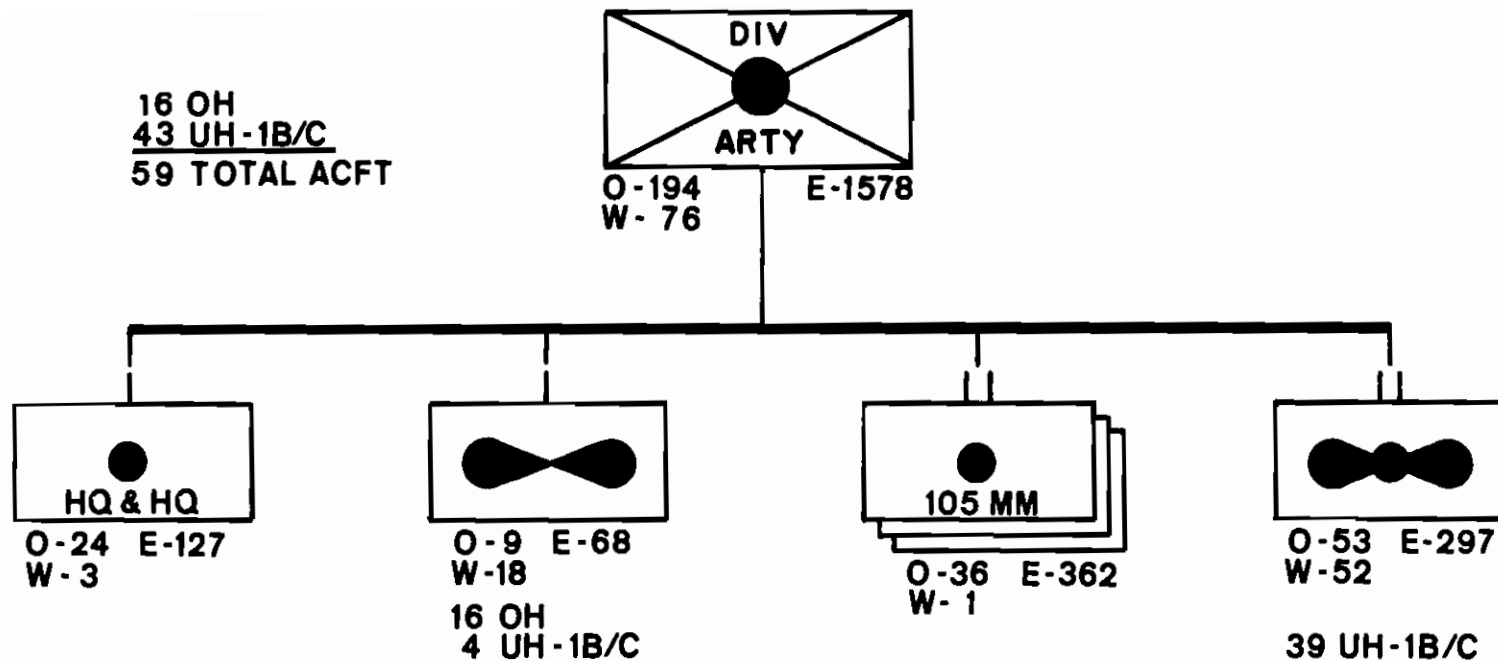
WEAPONS SECTION (2)

1 LT	Sec Comd	61204
1 LT	Tm Ldr	61204
8 WO	Hel Pilot	062B0 (one section has 7)
5 SP5	Crew Chief	67N20

Lchr gren 40mm	5
Pistol auto cal .45	5
Revolver cal .38 PPS	10
Rdo set AN/URC-10	5
Rdo set AN/PRC-25	1
Hel util UH-1B/C w/wpns subsystem XM16 mtd	5

b. Aviation Battery, Division Artillery.

- (1) **Composition.** The composition of the aviation battery, airmobile division artillery is shown in figure 25.
- (2) **Mission.** The mission of the aviation battery, airmobile division artillery is to increase the combat effectiveness of the airmobile division artillery by providing its headquarters and elements with immediately responsive aviation support.
- (3) **Assignment.** The aviation battery, airmobile division artillery is organic to the airmobile division artillery, TOE 6-700T.
- (4) **Capabilities.** The capabilities of the aviation battery, airmobile division artillery include -
 - (a) Continuous (day and night) operations during visual weather conditions and limited operations under instrument weather conditions.
 - (b) Aerial observation, reconnaissance, and surveillance (both day and night) of enemy areas for the purpose of locating, verifying, and evaluating targets; terrain study; and adjusting artillery fire.
 - (c) Command, liaison, reconnaissance, and transportation.
 - (d) Aerial wire laying, radio relay, and propaganda leaflet dissemination.
- (5) **Organization.** The aviation battery consists of a battery headquarters, a flight operations section, a direct support platoon, a general support platoon, and a service platoon. The direct support platoon and the general support platoon have all the organic aircraft assigned to the aviation battery.
 - (a) **Direct support platoon.** The direct support platoon has 12 observation helicopters - 4 in each of 3 direct support sections. Normally, one of these sections (four helicopters each) is placed in direct support of each of the 105mm howitzer battalions. They perform tasks of observation, reconnaissance, surveillance; location and evaluation of targets; and adjustment of artillery fires for the supported battalion. All 12 helicopters of the direct support platoon are armed with the XM27 armament subsystem.
 - (b) **General support platoon.** The general support platoon provides general and utility type support to the division artillery headquarters, and to units in division artillery. To provide this type support, they have organic to the platoon four UH-1B/C helicopters and four observation helicopters. The UH-1B/C helicopters are armed with the XM16 weapons subsystem; the OH's are armed with the XM27 armament subsystem.



**NOTE: OH ARMED WITH XM 27.
 UH-1B/C ARMED WITH XM 3 OR M22.**

Figure 24. Airmobile division artillery (TOE 6-700T).

DATA FOR FIGURE 24

RECAPITULATION

VEHICULAR

Trk cgo 3/4-ton 4x4	70
Trk cgo 2 1/2-ton 6x6 LWB . .	16
Trk util 1/2-ton 4x4 mule . . .	26
Trk tk PS 2 1/2-ton 6x6	4
Trk util 1/4-ton 4x4	90
Trk amb frontline 1/4-ton . . .	1
Util veh 2 wheel	6
Tlr cgo 3/4-ton 2 wheel	34
Tlr cgo 1 1/2-ton 2 wheel . . .	7
Tlr tk water 1 1/2-ton 2 wheel .	9
Tlr amph cgo 1/4-ton 2 wheel .	90
Tlr 4 wheel M-274 mdfd	4

ARMAMENT

How lt towed 105mm	54
Lchr gren 40mm	42
Gun mach lt flex	106
Rifle 5.56mm M16E1	1512
Pistol auto cal .45	180
Revolver cal .38 PPS	154

COMMUNICATIONS

Elec tt sec equip TSEC/KW-7 .	9
Rdo set AN/URC-10	59
Rdo set AN/GRR-5	4
Rdo set AN/GRC-125 mtd in	
trk 1/4-ton	8
mtd in trk 3/4-ton	1
Rdo set AN/PRC-25	108
Rdo set AN/PRC-47	17
Rdo set AN/VRC-24 mtd in	
trk 1/4-ton	1
mtd in trk 3/4-ton	5
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	40

COMMUNICATIONS

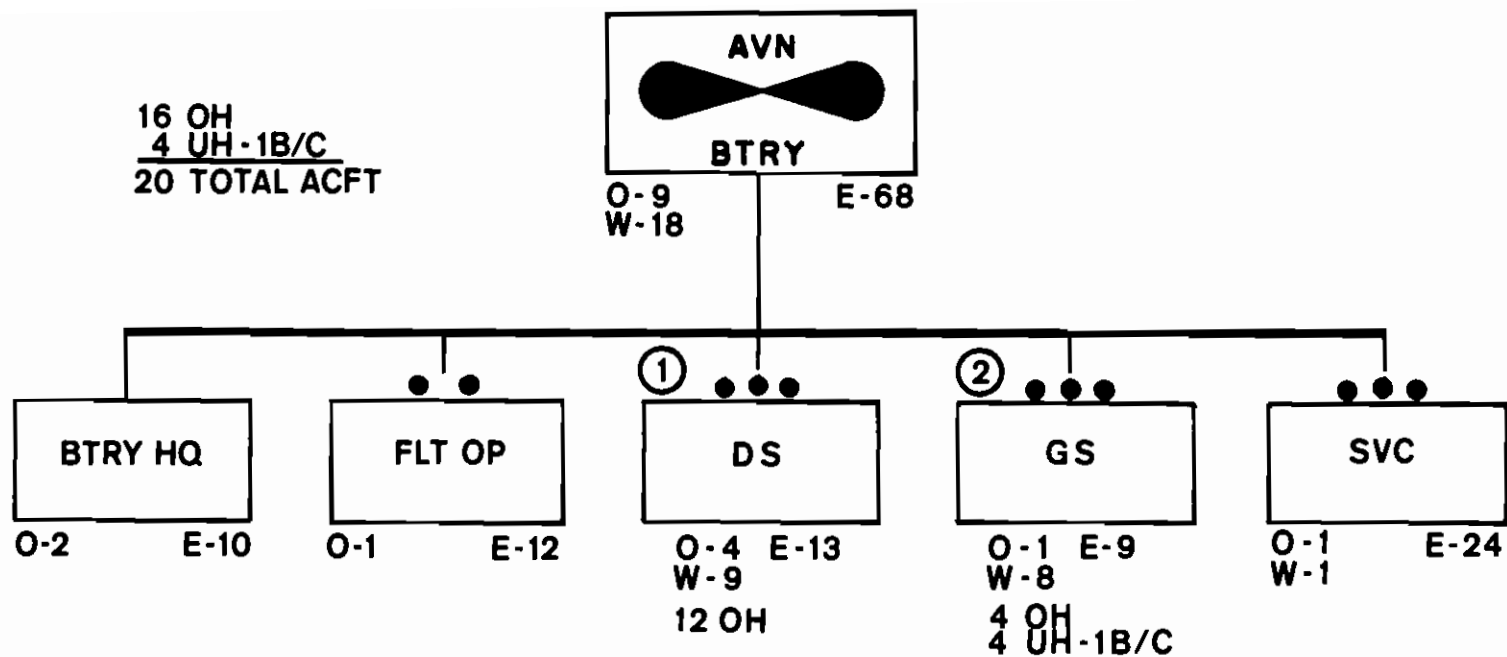
mtd in trk 3/4-ton	2
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	27
Rdo set AN/VRC-49 mtd in	
trk 1/4-ton	21
mtd in trk 3/4-ton	3
Teletype TT-76/GGC	4
Swbd tel manual SB-22/PT . . .	14
Tel set TA-1/PT	68
Tel set TA-312/PT	298
tt set AN/PGC-1	2
COMMEN AN/ARC-122	1
RATT AN/VSC-2	8
COMMEN AN/ASC-5	1

AIRCRAFT

Hel util UH-1B/C	43
Hel obon lt (OH)	16

AIRCRAFT ARMAMENT

Armt subsystem hel GM	
lchr M22	12
Armt subsystem hel 7.62mm	
twin XM27	16
Armt subsystem hel 2.75-in	
rkt lchr XM3	36
Wpn subsystem XM16	7



NOTE: OH ARMED WITH XM 27.
UH-1B/C ARMED WITH XM 16.

Figure 25. Aviation battery, airmobile division artillery (TOE 6-702T).

DATA FOR FIGURE 25

BATTERY HEADQUARTERS

1 CPT	Btry Comd	61193
1 LT	XO	61193
1 SSG	First Sgt	67R50
1 SSG	Mess Steward	91B40
1 SSG	Sup Sgt	76B40
2 SP5	First Cook	94B20
1 SP4	Btry Clerk	71H20
1 SP4	Armorer	76K30
1 SP4	Cook	94B20
1 PFC	Cook's Helper	94A10
1 PFC	RATEL Op	13A10

Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6 LWB . .	1
Trk util 1/4-ton 4x4	2
Tlr cgo 3/4-ton 2 wheel	1
Tlr tk water 1 1/2-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	2
Lchr gren 40mm	1
Rifle 5.56mm M16E1	9
Pistol auto cal .45	3
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	2
Tel set TA-312/PT	1

FLIGHT OPERATIONS SEC

1 LT	Flt Op Off	1982
1 SFC	Flt Op Chief	71P40
1 SGT	Comm Chief	31H40
1 SGT	Comm Tm Chief	05060
1 SP5	Sr Flt Op SP	71P20
1 SP4	Flt Op SP	71P20
1 SP4	Rdo Mech	31D20
2 SP4	Rdo tt Op	05C20
1 SP4	Swbd Op	36A10
1 SP4	Rdo Op	05B20
2 PFC	Wiremen	36A10

FLIGHT OPERATIONS SEC

Trk cgo 3/4-ton 4x4	2
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	2
Tlr amph cgo 1/4-ton 2 wheel	1
Util veh 2 wheel	3
Lchr gren 40mm	1
Gun mach lt flex	1
Rifle 5.56mm M16E1	11
Pistol auto cal .45	2
Elec tt sec equip TSEC/KW-7.	1
Rdo set AN/PRC-25	2
Rdo set AN/VRC-24 mtd in	

trk 3/4-ton	1
Rdo set AN/VRC-46 mtd in	
trk 3/4-ton	2
Swbd tel manual SB-22/PT . .	1
Tel set TA-312/PT	5
Rdo tt set AN/VSC-2	1
COMMEN AN/ASC-5	1

DIRECT SUPPORT PLAT HQ

1 LT	Plat Comd	61193
1 SSG	Plat Sgt	67R40

Rifle 5.56mm M16E1	1
Pistol auto cal .45	1
Tel set TA-312/PT	1

① DIRECT SUPPORT AVN SEC (3)

1 LT	Sec Ldr	61193
3 WO	Hel Pilot	062B0
4 SP5	Crew Chief	67N20
Revolver cal .38 PPS	8	
Rdo set AN/URC-10	4	
Tel set TA-1/PT	1	

DIRECT SUPPORT AVN SEC (3)

Hel obsn lt (LOH) w/armt sub-	
system 7.62mm XM27	4

GEN SUPPORT PLAT HQ

1 LT	Plat Comd	61193
1 SSG	Plat Sgt	67R40

Rifle 5.56mm M16E1	1
Pistol auto cal .45	1
Tel set TA-312/PT	1

② GENERAL SUPPORT SEC

8 WO	Hel Pilot	06280
8 SP5	Crew Chief	67N20

Revolver cal .38 PPS	16
Rdo set AN/URC-10	8
Hel util UH-1B/C w/wpn sub-	
system XM16 mtd	4
Hel obsn lt (LOH) w/armt	
subsystem 7.62mm	
XM27	4

SERVICE PLATOON HQ

1 LT	Plat Comd	64823
1 PSG	Plat Sgt	67R40
1 SGT	Mtr Sgt	63B40
2 SP6	Tech Insp	67W20
3 SP4	Acft Fuel Hdlig SP	56C20
1 SP4	Acft Parts SP	76H20
1 SP4	Equip Rec Clerk	71B20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Sup Clerk	76A10
1 PFC	Wheel Veh Mech	
Helper		63A10

DATA FOR FIGURE 25 - (continued)

SERVICE PLATOON HQ

Trk cgo 3/4-ton 4x4	3
Trk util 1/4-ton 4x4	1
Util veh 2 wheel	3
Trk tk FS 2 1/2-ton 6x6	1
Tlr cgo 3/4-ton 2 wheel	3
Tlr amph cgo 1/4-ton 2 wheel	1
Lchr gren 40mm	1
Gun mach lt flex	1
Rifle 5.56mm M16E1	11
Pistol auto cal .45	2
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	1
Tel set TA-312/PT	2

AIRCRAFT MAINT SECTION

1 WO	Acft Rep Tech	67100
1 SSG	Maint Supv	67R40
2 SP5	Sr Acft Armt SP	45J20
2 SP5	Sr Hel Mech	67N20
2 SP4	Acft Armt SP	45J20
2 SP4	Avn Elct Equip Rpmn	31Q20
2 SP4	Hel Mech	67N20
1 PFC	Hel Mech Helper	67A10
Trk cgo 3/4-ton 4x4	1	
Trk util 1/2-ton 4x4 mule	2	
Tlr cgo 3/4-ton 2 wheel	1	
Gun mach lt flex	1	
Rifle 5.56mm M16E1	12	
Pistol auto cal .45	1	

c. Field Artillery Battalion, Aerial Artillery.

- (1) Composition. The composition of the field artillery battalion, aerial artillery, airmobile division, is shown in figure 26.
- (2) Mission. The mission of the field artillery battalion, aerial artillery is to provide aurally mounted rocket direct fire support to the assault units of the airmobile division.
- (3) Assignment. The field artillery battalion, aerial artillery, is organic to the airmobile division artillery, TOE 6-700T.
- (4) Capabilities. The capabilities of the field artillery battalion, aerial artillery, include -
 - (a) Providing a highly mobile direct fire support unit with aurally mounted rocket launchers.
 - (b) Elements of the battalion may be detached and placed in support of specific ground units.
 - (c) Employment as a battalion or as individual batteries.
 - (d) Providing aurally mounted antitank capability.
- (5) Organization. The battalion consists of a headquarters, headquarters and service battery, and three aerial artillery batteries.

d. Headquarters, Headquarters and Service Battery, Field Artillery Battalion, Aerial Artillery.

- (1) Composition. The composition of the headquarters, headquarters and service battery is shown in figure 27.
- (2) Mission. The mission of the headquarters, headquarters and service battery is to direct and coordinate operations of the battalion; to provide facilities with which the battalion commander controls the battalion; to procure, break down, and distribute all classes of supplies to units of the battalion.
- (3) Assignment. The headquarters, headquarters and service battery is organic to field artillery battalion, aerial artillery, airmobile division. TOE 6-725T.
- (4) Capabilities. The capabilities of the headquarters, headquarters and service battery include -
 - (a) Staff planning, supervision, and coordination and control of operations of organic units of the battalion.
 - (b) Providing unit level medical service, establishing an aid station, and furnishing aidmen to battalion units.

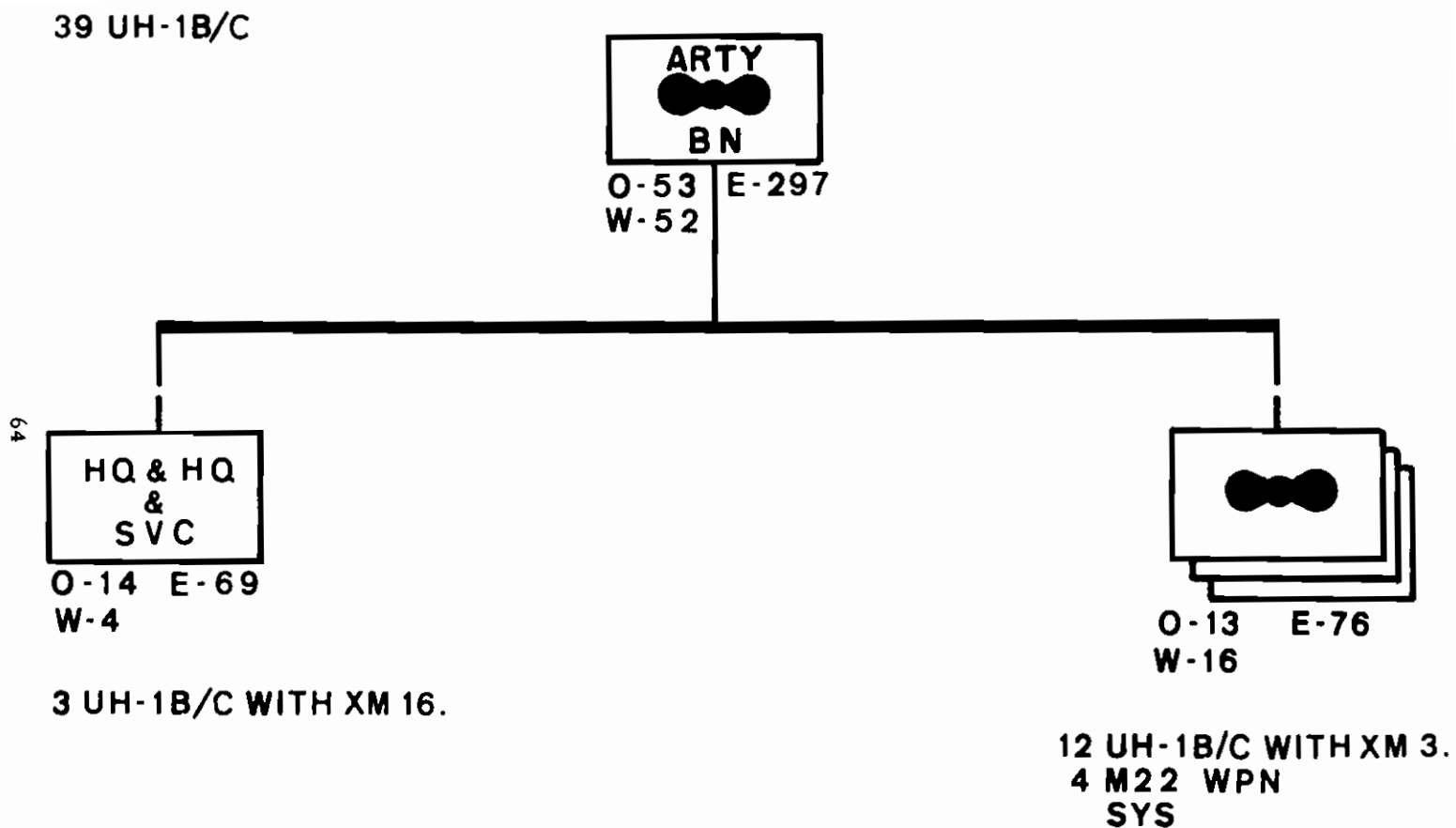


Figure 26. Field artillery battalion, aerial artillery, airmobile division (TOE 6-725T).

DATA FOR FIGURE 26

RECAPITULATION

VEHICULAR

Trk amb frontline 1/4-ton . . .	1
Trk cgo 3/4-ton 4x4	24
Trk cgo 2 1/2-ton 6x6 LWB . .	8
Trk tk FS 2 1/2-ton 6x6	3
Trk util 1/4-ton 4x4	12
Tlr cgo 3/4-ton 2 wheel	17
Tlr cgo 1 1/2-ton 2 wheel . . .	4
Tlr tk water 1 1/2-ton 2 wheel	4
Tlr amph cgo 1/4-ton 2 wheel	12

ARMAMENT

Gun mach lt flex	23
Rifle 5.56mm M16E1	254
Pistol auto cal .45	34
Revolver cal .38 PPS	114

COMMUNICATIONS

Elec tt sec equip TSEC/KW-7.	1
Rdo set AN/URC-10	39
Rdo set AN/GRC-125 mtd	
in trk, 1/4-ton	3
Rdo set AN/PRC-25	10
Rdo set AN/PRC-47	4
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	4
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	6
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	5
Rdo set AN/VRC-49 mtd in	
trk 3/4-ton	2
Swbd tel manual SB-22/PT . .	5
Tel set TA-1/AT	6
Tel set TA-312/PT	37
RATT set AN/VSC-2	1

COMMUNICATIONS

COMMCEN AN/ARC-122 . . .	1

AIRCRAFT

Hel util UH-1B/C	39

AIRCRAFT ARMAMENT

Armt subsystem hel 2.75-in	
rkt lchr XM3	36
Wpn subsystem XM16	3
Armt subsystem hel GM	
lchr M22	12

3 UH-1B/C

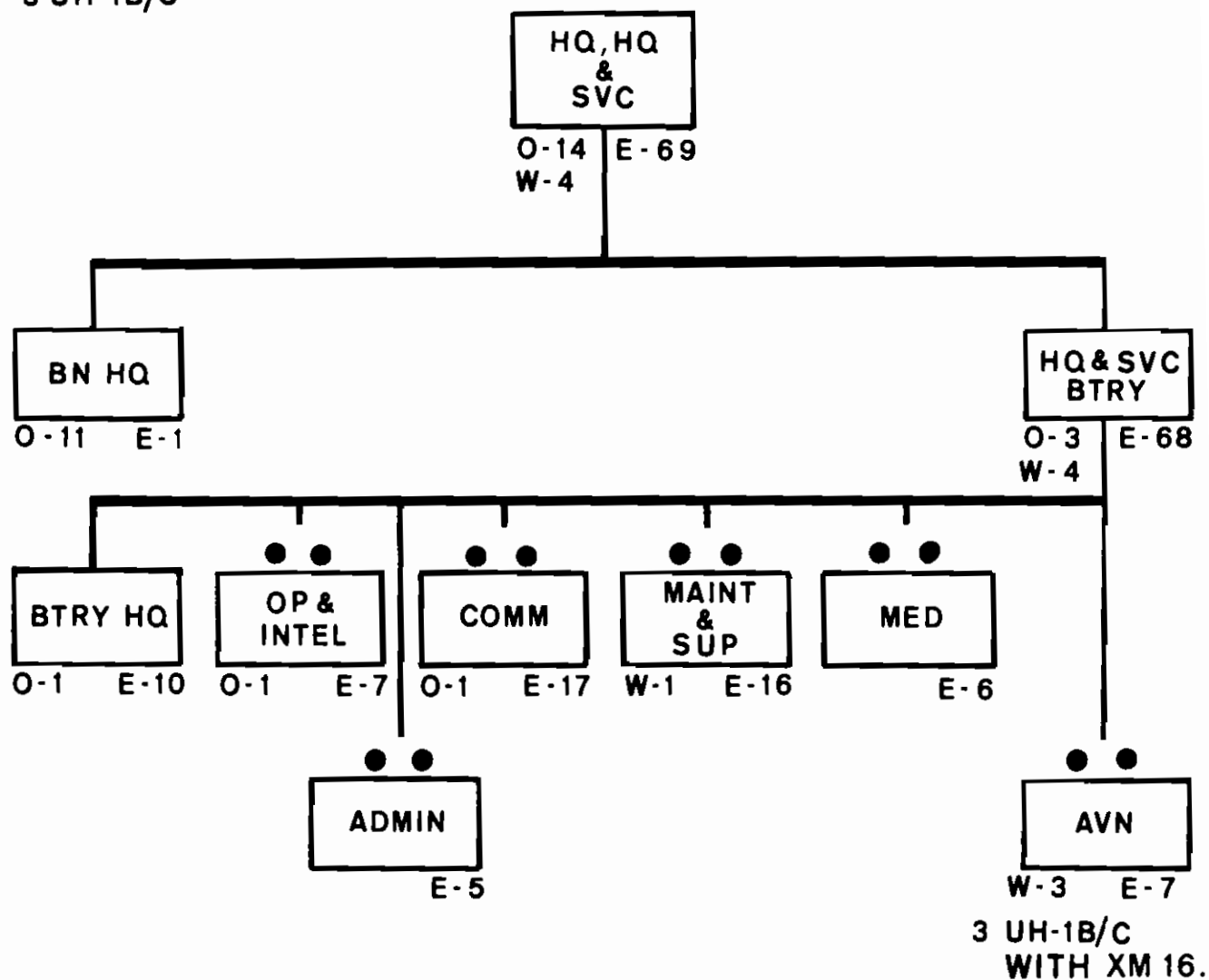


Figure 27. Headquarters, headquarters and service battery, field artillery battalion, aerial artillery (TOE 6-762T).

DATA FOR FIGURE 27

BATTALION HEADQUARTERS

1 LTC	Bn Comd	61193
1 MAJ	XO	61193
1 MAJ	S3	62162
1 CPT	S1	2110
1 CPT	S2	9301
1 CPT	S4	4010
1 CPT	Avn Maint Off	64823
1 CPT	Avn Med Off	3160
1 CPT	Avn Safety Off	7423
1 CPT	Comm Off	0200
1 CPT	Ln Off	61193
1 SGM	Sgt Maj	13B50

Rifle 5.56mm M16E1	1
Pistol auto cal .45	11

BATTERY HEADQUARTERS

1 CPT	Btry Comd	2900
1 ISG	First Sgt	13B50
1 SSG	Mess Steward	94B40
1 SSG	Sup Sgt	76K40
2 SP5	First Cook	94B20
1 SP4	Armorer	76K30
1 SP4	Btry Clerk	71H20
1 SP4	Cook	94B20
1 PFC	Cook's Helper	94A10
1 PFC	RATEL Op	13A10

Trk cgo 3/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Rifle 5.56mm M16E1	10
Pistol auto cal .45	1
Rdo set AN/PRC-25	1

ADMINISTRATION SECTION

1 SFC	Pers Stf NCO	71H40
1 SP4	Clerk Typist	71B30

ADMINISTRATION SECTION

1 PFC	Clerk Typist	71B30
2 PFC	RATEL Op	13A10
Trk util 1/4-ton 4x4	2	
Tlr amph cgo 1/4-ton 2 wheel	2	
Rifle 5.56mm M16E1	5	
Rdo set AN/VRC-47 mtd in		
trk 1/4-ton	2	
Tel set TA-312/PT	2	

OP AND INTEL SECTION

1 CPT	Asst S3	62162
1 MSG	Op Sgt	13A50
1 MSG	Intel Sgt	13A50
1 SFC	Asst Op Sgt	71P40
1 SSG	Cml NCO	54E40
1 SP4	Clerk Typist	71B30
1 SP4	FA Op/Intel	13A20
1 SP4	Flt Op SP	71P20

Trk cgo 3/4-ton 4x4	3
Tlr cgo 3/4-ton 2 wheel	3
Rifle 5.56mm M16E1	7
Pistol auto cal .45	1
Rdo set AN/VRC-24 mtd	
in trk 3/4-ton	1
Rdo set AN/VRC-49 mtd	
in trk 3/4-ton	2
Tel set TA-312/PT	2

COMMUNICATIONS SECTION

1 LT	Asst Comm Off	0200
1 SSG	Comm Chief	31H40
1 SGT	Tm Chief	05C40
1 SP5	Sr Rdo Mech	31D20
1 SP4	Rdo Mech	31D20
2 SP4	RATT Op	05C20

COMMUNICATIONS SECTION

1 SP4	Sr Rdo Op	05B20
1 SP4	Sr Msg Clerk	36A10
1 SP4	Sr Swbd Op	36A10
1 PFC	Msg Clerk	36A10
1 PFC	Msg	36A10
1 PFC	Rdo Op	05B20
3 PFC	RATEL Op	13A10
1 PFC	Swbd Op	36A10
1 PFC	Wireman	36A10

Trk util 1/4-ton 4x4	1
Tlr amph cgo 1/4-ton	
2 wheel	1
Gun mach lt flex	1
Rifle 5.56mm M16E1	18
Elec tt sec equip TSEC/	
KW-7	1
Rdo set AN/PRC-47	1
Swbd tel manual SB-22/PT	2
Tel set TA-312/PT	6
RATT set AN/VSC-2	1

MAINTENANCE AND SUPPLY SEC

1 WO	Unit Sup Tech	761A0
1 SFC	Acft Armt Supv	45J40
1 SFC	Sup Sgt	76K40
2 SP6	RW Tech Insp	67W20
1 SGT	Mtr Sgt	63B40
1 SP4	Acft Parts SP	76H20
1 SP4	Equip Rec Clerk	71B20
2 SP4	Gen Sup SP	76K20
1 SP4	Ord Parts SP	76D20
1 SP4	Powerman	52B20
2 SP4	Wheel Veh Mech	63B20
1 PFC	Mech Helper	63A10
2 PFC	Sup Clerk	76A10

DATA FOR FIGURE 27 - (continued)

MAINTENANCE AND SUPPLY SEC

Trk cgo 3/4-ton 4x4	2
Trk cgo 2 1/2-ton 6x6 LWB . .	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr tk water 1 1/2-ton 2 wheel	1
Gun mach lt flex	1
Rifle 5.56mm M16E1	17
Tel set TA-312/PT	1

MEDICAL SECTION

1 SSG	Sec Sgt	91B40
1 SP4	Amb Dvr	91B20
3 SP4	Btry Aidman	91B20
1 SP4	Med Aidman	91B20

Trk amb frontline 1/4-ton . . .	1
Pistol auto cal .45	6
Tel set TA-312/PT	1

① AVIATION SECTION

3 WO	Hel Pilot	062B0
1 SSG	Sec Chief	67R40
3 SP5	Crew Chief	67N20
1 SP5	Sr Hel Mech	67N20
1 SP4	Acft Fuel Hdlg SP	56C20
1 SP4	Acft Armt Rpmn	45J20

Trk cgo 2 1/2-ton 6x6 LWB . .	1
Tlr cgo 1 1/2-ton 2 wheel . . .	1
Rifle 5.56mm M16E1	4
Rdo set AN/URC-10	3
Tel set TA-312/PT	1
Hel util UH-1B/C w/wpn	
subsystem XM16 mtd	3
Revolver cal .38 PPS	6
COMMCEN AN/ARC-122	1

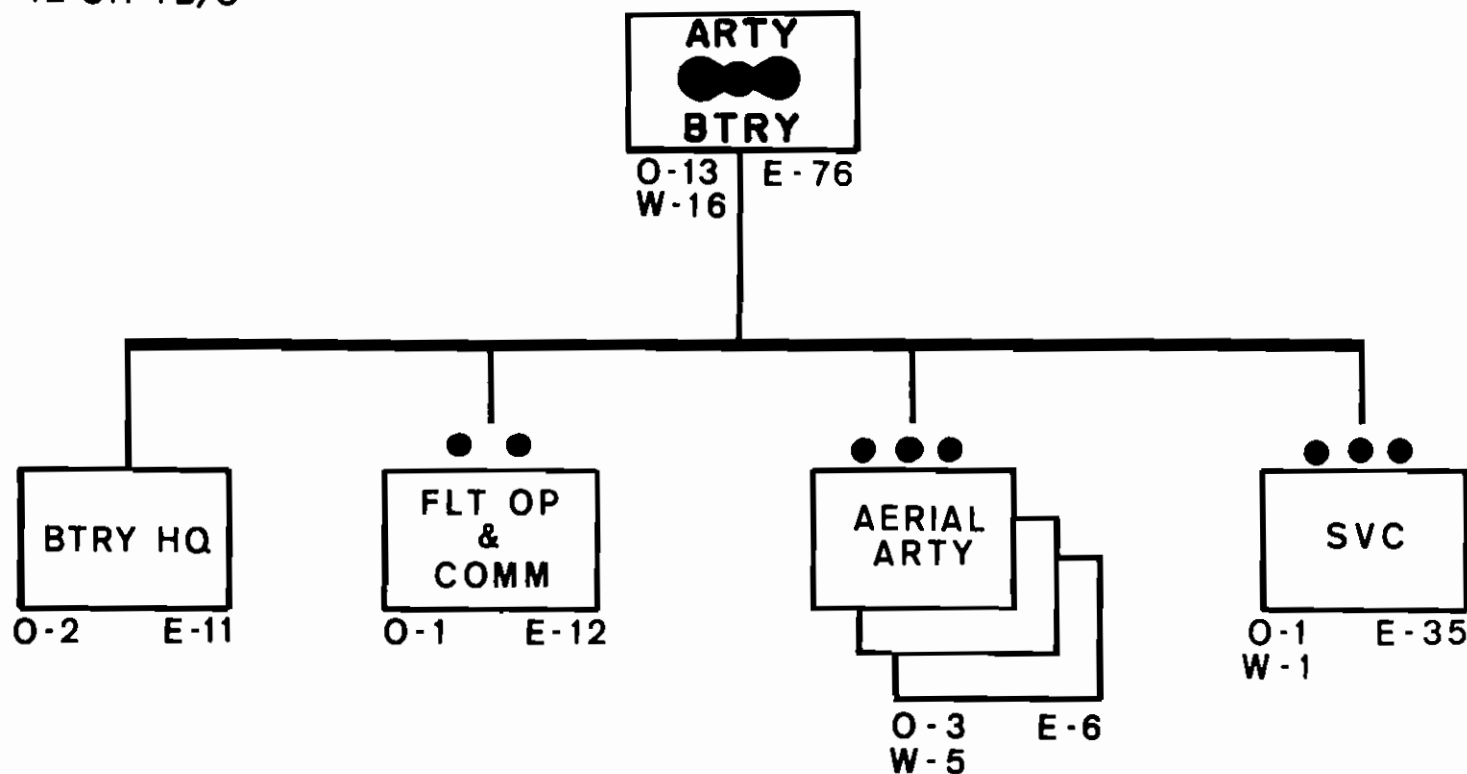
- (c) Providing personnel to supervise supply and maintenance for the batteries.
 - (d) Operating a central aircraft communication and control facility for the battalion.
 - (e) Drawing and issuing all classes of supplies.
 - (f) Providing battalion level organizational maintenance for organic elements.
- (5) Organization. The battery consists of a battalion headquarters, and a headquarters and service battery. The headquarters and service battery has an aviation section equipped with three UH-1B/C helicopters. These helicopters are equipped with the XM16 weapons system and are used to support the command, control, and liaison effort of the battalion.

e. Aerial Artillery Battery, Field Artillery Battalion, Aerial Artillery.

- (1) Composition. The composition of the aerial artillery battery, field artillery battalion, aerial artillery, airmobile division, is shown in figure 28.
- (2) Mission. The mission of the aerial artillery battery is to provide aeri-ally mounted rocket direct fire support and to furnish its portion of the battalion communications system.
- (3) Assignment. The aerial artillery battery is organic to field artillery battalion, aerial artillery, airmobile division, TOE 6-725T.
- (4) Capabilities. The capabilities of the aerial artillery battery, field artillery battalion, aerial artillery, include -
 - (a) Providing aeri-ally mounted rocket fire support.
 - (b) Semi-independent operations.
 - (c) Providing aeri-ally mounted antitank capability.
- (5) Organization. The aerial artillery battery consists of a battery head-quarters, a flight operations and communications section, three aerial artillery platoons, and a service platoon. The battery has 12 UH-1B/C helicopters.
 - (a) Aerial artillery platoon. Each of the three aerial artillery pla-toons has organic four UH-1B/C helicopters armed with the XM3 weapons system. The platoon consists of a platoon headquarters and two aerial artillery sections.
 - (b) Service platoon. The service platoon carries four separate M22 armament subsystems. This gives the battery some degree of flexibility in armament, depending on the current combat environ-ment. The service platoon consists of a platoon headquarters, an aircraft maintenance section, and an aircraft service section.

12 UH-1B/C

70



4 UH-1B/C

NOTE. ALL UH-1B/C HAVE M3 WEAPONS SYSTEMS; IN ADDITION, THE SERVICE PLATOON HAS FOUR M22 WEAPONS SYSTEMS FOR FLEXIBILITY OF ARMAMENT.

Figure 28. Aerial artillery battery, field artillery battalion, aerial artillery, airmobile division (TOE 6-727T).

DATA FOR FIGURE 28

BATTERY HEADQUARTERS

1 CPT	Btry Comd	61193
1 LT	XO	61193
1 1SG	First Sgt	13B50
1 SSG	Mess Steward	94B40
1 SSG	Sup Sgt	76K40
2 SP5	First Cook	91B40
1 SP4	Armorer	76K40
1 SP4	Btry Clerk	71H20
2 SP4	Cook	91B20
1 PFC	Cook's Helper	94A10
1 PFC	RATEL Op	14000

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	1
Rifle 5.56mm M16E1	11
Pistol auto cal .45	2
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1
Tel set TA-1/PT	2
Tel set TA-312/PT	1

FLT OP AND COMM SECTION

1 LT	Op Off	61982
1 SFC	Flt Op Chief	71P40
1 SGT	Comm Chief	31H40
2 SP4	Rdo Op	05B20
1 SP4	Flt Op SP	71P20
1 SP4	Sr Wireman	36A10
1 SP4	Sr Swbd Op	36A10
2 PFC	Rdo Op	13A10
1 PFC	Swbd Op	36A10
2 PFC	Wireman	36A10

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1

FLT OP AND COMM SECTION

Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	1
Gun mach lt flex	1
Rifle 5.56mm M16E1	12
Pistol auto cal .45	1
Rdo set AN/PRC-47	1
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	2
Swbd tel man SB-22/PT	1
Tel set TA-312/PT	3

AERIAL ARTY PLAT HQ (3)

1 LT	Plat Comd	61193
1 WO	Hel Pilot	062B0
1 PSG	Plat Sgt	67R40
1 SP4	Acft Armt Rpmn	45J20
Rifle 5.56mm M16E1	2	
Revolver cal .38 PPS	2	
Rdo set AN/PRC-25	1	
Tel set TA-312/PT	1	
Gun mach lt flex	1	

AERIAL ARTY SECTION (6)

1 LT	Sec Ldr	61193
2 WO	Hel Pilot	062B0
2 SP5	Crew Chief	67N20
Revolver cal .38 PPS	5	
Rdo set AN/URC-10	2	
Hel util UH-1B/C w/armt sub-		
system 2.75 in rkt lchr		
XM3 mtd	2	

SERVICE PLATOON HQ

1 LT	Plat Comd	64823
1 WO	Hel Rep Tech	671C0
1 SFC	Acft Maint Supv	67R40
2 SP6	RW Tech Insp	67W20
1 SP4	Acft Armt Rpmn	45J20
1 SP4	Acft Parts SP	76H20
2 SP4	Avn Elec Equip Rpmn	31Q20
1 SP4	Shop Clerk	71B20
1 SP4	Petrl Hdlg SP	56C20
1 SP4	Wheel Veh Mech	63B20

Trk cgo 3/4-ton	2
Trk tk FS 2 1/2-ton 6x6	1
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	2
Tlr amph cgo 1/4-ton	
2 wheel	1
Gun mach lt flex	1
Rifle 5.56mm M16E1	10
Pistol auto cal .45	2
Rdo set AN/GRC-125 mtd in	
trk 1/4-ton	1
Tel set TA-312/PT	1
Armt subsystem hel GM	
lchr M22	4

AIRCRAFT SERVICE SEC

1 SSG	Sec Chief	67R40
1 SGT	Ammo Sup Sgt	13B40
2 SP4	Ammo Team Chief	13A10
6 SP4	Acft Fuel Hdlg SP	56C20
9 PFC	Ammo Handler	13A10

Trk cgo 3/4-ton 4x4	2
Trk cgo 2 1/2-ton 6x6 LWB	2
Tlr cgo 1 1/2-ton 2 wheel	1

DATA FOR FIGURE 28 - (continued)

AIRCRAFT SERVICE SEC

Tlr tk water 1 1/2-ton	
2 wheel	1
Rifle 5.56mm M16E1	19

AIRCRAFT MAINT SEC

1 SSG	Sec Chief	67R40
2 SP5	Sr Hel Mech	67N20
3 SP4	Hel Mech	67N20
Gun mach lt flex		1
Rifle 5.56mm M16E1		6

- (6) Concept of employment. The aerial artillery batteries may be employed as separate batteries, or as a part of the battalion, to provide highly mobile aerial fire support and antitank support for ground combat units, particularly during periods when the 105mm battalions of airmobile division artillery are being displaced. A battery, or an element thereof, may be detached and placed in support of specific ground elements.

34. AVIATION GROUP

a. General.

- (1) Composition. The composition of the aviation group, airmobile division is shown in figure 29.
- (2) Mission. The mission of the aviation group is to provide aviation support to the division, and aviation special staff personnel to the division headquarters.
- (3) Assignment. The aviation group is organic to the airmobile division, TOE 67T.
- (4) Capabilities. The group has the following capabilities:
- (a) Provides command, control, and staff planning, and supervision of subordinate and attached units.
 - (b) Provides aviation special staff personnel for the division headquarters.
 - (c) Provides limited aerial battlefield surveillance to acquire information from the enemy and terrain, and performs target acquisition.
 - (d) At normal helicopter availability (CH-47 - 60 percent and UH-1 - 80 percent), airlifts simultaneously the assault elements of two airmobile infantry battalions and three 105mm howitzer batteries or any combination thereof.
 - (e) Provides continuous (day and night) operations during visual weather conditions and limited operations under instrument flight conditions.
 - (f) Airlifts supplies, equipment, and troops of units of the division.
 - (g) Provides aircraft to support the division headquarters, the support command, and other units without organic aircraft.
 - (h) Provides aircraft for general support and reinforcement to units with organic aircraft.
 - (i) Augments aeromedical capability of the medical battalion by providing air transportation of nonemergency-type patients at the request of the appropriate command surgeon.

221 RW
6 FW
 227 TOTAL ACFT

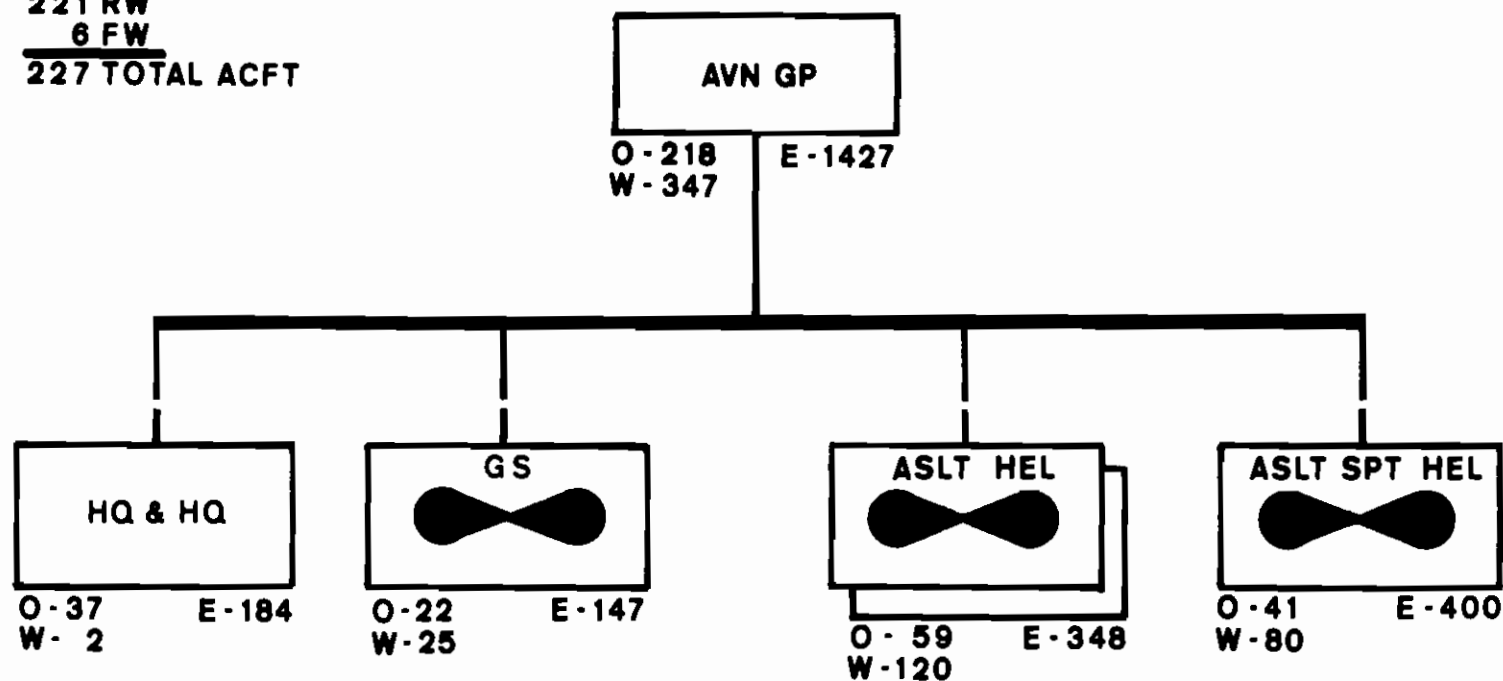


Figure 29. Aviation group, airmobile division (TOE 1-100T).

DATA FOR FIGURE 29

RECAPITULATION

VEHICULAR

Trk amb frontline 1/4-ton . . .	3
Trk cgo 3/4-ton 4x4	122
Trk cgo 2 1/2-ton 6x6 LWB . .	38
Trk util 1/2-ton 4x4 mule . . .	24
Trk tk FS 2 1/2-ton 6x6	14
Trk util 1/4-ton 4x4	92
Trk forklift RT 3,000 lbs . . .	1
Util veh 2 wheel	26
Util veh 3 wheel	2
Tlr amph cgo 1/4-ton 2 wheel	60
Tlr cgo 3/4-ton 2 wheel	117
Tlr cgo 1 1/2-ton 2 wheel . . .	31
Tlr tk water 1 1/2-ton 2 wheel	4
Trk trac RT w/backhoe & front loader 1/2 cu yd cap .	3

ARMAMENT

Lchr gren 40mm	70
Gun mach lt flex	50
Lchr rkt 3.5 in	2
Rifle 5.56mm M16E1	1079
Pistol auto cal .45	101
Revolver cal .38 PPS	807

COMMUNICATIONS

Elec tt sec equip TSEC/KW-7.	14
Rdo set AN/ARC-102	3
Rdo set AN/ARC-51X	15
Rdo set AN/URC-10	229
Rdo set AN/GRC-106 mtd in trk 1/4-ton	4
Rdo set AN/PRC-25	134
Rdo set AN/VRC-24 mtd in trk 1/4-ton	4

COMMUNICATIONS

Rdo set AN/VRC-24 mtd in trk 3/4-ton	10
Rdo set AN/VRC-46	4
mtd in trk 1/4-ton	27
mtd in trk 3/4-ton	34
Rdo set AN/VRC-47 mtd in trk 1/4-ton	35
mtd in trk 3/4-ton	2
Rdo set AN/VRC-49	1
mtd in trk 1/4-ton	7
Swbd tel manual SB-22/PT . .	20
Swbd tel manual SB-86/P . . .	1
Tel set TA-1/PT	8
Tel set TA-312/PT	196
tt set AN/GGC-3	2
tt set AN/PGC-1	1
COMM-CEN AN/ASC-5	4
COMM-CEN rdo AN/ ARC-122	2
Term tg TH-22/TG	1

AIRCRAFT

Airplane obsn OV-1B	3
Airplane obsn OV-1C	3
Hel trans med	48
Hel util UH-1B/C	30
Hel util UH-1D	124
Hel obsn lt (LOH)	19

AIRCRAFT ARMAMENT

Armt subsystem hel 7.62mm mg dr mtd M24	48
Armt subsystem hel 7.62mm mg dr mtd lt wt M23	124
Armt subsystem hel 7.62mm XM27	19

AIRCRAFT ARMAMENT

Wpns subsystem XM16 (M5 and aco 60).	30

- (j) Provides pathfinder support for the division.
- (k) Provides armed aerial escort for the airmobile division.

(5) Organization. The aviation group consists of a headquarters and headquarters company, a general support aviation company, two assault helicopter battalions, and one assault support helicopter battalion. The headquarters and headquarters company does not have any organic aircraft but does provide an Army aviation element for the division headquarters. The company also contains a pathfinder platoon with four pathfinder sections and a communications platoon. The communications platoon contains a radio section, communications center and wire section, and five GCA teams. The aviation group, airmobile division, has organic, 227 aircraft.

b. General Support Aviation Company, Aviation Group.

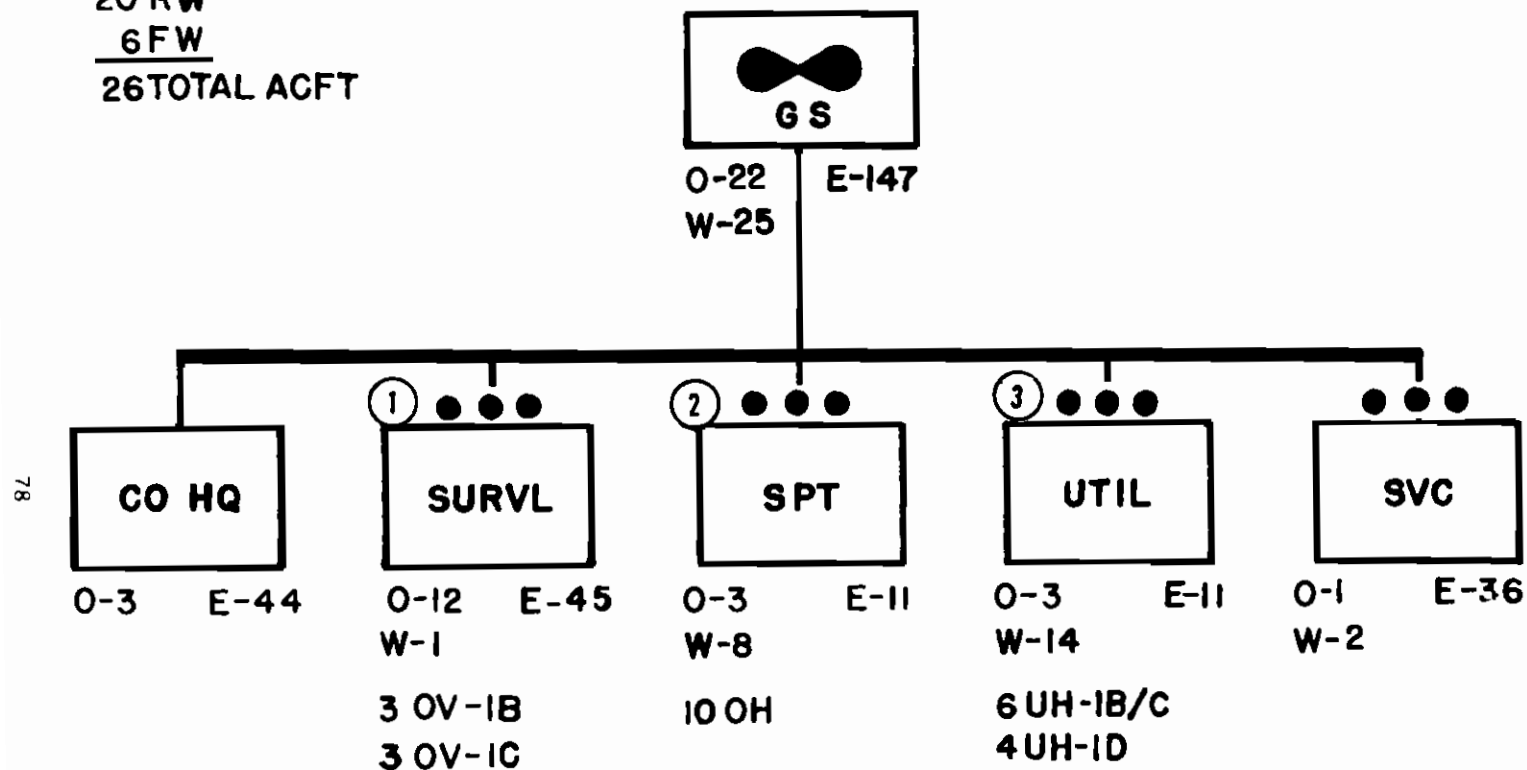
- (1) Composition. The composition of the general support aviation company, aviation group, airmobile division, is shown in figure 30.
- (2) Mission. The mission of the general support aviation company is to provide aviation support for the division headquarters, aviation group headquarters, support command, and other units without organic aircraft; to furnish electronic surveillance; and to acquire combat intelligence and target information for the airmobile division.
- (3) Assignment. The general support aviation company is organic to the aviation group, airmobile division, TOE 1-100T.
- (4) Capabilities. This unit has the following capabilities:
 - (a) Provides aerial observation, reconnaissance, and surveillance by visual, radar, infrared, and visual photographic means of enemy areas for the purpose of locating, verifying, and evaluating targets; terrain study; and for fire adjustment.
 - (b) Provides (day and night) operations during visual weather conditions and limited operations under instrument weather conditions.
 - (c) Provides aircraft for aerial command post control, liaison, reconnaissance, and radio relay for the division.
 - (d) Augments aeromedical evacuation units by transporting nonemergency-type patients at the request of the appropriate command surgeon.
 - (e) Provides rapid aerial photography consisting of daylight vertical and oblique photography and night vertical photography.
 - (f) Provides battlefield illumination and local small area smoke-screens for combat elements of the division.

- (5) Organization. The general support aviation company consists of a company headquarters, surveillance platoon, support platoon, utility platoon, and a service platoon.
- (a) Surveillance platoon. The surveillance platoon is equipped with six OV-1 (Mohawk) airplanes - three OV-1B's in the aerial radar section and three OV-1C's in the aerial infrared section. These are the only airplanes organic to the airmobile division. They provide the aerial observation, reconnaissance, and surveillance by visual, radar, infrared, and photographic means for the division.
- (b) Support platoon. The support platoon has 10 observation helicopters, all armed with the XM27 armament subsystem. They provide general aviation support (within their capabilities) to the division headquarters and other elements of the division requiring this type support.
- (c) Utility platoon. The utility platoon is equipped with 10 utility helicopters (6 UH-1B's /C's and 4 UH-1D's). The UH-1B's /C's are armed with the XM16 weapons subsystem and the UH-1D's are equipped with the M23 armament subsystem. These helicopters provide general and utility support for the division headquarters and other elements of the division.
- (d) Service platoon. The service platoon has no assigned aircraft but provides aircraft maintenance and services.

c. Assault Helicopter Battalion, Aviation Group.

- (1) Composition. The composition of the assault helicopter battalion, aviation group, airmobile division, is shown in figure 31.
- (2) Mission. The mission of the assault helicopter battalion is to provide tactical mobility for combat troops, supplies, and equipment of the division during the conduct of combat and airmobile operations.
- (3) Assignment. The assault helicopter battalion is organic to the aviation group, airmobile division, TOE 1-100T.
- (4) Capabilities. This unit has the following capabilities:
- (a) Provides continuous (day and night) operations during visual and marginal weather conditions and limited operations under instrument weather conditions in support of the division in the forward areas of the combat zone.
- (b) Based on 80 percent aircraft availability, provides in a single lift, airlift for the assault elements of one infantry battalion.
- (c) Augments aeromedical evacuation from the immediate battlefield.
- (d) Provides armed aerial escort for airmobile operations within the combat zone.

20 RW
6FW
 26TOTAL ACFT



NOTE: OH ARMED WITH XM27 WEAPONS SYSTEM.
 UH-1B/C ARMED WITH XM16 WEAPONS SYSTEM.
 UH-1D ARMED WITH M23.
 OV-1 NOT ARMED.

Figure 30. General support aviation company, aviation group, airmobile division (TOE 1-102T).

DATA FOR FIGURE 30

COMPANY HEADQUARTERS

1 CPT	Co Comd	1983
2 LT	Flt Op Off	1982
1 ISG	First Sgt	67R50
1 SFC	Flt Op Sgt	71P40
1 SSG	Mess Steward	94B40
1 SSG	Sup Sgt	76K40
1 SGT	Comm Chief	31F40
2 SGT	Crash Rescue Chief	51M40
2 SGT	RATT Tm Chief	05C40
3 SP5	First Cook	94B20
1 SP5	Sr Con Twr Op	93B20
1 SP5	Sr Flt Op SP	71P20
1 SP4	Armorer	76K30
3 SP4	Co Aidman	91B20
1 SP4	Co Clerk	71H20
2 SP4	Con Twr Op	93B20
3 SP4	Cook	94B20
4 SP4	Crash Rescue SP	51M20
1 SP4	Flt Op SP	71P20
1 SP4	Gen Sup SP	76K20
4 SP4	RATT Op	05C20
1 SP4	Radio Mech	31B20
1 SP4	Sr Swbd Op	36A10
1 PFC	Con Twr Op Helper	93B20
1 PFC	Cook's Helper	94A10
2 PFC	RATEL Op	36A10
2 PFC	Swbd Op	36A10
2 PFC	Wireman	36A10

Trk cgo 3/4-ton 4x4	2
Trk cgo 2 1/2-ton 6x6 LWB . .	3
Trk util 1/4-ton 4x4	6
Tlr cgo 3/4-ton 2 wheel	2
Tlr amph cgo 1/4-ton 2 wheel	6
Tlr tk water 1 1/2-ton 2 wheel	1
Lchr gren 40mm	2
Rifle 5.56mm M16E1	42
Pistol auto cal .45	2
Revolver cal .38 PPS	3

COMPANY HEADQUARTERS

Elec tt sec equip TSEC/KW-7.	2
Rdo set AN/PRC-25	1
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	2
Rdo set AN/VRC-46 mtd in	
trk 3/4-ton	2
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	2
Swbd tel manual SB-22/PT . .	2
Tel set TA-312/PT	14

① SURVEILLANCE PLAT HQ

1 LT	Plat Comd	1980
1 LT	Aerial Survl Off	9309
1 PSG	Plat Sgt	67L40
1 SSG	Flt Op Sgt	71P40
1 SP4	Flt Op Helper	71P20
1 SP4	Intel SP	96B20
1 PFC	Clerk	71H10

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	1
Rifle 5.56mm M16E1	5
Pistol auto cal .45	1
Revolver cal .38 PPS	1
Rdo set AN/VRC-47	
mtd in trk 3/4-ton	1
mtd in trk 1/4-ton	1

PHOTO PROCESS SECTION

1 SSG	Photo Lab Supv	84G40
1 SP5	Sr St Photo Lab Op	84G20
3 SP4	St Photo Lab SP	84G20
1 PFC	Photo Lab Asst	84G10

PHOTO PROCESS SECTION

Trk cgo 2 1/2-ton 6x6 LWB .	1
Tlr cgo 1 1/2-ton 2 wheel . .	1
Rifle 5.56mm M16E1	6

AERIAL RADAR SECTION

1 LT	Sec Ldr	1980
4 LT	FW Aviator	1980
2 SP6	Aerial Sens Op	26E20
2 SP5	Aerial Sens Op	26E20
3 SP5	Airplane Crew Chief	67H20

Trk cgo 3/4-ton 4x4	2
Tlr cgo 3/4-ton 2 wheel	2
Rifle 5.56mm M16E1	3
Revolver cal .38 PPS	9
Airplane obsn STOL OV-1B .	3
Rdo AN/URC-10	6

AERIAL INFRARED SEC

1 LT	Sec Ldr	1980
4 LT	FW Aviator	1980
2 SP6	Aerial Sens Op	26E20
3 SP5	Aerial Sens Op	35H40
3 SP5	Airplane Crew Chief	67H20

Trk cgo 3/4-ton 4x4	2
Tlr cgo 3/4-ton 2 wheel	2
Rifle 5.56mm M16E1	3
Revolver cal .38 PPS	10
Rdo set AN/URC-10	6
Airplane obsn STOL OV-1C .	3

SURV ACFT MAINT SEC

1 WO	Maint Tech	67100
1 SSG	Sec Chief	67L40
1 SP6	Airplane Tech Insp	67W20

DATA FOR FIGURE 30 - (continued)

SURV ACFT MAINT SEC

2 SP5	Sr Airplane Mech	67H20
1 SP5	Sr Aerial Sens Op	26E20
1 SP5	Sr Trans Parts SP	76H20
1 SP5	Avn Elct Equip Mech	31Q20
1 SP4	Avn Elct Equip Mech	31Q20
1 SP4	Aerial Sens SP	26E20
3 SP4	Airplane Mech	67H20
3 SP4	Acft Rfl SP	56C20
1 SP4	Clerk Typist	71B30
1 SP4	Survl Ph Rpmn	41G20
2 PFC	Airplane Mech Helper	67A10

Trk cgo 3/4-ton 4x4	2
Trk cgo 2 1/2-ton 6x6 LWB	3
Trk tk FS 2 1/2-ton 6x6	1
Util veh 2 wheel	2
Tlr cgo 3/4-ton 2 wheel	2
Tlr cgo 1 1/2-ton 2 wheel	4
Trk forklift RT 3,000 lbs	1
Rifle 5.56mm M16E1	19
Revolver cal .38 PPS	1

② SUPPORT PLATOON HQ

1 LT	Plat Comd	1981
1 SSG	Plat Sgt	67R40

Rifle 5.56mm M16E1	1
Revolver cal .38 PPS	1

SUPPORT SECTION (2)

1 LT	Sec Ldr	1981
4 WO	Hel Pilot	062B0
5 SP5	Crew Chief	67N20

Revolver cal .38 PPS	10
Rdo set AN/URC-10	5

SUPPORT SECTION (2)

Hel obsn lt (LOH) w/armt subsystem 7.62mm XM27 mtd	5

③ UTILITY PLATOON HQ

1 LT	Plat Comd	1981
1 SSG	Plat Sgt	67R40

Rifle 5.56mm M16E1	1
Revolver cal .38 PPS	1

UTILITY SECTION (2)

1 LT	Sec Ldr	1981
7 WO	Hel Pilot	062B0
5 SP5	Crew Chief	67N20

Revolver cal .38 PPS	13
Rdo set AN/URC-10	6
Rdo set AN/ARC-102	3
Hel util UH-1B/C	3
Hel util UH-1D w/armt subsystem 7.62mm mg dr mtd lt wt M23 w/equip	2

SERVICE PLATOON HQ

1 LT	Plat Comd	64823
1 PSG	Plat Sgt	67570

Rifle 5.56mm M16E1	1
Revolver cal .38 PPS	1

SERVICE SECTION

1 WO	Sec Ldr	761A0
1 SGT	Mtr Sgt	63B40
1 SGT	Afld Svc Supv	67R40

SERVICE SECTION

8 SP4	Acft Rfl SP	56C20
1 SP4	Shop Clerk	71B20
2 SP4	Power Genr SP	52B30
2 SP4	Trans Parts SP	76H20
2 SP4	Wheel Veh Mech	63B20
2 SP4	Petrl Storage SP	56C20
2 PFC	Wheel Veh Mech Helper	63A10

Trk cgo 2 1/2-ton 6x6 LWB	1
Trk tk FS 2 1/2-ton 6x6	3
Tlr cgo 1 1/2-ton 2 wheel	4
Rifle 5.56mm M16E1	20
Pistol auto cal .45	2

ACFT MAINT SECTION

1 WO	Hel Maint Tech	67100
1 SSG	Maint Supv	67R40
2 SP6	Hel Tech Insp	67W20
1 SP5	Sr Acft Armorer	45J20
2 SP5	Sr Hel Mech	67N20
2 SP4	Acft Armorer	45J20
2 SP4	Avn Elct Equip Mech	31Q20
3 SP4	Hel Mech	67N20
1 PFC	Hel Mech Helper	67A10

Trk cgo 3/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Util veh 2 wheel	2
Rifle 5.56mm M16E1	14
Revolver cal .38 PPS	1

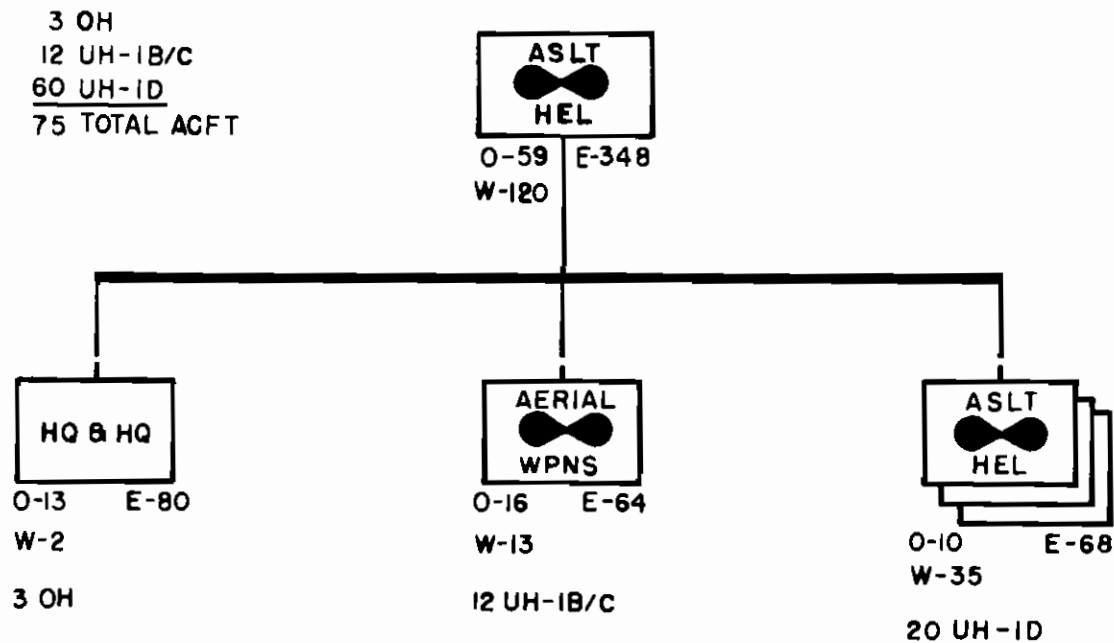
- (5) Organization. The assault helicopter battalion consists of a headquarters and headquarters company, an aerial weapons company, and three assault helicopter companies.
- (6) Employment concepts. Normally, the assault helicopter battalion will operate in direct support of an infantry brigade, and the lift companies in direct support of an infantry battalion. However, the assault helicopter battalion may operate under direct control of the division, or the assault helicopter companies under direct control of the infantry brigade. The aerial weapons company of an assault helicopter battalion normally is employed as an armed escort for the lift elements of the battalion. It also may be used to place suppressive fires on the landing zone during the landing and unloading of troops. The aerial weapons company may also be used for reconnaissance by the assault helicopter battalion. The assault helicopter battalion should not be restricted to a single type operation. Versatility of the battalion must be maintained to the extent that it can effectively be employed in different types of operations during daylight or at night.

d. Headquarters and Headquarters Company, Assault Helicopter Battalion.

- (1) Composition. The composition of the headquarters and headquarters company, assault helicopter battalion, airmobile division, is shown in figure 32.
- (2) Mission. The mission of the headquarters and headquarters company is to furnish command, control, staff planning, and supervision for the assault helicopter battalion.
- (3) Assignment. The headquarters and headquarters company is organic to the assault helicopter battalion, airmobile division, TOE 1-155T.
- (4) Capabilities. This unit has the following capabilities:
 - (a) Commands, controls, performs staff planning, and furnishes communications and supervision of operations for subordinate units of the battalion and attached units.
 - (b) Provides personnel to supervise supply, maintenance, and administration for organic and attached units.
- (5) Organization. The headquarters company consists of a company headquarters, battalion headquarters section, battalion communications section, battalion medical section, and a battalion maintenance and supply section. Organic to the company headquarters are three observation helicopters utilized to support the command, control, supervision, and liaison efforts of the battalion.

e. Aerial Weapons Company, Assault Helicopter Battalion.

- (1) Composition. The composition of the aerial weapons company, assault helicopter battalion, airmobile division, is shown in figure 33.



NOTE. OH ARMED WITH XM27.
UH-1B/C ARMED WITH XM16.
UH-1D ARMED WITH M23.

Figure 31. Assault helicopter battalion, aviation group, airmobile division (TOE 1-155T).

DATA FOR FIGURE 31

RECAPITULATION

VEHICULAR

Trk amb frontline 1/4-ton . . .	1
Trk cgo 3/4-ton 4x4	43
Trk cgo 2 1/2-ton 6x6 LWB . .	12
Trk util 1/2-ton 4x4 mule . . .	12
Trk tk FS 2 1/2-ton 6x6	4
Trk util 1/4-ton 4x4	20
Tlr cgo 3/4-ton 2 wheel	43
Tlr cgo 1 1/2-ton 2 wheel . . .	11
Tlr tk water 1 1/2-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	18
Util veh 2 wheel	6

ARMAMENT

Lchr gren 40mm	24
Rifle 5.56mm M16E1	243
Pistol auto cal .45	32
Revolver cal .38 PPS	251

COMMUNICATIONS

Elec tt sec equip TSEC/KW-7 .	2
Rdo set AN/URC-10	75
Rdo set AN/PRC-25	35
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	4
Rdo set AN/VRC-46	2
mtd in trk 3/4-ton	11
mtd in trk 1/4-ton	2
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	8
Rdo set AN/VRC-49 mtd in	
trk 1/4-ton	1
Swbd tel manual SB-22/PT . .	6
Tel set TA-312/PT	48
Rdo tt set AN/VSC-2	2

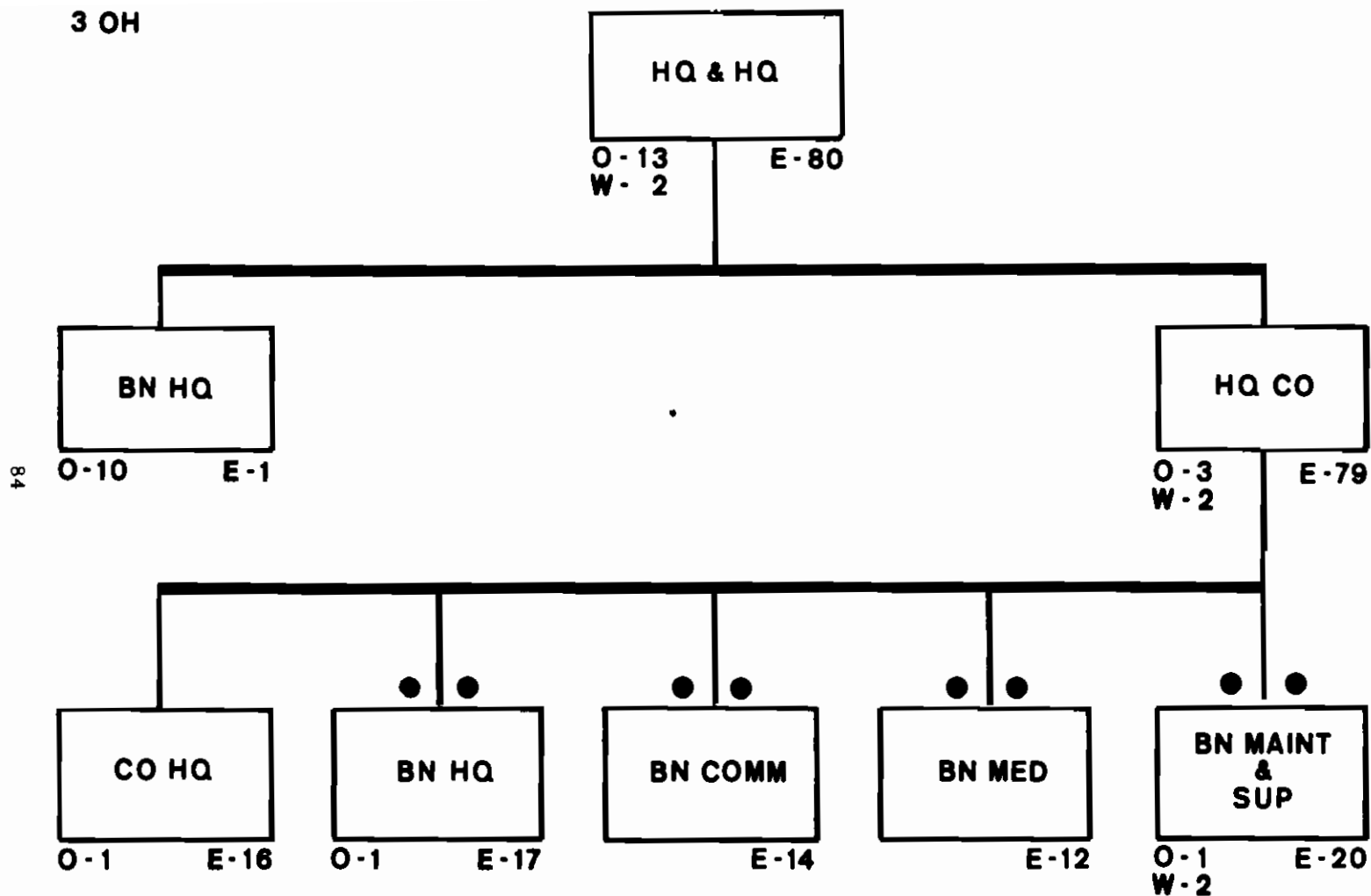
AIRCRAFT ARMAMENT

Armt subsystem hel 7.62mm	
mg dr mtd lt wt M23 w/equip. .	60
Armt subsystem hel 7.62mm	
XM27	3
Wpns subsystem XM16	12

AIRCRAFT

Hel util UH-1B/C	12
Hel util UH-1D	60
Hel obsn lt (LOH)	3

3 OH



3 OH

NOTE. OH ARMED WITH XM 27.

Figure 32. Headquarters and headquarters company, assault helicopter battalion, airmobile division (TOE 1-156T).

DATA FOR FIGURE 32

BATTALION HEADQUARTERS

1 LTC	Bn Comd	1983
1 MAJ	XO	1983
1 MAJ	S3	62162
1 CPT	S1	62110
1 CPT	S2	69301
1 CPT	S4	64810
1 CPT	Avn Safety Off	7423
1 CPT	Ln Off	1961
1 CPT	Sig Off	60210
1 CPT	Surg	63160
1 SGM	Sgt Major	67R50

Rifle 5.56mm M16E1	1
Revolver cal .38 PPS	9
Pistol auto cal .45	1

COMPANY HEADQUARTERS

1 CPT	Co Comd	62900
1 ISG	First Sgt	67R50
1 SSG	Mess Steward	94B40
1 SSG	Sup Sgt	76K40
1 SGT	Mtr Sgt	63B40
3 SP5	Crew Chief	67N20
2 SP5	First Cook	94B20
1 SP4	Armorer	76K30
1 SP4	Ackt Armorer	45J20
1 SP4	Co Clerk	71H20
1 SP4	Cook	94B20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Cook's Helper	94A10
1 PFC	Wheel Veh Mech Helper	63A10

Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6 LWB	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr tk water 1 1/2-ton 2 wheel	1
Lchr gren 40mm	4

COMPANY HEADQUARTERS

Rifle 5.56mm M16E1	9
Pistol auto cal .45	4
Revolver cal .38 PPS	4
Rdo set AN/URC-10	3
Hel obsn lt (OH) w/armt sub-system 7.62mm XM27 mtd	3

BATTALION HQ SECTION

1 CPT	Flt Op Off	1982
1 MSG	Intel Sgt	96B50
1 MSG	Op Sgt	71P50
1 SFC	Asst Op Sgt	71P40
1 SFC	Pers Staff NCO	71H40
1 SSG	Cml NCO	54E40
1 SP5	Sr Afld Controller	93B20
2 SP4	Afld Controller	93B20
3 SP4	Clerk Typist	71B30
1 SP4	Draftsman	81A10
1 SP4	Flt Op SP	71P20
1 PFC	Afld Con Helper	93B20
1 PFC	Mail Dlvr Clerk	71A10
2 PFC	RATEL Op	71A10

Trk cgo 3/4-ton 4x4	2
Trk util 1/4-ton 4x4	3
Tlr cgo 3/4-ton 2 wheel	2
Tlr amph cgo 1/4-ton 2 wheel	3
Lchr gren 40mm	1
Rifle 5.56mm M16E1	16
Pistol auto cal .45	1
Revolver cal .38 PPS	1
Rdo set AN/VRC-46 mtd in trk 1/4-ton	2
Rdo set AN/VRC-47 mtd in trk 1/4-ton	3

BATTALION COMM SECTION

1 SSG	Comm Chief	31F40
2 SGT	RATT Team Chief	05C20
1 SP5	Sr Rdo Mech	31B20
1 SP4	Avionics Equip Mech	31Q20
1 SP4	Rdo Mech	31B20
4 SP4	RATT Op	05C20
1 SP4	Sr Msg Clerk	36A10
1 SP4	Sr Swbd Op	36A10
1 PFC	Msg Clerk	36A10
1 PFC	Swbd Op	36A10

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	4
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	3
Rifle 5.56mm M16E1	14
Rdo set AN/PRC-25	5
Rdo set AN/VRC-46	2
Rdo set AN/VRC-49 mtd in trk 1/4-ton	1
Swbd tel man SB-22/PT	2
Tel set TA-312/PT	15
COMMEN rdo AN/ARC-122	1
RATT set AN/VSC-2	2

BATTALION MED SECTION

1 SGT	Sec Sgt	91B40
1 SP6	Med Asst	91C20
1 SP4	Amb Dvr	91B20
8 SP4	Co Aidman	91B20
1 SP4	Med Aidman	91B20

Trk amb frontline 1/4-ton	1
Trk cgo 3/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Rifle 5.56mm M16E1	4
Pistol auto cal .45	8

DATA FOR FIGURE 32 - (continued)

BN MAINT AND SUP SEC

1 CPT	Avn Maint Off	64823
1 WO	Auto Maint Tech	631A0
1 WO	Unit Sup Tech	761A0
1 SFC	Bn Sup Sgt	76K40
1 SSG	Bn Mtr Maint Sgt	63B40
1 SSG	Petrl Stor Supv	54C40
2 SP6	Tech Insp	67W20
1 SP4	Card Punch Op	74B20
1 SP4	Equip Rec Clerk	71B20
1 SP4	Powerman	52B20
1 SP4	Repair Parts SP	76K20
2 SP4	Rept Clerk	71B20
1 SP4	Sup SP	76K20
1 SP4	Transceiver Equip Op	05C20
1 SP4	Trans Sup SP	76K20
2 SP4	Wheel Veh Mech	63B20
1 PFC	Asst Card Punch Op	74B20
1 PFC	Sup Clerk	76A10
2 PFC	Wheel Veh Mech Helper	63A10

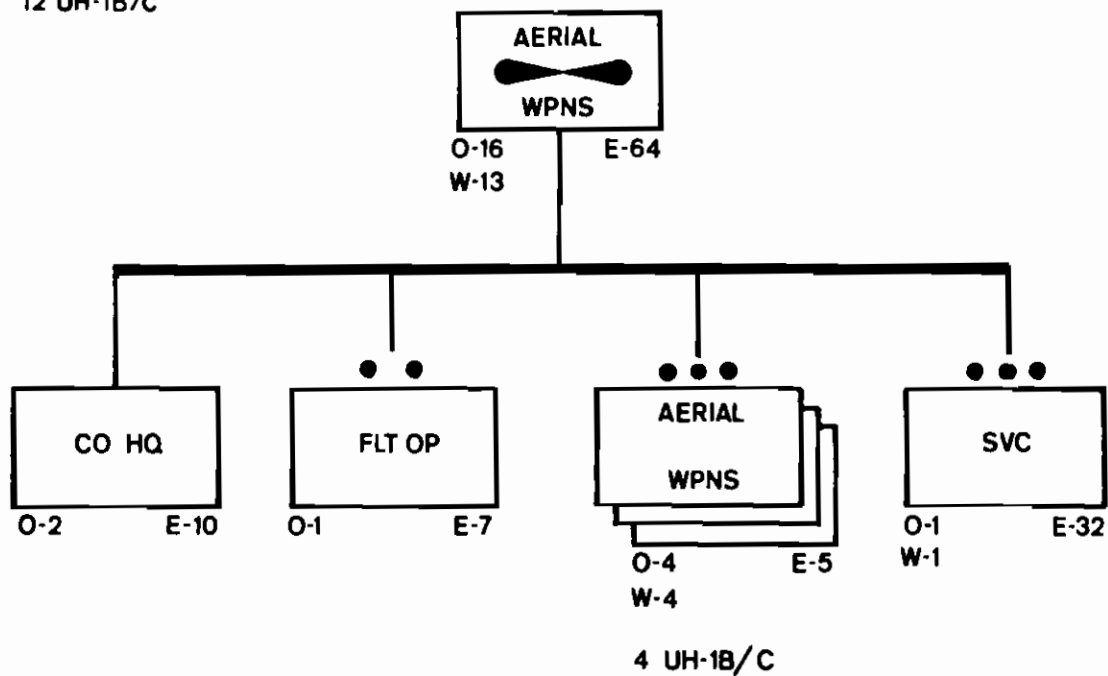
Trk cgo 3/4-ton 4x4	3
Trk cgo 2 1/2-ton 6x6 LWB . .	3
Trk util 1/4-ton 4x4	1
Util veh 2 wheel	2
Tlr cgo 3/4-ton 2 wheel . . .	3
Tlr cgo 1 1/2-ton 2 wheel . .	3
Tlr amph cgo 1/4-ton 2 wheel	1
Lchr gren 40mm	2
Rifle 5.56mm M16E1	20
Pistol auto cal .45	2
Revolver cal .38 PPS	1
Rdo set AN/VRC-47 mtd in trk 1/4-ton	1

- (2) Mission. The mission of the aerial weapons company is to provide security for airmobile forces and to participate in offensive, defensive, and delaying actions as part of a highly mobile combined arms team.
- (3) Assignment. The aerial weapons company is organic to the assault helicopter battalions, airmobile division, TOE 1-155T
- (4) Capabilities. The company has the following capabilities:
 - (a) Provides armed aerial escort and aerial suppressive fire support for airmobile forces.
 - (b) Participates in semi-independent operations as required.
 - (c) Provides effective aerial suppressive fires for antiguerrilla forces.
- (5) Organization. The aerial weapons company consists of a company headquarters, three weapons platoons, and a service platoon. Twelve UH-1B /C helicopters are organic to the company, four in each of the weapons platoons. These helicopters are all armed with the XM16 weapons subsystem.
- (6) Employment concept. The aerial weapons company may be employed as a unit or as separate platoons. In support of airmobile forces, the aerial weapons company provides security and suppressive fires "on call" and is normally under the control of the lift unit commander. When placed in support of a specific ground unit, the company provides "on call" fires and is under the control of the supported ground unit commander. In either event, fires of the aerial weapons company are normally included in the fire support plan as "on call" fires, and are fully coordinated with the scheme of maneuver, which includes the flight route.

f. Assault Helicopter Company, Assault Helicopter Battalion, Airmobile Division.

- (1) Composition. The composition of the assault helicopter company is shown in figure 34.
- (2) Mission. The mission of the assault helicopter company is to provide tactical mobility for combat troops, supplies, and equipment of the division during the conduct of airmobile operations.
- (3) Assignment. The company is organic to the assault helicopter battalion, airmobile division, TOE 1-155T.
- (4) Capabilities. This unit has the following capabilities:
 - (a) Provides continuous (day and night) operations during visual and marginal weather conditions and limited operations under instrument weather conditions in support of the units in the combat zone.

12 UH-1B/C



NOTE. ALL UH-1B/C ARMED WITH XM16 WEAPONS SYSTEM.

Figure 33. Aerial weapons company, assault helicopter battalion, airmobile division (TOE 1-157T).

DATA FOR FIGURE 33

COMPANY HEADQUARTERS

1 CPT	Co Comd	1983
1 LT	XO	1983
1 ISG	First Sgt	67R50
1 SSG	Mess Steward	94B40
1 SSG	Sup Sgt	76K30
2 SP5	First Cook	94B40
1 SP4	Co Clerk	71H20
1 SP4	Cook	94B40
1 SP4	RATEL Op	71A70
1 SP4	Sup SP	76K20
1 PFC	Cook's Helper	94A10

Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6 LWB . .	1
Trk util 1/4-ton 4x4	2
Util veh 2 wheel	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	1
Lchr gren 40mm	1
Rifle 5.56mm M16E1	9
Pistol auto cal .45	1
Revolver cal .38 PPS	2
Rdo set AN/VRC-47 mtd	
in trk 1/4-ton	1

FLIGHT OP SECTION

1 LT	Op Off	1982
1 SFC	Flt Op Chief	71P40
1 SGT	Comm Chief	31F40
1 SP5	Sr Flt Op SP	71P20
1 SP4	Flt Op SP	71P20
1 SP4	Rept Clerk	71B20
1 SP4	Sr Swbd Op	36A10
1 PFC	Wireman	36A10

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1

FLIGHT OP SECTION

Tlr amph cgo 1/4-ton 2 wheel	1
Rifle 5.56mm M16E1	5
Pistol auto cal .45	2
Lchr gren 40mm	2
Rdo set AN/VRC-24 mtd	
in trk 3/4-ton	1
Rdo set AN/VRC-46 mtd	
in trk 3/4-ton	2
Swbd tel man SB-22/PT	1
Tel set TA-312/PT	6
Revolver cal .38 PPS	1

AERIAL WPNS PLATOON HQ (3)

1 LT	Plat Comd	1981
1 LT	Hel Pilot	1981
1 PSG	Plat Sgt	67R40

Rifle 5.56mm M16E1	1
Revolver cal .38 PPS	2
Rdo set AN/PRC-25	2

AERIAL WEAPONS SECTION (6)

1 LT	Sec Comd	1981
2 WO	Hel Pilot	062B0
2 SP5	Crew Chief	67N20

Revolver cal .38 PPS	5
Rdo set AN/URC-10	2
Hel util UH-1B/C w/wpns	
subsystem XM16 mtd	2

SERVICE PLATOON HQ

1 LT	Plat Comd	64823
1 PSG	Plat Sgt	67R40
1 SGT	Mtr Sgt	63B40
2 SP6	Tech Inspector	67W20

SERVICE PLATOON HQ

1 SP4	Acft Parts SP	76H20
3 SP4	Avn Elct Equip Mech	31Q20
1 SP4	Rept Clerk	71B20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Wheel Veh Mech	
	Helper	63A10

Trk cgo 3/4-ton 4x4	2
Trk util 1/2-ton 4x4 mule . . .	3
Tlr cgo 3/4-ton 2 wheel	2
Lchr gren 40mm	2
Rifle 5.56mm M16E1	9
Pistol auto cal .45	2
Revolver cal .38 PPS	1

ACFT MAINT SECTION

1 WO	Hel Rep Tech	671C0
1 SGT	Sec Maint Supv	67R40
2 SP5	Sr Acft Armorer	45J20
1 SP5	Sr Hel Mech	67N20
3 SP4	Acft Armorer	45J20
2 SP4	Hel Mech	67N20

Rifle 5.56mm M16E1	9
Revolver cal .38 PPS	1

AIRCRAFT SVC SECTION

1 SGT	Sec Chief	67R40
3 SP4	Acft Ammo Handler	55B20
3 SP4	Acft Fuel Handling	
	SP	56C20
3 PFC	Acft Ammo Handler	
	Helper	55A10
2 PVT	Acft Ammo Handler	
	Helper	55A10

Trk cgo 3/4-ton 4x4	7

DATA FOR FIGURE 33 - (continued)

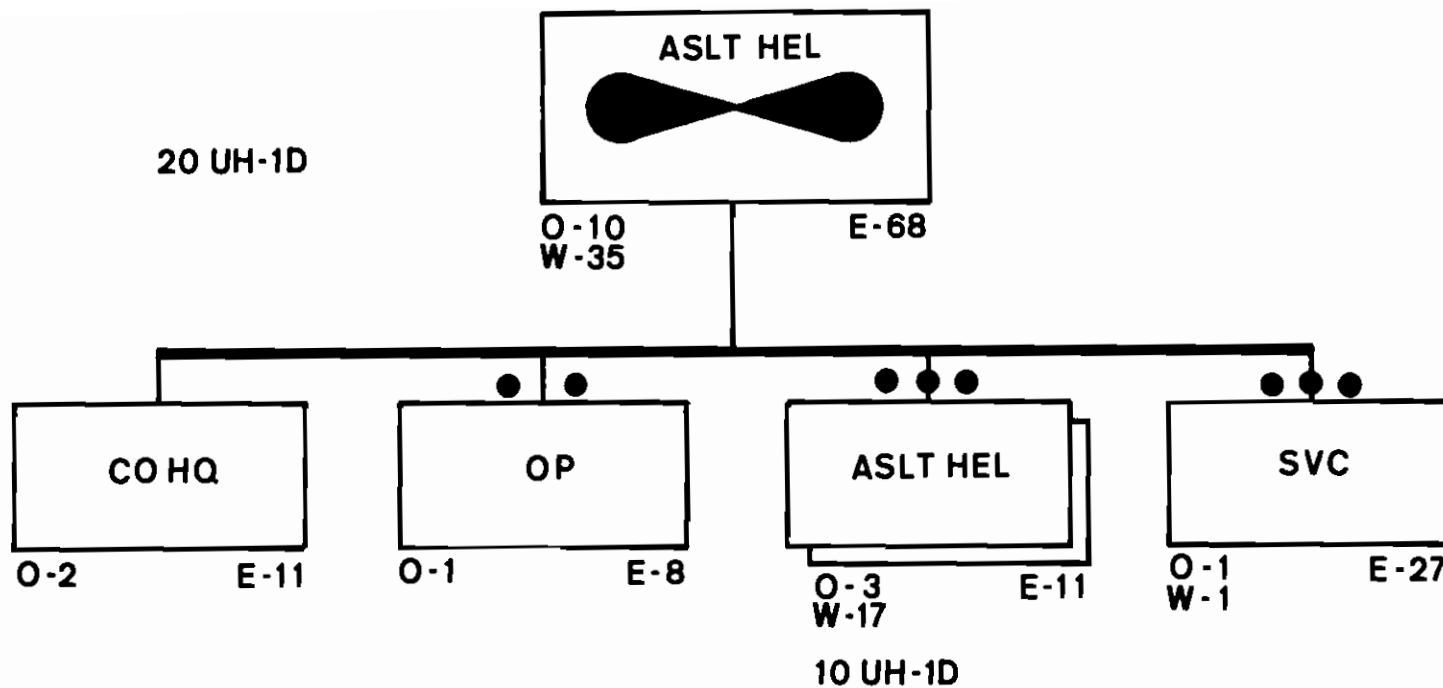
AIRCRAFT SVC SECTION

Trk cgo 2 1/2-ton 6x6 LWB . .	1
Tlr cgo 3/4-ton 2 wheel . . .	7
Tlr cgo 1 1/2-ton 2 wheel . . .	2
Rifle 5.56mm M16E1	12

- (b) Based on 80-percent availability of organic aircraft, provides in a single lift, airlift for one rifle company including the infantry supporting weapons.
 - (c) Provides air movement of troops, supplies, and equipment within the combat zone.
 - (d) Augments aeromedical evacuation from the immediate battlefield.
- (5) Organization. The assault helicopter company consists of a company headquarters, flight operations section, two assault helicopter platoons, and a service platoon. The company has organic 20 UH-1D helicopters, 10 in each of the assault helicopter platoons. All aircraft are armed with the M23 weapons system (door guns).
 - (6) Employment concepts. The assault helicopter companies are normally employed in direct support of an infantry battalion, and as a part of the assault helicopter battalion operations. However, the assault helicopter companies have their own support and are capable of being employed for extended periods of time as a separate company. The platoons are capable of independent missions but depend on the company for support.

g. Assault Support Helicopter Battalion.

- (1) Composition. The composition of the assault support helicopter battalion, airmobile division, is shown in figure 35.
- (2) Mission. The mission of the assault support helicopter battalion is to provide tactical air movement of combat troops, supplies, and equipment in airmobile operations within the combat zone.
- (3) Assignment. The battalion is organic to the aviation group, airmobile division, TOE 1-100T.
- (4) Capabilities. This unit has the following capabilities:
 - (a) Provides continuous (day and night) operations during visual weather conditions and limited operations under instrument weather conditions.
 - (b) Provides in a single lift, airlift for the assault elements of two infantry battalions (960 combat equipped troops), the combat elements of three 105mm howitzer batteries, 90,000 pounds of cargo or an equivalent logistical load, or any combination thereof.
 - (c) Augments aeromedical evacuation as required.
- (5) Organization. The assault support helicopter battalion consists of a headquarters and headquarters company and three assault support helicopter companies.
 - (a) Headquarters and headquarters company. The composition of the headquarters and headquarters company is shown in figure 36.



NOTE: ALL UH-1D ARMED WITH M23 WEAPONS SYSTEM.

Figure 34. Assault helicopter company, assault helicopter battalion, airmobile division (TOE 1-158T).

DATA FOR FIGURE 34

COMPANY HEADQUARTERS

1 CPT	Co Comd	1983
1 LT	XO	1983
1 ISG	First Sgt	67R50
1 SSG	Mess Steward	94B40
1 SSG	Sup Sgt	76K40
2 SP5	First Cook	91B20
1 SP4	Armorer	76K30
1 SP4	Co Clerk	71H20
2 SP4	Cook	91B20
1 PFC	Cook's Helper	94A10
1 PFC	RATEL Op	71A10

Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6 LWB	1
Trk util 1/4-ton 4x4	1
Util veh 2 wheel	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	1
Lchr gren 40mm	1
Rifle 5.56mm M16E1	10
Pistol auto cal .45	1
Revolver cal .38 PPS	2
Rdo set AN/PRC-25	1
Rdo set AN/VRC-47 mtd in trk 1/4-ton	1

FLIGHT OP SECTION

1 LT	Op Off	1982
1 SFC	Flt Op Chief	71P40
1 SGT	Comm Chief	31F40
1 SP5	Sr Flt Op SP	71P20
1 SP4	Clerk Typist	71B30
1 SP4	Flt Op SP	71P20
1 SP4	Sr Swbd Op	36A10
1 PFC	Swbd Op	36A10
1 PFC	Wireman	36A10

FLIGHT OP SECTION

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	1
Lchr gren 40mm	1
Rifle 5.56mm M16E1	7
Pistol auto cal .45	1
Revolver cal .38 PPS	1
Rdo set AN/PRC-25	3
Rdo set AN/VRC-24 mtd in trk 3/4-ton	1
Rdo set AN/VRC-46 mtd in trk 3/4-ton	2
Swbd tel manual SB-22/PT	1
Tel set TA-312/PT	9

ASLT HEL PLATOON HQ (2)

1 LT	Plat Comd	1981
3 WO	Hel Pilot	062B0
1 PSG	Plat Sgt	67R40
2 SP5	Crew Chief	67N20

Trk util 1/2-ton 4x4 mule	1
Rifle 5.56mm M16E1	1
Revolver cal .38 PPS	6
Rdo set AN/URC-10	2
Rdo set AN/PRC-25	2
Hel util UH-1D w/armt sub-system 7.62mm mg dr mtd lt wt M23 w/equip	2

ASLT HEL SECTION (4)

1 LT	Sec Comd	1981
7 WO	Hel Pilot	062B0
1 SSG	Sec Sgt	67R40
3 SP5	Crew Chief	67N20

ASLT HEL SECTION (4)

Revolver cal .38 PPS	12
Rdo set AN/URC-10	4
Hel util UH-1D w/armt sub-system 7.62mm mg dr mtd lt wt M23 w/equip	4

SERVICE PLATOON HQ

1 LT	Plat Comd	64823
1 PSG	Plat Sgt	67R40
1 SGT	Mtr Sgt	63B40
2 SP6	Hel Tech Insp	67W20
1 SP5	Avn Elct Equip Rpmn	31Q30
2 SP4	Avn Elct Equip Mech	31Q20
1 SP4	Acft Parts SP	76H20
1 SP4	Shop Clerk	71B20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Wheel Veh Mech Helper	63A10

Trk cgo 3/4-ton 4x4	1
Trk util 1/2-ton 4x4 mule	1
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph cgo 1/4-ton 2 wheel	1
Lchr gren 40mm	2
Rifle 5.56mm M16E1	9
Pistol auto cal .45	2
Revolver cal .38 PPS	1
Rdo set AN/VRC-46 mtd in trk 3/4-ton	1

AIRCRAFT MAINT SEC

1 WO	Hel Rep Tech	67IC0
1 SSG	Maint Supv	67R40
2 SP5	Sr Hel Mech	67N20
4 SP4	Hel Mech	67N20
1 PFC	Hel Mech Helper	67A10

DATA FOR FIGURE 34 - (continued)

AIRCRAFT MAINT SEC

Trk cgo 3/4-ton 4x4	2
Tlr cgo 3/4-ton 2 wheel	2
Rifle 5.56mm M16E1	8
Revolver cal .38 PPS	1

AIRCRAFT SVC SECTION

1 SGT Sec Chief	56C40
1 SP5 Sr Acft Armorer	45J20
2 SP4 Acft Armorer	45J20
4 SP4 Acft Fuel Hdlg SP	56C20

Trk cgo 3/4-ton 4x4	3
Trk cgo 2 1/2-ton 6x6 LWB . .	1
Trk tk FS 2 1/2-ton 6x6	1
Tlr cgo 3/4-ton 2 wheel	3
Tlr cgo 1 1/2-ton 2 wheel . . .	2
Rifle 5.56mm M16E1	8

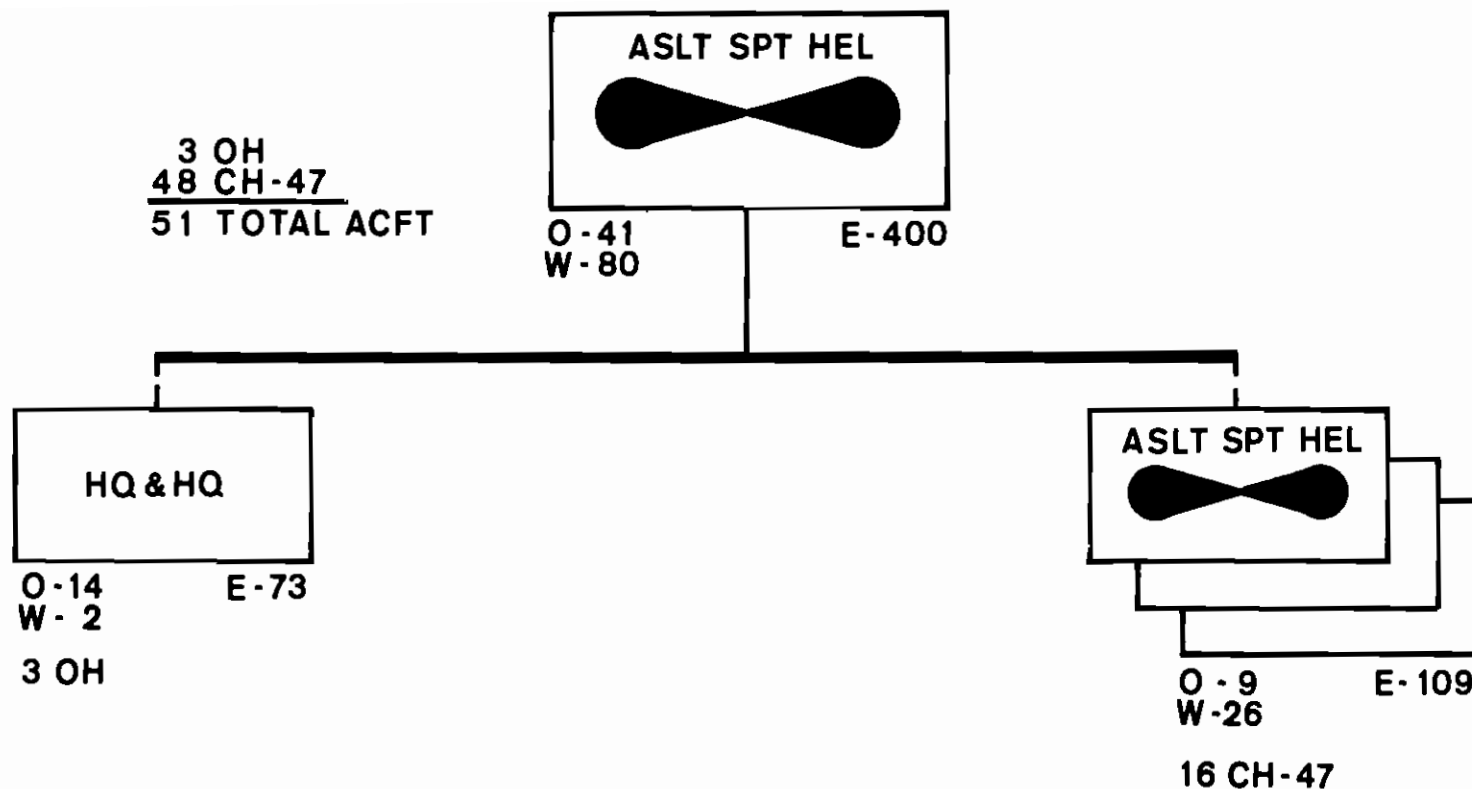
Three observation helicopters are assigned to the company headquarters and are used to support the command, control, supervision, and liaison efforts of the battalion.

- (b) Assault support helicopter company. The assault support helicopter company consists of a company headquarters, flight operations section, two assault support helicopter platoons of eight aircraft each, and a service platoon. The organization of the company is shown in figure 37.
- (6) Employment concepts. The battalion is employed as the primary means of moving the artillery and combat engineers on the battlefield. It is also employed to move combat troops, logistical elements of the infantry battalions, and the brigade forward command post. Habitually, the assault support helicopter battalion will operate in general support of the division. One or more of its subordinate units may be placed in direct support of a brigade. When this occurs, coordination and mission requirements will be received through the brigade staff or aviation group liaison officer. Normal employment of the assault support helicopter companies is on a "mission" basis.

35. SUPPORT COMMAND

a. General.

- (1) Composition. The composition of the support command, airmobile division is shown in figure 38.
- (2) Mission. The mission of the support command is to provide division-level combat service support to all assigned or attached elements of the division, except for military police service, communications, construction, and those administrative services provided by special staff sections in the administration company.
- (3) Assignment. The support command is assigned to the airmobile division, TOE 67T.
- (4) Capabilities. This command is capable of providing -
 - (a) Requisition, receipt, storage, and distribution of all class I, II, III, IV, and V supplies; and maintenance of 1-day reserve of supplies for the division.
 - (b) Direct maintenance support, except for medical and cryptographic items.
 - (c) Medical service support to include evacuation of patients, medical (and emergency dental) treatment, medical supply, and organizational maintenance of medical equipment.
 - (d) Graves registration service when appropriate teams from TOE 10-500 are attached.



**NOTE: OH ARMED WITH XM27.
CH-47 ARMED WITH M24.**

Figure 35. Assault support helicopter battalion, airmobile division (TOE 1-165T).

DATA FOR FIGURE 35

RECAPITULATION

VEHICULAR

Trk amb frontline 1/4-ton . . .	1
Trk cgo 3/4-ton 4x4	5
Trk cgo 2 1/2-ton 6x6 LWB . .	4
Trk tk FS 2 1/2-ton 6x6	2
Trk util 1/4-ton 4x4	28
Util veh 2 wheel	6
Util veh 3 wheel	2

ARMAMENT

Lchr gren 40mm	17
Gun mach lt flex	48
Rifle 5.56mm M16E1	283
Pistol auto cal .45	26
Revolver cal .38 PPS	212

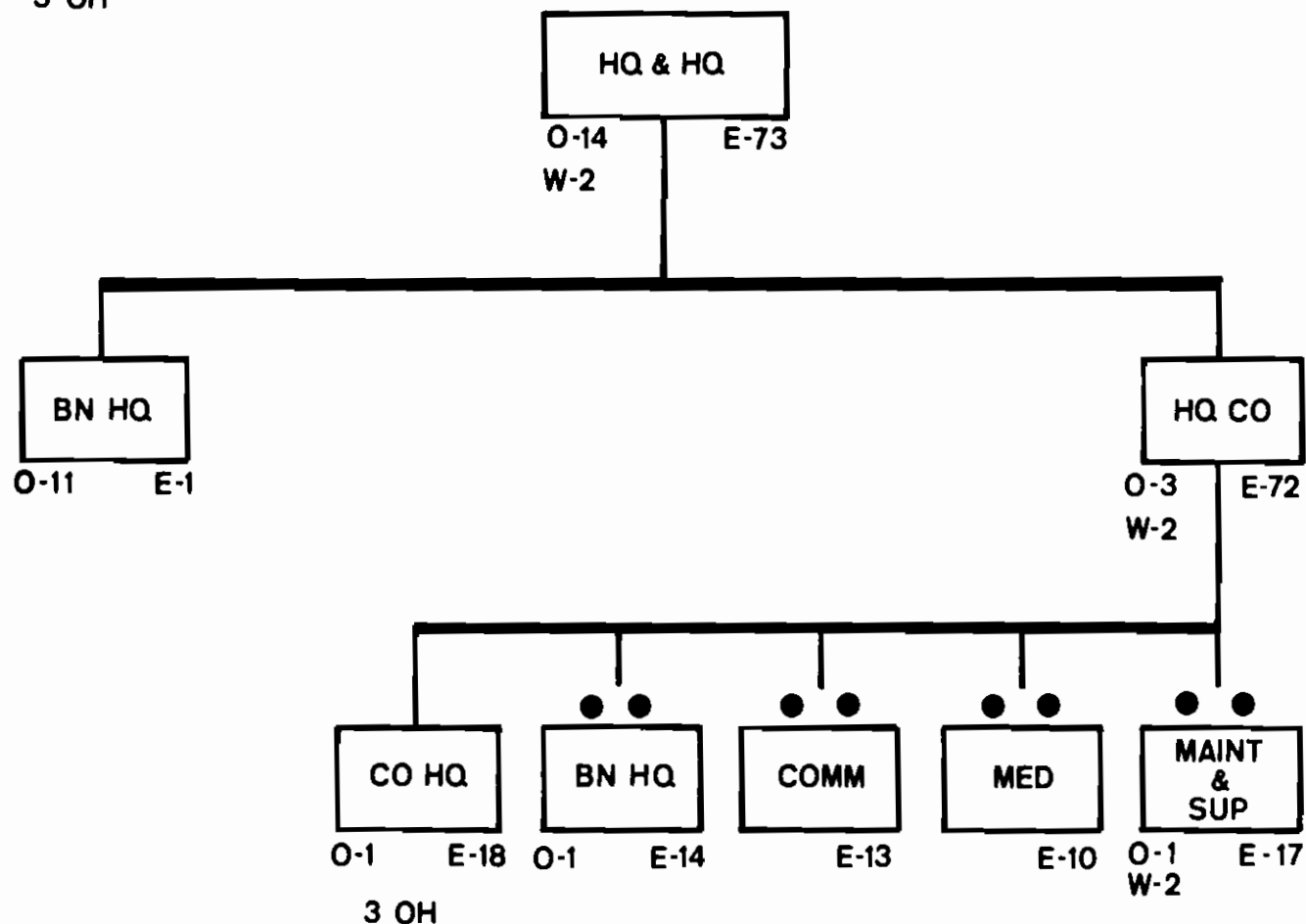
COMMUNICATIONS

Elec tt sec equip TSEC/KW-7.	2
Rdo set AN/URC-10	51
Rdo set AN/GRC-106 mtd	
in trk 1/4-ton	4
Rdo set AN/PRC-25	15
Rdo set AN/VRC-24 mtd	
in trk 1/4-ton	3
Rdo set AN/VRC-46 mtd	
in trk 1/4-ton	11
Rdo set AN/VRC-47 mtd	
in trk 1/4-ton	13
Rdo set AN/VRC-49 mtd	
in trk 1/4-ton	3
Swbd tel man SB-22/PT	5
Tel set TA-312/PT	31
RATT set AN/VSC-2	2

AIRCRAFT ARMAMENT

Armt subsystem hel 7.62mm	
mg dr mtd M24	48
Armt subsystem hel 7.62mm	
XM27	3
Hel trans mdm	48
Hel obsn lt (OH)	3

3 OH



NOTE. OH ARMED WITH XM27.

Figure 36. Headquarters and headquarters company, assault support helicopter battalion, airmobile division (TOE 1-166T).

DATA FOR FIGURE 36

BATTALION HEADQUARTERS

1 LTC	Bn Comd	1983
1 MAJ	XO	1983
1 MAJ	S3	62162
1 CPT	Avn Safety Off	7423
2 CPT	Ln Off	1981
1 CPT	S1	2110
1 CPT	S2	69301
1 CPT	S4	64010
1 CPT	Sig Off	60210
1 CPT	Surg	3160
1 SGM	Sgt Major	67U50

Rifle 5.56mm M16E1	1
Revolver cal .38 PPS	9
Pistol auto cal .45	2

COMPANY HEADQUARTERS

1 CPT	Co Comd	2900
1 ISG	First Sgt	67U50
1 SSG	Mess Steward	94B40
1 SSG	Sup Sgt	76K40
3 SP5	Crew Chief	67N20
2 SP5	First Cook	94B20
1 SP4	Armorer	76K30
1 SP4	Acft Armorer	45J20
1 SP4	Avionics Equip Mech	31Q20
1 SP4	Co Clerk	71H20
1 SP4	Cook	94B20
2 SP4	Petrl Handling SP	56C20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Cook's Helper	94A10
1 PFC	Lt Trk Dvr	71A10

Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6 LWB	1
Trk tk FS 2 1/2-ton 6x6	2
Trk util 1/4-ton 4x4	1
Lchr gren 40mm	1

COMPANY HEADQUARTERS

Rifle 5.56mm M16E1	17
Pistol auto cal .45	2
Rdo set AN/URC-10	3
Rdo set AN/PRC-25	3
Rdo set AN/VRC-49 mtd	
in trk 1/4-ton	1
Hel obsn lt (OH) w/armt	
subsystem 7.62mm	
XM27 mtd	3

BATTALION COMM SECTION

1 SSG	Comm Chief	31F40
2 SGT	RATT Tm Chief	05C20
1 SP5	Sr Rdo Mech	31B20
1 SP4	Rdo Mech	31B20
4 SP4	RATT Op	05C20
1 SP4	Sr Msg Clerk	36A10
1 SP4	Sr Swbd Op	36A10
1 PFC	Msg Clerk	36A10
1 PFC	Swbd Op	36A10

Trk util 1/4-ton 4x4	2
Rifle 5.56mm M16E1	13
Elec tt sec equip TSEC/KW-7	2
Rdo set AN/VRC-49 mtd	
in trk 1/4-ton	1
Swbd tel man SB-22/PT	2
Tel set TA-312/PT	13
RATT set AN/VSC-2	2

BATTALION HQ SECTION

1 CPT	Flt Op Off	1982
1 MSG	Intel Sgt	96B50
1 MSG	Op Sgt	71P50
1 SFC	Perp Staff NCO	71H40
1 SFC	Asst Op Sgt	71P40
1 SSG	Cml NCO	54E40

BATTALION HQ SECTION

1 SP5	Sr Flt Op SP	71P20
3 SP4	Clerk Typist	71B30
1 SP4	Draftsman	81A10
1 SP4	Op SP	71P20
1 PFC	Mail Dlv'r Clerk	71A10
2 PFC	Rad TP Op	71A10

Trk util 1/4-ton 4x4	2
Rifle 5.56mm M16E1	14
Revolver cal .38 PPS	1
Rdo set AN/GRC-106 mtd	
in trk 1/4-ton	1
Rdo set AN/VRC-46 mtd	
in trk 1/4-ton	1
Rdo set AN/VRC-49 mtd	
in trk 1/4-ton	1

BATTALION MEDICAL SEC

1 SSG	Sec Sgt	91B40
1 SP6	Med Asst	91C20
1 SP4	Amb Dvr	91A10
6 SP4	Co Aidman	91B20
1 SP4	Med Aidman	91B20

Trk amb frontline 1/4-ton	1
Rifle 5.56mm M16E1	4
Pistol auto cal .45	6

BN MAINT AND SUP SECTION

1 CPT	Avn Maint Off	64823
1 WO	Auto Maint Tech	631A0
1 WO	Unit Sup Tech	761A0
1 SFC	Acft Maint Supv	67Q40
1 SFC	Bn Sup Sgt	76K40
1 SGT	Bn Mtr Maint Sgt	63B40
1 SGT	Petrl Storage Supv	56C40
2 SP6	Tech Insp	67W20

DATA FOR FIGURE 36 - (continued)

BN MAINT AND SUP SECTION

1 SP4	Card Punch Op	74B20
1 SP4	Equip Rec Clerk	71B20
1 SP4	Powerman	52B20
1 SP4	Rep Parts Clerk	76K20
2 SP4	Sup SP	76K20
1 SP4	Tcr Equip Op	05C20
1 SP4	Trans Sup SP	76H20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Asst Card Punch Op	74B20
1 PFC	Sup Clerk	76A10

Trk cgo 2 1/4-ton 4x4	1
Trk util 1 1/4-ton 4x4	2
Util veh 3 wheel	2
Lchr gren 40mm	1
Rifle 5.56mm M16E1	18
Pistol auto cal .45	1
Revolver cal .38 PPS	1
Rdo set AN/VRC-46 mtd	
in trk 1 1/4-ton	1
Rdo set AN/VRC-47 mtd	
in trk 1 1/4-ton	1

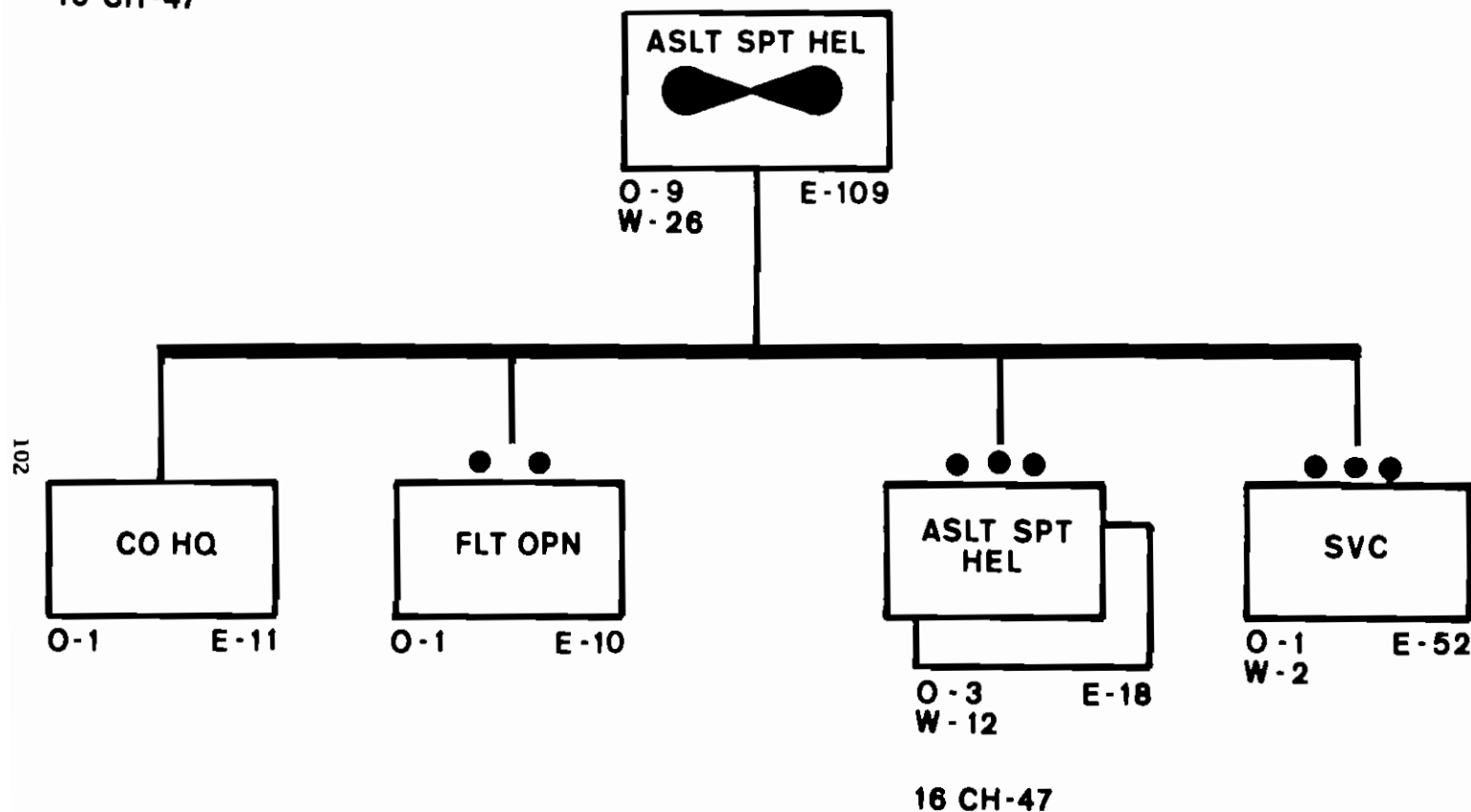
- (e) Air equipment supply and maintenance support to the division.
- (f) Music for division functions.

- (5) Organization. The support command consists of the headquarters, headquarters company and band; administration company; supply battalion, transportation aircraft maintenance and supply battalion; medical battalion; and maintenance battalion. The only units of support command which have organic aircraft are the transportation aircraft maintenance and supply battalion and the medical battalion.

b. Transportation Aircraft Maintenance and Supply Battalion.

- (1) Composition. The composition of the transportation aircraft maintenance and supply battalion, airmobile division, is shown in figure 39.
- (2) Mission. The mission of the transportation aircraft maintenance and supply battalion is to provide aircraft direct support maintenance to include avionics and armament maintenance, and repair parts support for aircraft organic to an airmobile division.
- (3) Assignment. This battalion is organic to support command, airmobile division, TOE 29-41T.
- (4) Capabilities. This unit can -
 - (a) Accomplish approximately 95 percent of the aircraft, aircraft armament, and avionics direct support maintenance required for aircraft organic to an airmobile division. The maintenance capability includes -
 - 1. 137,360 man-hours per month for aircraft support maintenance.
 - 2. 9,696 man-hours per month for avionics support maintenance.
 - 3. 3,232 man-hours per month for aircraft armament systems support maintenance.
 - (b) Provide repair parts supply to supported units.
- (5) Organization. The battalion consists of a headquarters and headquarters company, and four transportation aircraft maintenance and supply companies.
 - (a) Headquarters and headquarters company. The composition of the headquarters and headquarters company is shown in figure 40. The battalion headquarters section of the company has organic one UH-1D helicopter. It is used to support the battalion's command, control, and liaison efforts.

16 CH-47



NOTE. CH-47 ARMED WITH M24.

Figure 37. Assault support helicopter company, assault support helicopter battalion, airmobile division (TOE 1-167T).

DATA FOR FIGURE 37

COMPANY HEADQUARTERS

1 CPT	Co Comd	1983
1 ISG	First Sgt	67U50
1 SSG	Mess Steward	94B40
1 SGT	Sup Sgt	76K40
2 SP5	First Cook	94B20
1 SP4	Armorer	76K30
1 SP4	Co Clerk	71H20
2 SP4	Cook	94B20
1 PFC	Cook's Helper	94A10
1 PFC	Lt Trk Dvr	71A10

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1
Lchr gren 40mm	1
Rifles 5.56mm M16E1	10
Pistol auto cal .45	1
Revolver cal .38 PPS	1
Rdo set AN/VRC-47 mtd	
in trk 1/4-ton	1

FLIGHT OPERATIONS SEC

1 LT	Flt Op Off	1982
1 SFC	Op Chief	71P40
1 SGT	Comm Chief	31F40
1 SP5	Sr Con Twr Op	93B20
1 SP5	Sr Flt Op SP	71P20
1 SP4	Con Twr SP	93B20
1 SP4	Flt Op SP	71P20
1 SP4	Sr Rdo Op	05B20
1 SP4	Swbd Op	36A10
1 PFC	Flt Op Helper	71P20
1 PFC	Rdo Op	05B20

Trk util 1/4-ton 4x4	2
Lchr gren 40mm	2
Rifle 5.56mm M16E1	8
Pistol auto cal .45	2
Revolver cal .38 PPS	1

FLIGHT OPERATIONS SEC

Rdo set AN/GRC-106 mtd	
in trk 1/4-ton	1
Rdo set AN/VRC-24 mtd	
in trk 1/4-ton	1
Rdo set AN/VRC-46 mtd	
in trk 1/4-ton	2
Swbd tel man SB-22/PT	1
Tel set TA-312/PT	6
Rdo set AN/VRC-47	1

ASLT SPT HEL PLAT HQ (2)

1 LT	Plat Comd	1981
1 PSG	Plat Sgt	67U40
1 PFC	Lt Trk Dvr	67A10

Trk util 1/4-ton 4x4	1
Rifle 5.56mm M16E1	2
Revolver cal .38 PPS	1
Rdo set AN/VRC-47 mtd	
in trk 1/4-ton	1

ASLT SPT HEL SECTION (4)

1 LT	Sec Comd	1981
6 WO	Hel Pilot	062B0
4 SP6	Flt Engr	67U20
4 SP5	Crew Chief	67U20

Gun mach lt flex	4
Revolver cal .38 PPS	15
Rdo set AN/URC-10	4
Rdo set AN/PRC-25	1
Hel trans mdm w/armt sub-system 7.62mm mg dr mtd M24	4

SERVICE PLATOON HQ

1 LT	Plat Comd	64823
1 SFC	Plat Maint Supv	67U40
2 SP6	Tech Insp	67W20
2 SP5	Acft Parts SP	76H20
1 SP5	Sr Elct Rpmn	68F20
2 SP4	Airframe Rpmn	68G20
1 SP4	Av Elct Equip Mech	31Q20
1 SP4	Clerk Typist	71B30
1 SP4	Elct Rpmn	68F20
1 SP4	Powerman	52B20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Sup Clerk	76A10

Trk cgo 2 1/2-ton 6x6 LWB	1
Trk util 1/4-ton 4x4	1
Util veh 2 wheel	2
Lchr gren 40mm	2
Rifle 5.56mm M16E1	12
Pistol auto cal .45	2
Revolver cal .38 PPS	1
Rdo set AN/VRC-46 mtd	
in trk 1/4-ton	1

AIRCRAFT SVC SECTION

1 SGT	Sec Chief	56C40
1 SP4	Petr1 Stor SP	56C20
2 PFC	Petr1 Sup Handlers	56A10
1 PVT	Petr1 Sup Handlers	56A10

Trk util 1/4-ton 4x4	1
Rifle 5.56mm M16E1	5

AIRCRAFT MAINT SEC (2)

1 WO	Hel Rep Tech	671C0
1 SFC	Maint Supv	67U40
6 SP5	Sr Hel Mech	67U20

DATA FOR FIGURE 37 - (continued)

AIRCRAFT MAINT SEC (2)

1 SP4	Equip Rec Clerk	71B20*
6 SP4	Hel Mech	67U20
3 PFC	Hel Mech Helper	67A10

Rifle 5.56mm M16E1	17
Revolver cal .38 PPS	1

*Common to both sections.

- (b) Transportation aircraft maintenance and supply company. The composition of the transportation aircraft maintenance and supply company is shown in figure 41. The service and equipment platoon has organic one observation helicopter and one UH-1D helicopter. These helicopters are used to support the maintenance and supply efforts of the company.

c. Medical Battalion.

- (1) Composition. The composition of the medical battalion, airmobile division, is shown in figure 42.
- (2) Mission. To provide division-level and unit-level medical service as required to divisional units.
- (3) Assignment. The medical battalion is organic to support command, airmobile division, TOE 29-41T.
- (4) Capabilities. This unit provides -
 - (a) Aeromedical and limited ground evacuation.
 - (b) Air crash rescue support on an area basis.
 - (c) Clearing station treatment.
 - (d) Management of psychiatric problems.
 - (e) Unit-level medical service as required on an area basis, to include medical service support for an airborne brigade.
 - (f) Division-level medical supply and medical equipment maintenance support.
- (5) Organization. The medical battalion consists of a headquarters and support company and three medical companies. One of the medical companies has an airborne capability.
 - (a) Headquarters and support company. The composition of the headquarters and support company is shown in figure 43. All aircraft organic to the medical battalion are located in the air ambulance platoon of the headquarters and support company. The air ambulance platoon consists of a platoon headquarters, an air ambulance section, and a crash rescue section. Eight UH-1D helicopters are assigned to the air ambulance section, and four are assigned to the crash rescue section. The air ambulance platoon provides division-wide aeromedical evacuation; air crash rescue; in-flight treatment of patients; and aerial delivery of whole blood, biologicals, medical supplies, and medical personnel.
 - (b) Medical company. The medical company consists of a company headquarters, an evacuation platoon, and a clearing platoon. The company provides division-level medical service and unit-level

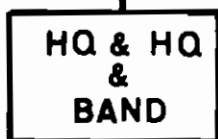
17 UH-1D
4 OH

21 TOTAL



O-204
W-87
N-5

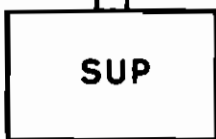
E-2899



O-27 E-133
W-2



O-34 E-338
W-8



O-24 E-448
W-6



O-48 E-1328
W-52
4 OH
5 UH-1D



O-47 E-344
W-15
N-5
12 UH-1D



O-22 E-308
W-4

Figure 38. Support command, airmobile division (TOE 29-41T).

DATA FOR FIGURE 38

RECAPITULATION

VEHICULAR

Trk cgo 3/4-ton 4x4	70
Trk cgo 3/4-ton 4x4 wwn . . .	30
Trk cgo 2 1/2-ton 6x6 LWB . .	41
Trk cgo 2 1/2-ton 6x6 LWB wn	10
Trk platform util 1/2-ton 4x4 .	28
Trk tk fuel svc 2 1/2-ton . . .	5
Trk trac 5-ton 6x6	1
Trk amb frontline 1/4-ton . . .	12
Trk util 1/4-ton 4x4	113
Trk wkr lt 2 1/2-ton	2
Tlr cgo 3/4-ton	93
Tlr cgo 1 1/2-ton	27
Tlr tank water 1 1/2-ton	5
Tlr amph 1/4-ton	113
Util veh 2 wheel	14
Trk 3/4-ton 4x4 w/wkr kit . .	5

ARMAMENT

Lchr gren 40mm	109
Lchr rkt 3.5	35
Mach gun hv	4
Mach gun lt flex	80
Rifle 5.56mm M16E1	2845
Pistol auto cal .45	193
Revolver cal .38 PPS	118

COMMUNICATIONS

Rdo set AN/URC-10	21
Rdo set AN/PRC-25	35
Rdo set AN/PRC-47	4
Rdo set AN/VRC-24	1
Rdo set AN/VRC-24 mtd in 1/4-ton	9
Rdo set AN/VRC-46	10

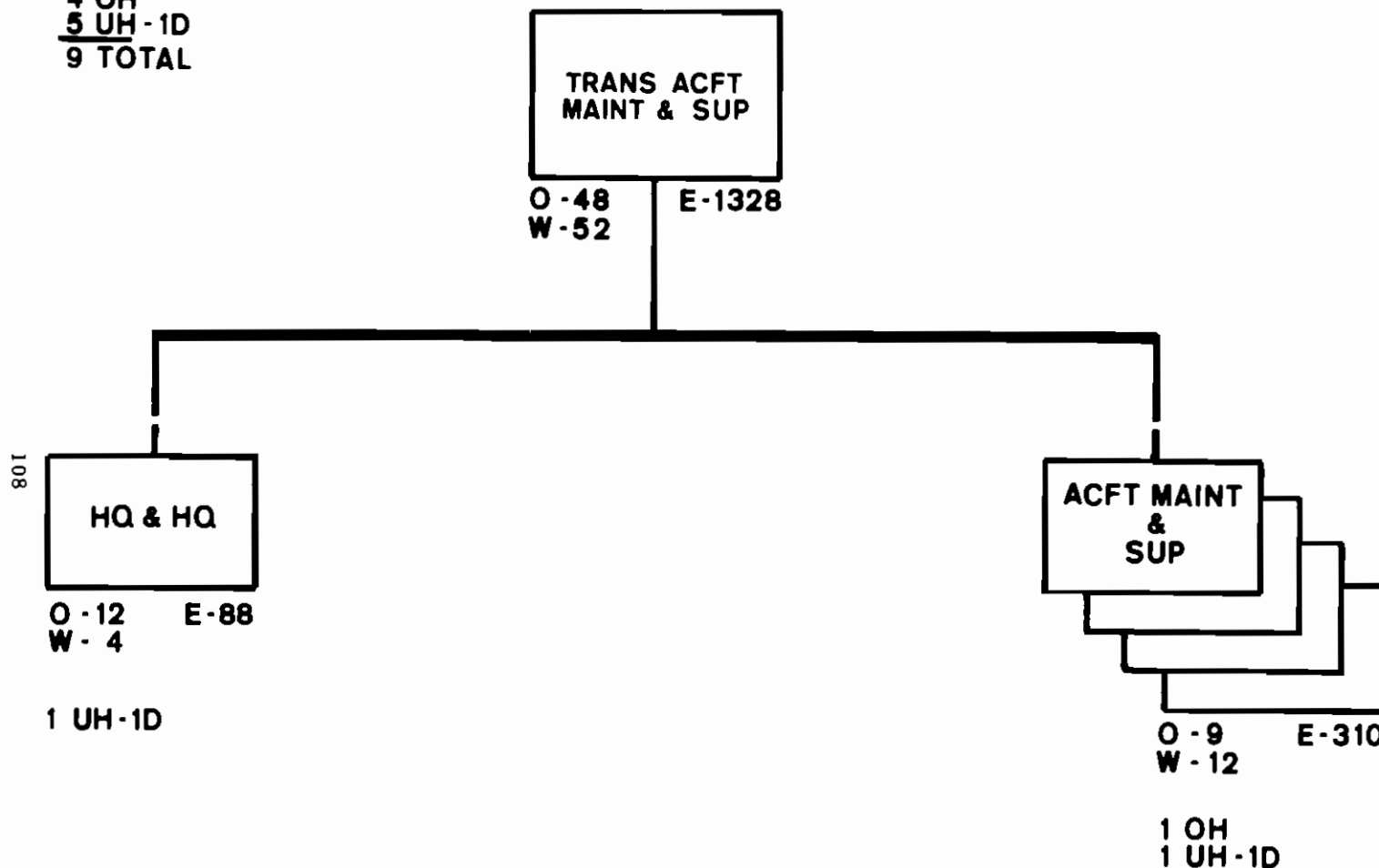
COMMUNICATIONS

Rdo set AN/VRC-46 mtd in 1/4-ton	37
Rdo set AN/VRC-46 mtd in 3/4-ton	5
Rdo set AN/VRC-47	4
Rdo set AN/VRC-47 mtd in 1/4-ton	27
Rdo set AN/VRC-47 mtd in 3/4-ton	6
Rdo set AN/VRC-49 mtd in 1/4-ton	1
Rdo set AN/VRC-49 mtd in 3/4-ton	1
Rdo set con gp AN/GRA-59 . .	37
Rdo set con gp AN/GRA-74 . .	2
RATT set AN/VSC-2	8
Swbd tel manual SB-993/GT . .	1
Swbd tel manual SB-22/PT . .	19
Tel set TA-312/PT	224

AIRCRAFT AND ARMAMENT SYSTEMS

Hel obsn	4
Hel util UH-1D	17
Armt subsystem M23	5
Armt subsystem XM27	4

4 OH
5 UH-1D
 9 TOTAL



NOTE. OH ARMED WITH XM27.
 UH-1D ARMED WITH M23.

Figure 39. Transportation aircraft maintenance and supply battalion, airmobile division (TOE 55-405T).

DATA FOR FIGURE 39

RECAPITULATION

VEHICULAR

Trk tk fuel svc 2 1/2-ton	4
Trk cgo 3/4-ton 4x4	50
Trk util 1/2-ton 4x4 mule . . .	28
Trk util 1/4-ton 4x4	50
Tlr cgo 3/4-ton 2 wheel	50
Tlr amph 1/4-ton 2 wheel . . .	50
Crane wheel-mtd M60 3-ton . .	8
Forklift trk 3,000 lb cap . . .	8

ARMAMENT

Lchr gren 40mm	96
Lchr rkt 3.5 in	10
Mach gun lt flex.	18
Rifle 5.56mm M16E1	1250
Pistol auto cal .45	104
Revolver cal .38 PPS	72

COMMUNICATIONS

Rdo set AN/URC-10	9
Rdo set AN/VRC-24	4
Rdo set AN/VRC-46	28
Rdo set AN/VRC-47	13
Rdo set con gp AN/GRA-39 . .	10
RATT set AN/VSC-2	6
Swbd SB-22/PT	10
Tel set TA-312/PT	98

AIRCRAFT AND ARMAMENT

Hel util UH-1D	5
Armt subsystem M23	5
Hel obsn lt (LOH)	4
Armt subsystem XM27	4

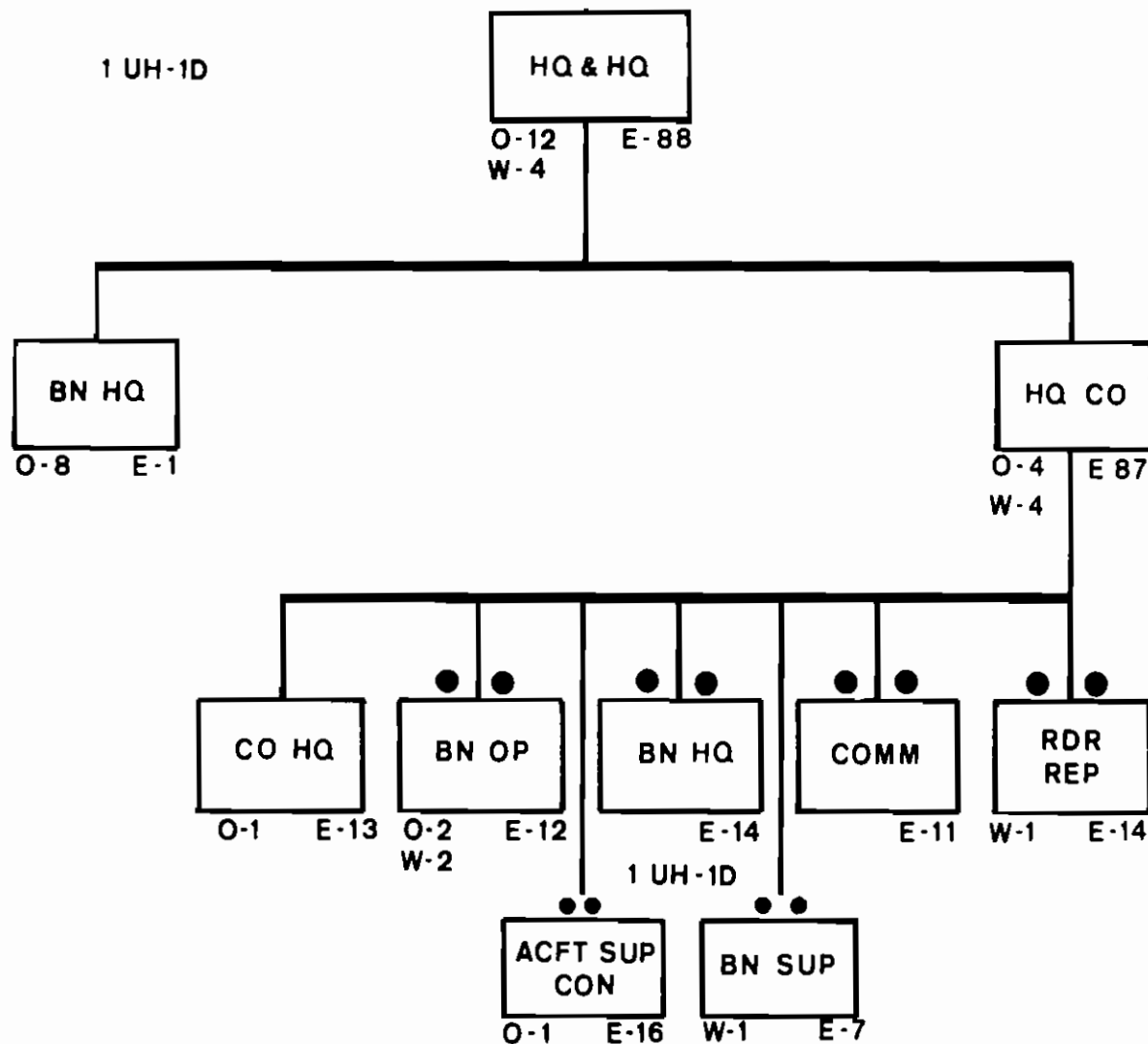


Figure 40. Headquarters and headquarters company, transportation aircraft maintenance and supply battalion, airmobile division (TOE 55-406T).

DATA FOR FIGURE 40

BATTALION HEADQUARTERS

1 LTC	Bn Comd	64823
1 MAJ	XO	64823
1 MAJ	Bn S3	62162
1 CPT	Adj	2110
1 CPT	Bn S4	4010
2 CPT	Ch	5310
1 CPT	Plans-Tng Off	62162
1 SGM	Sgt Maj	67Z50

Rifle 5.56mm M16E1	3
Revolver cal .38 PPS	4

COMPANY HEADQUARTERS

1 CPT	Co Comd	2900
1 ISG	First Sgt	67Z50
1 SSG	Mess Steward	94B40
1 SSG	Sup Sgt	76K40
2 SP5	First Cook	94B20
1 SP4	Co Clerk	71H20
2 SP4	Cook	94B20
1 SP4	Unit Sup SP	76K20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Cook's Helper	94A10
1 PFC	Lt Trk Dvr	71A10
1 PFC	Wheel Veh Mech Helper	63A10

Trk cgo 3/4-ton 4x4	2
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	2
Tlr amph cgo 1/4-ton 2 wheel	1
Lchr gren 40mm	2
Mach gun lt flex	2
Rifle 5.56mm M16E1	12
Pistol auto cal .45	2
Tel set TA-312/PT	2
Lchr rkt 3.5 in	2

BATTALION HQ SECTION

1 SFC	Pers Stf NCO	71H40
1 SFC	Plans-Op Sgt	11F40
1 SP6	Chief Admin Clerk	71H40
1 SSG	Cml Stf NCO	54A20
1 SP5	Hel Crew Chief	67N20
2 SP4	Ch Asst	71M20
2 SP4	Clerk Typist	71B30
1 SP4	Gen Draftsman	81A10
1 SP4	Rep Clerk	71B20
1 PFC	Lt Trk Dvr	71A10
2 PFC	Mail Dlv'r Clerk	71A10

Trk util 1/4-ton 4x4	3
Tlr amph 1/4-ton 2 wheel	3
Lchr gren 40mm	2
Rifle 5.56mm M16E1	11
Pistol auto cal .45	2
Revolver cal .38 PPS	1
Rdo set AN/VRC-47	1
Rdo set AN/URC-10	1
Tel set TA-312/PT	4
Hel util UH-1D	1
Armt subsystem M23	1

BATTALION OPERATIONS SEC

2 CPT	Acft Maint Off	64823
1 WO	Acft Maint Tech	671C0
1 WO	Avionics Rep Tech	268A0
1 MSG	Maint Op Sgt	67Z50
1 SFC	Armt Maint Sgt	45J40
1 SFC	Asst Maint Op Sgt	67Z40
1 SFC	Avionics Rep Sgt	28470
4 SP6	Acft Tech Insp	67W20
2 SP4	Clerk Typist	71B30
1 SP4	Rep Clerk	71B20
1 PFC	Clerk Gen	71A10

Trk cgo 3/4-ton 4x4	1

BATTALION OPERATIONS SEC

Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph 1/4-ton 2 wheel	1
Lchr gren 40mm	2
Rifle 5.56mm M16E1	11
Pistol auto cal .45	2
Revolver cal .38 PPS	3
Rdo set AN/VRC-46	1
Tel set TA-312/PT	2

ACFT SUPPLY CONTROL SEC

1 CPT	Stk Con Off	4474
1 SSG	Stk Con Supv	76H40
3 SP5	Mach Op SP	74D20
1 SP5	Stk Con SP	76H20
2 SP4	EAM Equip Op	74A10
4 SP4	Stk Rec SP	76H20
1 PFC	Asst EAM Equip Op	74A10
4 PFC	Stk Rec Clerk	76A10

Trk cgo 3/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Rifle 5.56mm M16E1	17
Tel set TA-312/PT	2

COMMUNICATIONS SECTION

1 SSG	Comm Chief	31F40
2 SGT	RATT Tm Chief	05C40
4 SP4	RATT Op	05C20
1 SP4	Rdo Mech	31B20
1 SP4	Sr Swbd Op	36A10
2 PFC	Swbd Op	36A10

Trk cgo 3/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Lchr gren 40mm	2

COMMUNICATIONS SECTION

Rifle 5.56mm M16E1	9
Pistol auto cal .45	2
Rdo set AN/VRC-46	2
Swbd tel manual SB-22/PT	2
Rdo set con gp AN/GRA-39	2
Tel set TA-312/PT	2

BATTALION SUPPLY SECTION

1 WO	Sup Tech	761A0
1 SFC	Bn Mtr Maint Sgt	63B40
1 SFC	Bn Sup Sgt	76K40
1 SP4	Gen Sup SP	76K20
1 SP4	Ord Part SP	76D20
2 PFC	Sup Clerk	76A10
1 SP4	Clerk Typist	71B30

Trk util 1/4-ton 4x4	1
Tlr amph 1/4-ton 2 wheel	1
Rifle 5.56mm M16E1	8
Rdo set AN/VRC-46	1
Tel set TA-312/PT	1

RADAR REPAIR SECTION

1 WO	Rdr Rep Tech	282A0
1 SSG	Rdr Rep Supv	26F40
1 SP6	Rdr Rep Insp	26F40
4 SP5	Sr Abn Rdr SP	26E20
5 SP5	Sur Equip Rpmn	41G20
3 SP4	Abn Rdr SP	26E20

Trk cgo 3/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Rifle 5.56mm M16E1	15

medical service as required, on an area basis, to divisional units operating in the brigade area. Normally, one medical company supports each brigade area.

36. HEADQUARTERS AND HEADQUARTERS COMPANY, AIRMOBILE DIVISION
BRIGADE (Three per airmobile division)

a. Composition. The composition of the brigade headquarters and headquarters company, airmobile division, is shown in figure 44.

b. Mission. The mission of the headquarters and headquarters company is to command and control attached combat and combat support elements in both training and combat operations.

c. Assignment. The company is organic to the airmobile division, TOE 67T.

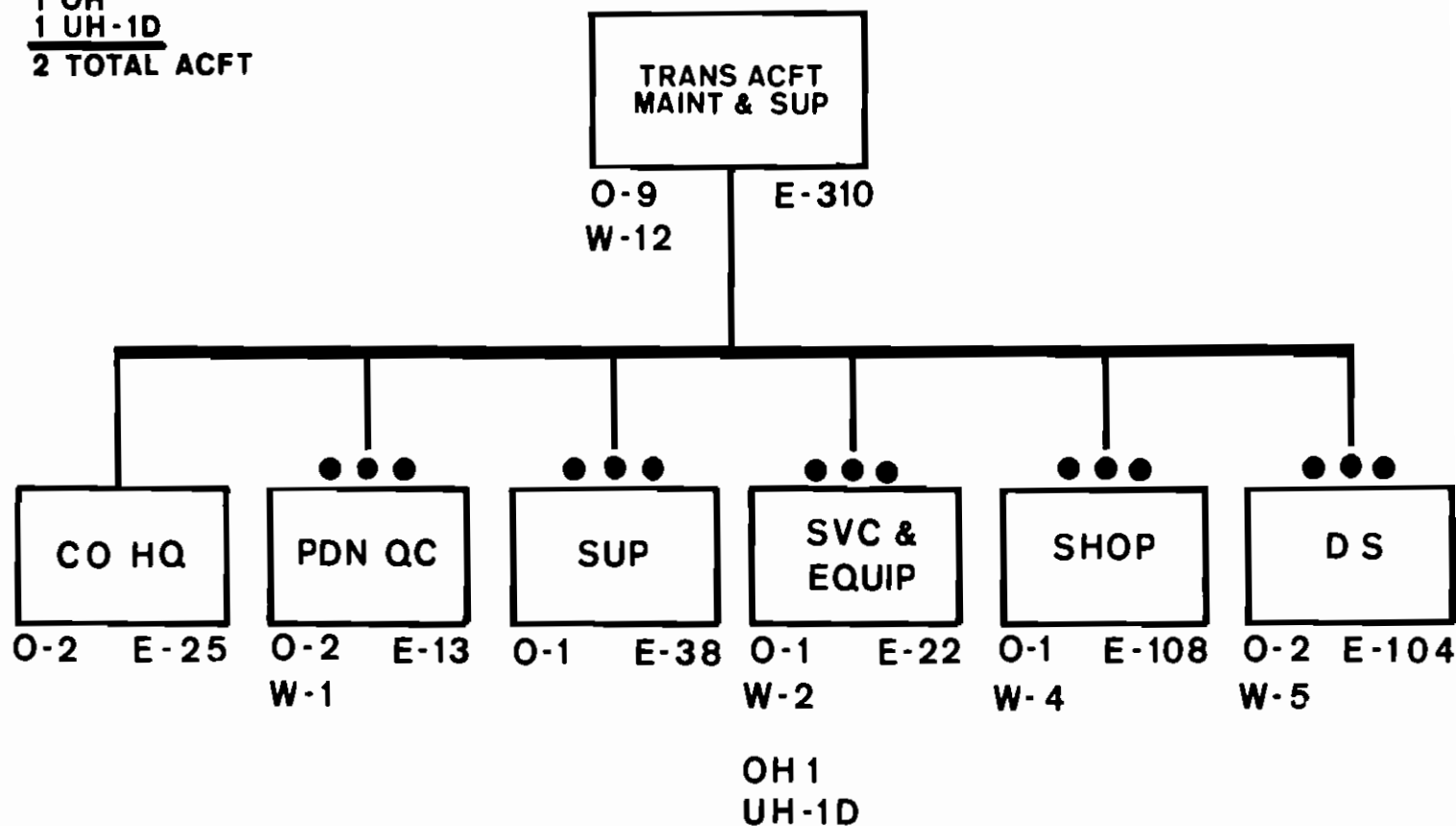
d. Capabilities. This unit has the following capabilities:

- (1) Commands attached elements of the airmobile division's combat and combat support elements in offensive and defensive combat operations.
- (2) Accepts or releases attached elements on short notice.
- (3) Provides messing facilities for elements attached to the brigade headquarters and headquarters company.
- (4) Conducts operations on a sustained 24-hour-a-day basis.
- (5) Supervises the movement and security of attached or supporting elements.
- (6) Establishes liaison with higher and other headquarters, as required.
- (7) Supervises tactical training of attached airmobile division elements.
- (8) Acts as emergency successor operational headquarters in the event of the destruction of division headquarters.
- (9) Provides Army aviation for command and control of brigade headquarters and attached infantry battalions.

e. Organization. The headquarters company (fig. 44) has organic an aviation platoon. The aviation platoon has eight observation helicopters and five UH-1D helicopters. This platoon provides the Army aviation for command and control of brigade headquarters and attached infantry battalions.

1 OH
1 UH-1D
2 TOTAL ACFT

114



NOTE. OH ARMED WITH XM 27.
UH-1D ARMED WITH M 23.

Figure 41. Transportation aircraft maintenance and supply company, transportation aircraft maintenance and supply battalion, airmobile division (TOE 55-407T).

DATA FOR FIGURE 41

COMPANY HEADQUARTERS

1 MAJ	Co Comd	64823
1 CPT	XO	64823
1 ISG	First Sgt	67Z50
1 SFC	Mess Steward	94B40
1 SSG	Sup Sgt	76K40
1 SGT	RATT Tm Chief	05C40
5 SP5	First Cook	94B20
1 SP4	Armorer	76K30
1 SP4	Co Clerk	71H20
4 SP4	Cook	94B20
2 SP4	RATT Op	05C20
1 SP4	Rec Clerk	71B20
1 SP4	Sr Swbd Op	31B20
1 SP4	Unit Sup SP	76K20
1 PFC	Cook's Helper	94H10
1 PFC	Lt Trk Dvr	71A10
1 PFC	Sup Clerk	76A10
1 PFC	Swbd Op	36A10
1 PFC	Wireman	36A10

Trk cgo 3/4-ton 4x4	2
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	2
Tlr amph 1/4-ton 2 wheel	1
Lchr gren 40mm	2
Lchr rkt 3.5 in	2
Mach gun lt flex	4
Rifle 5.56mm M16E1	23
Pistol auto cal .45	2
Revolver cal .38 PPS	2
Rdo set AN/VRC-47	2
Rdo set con gp AN/GRA-39	2
Swbd tel manual SB-22/PT	2
Tel set TA-312/PT	3
RATT AN/VSC-2	1

PRODUCTION AND QUALITY CONTROL SECTION

1 CPT	Acft Maint Off	64823
1 LT	Pdn Con Off	64823
1 WO	Quality Con Tech	671C0
1 MSG	Pdn Con Sgt	67Z50
1 SFC	Quality Con Sgt	67Z40
7 SP6	Acft Tech Insp	67W20
2 SP4	Clerk Typist	71B30
2 SP4	Shop Clerk	71B20

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph 1/4-ton 2 wheel	1
Lchr gren 40mm	2
Rifle 5.56mm M16E1	11
Pistol auto cal .45	4
Revolver cal .38 PPS	1
Tel set TA-312/PT	2

SUPPLY PLATOON HQ

1 CPT	Plat Ldr	4474
1 SFC	Plat Sgt	76H40
1 SP4	Rep Clerk	71B20

Trk util 1/4-ton 4x4	1
Tlr amph 1/4-ton 2 wheel	1
Rifle 5.56mm M16E1	3
Rdo set AN/VRC-46	1
Tel set TA-312/PT	1

PARTS REQ AND RECORDS SEC

1 SSG	Sec Sgt	76H40
1 SP5	Sr Parts Rec SP	76H20
1 SP5	Sr Req SP	76H20
2 SP4	Card Punch Op	74B20
2 SP4	Parts Rec SP	76H20

PARTS REQ AND RECORDS SEC

1 SP4	Rep Clerk	71B20
2 SP4	Req SP	76H20
1 PFC	Asst Card Punch Op	74B20
4 PFC	Sup Clerk	76A10

Lchr gren 40mm	2
Rifle 5.56mm M16E1	13
Pistol auto cal .45	2
Tel set TA-312/PT	1

STORAGE AND ISSUE SEC

1 SSG	Sec Sgt	76H40
2 SP6	Acft Tech Insp	67W20
1 SP5	Sr Trans Parts SP	76H20
3 SP4	(1 PFC) Packing-Crtg SP	56B20
3 SP4	Trans Parts SP	76H20
2 PFC	Forklift Op	56B20
2 PFC	Sup Clerk	76A10

Trk cgo 3/4-ton 4x4	1
Trk util 1/2-ton 4x4 mule	1
Tlr cgo 3/4-ton 2 wheel	1
Forklift trk 3,000 lb cap	2
Rifle 5.56mm M16E1	14
Tel set TA-312/PT	1

SHOP SUPPLY SECTION

1 SGT	Sec Sgt	76H40
3 SP4	Trans Parts SP	76H20
3 PFC	Sup Clerk	76A10

Trk util 1/2-ton 4x4 mule	1
Rifle 5.56mm M16E1	7
Tel set TA-312/PT	1

SERVICE AND EQUIP PLAT

1 CPT	Plat Ldr	64823
2 WO	Acft Maint Tech	671C0
1 SGT	Mtr Sgt	63B40
1 SP5	Crew Chief	67N20
1 SP5	Crew Chief	67N20
2 SP4	Acft Fueling SP	56C20
1 SP4	Avionics Equip Mech	31Q20
1 SP4	Equip Rec Clerk	71A10
1 SP4	Flt Op SP	71P20
1 SP4	Ord Parts SP	76020
2 SP4	Powerman	52B20
1 SP4	Rdo Mech	36B20
2 SP4	Wheel Veh Mech	63B20
2 SP4	Wkr Op	63B20
2 PFC	Afld Svc Attnd	67A10
2 PFC	Powerman Helper	52A10
2 PFC	Wheel Veh Mech Helper	63A10

Trk tk fuel 2 1/2-ton	1
Trk cgo 3/4-ton 4x4	2
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	2
Tlr amph 1/4-ton 2 wheel	1
Crane wheel mtd M60 3-ton	2
Lchr gren 40mm	2
Rifle 5.56mm M16E1	18
Pistol auto cal .45	2
Revolver cal .38 PPS	5
Rdo set AN/URC-10	2
Rdo set AN/VRC-24	1
Rdo set AN/VRC-47	1
Hel util UH-1D	1
Armt subsystem M23	1
Hel oban lt (OH)	1
Armt subsystem XM27	1
Tel set TA-312/PT	3

SHOP PLAT HEADQUARTERS

1 CPT	Plat Ldr	64823
1 SFC	Plat Sgt	67Z40
1 SSG	Asst Plat Sgt	67Z40
2 SP4	Shop Clerk	71B20

Trk util 1/4-ton 4x4	1
Tlr amph 1/4-ton 2 wheel	1
Rifle 5.56mm M16E1	4
Revolver cal .38 PPS	1
Tel set TA-312/PT	1

AVIONICS REPAIR SECTION

1 WO	Avionics Maint Tech	286A0
1 SFC	Sec Sgt	31Q40
12 SP5	Avionics Equip Rpmn	31Q30

Rifle 5.56mm M16E1	14
Tel set TA-312/PT	1

AIRCRAFT ENGINE REPAIR SEC

1 WO	Acft Maint Tech	671B0
1 SSG	Sec Sgt	67Z40
2 SP6	Tech Insp	67W20
8 SP5	Sr Acft Eng Rpmn	68B20
8 SP4	Acft Eng Rpmn	68B20
4 PFC	Acft Eng Rpmn Helper	68A10

Lchr gren 40mm	2
Rifle 5.56mm M16E1	22
Pistol auto cal .45	2
Tel set TA-312/PT	1

AIRCRAFT COMPONENT REP
SECTION (2)

1 WO	Acft Rep Tech	671B0
1 SSG	Sec Sgt	67Z40

AIRCRAFT COMPONENT REP
SECTION (2)

1 SGT	Asst Sec Sgt	67Z40
1 SP6	Tech Insp	67W20
1 SP5	Mach	44E20
1 SP5	Sr Acft Armt Rpmn	45J20
2 SP5	Sr Acft Elec Rpmn	68F20
2 SP5	Sr Acft Hyd Rpmn	68H20
1 SP5	Sr Acft Inst Rpmn	68J20
3 SP5	Sr Airframe Rpmn	68G20
1 SP5	Sr Power Train Rpmn	68D20
1 SP5	Sr Rotor-Prop Rpmn	68A20
1 SP4	Acft Armt Rpmn	42710
2 SP4	Acft Elec Rpmn	68F20
2 SP4	Acft Hyd Rpmn	68H20
1 SP4	Acft Inst Rpmn	68J20
7 SP4	Airframe Rpmn	68G20
1 SP4	Power Train Rpmn	68D20
1 SP4	Rotor-Prop Rpmn	68E20
3 PFC	Acft Rpmn Helper	68A10
1 PFC	Tool Room Keeper	68A10

Lchr gren 40mm	1
Rifle 5.56mm M16E1	34
Pistol auto cal .45	1

DIRECT SUPPORT PLAT HQ

1 CPT	Plat Ldr	64823
1 LT	Acft Maint Off	64823
1 SFC	Plat Sgt	67Z40
1 SSG	Asst Plat Sgt	67Z40
2 SP4	Shop Clerk	71B20

Trk util 1/4-ton 4x4	1
Tlr amph cgo 1/4-ton	1
Rifle 5.56mm M16E1	4
Revolver cal .38 PPS	2
Tel set TA-312/PT	1

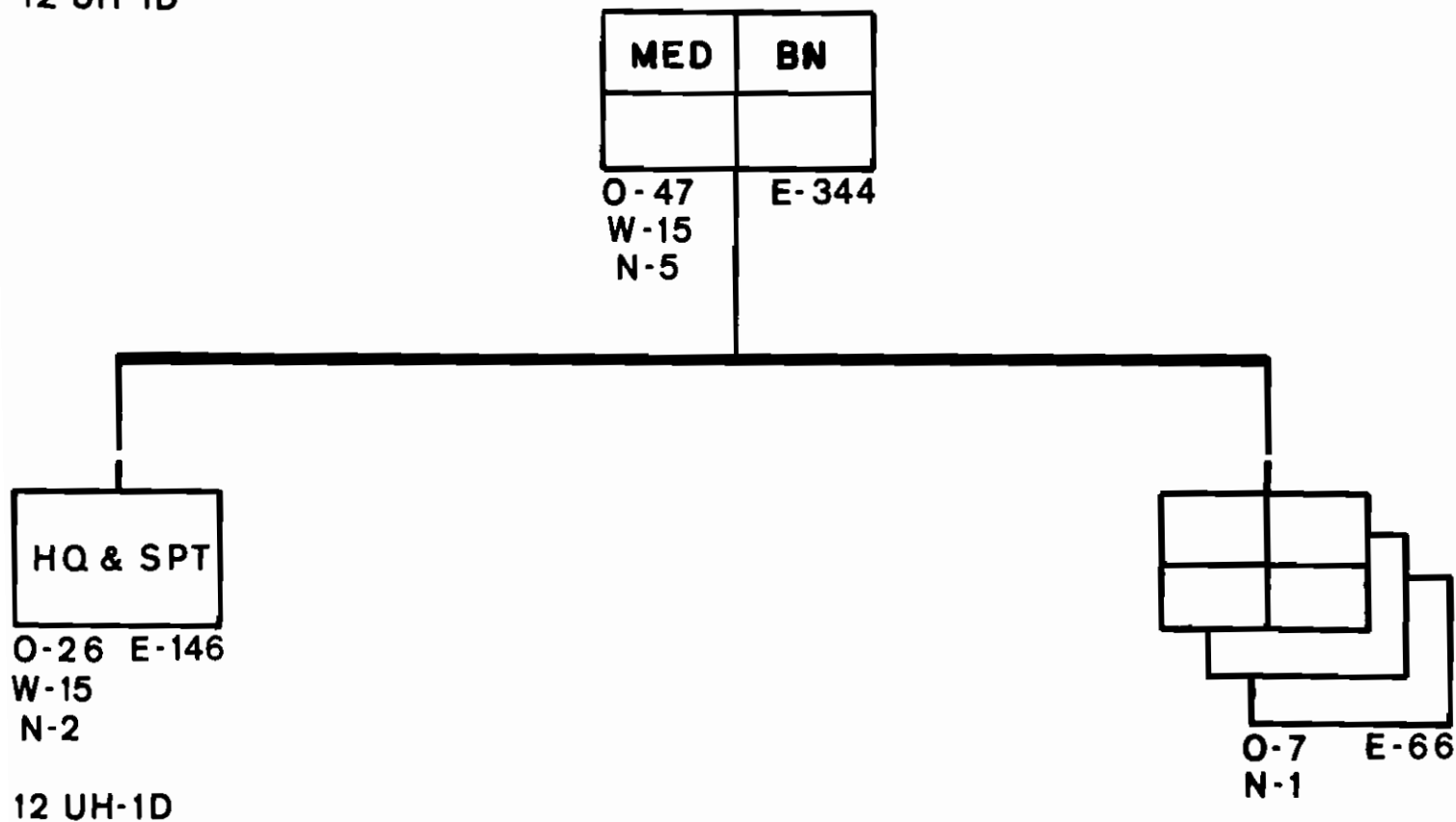
DATA FOR FIGURE 41 - (continued)

DIRECT SUPPORT SECTIONS (5)

1 WO	Acft Maint Tech	671C0
1 SSG	Sec Sgt	67Z40
1 SP6	Tech Insp	67W20
7 SP5	Sr Hel Rpmn	67Q20
1 SP4	Airframe Rpmn	68G20
7 SP4	Hel Rpmn	67Q20
3 PFC	Hel Rpmn Helper	67A10

Trk cgo 3/4-ton 4x4	1
Trk util 1/2-ton 4x4 mule . . .	1
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph 1/4-ton 2 wheel . . .	1
Lchr gren 40mm	2
Rifle 5.56mm M16E1	18
Pistol auto cal .45	2
Revolver cal .38 PPS	1
Rdo set AN/VRC-46	1
Tel set TA-312/PT	1

12 UH-1D



NOTE. NONE OF THESE UH-1D ARE ARMED.

Figure 42. Medical battalion, airmobile division (TOE 8-25T).

DATA FOR FIGURE 42

RECAPITULATION

VEHICULAR

Trk tk fuel 2 1/2-ton 6x6	1
Trk cgo 2 1/2-ton 6x6	3
Trk cgo 3/4-ton 4x4	3
Trk util 1/4-ton 4x4	16
Util veh 2 wheel	2
Trk amb fl 1/4-ton 4x4	12
Tlr cgo 1 1/2-ton 2 wheel . . .	2
Tlr cgo 3/4-ton 2 wheel . . .	3
Tlr amph 1/4-ton 2 wheel . . .	16

ARMAMENT

Rifle 5.56mm M16E1	301
Pistol auto cal .45	31
Revolver cal .38 PPS	46

COMMUNICATIONS

Rdo set AN/URC-10	12
Rdo set AN/PRC-25	4
Rdo set AN/VRC-47	14
Rdo set AN/VRC-24	1
Rdo set con gp AN/GRA-39 . .	10
Rdo set con gp AN/GRA-74 . .	1
RATT set AN/VSC-2	1
Swbd tel manual SB-22/PT . .	1
Tel set TA-312/PT	23

AIRCRAFT

Hel util UH-1D	12

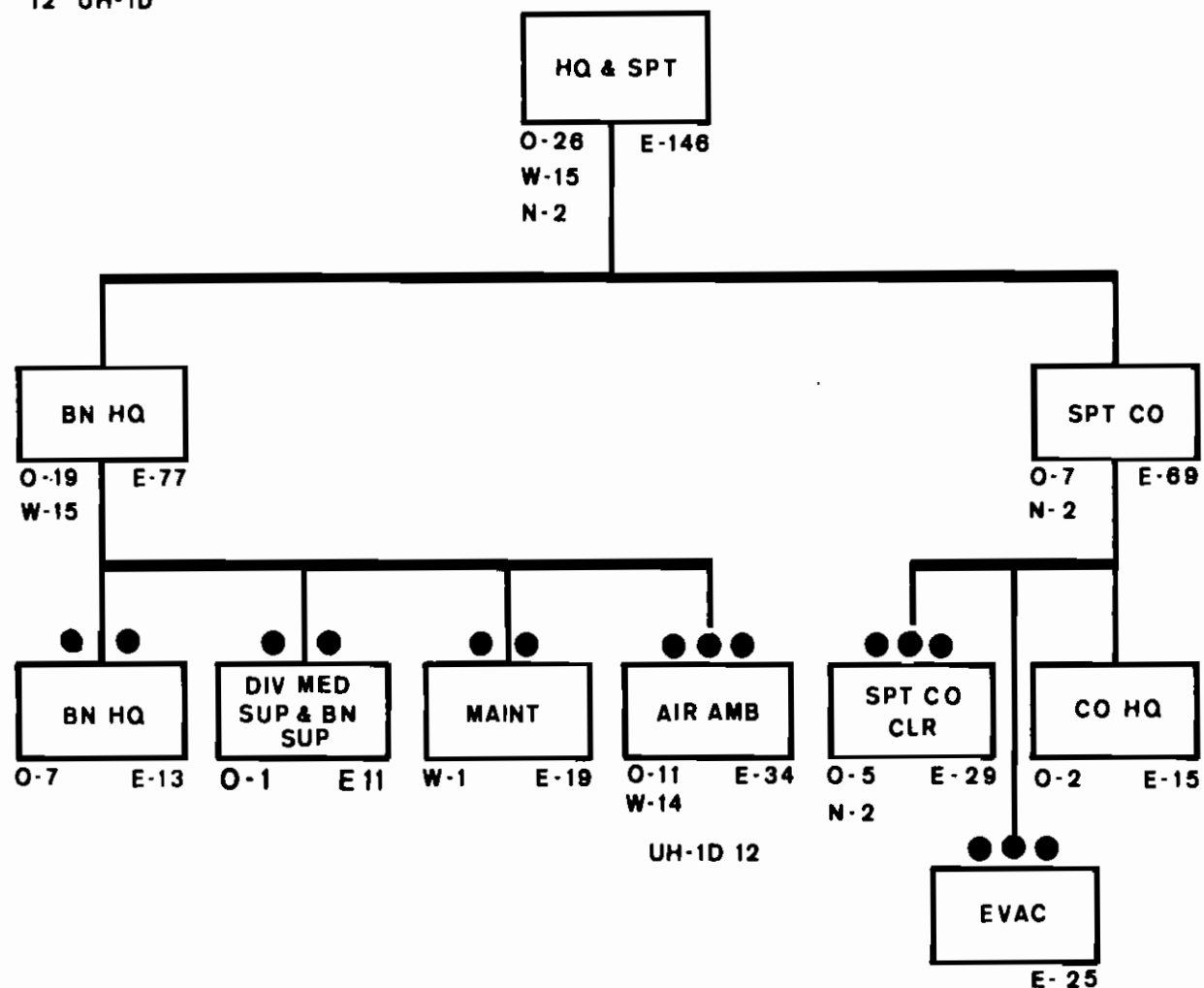


Figure 43. Headquarters and support company, medical battalion, airmobile division (TOE 8-26T).

DATA FOR FIGURE 43

BATTALION HQ SECTION

1 LTC	Bn Comd	3500
1 MAJ	XO	3506
1 MAJ	S3	2162
1 CPT	Adj - SI	2110
1 CPT	Maint Off	64823
1 CPT	S4	4010
1 LT	Social Worker	3606
1 SGM	Sgt Maj	91B50
1 MSG	Op Sgt	91B50
1 SFC	Air Op Sgt	91B40
1 SFC	Pers Stf NCO	71H40
1 SSG	Comm Chief	31F40
1 SGT	RATT Trm Chief	05C40
2 SP4	Clerk Typist	71B30
2 SP4	RATT Op	05C20
1 SP4	Swbd Op	36A10
1 PFC	Lt Trk Dvr	71A10
1 PFC	Mail Divr Clerk	71A10

Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	2
Tlr cgo 3/4-ton 2 wheel	1
Tlr amph 1/4-ton 2 wheel	2
Rifle 5.56mm M16E1	16
Pistol auto cal .45	3
Revolver cal .38 PPS	1
Rdo set AN/VRC-24	1
Rdo set AN/VRC-47	2
Rdo set con gp AN/GRA-39	2
Rdo set con gp AN/GRA-74	1
RATT set AN/VSC-2	1
Swbd tel manual SB-22/PT	1
Tel set TA-312/PT	4

DIV MED SUP AND BN SUP SECTION

1 LT	Med Sup Off	4490
1 SFC	Bn Sup Sgt	76K40
1 SFC	Div Med Sup Sgt	76G40

DIV MED SUP AND BN SUP SECTION

1 SP5	Pharmacy SP	91Q20
1 SP4	Acft Refuel SP	56C20
1 SP4	Med Sup SP	76G20
2 SP4	Unit Sup SP	76K20
1 PFC	Med Sup Clerk	76A10
1 PFC	Petri Sup Clerk	56A10
2 PFC	Sup Clerk	76A10

Trk tk fuel 2 1/2-ton	1
Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	1
Rifle 5.56mm M16E1	12
Tel set TA-312/PT	1

MAINTENANCE SECTION

1 WO	Acft Rep Tech	671B0
1 SSG	Maint Supv	67R40
1 SGT	Mtr Maint Sgt	63B40
2 SP6	Tech Insp	67W20
2 SP5	Sr Hel Mech	67N20
1 SP4	Acft Parts SP	66H20
2 SP4	Avn Elec Equip Mech	31Q20
1 SP4	Equip Rec Clerk	76B20
2 SP4	Hel Mech	67N20
1 SP4	Med Equip Rpmn	35G20
1 SP4	Powerman	52B20
1 SP4	Rdo Mech	31B20
1 SP4	Rep Parts SP	76D20
2 SP4	Wheel Veh Mech	63B20
1 PFC	Wheel Veh Mech Helper	63A10

Trk cgo 2 1/2-ton 6x6 LWB	2
Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1
Tlr cgo 1 1/2-ton 2 wheel	1

MAINTENANCE SECTION

Tlr cgo 3/4-ton 2 wheel	1
Tlr amph 1/4-ton 2 wheel	1
Rifle 5.56mm M16E1	20
Tel set TA-312/PT	1

AIR AMBULANCE PLAT HQ

1 LT	Plat Ldr	1981
1 LT	Op Off	1982
1 PSG	Plat Sgt	91B40
1 SP4	Flt Op SP	71P20

Trk util 1/4-ton 4x4	1
Tlr amph 1/4-ton 2 wheel	1
Rifle 5.56mm M16E1	2
Revolver cal .38 PPS	2
Rdo set AN/PRC-25	1
Tel set TA-312/PT	1

AIR AMBULANCE SECTION

1 LT	Sec Chief	1981
14 WO	Evac Pilot	062B0
8 SP5	Air Amb Aidman	91B20
8 SP5	Hel Crew Chief	67N20

Rifle 5.56mm M16E1	8
Revolver cal .38 PPS	23
Rdo set AN/URC-10	8
Rdo set AN/PRC-25	3
Hel util UH-1D	8

CRASH RESCUE SECTION

1 LT	Sec Chief	1981
7 LT	Evac Pilot	1981
4 SP5	Air Amb Aidman	91B30
4 SP5	Hel Crew Chief	67N20
4 SP4	Crash Rescue SP	51M20

CRASH RESCUE SECTION

4 SP4	Med Aidman	91B20
Rifle 5.56mm M16E1		4
Revolver cal .38 PPS		20
Rdo set AN/URC-10		4
Hel util UH-1D		4

SUPPORT COMPANY HQ

1 MAJ	Co Comd	3150
1 CPT	XO	3506
1 1SG	First Sgt	91B50
1 SSG	Mess Steward	94B40
1 SSG	Sup Sgt	76K40
3 SP5	First Cook	94B20
1 SP4	Co Clerk	71H20
3 SP4	Cook	94B20
1 SP4	Unit Sup SP	76K20
1 SP4	Wheel Veh Mech	63B20
1 PFC	Cook's Helper	94A10
1 PFC	Sup Clerk	76A10
1 PFC	Wheel Veh Mech Helper	63000
Trk util 1/4-ton 4x4		2
Tlr amph 1/4-ton 2 wheel		2
Veh util 2 wheel		1
Rifle 5.56mm M16E1		16
Pistol auto cal .45		1
Rdo set AN/PRC-47		3
Rdo set con gp AN/GRA-39		2
Tel set TA-312/PT		4

EVACUATION PLATOON

1 PSG	Plat Sgt	91B40
12 SP4	Amb Dvr	91B20
12 PFC	Amb Orderly	91A10

EVACUATION PLATOON

Trk amb 1/4-ton	12
Rifle 5.56mm M16E1	25

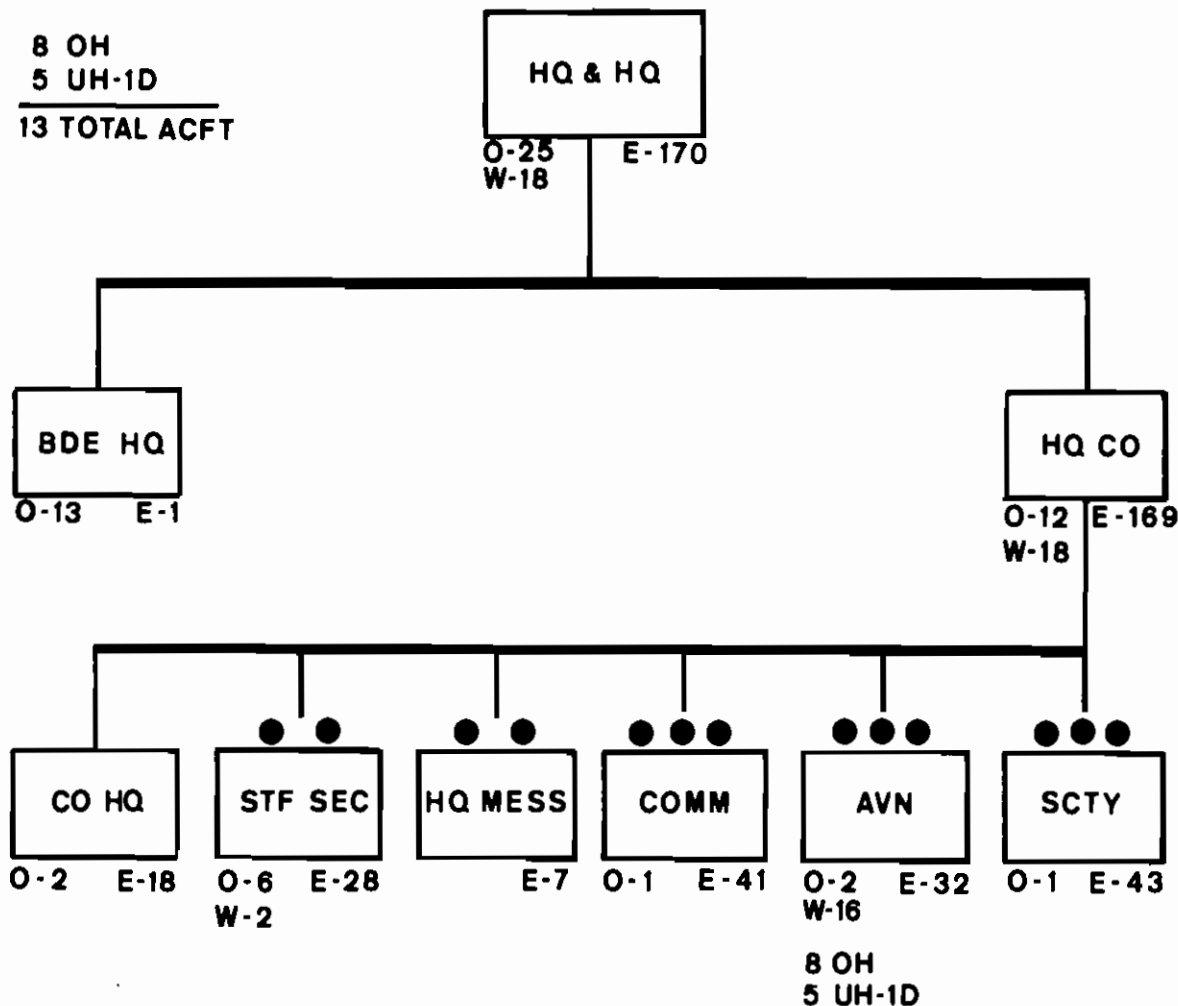
SUPPORT CO CLEARING PLATOON

1 CPT	Plat Comd	3150
1 CPT	Dental Off	3170
2 CPT	Gen Med Off	3100
1 LT	Med Op Asst	3506
2 LT	Anes	3445
1 PSG	Plat Sgt	91B40
2 SSG	Sec Sgt	91B40
1 SP7	Sr Med Asst	91C20
1 SP6	Clinical Psych SP	91G20
2 SP6	Med Asst	91C20
2 SP6	Sr Op Room SP	91D20
1 SP6	Social Work SP	91H20
1 SP5	Med Lab SP	92B20
2 SP5	Op Room SP	91D20
4 SP5	Sr Med Aidman	91B30
1 SP5	X-Ray SP	91P20
1 SP4	Dental Asst	91E20
4 SP4	Med Aidman	91B10
1 SP4	Rec-Fwd Clerk	71G20
1 SP4	Sr Litter Bearer	91B20
1 PFC	Asst Rec-Fwd Clerk	71A10
3 PFC	Litter Bearer	91A10
Trk util 1/4-ton 4x4		1
Tlr amph 1/4-ton 2 wheel		1
Pistol auto cal .45		6
Rifle 5.56mm M16E1		30

(THIS PAGE INTENTIONALLY LEFT BLANK.)

8 OH
5 UH-1D

13 TOTAL ACFT



NOTE. OH ARMED WITH XM27.
UH-1D ARMED WITH M23.

Figure 44. Headquarters and headquarters company, airmobile division brigade (TOE 67-42T).

DATA FOR FIGURE 44

BRIGADE HEADQUARTERS

1 COL	Bde Comd	1542
1 LTC	Deputy Comd	1542
1 MAJ	Ch	5310
3 CPT	Ch	5310
1 MAJ	S1	2110
1 MAJ	S2	59301
1 MAJ	S3	2162
1 MAJ	S4	4010
1 MAJ	Sig Off	60210
1 MAJ	Staff Surg	3000
1 CPT	Cml Off	57314
1 SGM	Sgt Major	11G50

Pistol auto cal .45 10

COMPANY HEADQUARTERS

1 CPT	Co Comd	2900
1 LT	XO	2900
1 ISG	First Sgt	11G50
1 SSG	Sup Sgt	76K40
1 SGT	Mtr Sgt	63B40
1 SP4	Armorer	76K30
1 SP4	Co Clerk	71H20
1 SP4	Equip Repts Clerk	71B20
1 SP4	Powerman	52B20
1 SP4	Rep Parts SP	76K20
2 SP4	Wheel Veh Mech	63B20
5 PFC	Lt Trk Dvr	64A10
2 PFC	Mech Helper	64A10
1 PFC	Sup Clerk	76K10

Trk cgo 3/4-ton 4x4 wvn . . .	6
Trk platform util 1/2-ton . . .	1
Trk util 1/4-ton 4x4	1
Util veh 2 wheel	3
Tlr cgo 3/4-ton 2 wheel	6
Tlr amph cgo 1/4-ton 2 wheel	1
Lchr gren 40mm	1

COMPANY HEADQUARTERS

Mach gun lt flex	2
Rifle 5.56mm M16E1	18
Pistol auto cal .45	2
Tel set TA-312/PT	2

STAFF SECTION

1 CPT	Asst S2	9301
1 CPT	Asst S3	2162
1 CPT	S3 Air	2163
1 CPT	Asst S4	4010
2 CPT	Ln Off	1542
1 WO	Food Advisor	941A0
1 WO	Unit Sup Tech	761A0
1 MSG	Op Sgt	11F50
1 MSG	Chief Sup Sgt	76K50
1 MSG	Intel Sgt	11F50
1 MSG	Asst Op Sgt	11F50
1 SFC	Air Intel Sgt	11F40
1 SFC	Food Serv Supv	94B40
1 SFC	Asst Intel Sgt	11F40
1 SFC	Pers Staff NCO	71H40
1 SSG	Cml NCO	54E40
1 SSG	Flt Op Sgt	71P40
4 SP4	Ch Asst	71M20
3 SP4	Clerk Typist	71B30
1 SP4	Gen Draftsman	91A10
1 SP4	Gen Sup SP	76K20
1 SP4	Med Aidman	91B20
1 SP4	Op Asst	11F20
1 SP4	Stenographer	71C20
1 SP4	Sup SP	76K20
5 PFC	Lt Trk Dvr	11B10

Trk util 1/4-ton 4x4	8
Tlr amph cgo 1/4-ton 2 wheel	8
Lchr gren 40mm	2
Rifle 5.56mm M16E1	26
Pistol auto cal .45	10

STAFF SECTION

Rdo set AN/VRC-46 mtd	
in 1/4-ton trk	1
Rdo set AN/VRC-47 mtd	
in 1/4-ton trk	2
Rdo set AN/VRC-49 mtd	
in 1/4-ton trk	2
Rdo set con gp AN/GRA-39 .	1

HEADQUARTERS MESS TEAM

1 SSG	Mess Steward	94B40
3 SP5	First Cook	94B20
2 SP4	Cook	94B20
1 PFC	Cook's Helper	94A10

Trk platform util	
1/2-ton 4x4	1
Lchr gren 40mm	2
Rifle 5.56mm M16E1	5
Pistol auto cal .45	2

COMMUNICATIONS PLATOON HQ

1 LT	Plat Ldr	0200
1 MSG	Comm Chief	31H50

Rifle 5.56mm M16E1	2

COMM CENTER & WIRE SECTION

1 SSG	Sec Sgt	31F40
1 SP5	COMMEN Supv	72B40
1 SP5	Wire Tm Chief	31F40
1 SP4	Cryptographer	72B20
1 SP4	Sr Fld Swbd Op	36A10
1 SP4	Sr Fld Wireman	36A10
1 SP4	Sr Msg Clerk	36A10
2 SP4	tt Op	72B20
4 PFC	Fld Wireman	36A10

COMM CENTER & WIRE SECTION

2 PFC	Msg Clerk	36A10
2 PFC	Msgr	36A10
2 PFC	Swbd Op	36A10
1 PVT	Asst Msgr	36A10

Trk platform util 1/2-ton 4x4 .	2
Trk util 1/4-ton 4x4	1
Tlr amph cgo 1/4-ton 2 wheel	1
Rifle 5.56mm M16E1	20
Electronic tt scty equip	
TSEC/KW-7	1
tt set AN/GGC-3	1
tt set AN/PGC-2	1
Swbd tel manual SB-22/PT . .	4
Tel set TA-312/PT	26
Tml strip TM-184	8
Tml tg TH-22/TG	1

RADIO SECTION

1 SSG	Sec Ch	05C40
1 SGT	Rdo tt Tm Chief	05C40
1 SP5	Sr Fld Rdo Mech	31B20
1 SP4	Fld Rdo Mech	31B20
2 SP4	RATT Op	05C20
7 SP4	Sr Rdo Op	05B20
7 PFC	Rdo Op	05B20

Trk platform util 1/2-ton 4x4 .	1
Trk util 1/4-ton 4x4	3
Tlr amph cgo 1/4-ton 2 wheel	3
Rifle 5.56mm M16E1	20
Con gp AN/GRA-6	1
Rdo set AN/PRC-25	12
Rdo set AN/PRC-41 w/charge	1
Rdo set AN/PRC-47	3
Rdo set AN/VRC-24 mtd	
in 1/4-ton trk	1

RADIO SECTION

Rdo set AN/VRC-46	4
Rdo set AN/VRC-49 mtd	
in 1/4-ton trk	2
Rdo set con gp AN/GRA-39 . .	8
Reeling mach cable hand	
RL-39	1
Rdo set con gp AN/GRA-74 . .	1
RATT set AN/VSC-2	1
COMMEN AN/ASC-5	1

AVIATION PLATOON

1 CPT	Plat Comd	1983
1 CPT	Afld Op Off	1982
1 WO	Main Sec Chief	671C0
15 WO	Hel Pilot	062B0
1 SFC	Plat Sgt	67R40
1 SSG	Maint Supv	67R40
1 SP6	Tech Insp	67W20
13 SP5	Hel Crew Chief	67N20
4 SP5	Hel Mech	67N20
1 SP5	Sr Con Twr Op	93B20
1 SP5	Sr Flt Op SP	71P20
2 SP5	Sr Hel Mech	67N20
1 SP4	Avn Elec Equip Mech	31Q20
1 SP4	Con Twr Op	93B20
1 SP4	Equip Rec Clerk	71B20
1 SP4	Flt Op SP	71P20
2 SP4	Petr Storage SP	71P20
1 SP4	Trans Parts SP	76H20
1 PFC	Con Twr Op Helper	93B20

Trk tk fuel servicing	
2 1/2-ton 6x6	1
Trk platform 1/2-ton	
util 4x4	1
Trk cgo 3/4-ton 4x4	2
Trk util 1/4-ton 4x4	1
Tlr cgo 3/4-ton 2 wheel . . .	1

AVIATION PLATOON

Tlr amph cgo 1/4-ton	
2 wheel	1
Lchr gren 40mm	3
Rifle 5.56mm M16E1	15
Pistol auto cal .45	3
Revolver cal .38 pol sp	
4 in barrel	32
Con gp AN/GRA-6	1
Rdo set AN/URC-10	13
Rdo set AN/PRC-25	3
Rdo set AN/VRC-24 mtd	
in 1/4-ton trk	1
Rdo set AN/VRC-46 mtd	
in 1/4-ton trk	1
Rdo set con gp AN/GRA-39 .	1
Hel util UH-1D w/armt	
subsystem 7.62mm mach	
gun M23	5
Hel obsn lt (OH) w/armt	
subsystem hel 7.62mm	
XM27	8

SECURITY PLATOON HQ

1 LT	Plat Ldr	1542
1 SFC	Plat Sgt	11B40
1 PFC	Rdo Tel Op	11B10
Trk util 1/4-ton 4x4		1
Flame thrower portable . . .		1
Lchr gren 40mm		1
Rifle 5.56mm M16E1		2
Pistol auto cal .45		1
Rdo set AN/PRC-25		1
Rdo set con gp AN/GRA-39 .		1
Tel set TA-1/PT		6

DATA FOR FIGURE 44 - (continued)

(3) RIFLE SQUADS

1 SSG	Sqd Ldr	11B40
2 SGT	Tm Ldr	11B40
2 SP4	Auto Rifleman	11B20
2 SP4	Gren	11B20
3 PFC	Rifleman	11B10

Lchr gren 40mm	2
Rifle 5, 56mm M16E1	8
Pistol auto cal .45	2
Rdo set AN/PRC-25	1

WEAPON SQUAD

1 SSG	Sqd Ldr	11B40
4 SP4	Mach Gnr	11B20
2 PFC	Ammo Bearer	11B10
4 PFC	Asst Mach Gnr	11B10

Trk util 1/4-ton 4x4	2
Tlr amph cgo 1/4-ton 2 wheel	2
Mach gun lt flex	4
Pistol auto cal .45	8
Rifle 5, 56mm M16E1	3
Rdo set AN/PRC-25	2

Section II. INFANTRY DIVISION AVIATION

37. THE INFANTRY DIVISION AVIATION BATTALION

a. General.

- (1) Composition. The composition of the infantry division aviation battalion is shown in figure 45.
- (2) Mission. The mission of the infantry division aviation battalion is to provide aviation support for the division headquarters, division support command, and other divisional units without organic aircraft; general support and reinforcement to units with organic aircraft; and an aviation special staff section for the division headquarters.
- (3) Assignment. The aviation battalion is organic to the infantry division, TOE 7.
- (4) Capabilities. At full strength, the infantry division aviation battalion provides -
 - (a) Command, control, staff planning, communications, and supervision of operations for companies of the battalion and attached units.
 - (b) Aviation special staff personnel for the division headquarters.
 - (c) Air messenger service, aerial radio relay, and field wire-laying service by aircraft as required by the division headquarters.
 - (d) Participation in airmobile combat operations - capable of lifting one dismounted infantry company in one lift using organic aircraft.
 - (e) Operation of one instrumented airfield with terminal flight facilities to include ground-controlled approach.
 - (f) Aircraft to support the division headquarters, division support command, and other divisional units without organic aircraft.
 - (g) Aircraft for general support and reinforcement to units with organic aircraft.
 - (h) Augmentation for aeromedical evacuation.
 - (i) Reconnoitering and marking of drop or landing sites to insure accurate delivery of personnel and material by paratroop or landing operations.
 - (j) Navigation and control assistance to Army aircraft in the objective area.

Note. Units of this battalion are dependent upon the division administration company for personnel administration.

4 OH - 6A (XM27)
 6 UH - 1B/C (XM21, M5)
27 UH - 1D (M23)
37 TOTAL

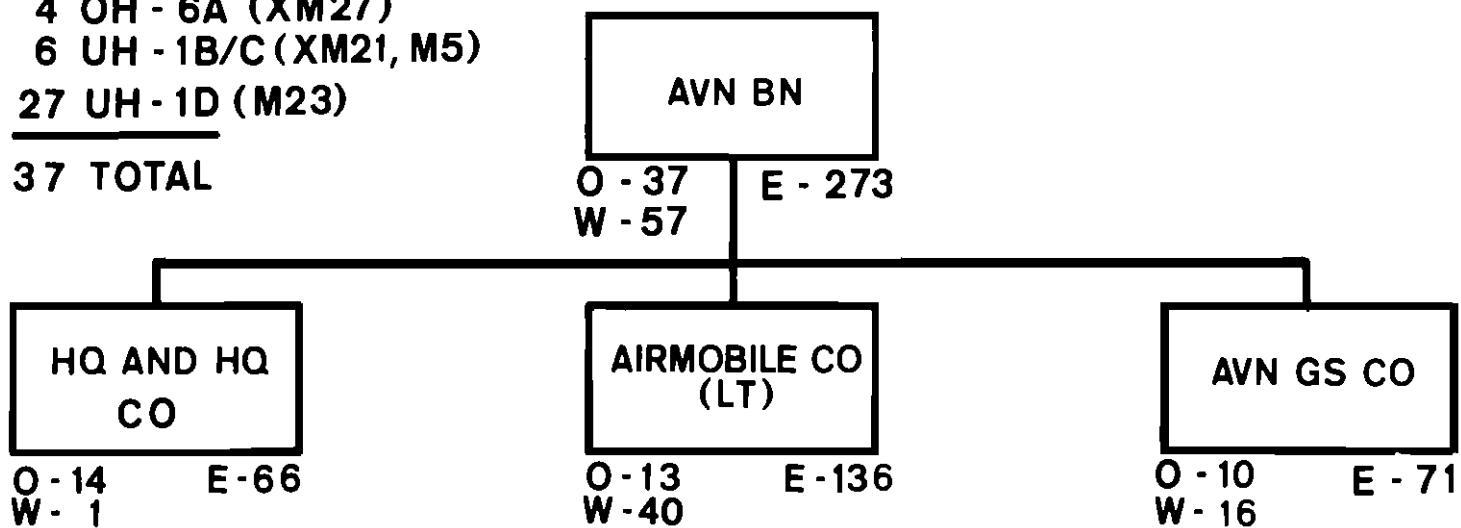


Figure 45. Aviation battalion, infantry division (TOE 1-75G).

- (5) Organization. The infantry division aviation battalion consists of a headquarters and headquarters company, an airmobile company (light), and an aviation general support company. The aviation battalion headquarters functions as the tactical controlling headquarters for the employment of aviation units assigned or attached to the aviation battalion.
- (6) Concept of employment. The infantry division aviation battalion is not normally employed as a whole unit; instead, its elements are assigned missions within their capabilities to provide continuous support to units of the division.

b. Aviation Battalion Headquarters. The infantry division aviation battalion headquarters is normally located in the vicinity of the division instrumented airfield. To reduce vulnerability to guerrilla action, subordinate units of the battalion, particularly the airmobile company, are usually dispersed close to the division reserve.

- (1) The aviation battalion commander assigns specific tasks to appropriate aviation companies of the battalion based on their capabilities and the type of mission to be performed. He may, when directed by the division commander, exercise operational control over all other organic aviation elements of the division in order to increase the total organic aviation capability. In addition, he advises the division staff on all matters pertaining to aviation in the division and, whenever feasible, recommends the integration of aviation in support of division operations.
- (2) The aviation battalion commander is also the division aviation officer. While filling both positions, he is responsible for keeping the division commander informed and advised on all matters concerning the employment of elements of the battalion and all other organic and nonorganic Army aviation units and elements supporting the division.
- (3) As division aviation officer, the aviation battalion commander prepares the aviation annex of all division orders, and recommends to the division G3 the allocation of Army aviation means to support the requirements of the division.
- (4) The division aviation officer may exercise operational control, when delegated by the division commander, of all Army aviation units and elements assigned, attached, or under operational control of the command.
- (5) Upon receipt of a specific mission, the aviation battalion commander assigns it to the appropriate aviation company. The company commander will analyze the requirement and assign it to the appropriate platoon, insuring that timely planning and coordination are effected between elements of the units concerned. It is the aviation unit commander's responsibility to effect liaison with the supported unit when assigned a mission. When assigned the mission, the platoon and section commanders of the aviation companies coordinate with and advise the supported unit commander on all aviation matters. Planning will be accomplished to insure coordination and communication between the supported commander and the supporting aviation company.

c. Headquarters and Headquarters Company.

- (1) Composition. The composition of the headquarters and headquarters company, infantry division aviation battalion, is shown in figure 46.
- (2) Mission. The mission of the headquarters and headquarters company, infantry division aviation battalion, is to furnish command, control, administration, communications, battalion level organizational maintenance, and supply for the aviation battalion; and to provide aviation special staff personnel for the division headquarters.
- (3) Assignment. The headquarters and headquarters company is organic to the aviation battalion, infantry division, TOE 1-75G.
- (4) Capabilities. At full strength, the headquarters and headquarters company provides -
 - (a) Command, control, staff planning, communications, and operational supervision for companies of the battalion and attached units.
 - (b) Aviation special staff personnel for the division headquarters.
 - (c) Personnel to supervise battalion supply, maintenance, and administration for organic and attached units.
 - (d) Operation of one instrumented airfield with terminal flight facilities to include ground control approach.
 - (e) Operation of a central aircraft communication and control facility.
 - (f) Unit medical service to the division base airfield and elements of the aviation battalion.
 - (g) Reconnoitering and marking of drop or landing sites to insure accurate delivery of personnel and material, and to assist in navigation and control of Army aircraft in the objective area.

Note. This unit is dependent upon the division administration company for personnel administration and upon the aviation general support company, aviation battalion, for mess.

- (5) Limitations. The headquarters and headquarters company has the following limitations:
 - (a) Operation of the instrumented airfield is influenced by surrounding terrain and enemy electronic countermeasures.
 - (b) A limited defense capability against hostile ground and air attack.
 - (c) The special staff must be augmented by personnel from the resources of the battalion to provide 24-hour capability of the Army aviation element in the divisional tactical operations center (DTC).

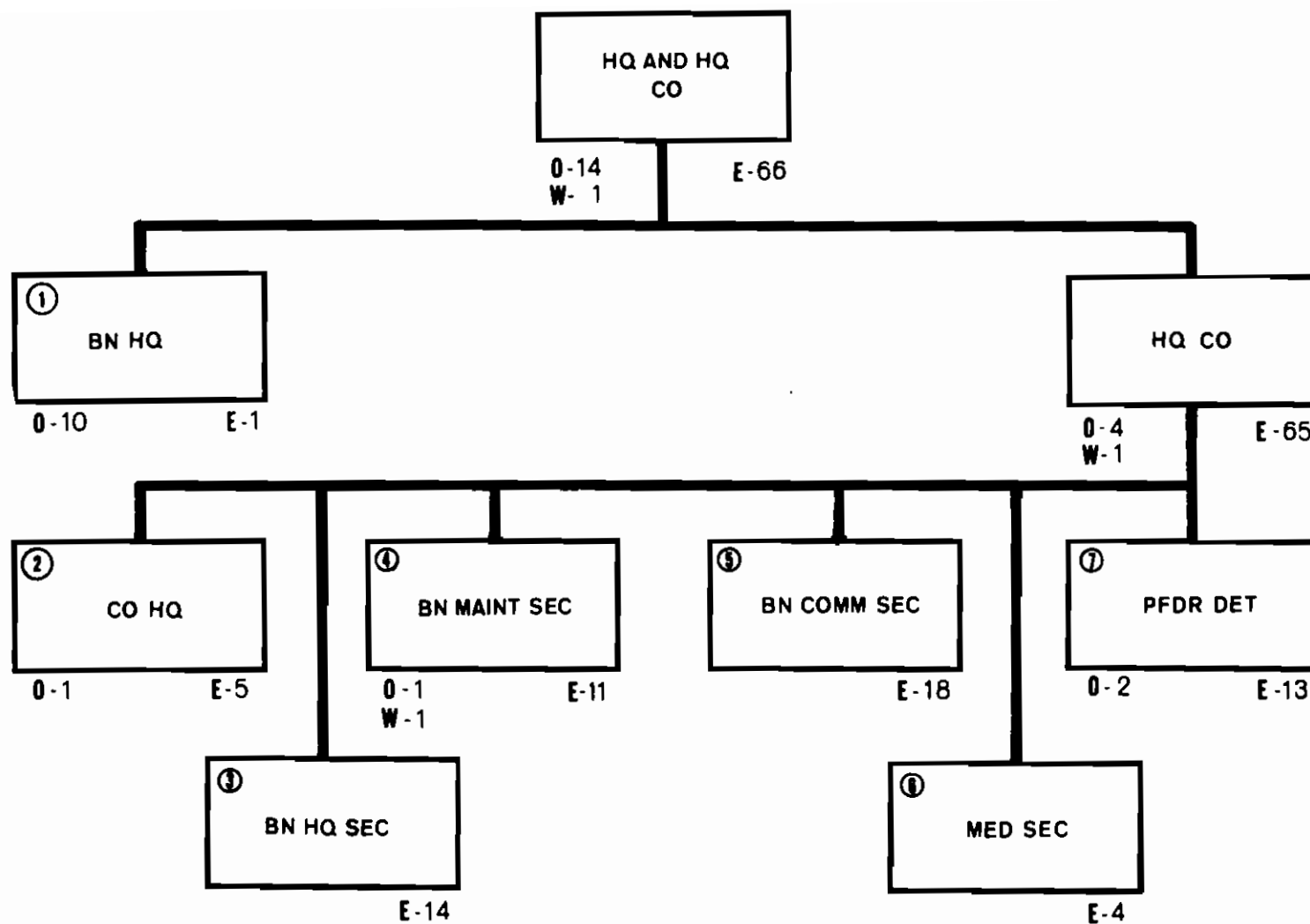


Figure 46. Headquarters and headquarters company, aviation battalion, infantry division (TOE 1-76G).

DATA FOR FIGURE 46*

1 BATTALION HEADQUARTERS

1 LTC	Bn CO	1983	13, 50
1 MAJ	Asst Div Avn Off	2518	13
1 MAJ	XO	1983	13
1 MAJ	S3	62162	13, 47
1 CPT	Avn Safety Off	7423	13
1 CPT	S1 - Adj	2110	11
1 CPT	S2	69301	13, 31
1 CPT	S4	4010	11
1 CPT	SigO	60210	13
1 CPT	Surg	3160	13
1 E-9	Sgt Maj	67N50	

2 COMPANY HEADQUARTERS

1 CPT	Co Comd	1983	13
1 E-8	First Sgt	67N50	
1 E-6	Sup Sgt	76K40	
1 E-4	Armorer	76K30	01
1 E-4	Co Clerk	71H20	
1 E-3	Lt Trk Dvr	71A10	

Radiacmeter IM-93/UD	6
Radiacmeter IM-174/PD	1
Tlr cgo 1/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	1
Trk cgo 2 1/2-ton 6x6	1
Trk util 1/4-ton 4x4	1

3 BATTALION HEADQUARTERS SECTION

1 E-8	Op Sgt	71P50	08
1 E-7	Intel Sgt	71P40	07
1 E-7	Mat Readiness		
	NCO	67N40	
1 E-7	Pers Stf NCO	71H40	
1 E-7	Sup Supv	76K40	
1 E-6	Cml Op Sgt	54F40	

1 E-5	Sr Op SP	71P20	
2 E-4	Clerk Typist	71B30	01
1 E-4	Op SP	71P20	01
1 E-4	Unit Sup SP	76K20	01
3 E-3	Lt Trk Dvr	71A10	

Rdo set AN/GRR-5 mtd in	
trk shop van	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	1
Rdo set AN/VRC-47 mtd in	
trk shop van	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1
Speech acty equip TSEC/KY-8	1
Tlr cgo 1/4-ton 2 wheel	4
Tlr cgo 1 1/2-ton 2 wheel	1
Trk cgo 3/4-ton 4x4	2
Trk util 1/4-ton 4x4	4
Trk van shop 2 1/2-ton 6x6	1

4 BATTALION MAINTENANCE SECTION

1 CPT	Maint Off	64823	13
1 WO	Autmv Maint		
	Tech	631A0	
1 E-7	Maint Supv	67N40	
1 E-6	Bn Mtr Sgt	63B40	
1 E-6	Hel Tech Insp	67W2F	
1 E-5	Sr Wheel Veh		
	Mech	63B40	
1 E-4	Acft Parts SP	76H20	
1 E-4	Maint Data SP	71B30	
1 E-4	Shop Clerk	71B20	
2 E-4	Wheel Veh Mech	63B20	44
2 E-3	Wheel Veh Mech		
	Helper	63A10	01

Tlr cgo 3/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	1
Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6 WVN	1
Trk wkr 5-ton 6x6 WVN	1

5 BATTALION COMMUNICATIONS SECTION

1 E-6	Comm Chief	31F40	
1 E-5	Tm Chief	05C40	
1 E-5	Sr Con Tower Op	93B20	
1 E-5	Sr Ldg Con Op	93B30	
1 E-4	Avn Elct Equip		
	Mech	31Q20	
1 E-4	Con Tower Op	93B20	
2 E-4	Ldg Con Op	93B30	
2 E-4	Powerman	52B20	
1 E-4	Rdo Mech	31B20	01
2 E-4	RATT Op	05C20	41
1 E-4	Sr Msg Clerk	36A10	01
1 E-4	Swbd Op	36A10	
1 E-3	Con Tower Op		
	Helper	93B20	01
1 E-3	Msg Clerk	36A10	
1 E-3	Wireman	36A10	01

Beacon set AN/GRN-6	1
Cipher mach TSEC/KC-7	2
Elec typewriter sec equip	
TSEC/KW-7	2
Rdr set AN/TPN-8	1
Rdo set AN/GRR-5 mtd in	
trk shop van	1
Rdo set AN/VRC-24 mtd in	
trk shop van	1
Rdo set AN/VRC-46 mtd in	
trk shop van	1
RATT set AN/GRC-46	1

*For remarks, see page 134.

Swbd tel manual SB-22 /PT 1
 Tel set TA-312/PT..... 8
 Tlr cgo 3/4-ton 2 wheel 3
 Tlr cgo 1 1/2-ton 2 wheel..... 1
 Trk cgo 3/4-ton 4x4 WVN 4
 Trk van shop 2 1/2-ton 6x6 2

6 MEDICAL SECTION

1 E-6 Sec Sgt 91B40
 1 E-5 Sr Med Aidman 91B30
 1 E-4 Amb Dvr 91B20
 1 E-4 Med Aidman 91B20 01

Radiac set AN/PDR-27 1
 Tlr cgo 3/4-ton 2 wheel 1
 Trk amb fld 3/4-ton 4x4 1
 Trk cgo 3/4-ton 4x4..... 1

7 PATHFINDER SECTION

1 LT Sec Comd 71542
 1 LT Asst Sec Comd 71542
 1 E-6 Pfdr Sgt 11B4P
 1 E-5 Asst Pfdr Sgt 11B4P
 4 E-4 Sr Pfdr 11B4P
 7 E-3 Pfdr 11B1P 45

Radiacmeter IM-93/UD..... 15
 Radiacmeter IM-174/PD..... 6
 Rdo set AN/PRC-25..... 8
 Rdo set AN/VRC-53..... 2
 Tel set TA-312/PT 4
 Tlr cgo 1/4-ton 2 wheel 1
 Tlr cgo 3/4-ton 2 wheel 1
 Xmtr infared AN/CVX-1..... 4
 Trk cgo 3/4-ton 4x4 WVN 1
 Trk util 1/4-ton 4x4 1

REMARKS:

01 Also light truck driver.
 07 Also information NCO.
 08 Also education NCO.
 11 Armed w/piston cal .45.
 13 Armed w/revolver cal .38.
 31 Also information officer.
 41 Remark 01 applies to 1 EM.
 44 1 EM also wrecker operator.
 45 Remark 01 applies to 2 EM.
 47 Also education officer.
 50 Also division aviation officer.

- (6) Organization. The headquarters and headquarters company, infantry division aviation battalion, consists of the battalion headquarters and the headquarters company. The battalion headquarters contains the battalion commander and his staff. The headquarters company contains the company headquarters, battalion headquarters section, battalion communications section, battalion maintenance section, medical section, and a pathfinder section.
- (a) Battalion headquarters. The battalion headquarters includes the battalion commander, executive officer, assistant division aviation officer, battalion staff officers and assistants, and the battalion sergeant major. These personnel provide the supervision for staff sections found in any tactical headquarters. Provisions for liaison with supported units are provided by attached or assigned aviation organizations. The assistant division aviation officer is assigned to the battalion; however, his principal duty is as a division aviation special staff officer. He operates the Army aviation element (AAE) in the DTOC. Command vehicular transportation, communications, and other mission items of equipment for the battalion commander and staff are found in the appropriate sections of the headquarters detachment. Command aerial transportation is provided by the aviation general support company as required.
- (b) Headquarters company.
1. Company headquarters. The company headquarters contains the company commander, first sergeant, supply sergeant, armorer, company clerk, and light truck driver.
 2. Battalion headquarters section. The battalion headquarters section contains an operations sergeant, intelligence sergeant, material readiness NCO, chemical operations sergeant, and sufficient operations specialists and clerical personnel to operate the battalion headquarters section, battalion supply, and the division aviation office. The necessary wheeled vehicles, drivers, and FM radios to support the battalion headquarters are organic to this section.
 3. Battalion communications section. The battalion communications section contains the communications chief, radio operators, radio teletypewriter (RATT) operators, airfield control operators, and repair personnel to provide the battalion with the required communications and air traffic control. Personnel of the section operate assigned vehicles as an additional duty. This section operates in the division/CG command net, intelligence net, administrative/logistics net (AM-RATT), division warning broadcast net, and corps flight operations net. In addition, the section operates terminal facilities for the aviation battalion airfield to include one GCA, one nondirectional homing beacon, and one aircraft control station which provides the division airfield with an all-weather capability. The communications section

normally operates at the instrumented airfield adjacent to the aviation battalion command post. The section installs wire communications to the division instrumented airfield, and to elements of the general support and airmobile companies retained under battalion control. It also establishes and operates a battalion communications center which serves as a message center and focal point for all battalion command radio and wire communication nets. FM radio is the normal means of communication with other elements of the company and battalion. An internal company wire net may be established within assembly or bivouac areas.

Note. The communications system is not designed to install elaborate systems of wire communications. Maximum use must be made of other communication facilities, i. e., area communications system.

4. Battalion maintenance section. The battalion maintenance section contains the maintenance officer, automotive maintenance technician, maintenance supervisor, battalion motor sergeant, and sufficient technical inspectors to provide assistance to aircraft and vehicle mechanics assigned to the battalion. There are sufficient wheeled vehicle mechanics and helpers to perform maintenance as directed. The aircraft maintenance officer, aircraft repair technician, a maintenance sergeant, one technical inspector, a parts specialist, and a shop clerk provide the battalion commander with the necessary supervisory and inspection personnel to provide staff guidance and quality control for the aviation maintenance effort. The maintenance section will normally operate in the vicinity of the division instrumented airfield as an integral unit. Deadline time per wheeled vehicle is reduced to a minimum by maintaining integrity of the section at one location, and by pooling equipment, spare parts, and skills. The quantity and quality of maintenance and supply provided by the section is governed by the technical skills of assigned personnel, by organic equipment, and by backup supply. This section provides backup organizational maintenance for the wheeled vehicles assigned to the airmobile and general support companies.
5. Medical section. This section contains a section sergeant, a medical assistant, and two enlisted personnel to assist the battalion surgeon in accomplishing the section's mission. The section provides emergency medical treatment, medical support to the battalion headquarters and subordinate units, medical supervision of sanitation within the battalion; and also operates a battalion aid station. The enlisted personnel also assist the battalion surgeon in keeping records and preparing reports and correspondence. The medical section is normally located near the aviation battalion command post and is employed as a single unit.

6. Pathfinder section. The section contains a section commander, an assistant commander, and the pathfinder personnel required to provide the aviation battalion with adequate support. This section provides the aviation battalion with the capability of reconnoitering and marking drop or landing sites to insure accurate delivery of personnel and material by paradrop or landing operations, and of assisting in navigation and control of Army aircraft in the objective area.

- (7) Concept of employment. The headquarters and headquarters company is employed as directed by the battalion commander and normally operates from the division instrumented airfield. The aviation general support company and the headquarters and headquarters company establish and operate the division instrumented airfield together. Messing facilities for the headquarters and headquarters company are provided by the aviation general support company. Organization of the sections within the company provides flexible employment to meet operational requirements. Terrain, the enemy situation, or the division's mission may require that the company operate at more than one location. Employment of the company at more than one location will require additional communications equipment and personnel.

d. Airmobile Company (Light).

- (1) Composition. The composition of the airmobile company (light), infantry division aviation battalion, is shown in figure 47.
- (2) Mission. The mission of the airmobile company (light), infantry division aviation battalion, is to provide tactical air movement of combat troops in airmobile operations, and tactical air movement of combat supplies and equipment within the combat zone.
- (3) Assignment. The airmobile company (light) is organic to the aviation battalion, infantry division.
- (4) Capabilities. At full strength, the airmobile company (light), infantry division aviation battalion, provides -
- (a) Continuous (day and night) operations during visual weather conditions and limited operations under nonvisual weather conditions in support of the force in the combat zone.
 - (b) In a single lift, airlift for one infantry company.
 - (c) Aerial movement of troops, supplies, and equipment within the division area.
 - (d) Aeromedical evacuation augmentation of medical air ambulance elements.
 - (e) Company level organizational maintenance on organic equipment.

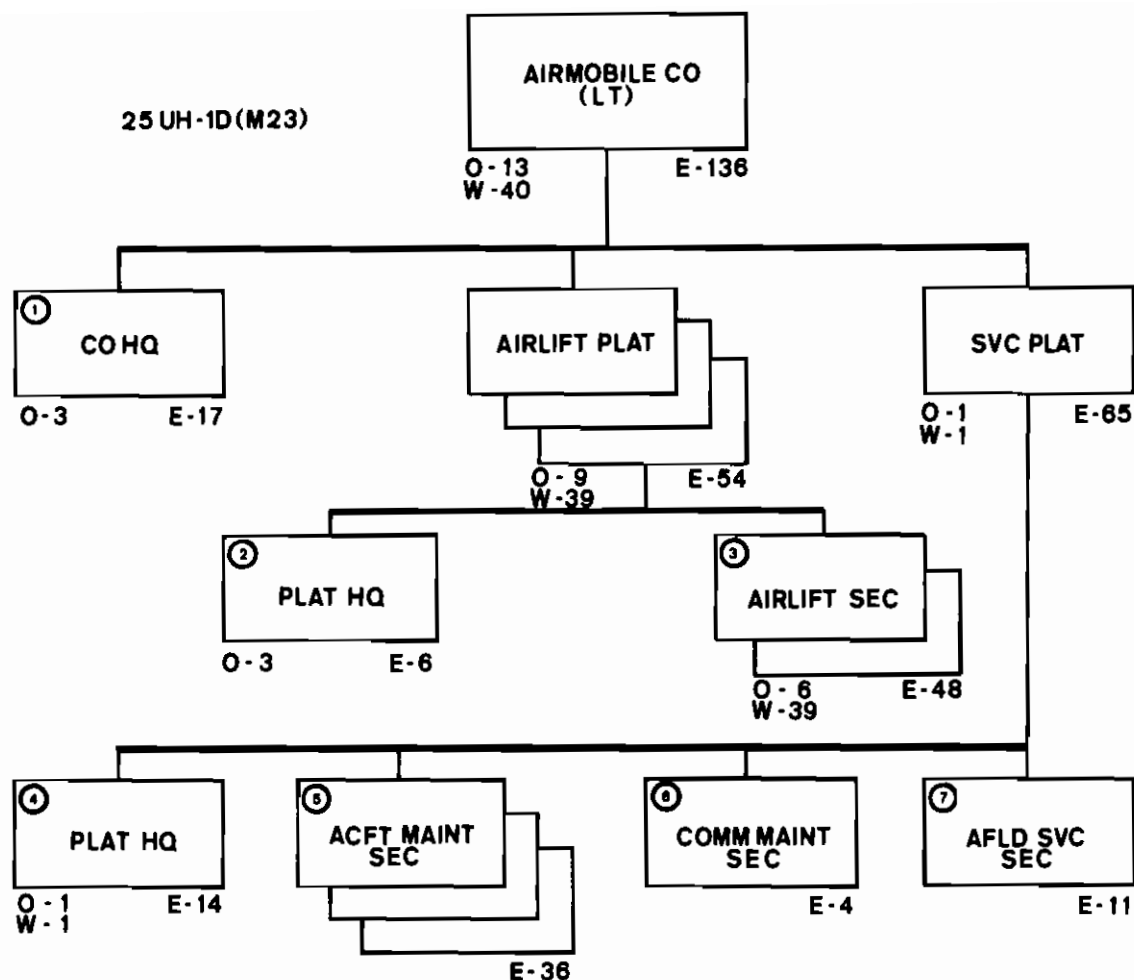


Figure 47. Airmobile company (light), aviation battalion, infantry division (TOE 1-77G).

DATA FOR FIGURE 47*

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983	13
1 CPT	XO	1983	13
1 LT	Flt Op Off	1982	13
1 E-8	First Sgt	67N50	
1 E-7	Flt Op Chief	71P40	
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76N40	
2 E-5	First Cook	94B20	
1 E-4	Armorer	76K30	
1 E-4	Co Clerk	71H20	
3 E-4	Cook	94B20	
1 E-4	Flt Op SP	71P20	
1 E-4	Swbd Op	36A10	
1 E-4	Unit Sup SP	76N20	01
1 E-4	Cook's Helper	94A10	01
1 E-3	Lt Trk Dvr	71A10	
1 E-3	Wireman	36A10	01

Gun mach 7.62mm lt flex	2
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Rdo set AN/GRR-5 mtd in shop van	1
Rdo set AN/VRC-24 mtd in shop van	1
Rdo set AN/VRC-47 mtd in shop van	1
Rdo set AN/VRC-47 mtd in 1/4-ton trk	1
Swbd tel SB-22/PT	1
Tel set TA-312/PT	3
Tlr cgo 1/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	2
Tlr tk 400-gal 1 1/2-ton 2 wheel	1
Trk cgo 2 1/2-ton 6x6	2
Trk util 1/4-ton	1
Trk van shop 2 1/2-ton 6x6	1

2 AIRLIFT PLATOON HEADQUARTERS (3)

3 CPT	Plat Comd	1981	13, 44, 45
3 E-6	Plat Sgt	67N40	
3 E-3	Lt Trk Dvr	67A10	42
	Radiacmeter IM-93/UD		6
	Rdo set AN/VRC-47 mtd in 3/4-ton trk		3
	Tel set TA-312/PT		3
	Tlr cgo 3/4-ton 2 wheel		3
	Trk cgo 3/4-ton 4x4		3

3 AIRLIFT SECTIONS (6)

6 LT	Sec Comd	1981	13
39 WO	Hel Pilot	062B0	13
24 E-5	Crew Chief	67N2F	13
24 E-4	Mach gnr	11B2F	13

Armt subsystem M23	24
Hel UH-1D	24

4 SERVICE PLATOON HEADQUARTERS

1 CPT	Plat Comd	64823	13
1 WO	Acft Maint Tech	671C0	13
1 E-7	Plat Sgt	67N40	
2 E-6	Hel Tech Insp	67W2F	
1 E-5	Crew Chief	67N2F	13
1 E-5	Mtr Sgt	63B40	
1 E-4	Acft Sup SP	76H20	01
1 E-4	Hel Mech	67N20	
1 E-4	Mach Gnr	11B2F	
2 E-4	Maint Data SP	71B30	
1 E-4	Powerman	71B20	01
1 E-4	Shop Clerk	71B20	
1 E-4	Wheel Veh Mech	63B20	

1 E-3	Wheel Veh Mech Helper	63A10	01

Armt subsystem M23	1
Hel UH-1D	1
Radiacmeter IM-93/UD	2
Tel set TA-312/PT	2
Tlr cgo 3/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	2
Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6 WVN	2

5 AIRCRAFT MAINTENANCE SECTION

3 E-6	Maint Supv	67N40	
12 E-5	Sr Hel Mech	67N20	
15 E-4	Hel Mech	67N20	
6 E-3	Hel Mech Helper	67A10	43
	Tlr cgo 3/4-ton 2 wheel		3
	Trk cgo 3/4-ton 4x4		3

6 COMMUNICATIONS MAINTENANCE SECTION

1 E-5	Comm Chief	31P40	
2 E-4	Avn Elct Equip Mech	31Q20	
1 E-4	Rdo Mech	31B20	01
	Tel set TA-312/PT		1
	Tlr cgo 3/4-ton 2 wheel		1
	Trk cgo 3/4-ton 4x4		1

7 AIRFIELD SERVICE SECTION

1 E-5	Sec Chief	67N40	
1 E-5	Crash Rescue Tm Chief	51M40	

*For remarks, see page 140.

DATA FOR FIGURE 47 - (continued)

AIRFIELD SERVICE SECTION

REMARKS:

6 E-4 Acft Fuel
 Handler SP 56C20 01
 2 E-4 Crash Rescue
 SP 51M20 41, 42
 1 E-3 Asld Svc Crmn 67A10 01
 Drum collapsible fuel 500-gal 6
 Pump assy liquid bulk trf 3
 Rdo set AN/VRC-53 1
 Tlr cgo 3/4-ton 2 wheel 1
 Tlr cgo 1 1/2-ton 2 wheel 6
 Trk cgo 3/4-ton 4x4 WWN 1
 Trk tk fuel servicing 2 1/2-ton
 6x6 6
 Yoke towing and lifting 500-gal
 collapsible drum 1

01 Also light truck driver.
 13 Armed with revolver cal .38.
 41 Remark 01 applies to 1 EM.
 42 Also radio telephone operator.
 43 Remark 01 applies to 3 EM.
 44 Must be qualified as rotary wing
 instrument flight examiner.
 45 Pilots aircraft in (2) above.

Note. This unit is dependent on the division administration company for personnel administration.

- (5) Limitations. The airmobile company (light), infantry division aviation battalion, has the following limitations:
- (a) It is partially dependent on higher headquarters or adjacent units for local security.
 - (b) It can offer only limited resistance against a hostile ground attack or enemy guerrilla action.
- (6) Organization. The airmobile company (light) consists of the company headquarters, three airlift platoons, and a service platoon.
- (a) Company headquarters. The company headquarters includes the company commander, executive officer, flight operations officer, first sergeant, flight operations chief, supply sergeant, mess steward, and sufficient personnel to perform the administrative, mess, and supply functions. Trucks are provided for administrative and supply functions and to transport the unit mess. FM radio is the normal means of communication within the company and the battalion. An internal company wire net may be established within the assembly or bivouac areas. The company normally disperses by platoon within the assembly area. The company headquarters normally will be established in an area which is centrally located in relation to the airlift platoons, with distance depending on terrain and probability of nuclear attack. A company heliport will be established for use by the command post group and the service platoon. The service platoon will be located in proximity to the command post area.
 - (b) Airlift platoons (3). Each of the three platoons consists of a platoon headquarters and two airlift sections of four helicopters each. These platoons provide the personnel and equipment necessary to operate and perform a portion of the organizational maintenance on the 24 UH-1D utility helicopters assigned to the platoons. These helicopters are capable of mounting weapons kits for providing aerial fire support. The airlift platoons will be placed under operational control or in direct support of a unit, and will usually require limited administrative support from that unit. When not supporting a unit, a platoon area and heliport will be established close enough to the company command post and service elements to use the company's administrative support. The distance from the company command post will depend on the terrain and the possibility of nuclear attack. Usually, each platoon heliport is located within 6 kilometers or 15 minutes by vehicle from the company command post. Within the platoon area, the dispersal of helicopters provides cover and concealment and reduces vulnerability to air or artillery attack; however, overdispersion must be avoided because of increased communication and security problems. The airlift platoons provide tactical air movement of troops, supplies, and equipment; aerial movement of artillery or

infantry weapons into or out of firing positions; a means of vertical infiltration for behind-the lines raiding parties, special forces personnel and patrols, and for recovering them on short notice from small predesignated areas; support and reinforcement missions as directed; and facilities for movement of engineer or chemical teams and munitions.

1. Platoon headquarters. Each platoon contains a platoon commander, platoon sergeant, and light truck driver who also serves as a radio operator.
 2. Airlift sections. Each of the two sections in each platoon contains a section commander who pilots one of the helicopters and supervises the training of the section. There are sufficient helicopter aviators, crew chiefs, and machine-gunners to operate the aircraft assigned to each section.
- (c) Service platoon. This platoon consists of a platoon headquarters (equipped with a UH-1D helicopter), aircraft maintenance section, communications maintenance section, and an airfield service section. It provides organizational maintenance services for the airmobile company's helicopters, vehicles, small arms, and communications equipment. The platoon headquarters and its maintenance and service elements will normally be located in the same general area as the airmobile company command post. The degree of dispersion will depend upon the tactical situation. Because of the large number of vehicles in the area, all personnel should be thoroughly trained in camouflage techniques and camouflage discipline. A heliport will be established for the joint use of the command group and the service elements.
1. Platoon headquarters. The platoon headquarters contains a platoon commander, aircraft maintenance technician, platoon sergeant, motor sergeant, helicopter technical inspector, crew chief, wheeled vehicle mechanic and helper, helicopter mechanic, helicopter supply specialist, shop clerk, machinegunner, and powerman. This section supervises and inspects the organizational maintenance of helicopters and stocks the required helicopter parts and supplies. A 3/4-ton truck mounting an FM radio permits communication in the company radio net. Officers from the flight platoons will be designated by the company commander as assistant maintenance officer, aircraft supply officer, and airfield service officer. They perform these additional duties under the supervision of the service platoon commander.
 2. Aircraft maintenance section. Each of the three sections contains a maintenance supervisor and adequate helicopter mechanics to perform the organizational maintenance of the company. Individual crew chiefs in the airlift platoons assist the personnel of the maintenance section in performing maintenance. Each section has a 3/4-ton truck with trailer assigned.

3. Communications maintenance section. This section contains a communications chief and sufficient repairmen to accomplish the functions of the section. The section performs organizational maintenance on communications equipment assigned to the company.
4. Airfield service section. This section contains an airfield section chief and personnel to provide crash and rescue service, refueling service, parking and mooring service, and general assistance to helicopters using the company heliport. A truck equipped with firefighting and rescue equipment is on continuous standby in the vicinity of the airborne control radio station. When this vehicle is dispatched from the heliport for crash and rescue purposes, it is augmented by a detail from other sections of the company. The airfield service section is equipped with six gasoline tank trucks for servicing helicopters on the heliports. A 3/4-ton truck is required to transport, install, and maintain a field lighting set. Additional personnel to assist the airfield service section may be detailed from other elements of the company.

(7) Concept of employment.

- (a) The airmobile company (light) is most effective when used as a unit, but can be fragmented if necessary. A platoon or section can operate detached from its parent unit for an extended period, with assistance from its parent or supported unit. The efforts of the other sections in the company are directed toward support of the airlift platoons. The company operates from its own dispersal or assembly area in the division rear area within the perimeter of one of the tactical units of the division reserve. It is habitually employed in support of the division in forward areas of the combat zone. Prepared landing areas are not required for its operations.
- (b) The planning and coordination necessary for the support of a unit will vary according to the mission of the supported unit. The airmobile company commander can best maintain his unit in a state of readiness through close and continuous coordination with the division aviation battalion commander. When the company is assigned an airlift mission, the commander will take immediate steps to effect liaison with the supported unit. The planning sequence to be coordinated is listed below.
 1. The mission and tactical plan, to include the strength and composition of the supported unit.
 2. The landing plan which includes landing sites, time of arrival, and order of arrival.
 3. The air movement plan, which includes routes to and from the objective area.
 4. The loading plan.

- (c) If the operation is to be supported by Army pathfinders and/or terminal guidance personnel, team leaders and aviators must coordinate radio aids and frequencies and other required landing aids; i.e., colored smoke, panels, ground-handling personnel, etc.

e. Aviation General Support Company.

- (1) Composition. The composition of the aviation general support company, infantry division aviation battalion, is shown in figure 48.
- (2) Mission. The aviation general support company, infantry division aviation battalion, provides aviation support for the division headquarters, division support command, and other units without organic aircraft. In addition, it provides limited general support and reinforcement to units with organic aircraft.
- (3) Assignment. The aviation general support company is organic to the aviation battalion, infantry division.
- (4) Capabilities. At full strength, the aviation general support company, infantry division aviation battalion, provides -
 - (a) Continuous (day and night) operations during visual weather conditions and limited operations under nonvisual weather conditions in support of the force in the combat zone.
 - (b) Aerial observation, reconnaissance, and surveillance (day and night) of enemy areas for the purposes of locating, verifying, and evaluating targets, terrain study, and fire adjustment.
 - (c) Radiological survey.
 - (d) Command, control, liaison, and reconnaissance.
 - (e) Aeromedical evacuation augmentation of medical air ambulance elements.
 - (f) Mess facilities for headquarters and headquarters company.

Note. This unit is dependent upon the division administration company for personnel administration.

- (5) Limitations. The aviation general support company, infantry division aviation battalion, has the following limitations:
 - (a) It is partially dependent on higher headquarters or adjacent units for local security.
 - (b) It can offer only limited resistance against hostile ground attack or enemy guerrilla action.
- (6) Organization. The aviation general support company consists of a company headquarters, general support platoon, and service platoon.

- (a) Company headquarters. The company headquarters consists of the company commander, executive officer, flight operations officer, first sergeant, flight operations chief, supply sergeant, and sufficient personnel to perform administrative, operational, and supply functions for the company. Trucks are provided for transportation to accomplish these functions. FM radio is the normal means of communication within the company and the battalion. An internal company wire net may be established within the assembly or bivouac areas. The company normally disperses by platoon in the vicinity of the division instrumented airfield.
- (b) General support platoon. The general support platoon contains a platoon commander and sufficient personnel and equipment to operate and perform organizational maintenance on the four light observation helicopters and eight utility helicopters assigned to the platoon. The platoon is composed of a platoon headquarters, a tactical support section, and a utility support section. The tactical support section is authorized six M5 and XM21 armament subsystems and the utility support section is authorized two M23 weapons subsystems. The platoon provides helicopters to support the division headquarters, division support command, and other division units without organic aircraft; and limited general support and reinforcement to division units with organic aircraft. The platoon provides the aerial mobility required for command, control, liaison, observation, augmentation of aeromedical evacuation means, reinforcement for airmobile operations, and limited logistical transport service. The platoon commander and the company operations officer exercise necessary control to prevent duplication of missions and to insure maximum utilization of assigned helicopters.
1. Platoon headquarters. The platoon headquarters contains a platoon commander, platoon sergeant, and a light truck driver. These personnel perform the administrative, operational, and supply functions for the general support platoon.
 2. Utility support section. The four light observation helicopters and two utility helicopters of the utility support section provide aviation support and aerial transportation for division units without organic aircraft, and also support and augment aviation requirements of division units with organic aircraft when the situation requires. Reconnaissance support, including aerial radiological survey, and special courier and command transport services are also provided by these helicopters. The utility support section normally operates from the division command post heliport.
 3. Tactical support section. The tactical support section contains a section leader and sufficient rotary wing aviators and crew chiefs to man the six utility helicopters organic to the section. The utility support section furnishes limited aerial fire support in both defensive and offensive operations using the M5 and XM21 armament subsystems. This section also

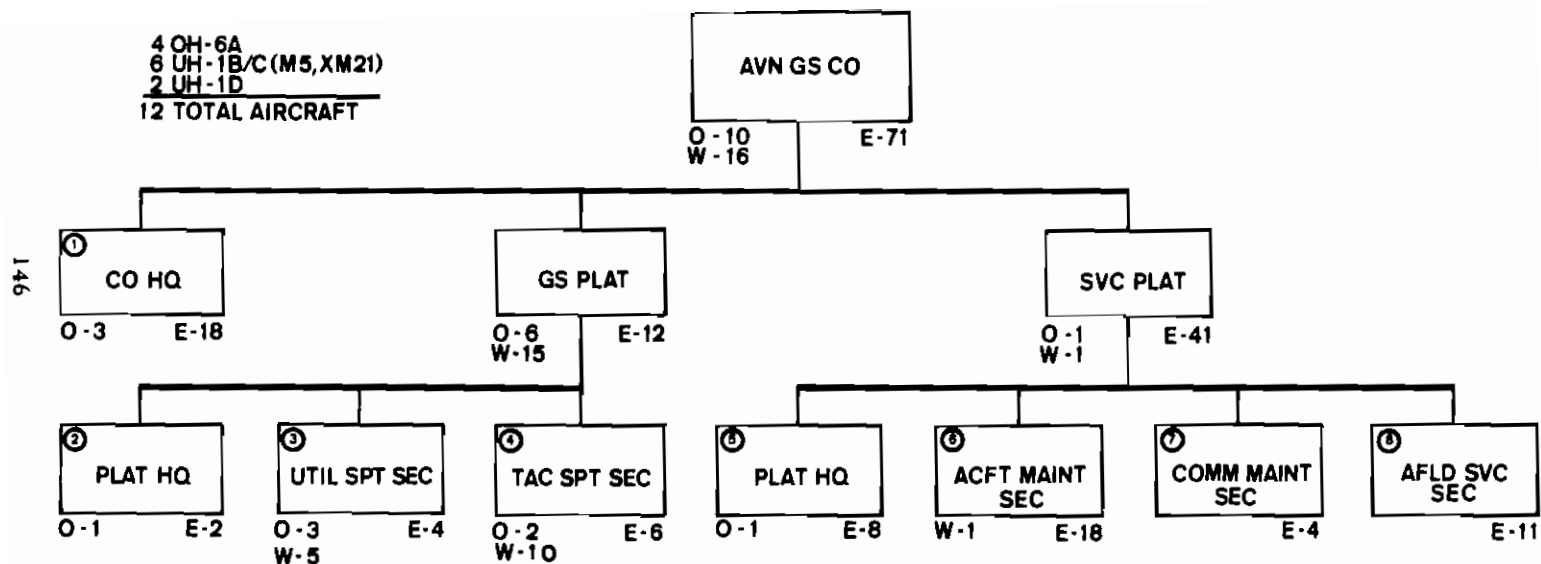


Figure 48. Aviation general support company, aviation battalion, infantry division (TOE 1-78G).

DATA FOR FIGURE 48*

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983	13
1 CPT	XO	1983	13, 36
1 LT	Flt Op Off	1982	13
1 E-8	First Sgt	67N50	08
1 E-7	Flt Op Chief	71P40	
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	
3 E-5	First Cook	94B20	
1 E-5	Sr Flt Op SP	71P20	
1 E-4	Armorer	76K30	
1 E-4	Co Clerk	71H20	
2 E-4	Cook	94B20	
1 E-4	Flt Op SP	71P20	01
1 E-4	Swbd Op	36A10	
1 E-4	Unit Sup SP	76K20	01
1 E-3	Cook's Helper	94A10	01
1 E-3	Lt Trk Dvr	71A10	42
1 E-3	Wireman	36A10	01

Gun mach 7. 62mm lt flex	4
Radiac set AN/PDR-27	1
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Rdo set AN/GRR-5 mtd in	
trk shop van	1
Rdo set AN/VRC-24 mtd in	
trk shop van	1
Rdo set AN/VRC-47 mtd in	
trk shop van	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1
Swbd tel manual SB-22/PT	1
Tel set TA-312/PT	2
Tlr cgo 1 1/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	1
Tlr tk water 400-gal 1 1/2-ton	
2 wheel	1

Trk cgo 2 1/2-ton 6x6	2
Trk util 1/4-ton	2
Trk van shop 2 1/2-ton 6x6	1

2 GENERAL SUPPORT PLATOON HEADQUARTERS

1 CPT	Plat Comd	1981	13, 45
1 E-6	Plat Sgt	67N40	
1 E-3	Lt Trk Dvr	67A10	

Radiacmeter IM-93/UD	2
Rdo set AN/VRC-47 mtd in	
trk 3/4-ton	1
Tel set TA-312/PT	1
Tlr cgo 3/4-ton 2 wheel	1
Trk cgo 3/4-ton 4x4	1

3 UTILITY SUPPORT SECTION

1 LT	Sec Ldr	1981	13
1 LT	LOH Flt Ldr	1981	13
1 LT	Util Flt Ldr	1981	13
5 WO	Hel Pilot	062B0	13
2 E-5	Hel Crew Chief	67N2F	13
2 E-5	LOH Crew Chief	67N20	

Hel OH-6A	4
Hel UH-1D	2
Radiacmeter IM-174/PD	5

4 TACTICAL SUPPORT SECTION

1 LT	Sec Ldr	1981	13
1 LT	Flt Ldr	1981	13
10 WO	Hel Pilot	062B0	13
6 E-5	Hel Crew Chief	67N2F	13

Armt subsystem XM21	6
Armt subsystem M5	6
Hel UH-1B/C	6

5 SERVICE PLATOON HEADQUARTERS

1 CPT	Plat Comd	64823	13
1 E-7	Plat Sgt	67N40	
1 E-5	Mtr Sgt	63B40	
1 E-6	Hel Tech Insp	67W2F	
1 E-4	Acft Parts SP	76H20	01
1 E-4	Powerman	52B20	01
1 E-4	Shop Clerk	71B20	
1 E-4	Wheel Veh Mech	63B20	01
1 E-3	Wheel Veh Mech		
	Helper	63A10	01

Radiacmeter IM-93/UD	2
Tel set TA-312/PT	1
Tlr cgo 1/4-ton 2 wheel	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	1
Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6 WVN	1
Trk util 1/4-ton	1

6 AIRCRAFT MAINTENANCE SECTION

1 WO	Acft Maint Tech	671C0	13
1 E-7	Maint Supv	67N40	
2 E-5	Acft Armt Rpmn	45J20	
4 E-5	Sr Hel Mech	67N20	
3 E-4	Acft Armt Rpmn	45J20	01
5 E-4	Hel Mech	67N20	
1 E-4	Maint Data SP	71B30	
2 E-3	Hel Mech		
	Helper	67A10	43

Tel set TA-312/PT..... 1
 Tlr cgo 3/4-ton 2 wheel..... 1
 Tlr cgo 1 1/2-ton 2 wheel..... 2
 Trk cgo 3/4-ton 4x4..... 1
 Trk cgo 2 1/2-ton 6x6 WVN..... 2

7 COMMUNICATIONS MAINTENANCE
SECTION

1 E-5 Comm Chief 31F40
 2 E-4 Avn Elct Equip
 Mech 31Q20
 1 E-4 Rdo Mech 31B20 01

Tel set TA-312/PT..... 1
 Tlr cgo 3/4-ton 2 wheel..... 1
 Trk cgo 3/4-ton 4x4..... 1

8 AIRFIELD SERVICE SECTION

1 E-5 Sec Chief 67R40
 1 E-5 Crash Rescue
 Chief 51M40
 4 E-4 Acft Fuel Hdlg
 SP 56C20 01
 1 E-4 Ammo Stor SP 55B20 01
 2 E-4 Crash Rescue
 SP 51H20 41
 2 E-3 Afld Svc Crmn 67A10 41

Drum collapsible 500-gal..... 4
 Lt set 1/2 kw afld rnwy..... 1
 Pump assy liq bulk trf..... 4
 Rdo set AN/VRC-53..... 1
 Tel set TA-312/PT..... 1
 Tlr cgo 3/4-ton 2 wheel..... 1
 Tlr cgo 1 1/2-ton 2 wheel..... 4
 Trk cgo 3/4-ton 4x4..... 1
 Trk cgo 2 1/2-ton 6x6 WVN..... 1

Trk tk fuel svc 2 1/2-ton 6x6 4
 Yoke lifting collapsible drum
 500-gal..... 1

REMARKS:

01 Also light truck driver.
 08 Also information NCO.
 13 Armed with revolver cal .38.
 36 Also education officer.
 41 Remark 01 applies to 1 EM.
 42 Also radio telephone operator.
 43 Remark 01 applies to 2 EM.
 45 Must be qualified as a rotary wing
 instrument flight examiner.

provides aerial escort and aerial fire support for airmobile operations.

- (c) Service platoon. The service platoon consists of the service platoon headquarters, aircraft maintenance section, communications maintenance section, and airfield service section. It provides organizational maintenance for organic aircraft and wheeled vehicles, communications and sensor maintenance, aircraft parts resupply, refueling service, and limited armament kit maintenance. The platoon headquarters and its maintenance and service elements will normally be located in the same general area as the company headquarters. The tactical situation will dictate the degree of dispersion required. All personnel must be thoroughly trained in camouflage techniques and discipline.

1. Platoon headquarters. This headquarters contains a platoon commander, platoon sergeant, motor sergeant, helicopter technical inspector, shop clerk, powerman, an aircraft parts specialist, and a wheeled vehicle mechanic and helper. The section supervises and inspects the organizational maintenance of aircraft and stocks the required aircraft parts and supplies. A 1 1/4-ton truck mounting an FM radio permits communication in the company radio net. Officers from the flight platoons will be designated by the company commander as assistant maintenance officer, aircraft supply officer, and airfield service officer. They perform these additional duties under the supervision of the service platoon commander.
2. Aircraft maintenance section. The aircraft maintenance section contains an aircraft maintenance technician, a maintenance supervisor, an aircraft armament repairman, and sufficient aircraft mechanics to perform the organizational maintenance for the company. Individual crew chiefs in the flight platoons assist the personnel of the maintenance section in performing maintenance. Minimum vehicles for required day-to-day operations are assigned to the section.
3. Communications maintenance section. This section contains the communications chief and sufficient communications repairmen to accomplish the functions of the section. The section performs the organizational maintenance on all communications and electronic equipment assigned to the company.
4. Airfield service section. This section contains an airfield section chief and personnel to provide crash and rescue service, refueling service, parking and mooring service, and general assistance to aircraft using the Army airfield. A truck equipped with firefighting and rescue equipment and an FM radio is on continuous standby in the vicinity of the control tower. When this vehicle is dispatched from the airfield for crash and rescue purposes, it is augmented by a

detail from other sections of the company. The airfield service section is equipped with four gasoline tank trucks for servicing aircraft on the Army airfields. A 3/4-ton truck is required to transport, install, and maintain a field lighting set. Additional personnel to assist the airfield service section may be detailed from other elements of the company.

(7) Concept of employment.

- (a) The aviation general support company is employed as directed by the aviation battalion commander and operates from the division instrumented airfield. The aviation battalion headquarters and headquarters company and the aviation general support company establish and operate the division instrumented airfield together. Messing facilities are provided by the aviation general support company. The company contains the personnel and equipment necessary to provide continuous and responsive aviation support to the division. It performs its own organizational maintenance, and provides its own supply and communications, but depends upon the division administration company for personnel administration. Organization of the sections within the company provides flexible employment to meet operational requirements. The general support platoon provides aviation support for those divisional units without organic aircraft, or limited reinforcement for those units with organic aircraft. The company establishes and maintains a heliport adjacent to the division main command post to support the division commander and his staff. This responsibility is normally assigned to the general support platoon commander. He coordinates the location of the heliport with the division headquarters commandant.
- (b) The company commander must anticipate plans for the employment of his company. To insure proper coordination, he maintains close liaison with the S3 of the battalion. The success of a mission depends upon the planning and coordination between the supported and supporting commanders. The supporting commander establishes and maintains liaison with the supported unit. Liaison officers act as technical advisors in all matters pertaining to their respective units. The amount and type of planning and coordination will vary with each mission. To maximize the effect of the available aviation support, close and continuous coordination with supported unit commanders is required.

38. AIR CAVALRY TROOP, INFANTRY DIVISION ARMORED CAVALRY SQUADRON

a. Description. The air cavalry troop is a combat force with combat elements mounted completely in organic aircraft. The unit combines the characteristics of tactical three-dimensional mobility and highly destructive aerial firepower.

b. General.

- (1) Composition. The composition of the air cavalry troop, infantry division armored cavalry squadron, is shown in figure 49.

- (2) Mission. The mission of the air cavalry troop, infantry division armored cavalry squadron, is to extend by aerial means the reconnaissance and security capabilities of the ground units and to engage in offensive, defensive, and delaying actions within its capability to seize and dominate lightly defended areas or terrain features.
- (3) Assignment. The air cavalry troop is organic to the armored cavalry squadron, infantry division.
- (4) Capabilities. The air cavalry troop, infantry division armored cavalry squadron, is capable of -
 - (a) Performing aerial and ground reconnaissance and providing security for unit to which assigned or attached.
 - (b) Engaging in offensive, defensive, or delaying actions.
 - (c) Conducting independent action when properly reinforced.
 - (d) Individuals of this organization can engage in effective, coordinated defense of the unit's area or installation.

Note. This unit is dependent upon the headquarters and headquarters troop for mess facilities.

- (5) Organization. The troop consists of a troop headquarters, flight operations section, aero scout platoon, aero rifle platoon, aero weapons section, and a service platoon.
 - (a) Troop headquarters. Troop headquarters contains the troop commander, one warrant officer (rotary wing aviator), first sergeant, one crew chief, one gunner, and a clerk who performs company level administrative functions. One utility helicopter is provided to transport the troop commander and to perform aeromedical evacuation of casualties. A 1/4-ton truck is provided for necessary command surface transportation. The warrant officer (aviator) pilots the utility helicopter. The crew chief serves as the mechanic for the helicopter and also acts as observer in his assigned helicopter. FM radio is the normal means of communication with other elements of the troop. If conditions permit, an internal troop wire net may be established within assembly areas. The helicopter in the troop headquarters is equipped with the M23 armament subsystem.
 - (b) Flight operations section. This section contains a flight operations officer (also executive officer), one warrant officer (rotary wing aviator), aviation operations sergeant, communications chief, and sufficient personnel and equipment (including communications means) to exercise control over the combat operations of the troop, and to provide communications between the troop and supported units. The operations section is the center of activity within the troop, and the successful accomplishment of missions is dependent upon planning and coordination provided by section

9 OH-6A(XM 27)
 11 UH-1 B/C (M5,M 22)
 6 UH-1D (M 23)
26 TOTAL AIRCRAFT

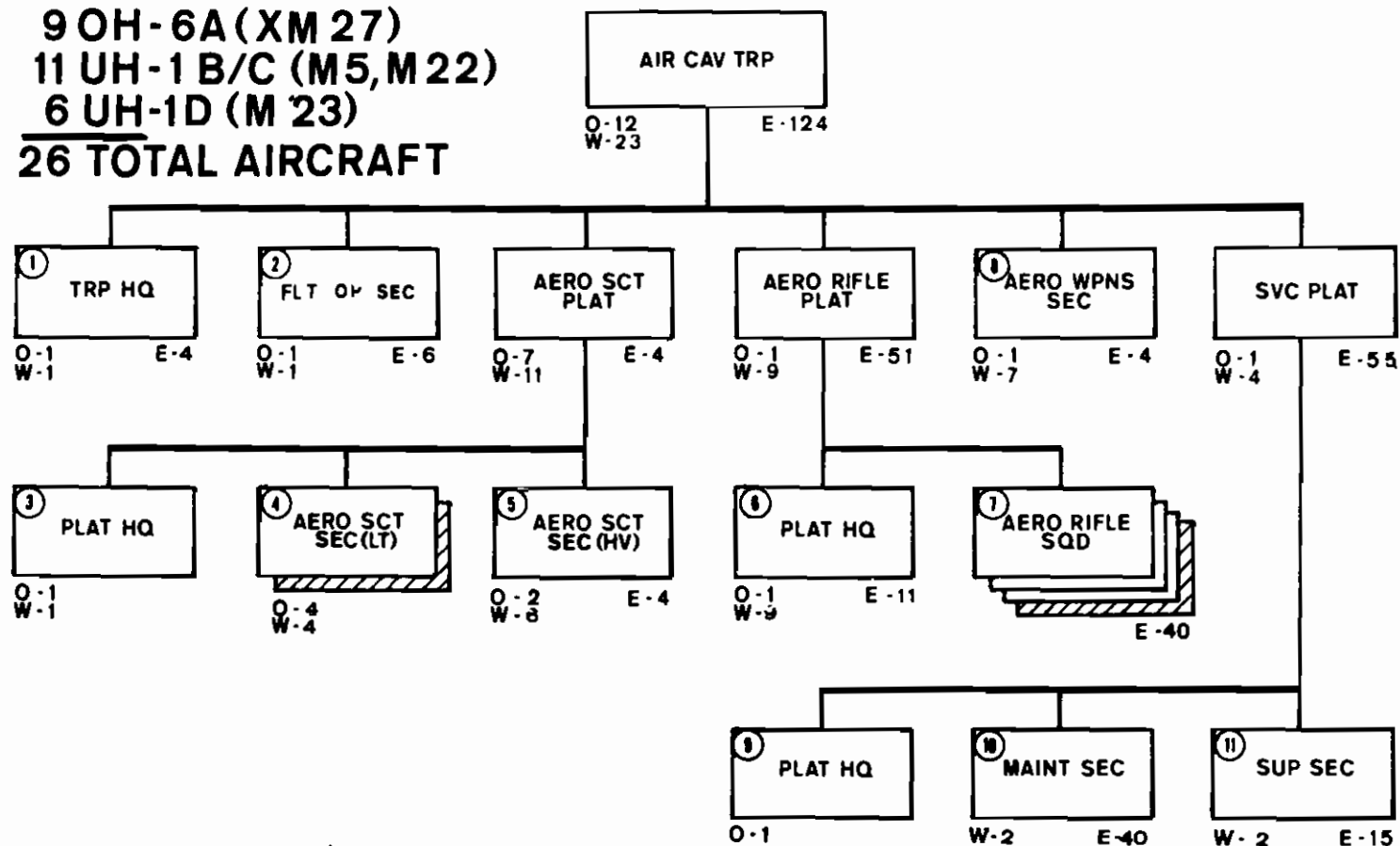


Figure 49. Air cavalry troop, infantry division armored
 cavalry squadron (TOE 17-108G).

DATA FOR FIGURE 49*

1 TROOP HEADQUARTERS

1 CPT	Trp Comd	61204	14
1 WO	Hel Pilot	062B0	14
1 E-8	First Sgt	67R50	15
1 E-5	Crew Chief	67N2F	14, 46
1 E-4	Gnr	11B2F	14
1 E-4	Trp Clerk	71H20	01, 12

Armt subsystem, M23	1
Hel, UH-1D	1
Radiac set AN/PDR-27	1
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1
Tlr cgo 1/4-ton	1
Trk util 1/4-ton	1

2 FLIGHT OPERATIONS SECTION

1 LT	Flt Op Off	61204	14, 32
1 WO	Hel Pilot	062B0	14
1 E-7	Avn Op Sgt	11E40	15
1 E-5	Comm Chief	31G40	15
1 E-5	Avn Op SP	11E20	15
1 E-5	Crew Chief	67N2F	12, 14
1 E-4	Sr Rdo Op	05B20	04, 15
1 E-3	Rdo Op	05B20	01, 14, 15

Armt subsystem, M5	1
Cipher mach TSEC/KL-7	1
Hel UH-1B/C	1
Radiacmeter IM-93/UD	3
Rdo set AN/ARC-102 mtd in	
UH-1	1
Rdo set AN/GRC-106 mtd in trk	
3/4-ton	1

Rdo set AN/GRR-5 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1
Rdo set AN/VRC-47 mtd in	
trk 3/4-ton	1
Swbd SB-22/PT	1
Tel set TA-312/PT	8
Tlr cgo 1/4-ton	1
Tlr cgo 3/4-ton	1
Trk cgo 3/4-ton	1
Trk util 1/4-ton	1

3 AERO SCOUT PLATOON HEADQUARTERS

1 LT	Plat Comd	61204	14
1 WO	Hel Pilot	062B0	14
Hel OH-6A	1		
Radiacmeter IM-93/UD	2		
Radiacmeter IM-174/PD	1		
Rdo set AN/PRC-25	1		
Armt subsystem, XM27	1		

4 AERO SCOUT SECTIONS, LIGHT (2)

2 LT	Sec Comd	61204	14
2 LT	Tm Ldr	61204	14
4 WO	Hel Pilot	062B0	14
Hel OH-6A	8		
Radiacmeter IM-93/UD	8		
Radiacmeter IM-174/PD	4		
Rdo set AN/PRC-25	2		
Armt subsystem XM27	8		

5 AERO SCOUT SECTION, HEAVY

1 LT	Sec Comd	61204	14
1 LT	Tm Ldr	61204	14
6 WO	Hel Pilot	062B0	14
4 E-5	Crew Chief	67N2F	14, 46
Armt subsystem M22	4		
Hel UH-1B/C	4		
Radiacmeter IM-93/UD	4		
Radiacmeter IM-174/PD	2		
Rdo set AN/PRC-25	1		

6 AERO RIFLE PLATOON HEADQUARTERS

1 LT	Plat Comd	61204	14
9 WO	Hel Pilot	062B0	14
1 E-7	Plat Sgt	11B40	15
5 E-5	Crew Chief	67N2F	14, 46
5 E-4	Gnr	11B2F	14

Armt subsystem M23	5
Hel UH-1D	5
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Rdo set AN/PRC-25	5
Starlight scope	8
Tel set TA-1/PT	5

7 AERO RIFLE SQUADS (4)

4 E-6	Squad Ldr	11B40	15
8 E-5	Tm Ldr	11B40	15
8 E-4	Auto		
	Rifleman	11B20	10
8 E-4	Grenadier	11B20	12
12 E-4	Rifleman	11B10	15

*For remarks, see page 154.

DATA FOR FIGURE 49 - (continued)

Gun mach 7.62mm..... 4
Radiacmeter IM-93/UD 4

8 AERO WEAPONS SECTION

1 LT Sec Comd 61204 14
7 WO Hel Pilot 062B0 14
4 E-5 Crew Chief 67N2F 14, 46

Armt subsystem M5 4
Hel UH-1B/C..... 4
Radiacmeter IM-93/UD 4
Radiacmeter IM-174/PD 1

9 SERVICE PLATOON HEADQUARTERS

1 LT Plat Comd 64823 14

10 MAINTENANCE SECTION

1 WO Sec Chief 671C0 14
1 WO Hel Pilot 062B0 14
1 E-7 Maint Supv 67N40
1 E-6 Tech Insp 67W2F 15
2 E-5 Avn Elct Equip
Mech 31Q20 15
1 E-5 Crew Chief 67N2F 14, 46
1 E-5 Msl Sys Rpmn 55G20 15
1 E-5 Sr Hel Mech 67N20 15, 46
2 E-4 Acft Armorer 45J20 15
1 E-4 Hel Mech 67N20 15, 46
2 E-4 Maint Data SP 71B20
1 E-4 Rdo Mech 31C20 01, 15
1 E-4 Wheel Veh Mech 63B20 01, 15
5 E-3 Hel Mech Helper 67A10 01, 15
1 E-3 Wheel Veh Mech
Helper 63A10 01, 15

Armt subsystem M5..... 1
Hel UH-1B/C..... 1
Gun Mach cal .50 2
Radiacmeter IM-93/UD..... 2
Radiacmeter IM-174/PD..... 1
Rdo set AN/VRC-47 mtd in
trk 1/4-ton..... 1
Tlr cgo 1/4-ton 1
Tlr cgo 3/4-ton..... 2
Tlr cgo 1 1/2-ton 3
Trk cgo 3/4-ton 2
Trk cgo 2 1/2-ton WWN 2
Trk util 1/4-ton 1
Trk van shop 2 1/2-ton 1

11 SUPPLY SECTION

1 WO Sec Chief 062B0 14
1 WO Hel Pilot 062B0 14
1 E-6 Sup Sgt 76K40 15
1 E-5 Crew Chief 67N2F 14, 46
2 E-4 Ammo Stor SP 55B20 02, 15
1 E-4 Rep Parts SP 76H20 01, 15
3 E-3 Afld Svc Crmn 67A10 15
1 E-3 Ammo Stor
Handler 55A10 15
1 E-2 Ammo Stor
Handler 55A10 15
2 E-4 Petrl Stor SP 56C10 01
1 E-3 Sup Clerk 76A10 01
2 E-3 Pump Op 56A10 01

Armt subsystem M5..... 1
Drum, collapsible 500-gal 4
Filter-separator 50 gpm,
75 psi 4
Hel UH-1B/C..... 1
Gun mach cal .50 5

Pump assy liq bulk trf..... 2
Tlr ammo 1 1/2-ton..... 2
Tlr cgo 1 1/2-ton 3
Trk cgo 2 1/2-ton WWN 3
Trk cgo 5-ton WWN 2
Trk tk 2 1/2-ton fuel servicing ... 4

REMARKS:

01 Also light truck driver.
02 Also heavy truck driver.
04 Also switchboard operator.
10 Armed with rifle 7.62mm lt bbl
w/bipod
12 Armed with 40mm grenade
launcher and pistol cal .45
automatic.
14 Armed with revolver cal .38.
15 Armed with 7.62mm rifle.
32 Also executive officer.
46 MOS 67P20 may be substituted
for MOS 67N20.

personnel. The section will frequently accompany combat elements of the troop into the forward area of the combat zone. The utility helicopter organic to the operations section is equipped with the M5 armament subsystem.

- (c) Aero scout platoon. The aero scout platoon consists of a platoon headquarters, two light aero scout sections, and a heavy aero scout section. This platoon accomplishes normal scout-type aerial reconnaissance missions.
1. Platoon headquarters. The platoon headquarters has a platoon commander and a warrant officer (rotary wing qualified). The platoon commander is responsible for the training, discipline, control, and tactical employment of his platoon and for the maintenance and efficient operation of its helicopters. The platoon headquarters has one OH-6A helicopter, which is armed with the XM27 armament subsystem and is maintained by the service platoon.
 2. Aero scout sections (light). Each of the two light aero scout sections has a section commander, a team leader, and two warrant officers (rotary wing qualified). The section commander is responsible for the training, discipline, control, and conduct of the personnel in his section. The team leader has the same responsibility for his team that the section commander has for his section. Each section has four OH-6A helicopters. These helicopters are armed with the XM27 armament subsystem and are maintained by the service platoon.
 3. Aero scout section (heavy). The heavy aero scout section has a section commander, a team leader, six warrant officers (rotary wing qualified), and four crew chiefs. The responsibilities of the section commander and the team leader are the same as in 2 above. This section has four UH-1B/C helicopters. These helicopters are armed with the M22 antitank guided missile armament subsystem, which provides the troop with immediately responsive antitank support.
- (d) Aero rifle platoon. The aero rifle platoon consists of a platoon headquarters and four integrated aero rifle squads. Each squad has a squad leader and two fire teams. Each squad contains two team leaders, two automatic riflemen, two grenadiers, and three riflemen. Each squad and the platoon headquarters elements are transported by the five utility helicopters, which are equipped with the M23 armament subsystem for aerial fire support. The helicopter is capable of transporting the entire squad under average conditions of temperature, altitude, and flight duration.
1. The platoon commander is responsible for the discipline, control, training, and tactical employment of the platoon and for maintenance of assigned helicopters.

2. **Warrant officers (aviators) act as pilots or copilots for the platoon helicopters.**
- (e) **Aero weapons section.** This section contains a section commander, seven rotary wing aviators, and four crew chiefs. The aero weapons section provides close area fire support for elements of the troop or squadron. It may be employed intact or as part of platoon task organizations. The four utility helicopters assigned to the section are equipped with the M5 armament subsystems.

 1. The section commander, in addition to piloting one of the helicopters, is responsible for the discipline, control, training, and tactical employment of the section and for the maintenance of the section helicopters.
 2. The crew chief on each helicopter will function as mechanic, observer, and gunner on the helicopter.
- (f) **Service platoon.** This platoon consists of a platoon headquarters, maintenance section, and supply section. The service platoon provides certain supply functions and the necessary mechanics and equipment to supervise and accomplish the troop's organizational maintenance.

 1. **Platoon headquarters.** The platoon headquarters is the command and control element for the platoon. The platoon commander coordinates all supply and maintenance support activities of the troop. In addition, the platoon commander supervises maintenance activities and the enlisted personnel in the platoon.
 2. **Maintenance section.** This section performs organizational maintenance on aircraft, ground vehicles, armament, and avionic equipment for the troop. It provides forward emergency repair service to elements of the troop by both aircraft and ground vehicle means.

 - (a) The section chief (WO) is the assistant maintenance officer. He advises and recommends maintenance procedures and policies and supervises the maintenance effort.
 - (b) The rotary wing aviator (WO) pilots the utility helicopter organic to the maintenance section and assists the section chief.
 - (c) The technical inspector is responsible for inspecting maintenance performed on all aircraft.
 - (d) The helicopter mechanics perform organizational maintenance on the helicopters.

- (e) The wheeled vehicle mechanics perform organizational maintenance on the wheeled vehicles in the troop.
- (f) The radio mechanic and the aviation electronic equipment mechanic perform organizational maintenance on the aircraft radios and ground-type radios in the troop.
- (g) The missile systems repairman performs organizational maintenance on the troop's machineguns, anti-tank guided missiles (ATGM), rockets, and individual weapons.

3. Supply section. This section contains the men and equipment necessary to receive, issue, store, and maintain required troop supplies. This includes general troop supply, aircraft repair parts, POL, ammunition, and other items of supply peculiar to the air cavalry troop operations.

- (a) The section chief functions as the unit supply officer. He is also responsible for the computation and maintenance of appropriate usage factors and stock levels of supply. A WO pilots the utility helicopter assigned this section.
- (b) The supply sergeant supervises the activities of supply personnel and coordinates the supply activities of the section with other elements of the troop.
- (c) The repair parts specialist operates the troop aviation supply. He requisitions, stores, and issues aircraft parts and equipment and maintains necessary forms and records.
- (d) The supply clerk assists the supply sergeant, maintains records, and receives, stocks, and issues supplies.
- (e) The ammunition storage handlers receive, stock, and issue all types of ammunition used by the unit and also assist in issuing ammunition and rearming aircraft.
- (f) The aircraft fuel handler specialists and airfield service crewman drive the gasoline tank trucks and provide POL servicing for the troop aircraft. Fueling is normally accomplished in a forward area at a rendezvous between tank trucks and aircraft.
- (g) The airfield service crewmen assist in operation of the troop heliport, refueling of aircraft, and installation and operation of lighting equipment.

(6) Concept of employment.

(a) General.

1. Employment of the air cavalry troop is based upon effective use of its unique characteristics and capabilities and an understanding of its limitations. The air cavalry troop may be employed on various types of tactical missions. It also may be employed on independent missions if required. The troop is primarily employed in close conjunction with armored cavalry ground units so that the capabilities of ground and air elements will complement each other. The air cavalry troop -
 - (a) Conducts reconnaissance and security missions over large areas, including acquisition of nuclear targets and nuclear damage assessment.
 - (b) Conducts chemical and radiological monitoring and survey, and collects biological samples.
 - (c) Conducts screening missions.
 - (d) Acts as part of a covering force.
 - (e) Performs rear area security.
 - (f) Provides security between ground tactical elements.
 - (g) Provides armed air escort for airmobile forces.
 - (h) Seizes and dominates lightly defended areas or terrain features.
2. The troop operates largely at nap-of-the-earth altitude (the airspace extending from the ground to a few feet above, but generally below the level of the surrounding terrain formations). This provides a relatively high degree of protection from enemy ground and air action. Aircraft are armed with area and point fire weapons capable of the destruction and suppression of enemy forces.
3. The air cavalry troop will operate from one or more assembly areas for the purposes of organizing for combat; refueling, maintenance, and supply; and regrouping after an attack or movement. During attack, the combat elements will operate from assembly areas located well forward in the combat zone, and as close to the enemy positions as terrain and enemy activity will permit. During periods of combat, the air cavalry troop service elements may operate from the vicinity of the squadron trains area to accomplish maintenance of vehicles and to provide aircraft supply and support activities. A high degree of air and ground mobility in the service

platoon permits maintenance and supply operations as far forward in the area of operations as possible and avoids lengthy disengagement by combat elements.

4. Air traffic regulation and identification of aircraft is of particular importance. Only minimum air traffic control measures can be utilized if the air cavalry troop is to accomplish its assigned mission. The use of airspace in the troop area of operations will require close coordination with friendly ground elements, air defense units, and other agencies operating within the area. However, the use of nap-of-the-earth flight techniques will minimize the degree of coordination required.

(b) Fundamentals of employment. Employment of the air cavalry troop is based on the following principles:

1. Surprise. The success of combat operations by air cavalry troops will depend mainly on the element of surprise attained. This surprise is achieved by using speed, maneuverability, and the troop capability to cross terrain obstacles to strike the enemy at an unexpected time and location, and from an unexpected direction. Surprise can be achieved by well-executed movements at low altitude, by using available cover and concealment, speed, aggressiveness, and deception.
2. Fire and movement. Air cavalry units use the techniques of fire and movement to destroy the enemy, and for self-protection. Organic weapons, as well as those of ground elements, must be used to the maximum to provide suppressive fires to protect the movement of aircraft and reduce their exposure to ground fire. The speed and maneuverability of the air cavalry elements enable them to move into unexpected and advantageous positions from which they can be employed to disrupt, disorganize, and destroy the enemy. The psychological effect of the concentrated fire of rapidly advancing armed aircraft should be recognized and exploited.
3. Teamwork. Air cavalry units are organized and equipped to operate habitually as units or as teams composed of aero scout, aero weapons, and aero rifle aircraft. The capabilities and characteristics of these elements are designed to complement each other. The flexibility in the organization of the troop permits rapid organization of platoon teams specifically tailored to complete the mission. Teamwork between air and ground reconnaissance elements is essential to fully exploit the capabilities of each.
4. Economy of employment. Elements of the air cavalry troop will be employed to insure a maximum flying capability when required. When a total troop effort is not required, only those elements necessary to complete the mission are

committed. Aircraft not engaged in flying missions are maintained in the highest state of operational readiness commensurate with the situation.

- (c) Factors affecting employment. As with any combat unit, employment of the air cavalry troop should be based on METT (mission, enemy situation, terrain and weather, and the troops available).
1. Mission. The primary consideration in the employment of the troop is its assigned mission. The mission affects the organization, combat formations, and scheme of maneuver.
 2. Enemy situation. In reconnaissance missions, the troop is normally oriented on the enemy; in security missions, it is oriented on the friendly main body. Employment of the unit in reconnaissance missions is based upon gaining information of the area of operations, finding the enemy forces, conducting surveillance and reconnaissance of enemy dispositions, reporting the nature of the enemy located, acquiring targets, and engaging the enemy within its means as required to accomplish its assigned mission. Consideration of the enemy situation will frequently dictate the specific mission to be assigned, security or reconnaissance, or a combination thereof. Enemy capabilities, including nuclear potential, will affect the employment of these units.
 3. Terrain and weather. Terrain has a lesser effect on these units than on ground forces. The air movement capability of these units negates the effects of terrain obstacles that impede the movement of ground elements of the squadron. The primary terrain consideration for air cavalry units is evaluation and use of air movement routes for nap-of-the-earth flying techniques. Availability of landing areas should also be considered. Weather is a controlling factor in employment because high winds, icing conditions, and periods of low visibility may restrict use of these techniques. However, air activities must be planned to follow up quickly and to exploit these adverse weather conditions.
 4. Troops available. The assignment of missions and the planned employment of air cavalry units is dependent on the personnel available, particularly aviators. To insure sustained operations, consideration must be given to such items as previous and contemplated employment of the unit, status of equipment and troops, and adequacy of logistics to support the mission.
- (d) Organization for combat. Organization of the air cavalry troop for combat is characterized by flexibility, and is such that small tailored teams may be formed and used according to the mission. In combat, the flexibility of the troop will permit variations in the force organization to meet changing situations. Elements of the troop may perform independent missions, or elements may be

cross-attached to provide several balanced air teams. The troop may be reinforced by attachment of air elements from other sources, or it may provide reinforcement or support for ground units.

(e) Fire support.

1. Added fire support may be made available to the air cavalry troop by artillery, mortars, Davy Crockett, ground forces, or tactical air. Fires provided by these elements must be planned and coordinated with planned troop employment. Mortars and artillery, including nuclear fires, will provide the bulk of the fire support for the troop. These fires, as well as fires provided by other units, may be required for suppression, counterbattery, or destruction of targets beyond the capability of organic air weapons.
2. An artillery forward observer will be made available to the troop when artillery is employed in direct support of or attached to the armored cavalry squadron. Requests for artillery fires are processed through the troop commander, or the forward observer, if available.

39. AVIATION SECTION, INFANTRY DIVISION ARTILLERY

a. Composition. The infantry division artillery aviation section is shown in figure 50.

b. Mission. The mission of the infantry division artillery aviation section is to provide limited aviation support to the division artillery headquarters and the organic artillery battalions.

c. Assignment. The infantry division artillery aviation section is organic to the headquarters and headquarters battery of division artillery.

d. Capabilities. The infantry division artillery aviation section is capable of providing adjustment of artillery fires, aerial vehicles for command and control, aerial observation and reconnaissance, aerial wire laying, aerial radio relay, radiological survey, limited aerial resupply and battle area illumination, and augmentation to the Army Medical Service for aeromedical evacuation.

e. Organization. The infantry division artillery aviation section contains sufficient personnel to assist the commander in supervising and controlling the aviation section operations.

- (1) Division artillery aviation officer. The division artillery aviation officer is also the division artillery aviation section commander. He advises the division artillery commander on all matters pertaining to the employment of Army aviation, organic or supporting, and is responsible for the training, discipline, control, and employment of the division artillery aviation section.

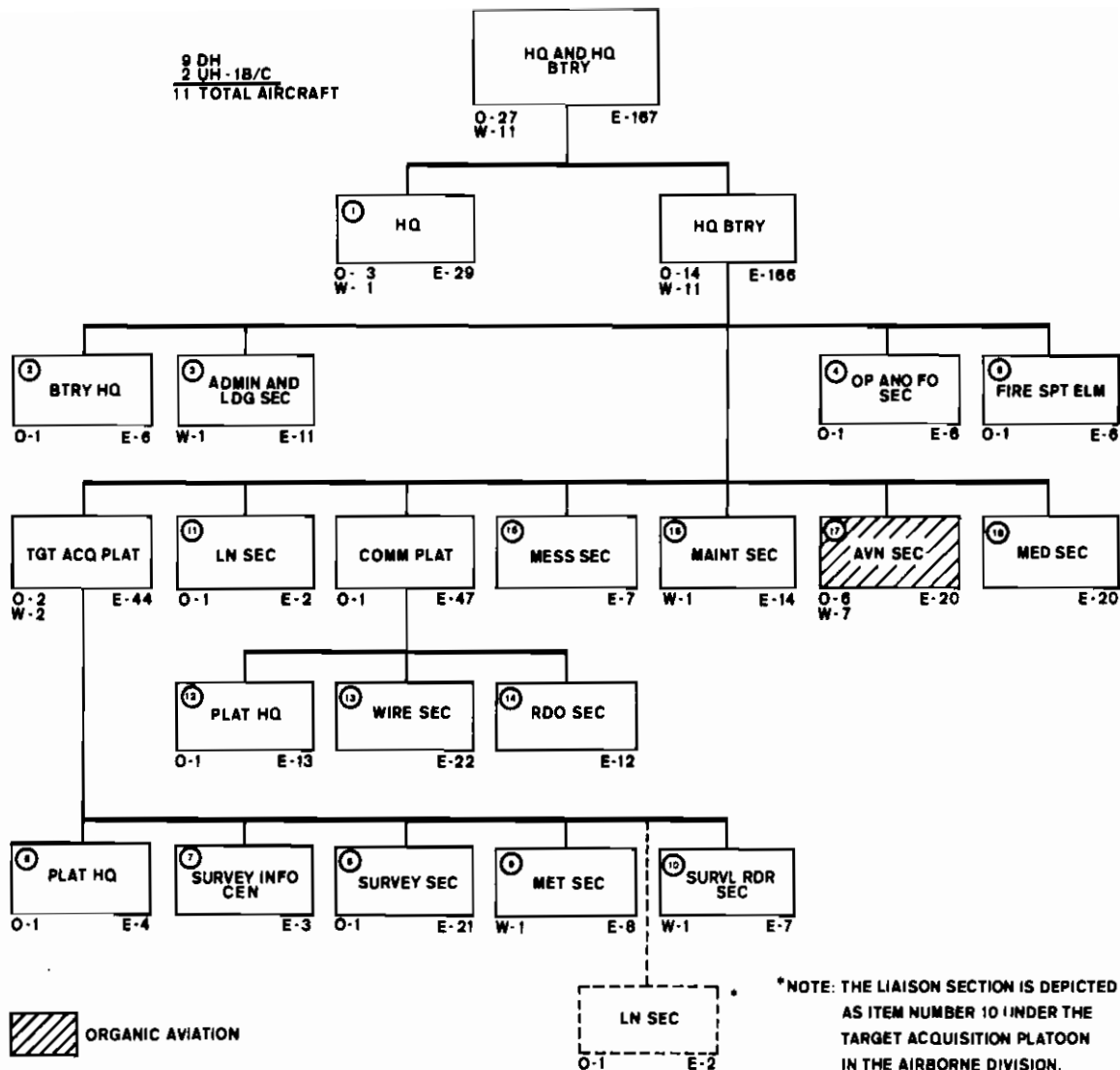


Figure 50. Aviation section, infantry division artillery
(TOE's 6-201G and 6-302G).

DATA FOR FIGURE 50*

① HEADQUARTERS

1 COL Div Arty Comd 51193 40
1 LTC XO 51193 31
1 LTC Asst Fire Spt
Coord 51199 11
1 MAJ S3 52162 11
1 MAJ Asst S3 52162 11
1 MAJ Avn Off 2518 13
1 MAJ Chaplain 5310
1 CPT Chaplain 5310 33
1 MAJ Sig Off 60210 11
1 MAJ S1 2110 11
1 MAJ S2 59301 11
1 MAJ S4 4010 11
1 MAJ Surg 3000 11
1 CPT Cml Off 57314 11
1 E-9 Sgt Maj 13Z5P 08

② BATTERY HEADQUARTERS

1 CPT Btry Comd 2900 11
1 E-8 First Sgt 13Z5P
1 E-6 Sup Sgt 76K4P
1 E-4 Armorer 76K3P 06
1 E-4 Btry Clerk 71H2P
1 E-3 Lt Trk Dvr 13A1P
1 E-3 Sup Clerk 76A1P 01

Gun mach 7.62mm lt flexible .. 1
Tlr cgo 3/4-ton 2 wheel 1
Trk cgo 3/4-ton 4x4 WWN 1
Trk util 1/4-ton 4x4 1
Radiac set AN/PDR-27 1
Radiacmeter IM-93/UD 2
Radiacmeter IM-174/PD 1
Tel set TA/312-PT 5

③ ADMINISTRATION AND LOGISTICS SECTION

1 WO Food Advisor 941A7
1 E-8 Mat Readiness NCO 63B5P
1 E-7 Food Svc Supv 94B4P
1 E-7 Personnel Stf NCO 71H4P
1 E-5 Chaplain's Asst 71M2P
1 E-5 Sr Info SP 71Q2P
1 E-4 Chaplain's Asst 71M2P 01
2 E-4 Clerk Typist 71B3P 41
1 E-3 Mail Divr Clerk 71A1P 01
1 E-3 Rdo Op 05B2P 01
1 E-3 RATEL Op 13A1P 01

Detector kit cml agt 1
Rdo set AN/GRC-106 mtd in
trk 1/4-ton 1
Rdo set AN/VRC-46 mtd in
trk 1/4-ton 2
Tel set TA-312/PT 5
Tlr cgo 1/4-ton 2 wheel 1
Tlr cgo 3/4-ton 2 wheel 2
Trk cgo 3/4-ton 4x4 2
Trk util 1/4-ton 4x4 2

④ OPERATION AND FIRE DIRECTION SECTION

1 MAJ Asst S3 52162 11
1 E-9 Op Sgt 13Z5P
1 E-8 Asst Op Sgt 13Z4P
1 E-7 Chief Fire Dir
Cmpt 13E4P
2 E-4 Clerk Typist 71B30 01
1 E-3 RATEL Op 13A1P 01

Gun mach 7.62mm lt flexible 1
Tlr cgo 3/4-ton 2 wheel 2
Trk cgo 3/4-ton 4x4 2
Trk util 1/4-ton 4x4 1
Rdo set AN/VRC-46 mtd in
trk 1/4-ton 1
Tel set TA-312/PT 5

⑤ FIRE SUPPORT ELEMENT

1 MAJ Asst Fire Spt Coord 51199 11
1 E-8 Intel Sgt 13Z5P
1 E-8 Op Sgt 13Z5P
1 E-7 Chief Fire Dir
Cmpt 13E4P
1 E-6 Asst Chief Fire
Dir Cmpt 13E4P
1 E-4 Clerk Typist 71B3P 01
1 E-3 Lt Trk Dvr 13A1P

Tlr cgo 3/4-ton 2 wheel 1
Trk cgo 3/4-ton 4x4 1
Trk util 1/4-ton 4x4 2
Tel set TA-312/PT 2

⑥ TARGET ACQUISITION PLATOON HEADQUARTERS

1 CPT Plat Comd 51154 11, 22, 42
1 E-8 Intel Sgt 13Z5P
1 E-5 Sr Chronograph Op 13E2P
1 E-4 Chronograph Op 13E2P 01
1 E-3 Rdo Tel Op 13A1P 01

Tlr cgo 1/4-ton 2 wheel 1
Trk util 1/4-ton 4x4 1
Radiacmeter IM-93/UD 2
Radiacmeter IM-174/PD 1
Rdo set AN/VRC-46 mtd in
trk 1/4-ton 1

*For remarks, see page 166.

Rdo set con gp AN/GRA-39..... 1
Tel set TA-312/PT..... 1

7 SURVEY INFORMATION CENTER

1 E-7 Chief Surveyer 82C4P
1 E-5 Surv Cmpt 82C2P
1 E-3 RATEL Op 82C1P 01

Tlr cgo 3/4-ton 2 wheel..... 1
Trk cgo 3/4-ton 4x4..... 1
Tel set TA-312/PT..... 1

8 SURVEY SECTION

1 CPT Recon-Surv Off 1183
1 E-7 Chief Surveyor 82C4P
2 E-6 Chief of Surv

Pty 82C4P
4 E-5 Surv Cmpt 82C2P 43
4 E-4 Inst Op 82C2P
4 E-4 Surv Rec 82C2P 45
1 E-3 RATEL Op 82C1P 01
2 E-3 Rodman -
Tapeman 82C1P 01

Gun mach 7.62mm lt flex..... 2
Tlr cgo 3/4-ton 2 wheel..... 2
Trk cgo 3/4-ton 4x4 WWN..... 2
Trk util 1/4-ton 4x4..... 4
Rdo set AN/GRC-125 mtd in
trk 3/4-ton cgo..... 6
Rdo set AN/VRC-46 mtd in
trk 1/4-ton..... 1
Rdo set AN/PRC-25..... 4

9 METEOROLOGICAL SECTION

1 WO Sec Chief 201A7
1 E-7 Met Sta Chief 93F4P
1 E-6 Bal Met Equip
Mech 35D2P
1 E-6 Chief Met Cmpt 93F2P
2 E-5 Sr Met Cmpt 93F2P
2 E-4 Met Cmpt 93F2P 41
3 E-3 Met Plotter 93F2P 44

Gun mach 7.62mm lt flex..... 1
Tlr cgo 3/4-ton 2 wheel..... 3
Trk cgo 3/4-ton 4x4..... 3
Tel set TA-312/PT..... 1

10 LIAISON SECTION

1 CPT Ln Off 51193 11
1 E-6 Ln Sgt 13E4P
1 E-4 Ln SP 13E2P 01

Tlr cgo 1/4-ton 2 wheel..... 1
Trk util 1/4-ton 4x4..... 1
Rdo set AN/VRC-46 mtd in
trk 1/4-ton cgo..... 1
Rdo set con gp AN/GRA-39..... 1
Tel set TA-312/PT..... 1

11 SURVEILLANCE RADAR SECTION

1 WO FA Rdr Tech 211A7
1 E-6 Sec Chief 17B4P
1 E-5 Rdr Mech 26B2P
1 E-5 Sr Rdr Op 17B2P
2 E-4 Rdr Op 17B2P 41
2 E-3 RATEL Op 17B1P 41

Multimeter TS-352/U..... 1
Rdr set AN/TPS-25..... 1
Rdo set AN/VRC-46 mtd in
trk 3/4-ton..... 1
Rdo con gp AN/GRA-39..... 1
Tel set TA-312/PT..... 3
Tlr cgo 1 1/2-ton 2 wheel..... 1
Trk cgo 3/4-ton 4x4..... 1
Trk cgo 2 1/2-ton 6x6 WWN.... 1

12 COMMUNICATIONS PLATOON HEADQUARTERS

1 LT Comm Off 70200 32
1 E-8 Comm Chief 31H5P
1 E-5 Sr Rdo Mech 31D2P
2 E-4 Cryptographer 72B2P
1 E-4 Rdo Mech 31D2P
1 E-4 Sr Msg Clerk 36A1P
1 E-4 Teletype Op 72B2P 41
1 E-3 Msg Clerk 36A1P 01
1 E-3 Msgr 36A1P 01
1 E-3 RATEL Op 36A1P 01
1 E-3 Asst Msgr 36A1P

Cipher mach TSEC/KC-7..... 2
Radiacmeter IM-93/UD..... 2
Radiacmeter IM-174/PD..... 1
Rdo set AN/VRC-49 mtd in
trk 1/4-ton..... 1
Rdo set con gp AN/GRA-39..... 1
Tel set TA-312/PT..... 2
tt AN/TGC-15..... 1
Tlr cgo 1/4-ton 2 wheel..... 1
Tlr cgo 3/4-ton 2 wheel..... 1
Trk cgo 3/4-ton 4x4..... 2
Trk util 1/4-ton 4x4..... 2

*For remarks, see page 166.

DATA FOR FIGURE 50* - (continued)

(13) WIRE SECTION

1 E-6 Sec Chief 31H4P
3 E-5 Tm Chief 31H4P
1 E-4 Sr Swbd Op 36A1P
3 E-4 Sr Wireman 36A1P
5 E-3 Swbd Op 36A1P 41
9 E-3 Wireman 36A1P 46

Gun mach 7. 62mm lt flex..... 3
Tlr cgo 3/4-ton 2 wheel..... 2
Trk cgo 3/4-ton 4x4 WVN..... 2
Trk util 1/4-ton 4x4..... 2
Swbd tel manual SB-22/PT..... 1
Swbd tel SB-86/P..... 2
Tel set TA-312/PT..... 11

(14) RADIO SECTION

1 E-6 Sec Chief 05C4P
3 E-5 Rdo tt Tm Chief 05C4P
6 E-4 Rdo tt Op 05C2P 45
1 E-4 Sr Rdo Op 05B2P
1 E-3 Rdo Op 05B2P 01

Rdo set AN/GRC-106 mtd in
trk 3/4-ton..... 1
Rdo set AN/GRR-5 mtd in
trk 3/4-ton..... 1
Rdo set AN/VRC-46 mtd in
trk 3/4-ton..... 2
Rdo set con gp AN/GRA-39..... 2
Rcvr - XMTR con gp AN/GRA-6.. 4
Speech acty equip TSEC/KY8.... 2
Tel set TA-312/PT..... 3
Tlr cgo 1/4-ton 2 wheel..... 3
Tlr cgo 3/4-ton 2 wheel..... 1
Trk cgo 3/4-ton 4x4..... 1

(15) MESS SECTION

1 E-6 Mess Steward 94B4P
3 E-5 First Cook 94B2P
2 E-4 Cook 94B2P
1 E-3 Cook's Helper 94A1P 01

Tlr tk water 1 1/2-ton 2 wheel... 1
Trk cgo 2 1/2-ton 6x6..... 1
Tel set TA-312/PT..... 1

(16) MAINTENANCE SECTION

1 WO Auto Maint Tech 631A7
1 E-6 Mtr Sgt 63B4P
1 E-5 Sr Wheel Veh
Mech 63B2P
2 E-4 Maint Data SP 71B2P
2 E-4 Powerman 52B2P 12
1 E-4 Rep Parts SP 76D2P
3 E-4 Wheel Veh Mech 63B2P
3 E-3 Mech Helper 63A1P 01
1 E-3 Powerman
Helper 52A1P

Gun mach 7. 62mm lt flex..... 1
Tel set TA-312/PT..... 1
Tlr cgo 3/4-ton 2 wheel..... 1
Trk cgo 3/4-ton 4x4 WVN..... 1
Trk cgo 2 1/4-ton 6x6 WVN..... 1

(17) AVIATION SECTION

6 LT RW Aviator 1981 13
7 WO RW Aviator 062B0 13
1 E-6 Sec Chief 67N4P

2 E-6 Hel Tech Insp 67W2F
9 E-5 Obsn Hel Crew
Chief 67N2P
1 E-5 Sr Turbine Util
Hel Mech 67N2P
2 E-5 Turbine Util Hel
Crew Chief 67N2F 13
1 E-5 Acft Fuel
Handling SP 56C2P 01
1 E-4 Avionic Equip
Rpmn 31Q2P
2 E-4 Turbine Util
Hel Mech 67N2P 01
1 RATEL Op 67A1P 01

Hel obsn OH-6A..... 9
Hel util UH-1B/C..... 2
Radiacmeter IM-93/UD..... 11
Radiacmeter IM-174/PD..... 11
Rdo set AN/VRC-46 mtd in
trk 1/4-ton..... 1
Rdo set con gp AN/GRA-39..... 1
Tel set TA-312/PT..... 1
Tlr cgo 1/4-ton 2 wheel..... 1
Tlr cgo 3/4-ton 2 wheel..... 3
Trk cgo 3/4-ton 4x4..... 3
Trk util 1/4-ton 4x4..... 1

(18) MEDICAL SECTION

1 E-6 Sec Sgt 91B4P
1 E-6 Med Asst 91C2P
1 E-5 Sr Med Aidman 91B3P 01
1 E-4 Amb Dvr 91B2P
1 E-4 Med Aidman 91B2P 01

Tlr cgo 3/4-ton 2 wheel..... 1
Trk amb 1/4-ton 4x4..... 1
Trk cgo 3/4-ton 4x4..... 1

*For remarks, see page 166

Trk util 1/4-ton 4x4..... 1
 Tel set TA-312/PT 1

REMARKS:

01 Also light truck driver.
 06 Also supply assistant.
 08 Also education NCO.
 11 Armed with pistol cal .45.
 12 Armed with launcher .40mm and
 pistol cal .45.
 13 Armed with revolver cal .38.
 22 Also assistant S2.
 31 Also information officer.
 32 Also battery executive officer.
 33 May be lieutenant.
 40 May be MOS 71193, 71203, 71210,
 or 71542.
 41 1 EM also light truck driver.
 42 Also countermortar intelligence
 officer.
 43 2 EM armed with launcher .40mm
 and pistol cal .45.
 44 2 EM also light truck drivers.
 45 3 EM also light truck drivers.
 46 Also radiotelephone operator.

- (2) Rotary wing aviators. The 13 rotary wing aviators coordinate with supported unit commanders or staff officers on matters of communications, security, and necessary logistical support.
- (3) Section chief. The section chief acts as maintenance supervisor for the section and in conjunction with the two technical inspectors supervises the work of the crew chiefs on their assigned helicopters. He schedules and coordinates section maintenance. He normally remains at the section base of operations which is in the vicinity of the division artillery fire direction center.
- (4) Crew chiefs and mechanics. The crew chiefs and mechanics perform organizational maintenance within individual skill levels and tool availability. They refuel and service organic and transient aircraft. They are trained to operate the section radios. The crew chief normally accompanies his aircraft when it is supporting a subordinate unit of division artillery. One crew chief is also assigned as driver of one of the section's 3/4-ton trucks.
- (5) Aircraft fuel handling specialist. The aircraft fuel handling specialist drives the organic tanker or truck and is responsible for POL resupply for the section aircraft. He assists the maintenance supervisor in maintaining technical publications and records pertinent to the aircraft and other equipment of the section.
- (6) Avionic equipment repairman. The avionic equipment repairman performs the necessary organizational maintenance on the avionic items of equipment in the aviation section.
- (7) Radiotelephone operator. The radiotelephone operator maintains and operates the vehicle assigned to him. He also operates and maintains the radios mounted on this vehicle.

f. Concept of Employment. The organic helicopters of the division artillery aviation section will be employed in the performance of those aviation tasks which the division artillery commander deems of greatest importance to the successful accomplishment of his mission. Operational missions for the section are assigned by the division artillery aviation officer based on priorities and guidance established by the commander.

- (1) To maximize the effect of the available aviation support, the division artillery aviation officer is required to exercise close and continuous coordination with the division artillery S2 and S3, the artillery battalion commanders, and the Army aviation element in the division tactical operations center. When the division artillery aviation section cannot provide the division artillery with the required aviation support, the division artillery aviation officer requests additional support through the Army aviation element in the division tactical operations center.
- (2) To provide maximum aviation support, the division artillery aviation section will normally be employed from the vicinity of the division artillery fire direction center. Portions of the section may be attached, placed under the operational control of, or placed in direct support of organic artillery battalions. Combat losses of helicopters and aviators

may be temporarily replaced from the division aviation battalion. Replacement of trained aerial observers is the responsibility of division artillery; therefore, the division artillery aviation section must train sufficient aerial observers in accordance with AR 95-51. This training is included in the unit training of the division artillery aviation section.

- (3) The division artillery aviation officer coordinates observation missions with the division artillery S2 and the division G2 (Air). Helicopters from the ASTA platoon may conduct observation missions for the division and the division artillery simultaneously. Normally, the ASTA platoon will not be used to adjust artillery fire but will relay locations of targets to the helicopters of the artillery aviation section, who can then adjust fire upon the targets. If the targets are located beyond the range of the artillery aviation section's helicopters, personnel of the ASTA platoon can effectively adjust fire upon the targets. Such employment reduces flying time on the helicopters of the artillery aviation section and provides more helicopter support during periods of heavy activity when it is critically needed. The number of helicopters required to perform observation effectively will vary with the situation. More helicopters will be required in an offensive situation than in a relatively stable defense.
- (4) The division artillery landing area should be located close to the fire direction center (FDC) for maximum utilization and control of unit air operations. Under combat conditions, the landing area should be located within the defensive perimeter of the division artillery headquarters and headquarters battery. The location must be chosen so that the approach of the aircraft, as well as the landing area itself, will be hidden from enemy observation as much as possible, and so that it can be easily protected from encirclement or from infiltration by the enemy. Dusty landing areas should be avoided because dust will reveal the operation of the aircraft and create a hazard to safe operations. The landing area should be in defilade from enemy fire and ground observation; natural cover for concealment of dispersed parking areas, maintenance areas, etc., is desirable. In many instances, it may be advantageous to consider the selection of the landing area and command posts as a joint task, and if possible, to select an area which is mutually satisfactory.
- (5) During displacement, the ground elements of the section move with the headquarters and headquarters battery. Helicopters and aviators displace with supported units. Nonflyable helicopters remain in the old area with sufficient maintenance personnel to repair them. The transportation aircraft company will evacuate aircraft when necessary.
- (6) The visual airborne target locator section (augmentation) furnishes the aviation section an expanded target acquisition capability. The division artillery target acquisition capability is expanded by increased speed and accuracy in the location of ground targets by aerial observers operating airborne sensory devices in the two utility helicopters. These devices are electronically connected to a ground station.

g. Maintenance. Every opportunity for maintenance should be exploited to avoid excessive downtime.

- (1) Maintenance beyond the capability of the crew chief is performed on site by the transportation aircraft maintenance (TAM) company, maintenance battalion. If the aircraft requires extensive maintenance, it is evacuated to the TAM company. If this is impossible, the TAM company will recover the aircraft by vehicle. Recovery and evacuation of disabled aircraft is a responsibility of the TAM company. Replacement aircraft are made available within the policies established by the major commander concerned.
- (2) Request for parts support is submitted by the section chief to the headquarters and headquarters battery of division artillery, which requests parts from the headquarters and main support company of the maintenance battalion.

h. Administrative Support. Administrative support for the aviation section is accomplished by division artillery headquarters and headquarters battery.

i. Supply. Resupply for all classes of supply, except class IIIA, for the aviation section is accomplished through normal resupply procedures and is provided by the division artillery headquarters and headquarters battery. When the aviation section personnel and equipment are operating with a subordinate element, the subordinate element provides resupply to the maximum extent possible, including at least classes I and V. The aircraft normally return to the aviation section base of operations or another appropriate aviation facility for refueling.

40. AVIATION SECTION, INFANTRY DIVISION BRIGADE

a. Composition. The aviation section, infantry division brigade, is shown in figure 51.

b. Mission. The mission of the aviation section, infantry division brigade, is to provide limited aviation support to the brigade headquarters and units attached to the brigade.

c. Assignment. The aviation section, infantry division brigade, is organic to the headquarters and headquarters company of each brigade.

d. Capabilities. The aviation section, infantry division brigade, is capable of providing aerial vehicles to be employed for command and control purposes, aerial observation and reconnaissance, aerial wire laying, and radiological survey.

e. Organization. The aviation section, infantry division brigade, consists of a section commander, three rotary wing aviators, a senior helicopter mechanic, a petroleum storage specialist, and an observation helicopter mechanic/driver.

- (1) Section commander. The section commander is the principal special staff advisor to the brigade commander on all matters pertaining to the employment of Army aviation, organic or supporting. He is responsible for the training, discipline, control, and employment of his section. He operates under the staff supervision of the brigade S3.
- (2) Rotary wing aviators. The three rotary wing aviators coordinate with supported unit commanders or staff officers on matters of communications, security, and certain logistical support.

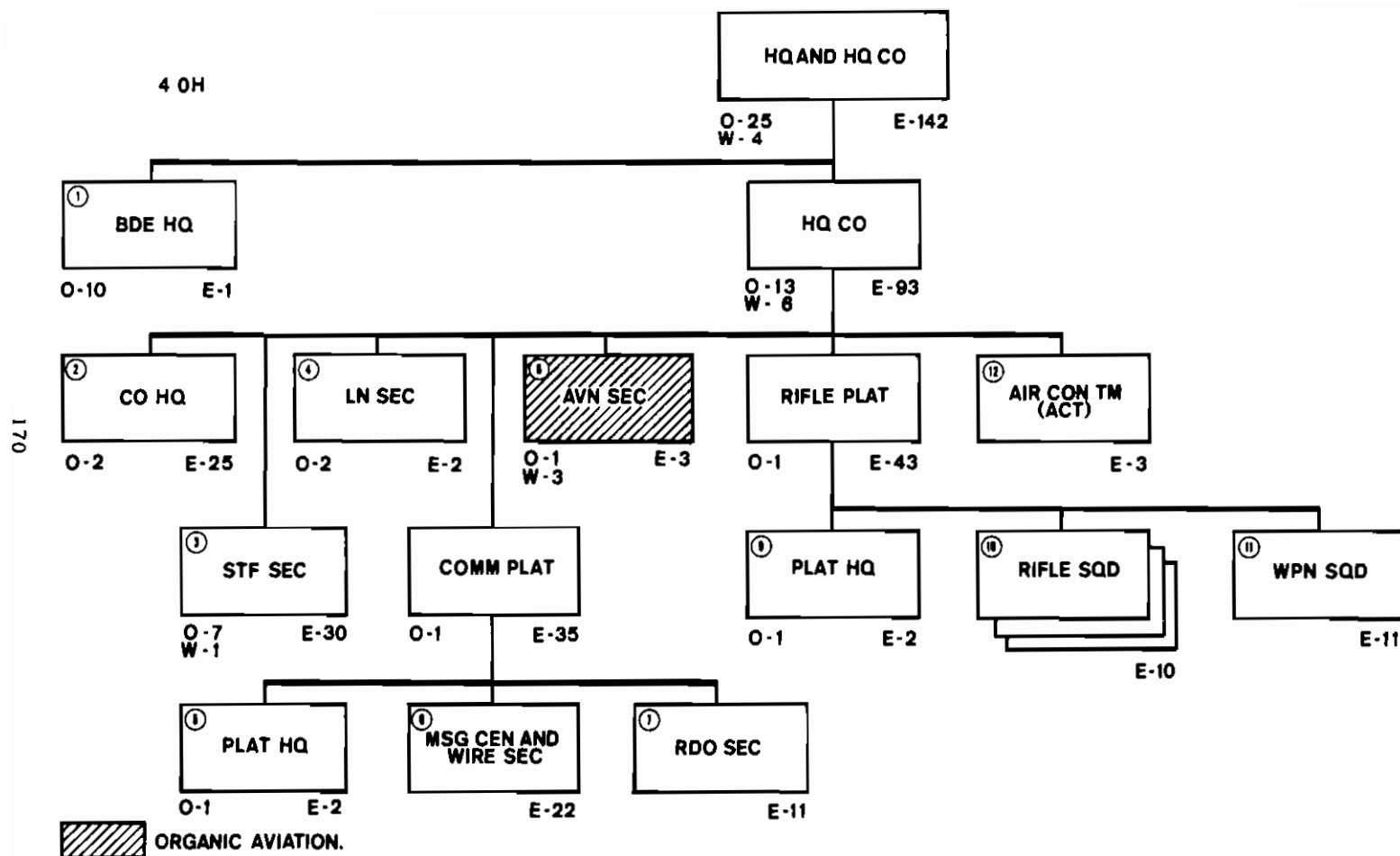


Figure 51. Aviation section, infantry division brigade (TOE 7-42G).

DATA FOR FIGURE 51*

1 BRIGADE HEADQUARTERS

1 COL	Bde Comd	1542	59
1 LTC	XO	1542	31
1 MAJ	Chaplain	5310	
1 MAJ	S1	2110	11
1 MAJ	S2	59301	11
1 MAJ	S3	52162	11
1 MAJ	S4	4010	11
1 MAJ	Sig Off	60210	11
1 MAJ	Stf Surg	3000	11
1 CPT	Cml Off	57314	11
1 E-8	Sgt Maj	11G50	41

2 COMPANY HEADQUARTERS

1 CPT	Co Comd	2900	11
1 LT	XO	2900	28
1 E-8	First Sgt	11G50	
1 E-6	Mess Steward	94B40	
1 E-6	Mtr Sgt	63B40	
1 E-6	Sup Sgt	76K40	
3 E-5	First Cook	94B20	
1 E-5	Sr Wheel Veh		
	Mech	63B20	
1 E-4	Armorer	76K30	01
1 E-4	Co Clerk	71H20	01
3 E-4	Cook	94B20	
2 E-4	Maint Data SP	71B30	
1 E-4	Powerman	52B20	
1 E-4	Repair parts		
	SP	76D20	
3 E-4	Wheel Veh		
	Mech	63B20	58
1 E-3	Cook's Helper	94A10	01
1 E-3	Lt Trk Dvr	11B10	47, 49
2 E-3	Mech Helper	63A10	45
1 E-3	Powerman's		
	Helper	52A10	

Detector kit cml agt.....	1
Metascope assy image infrared	
transistorized.....	1
Gun mach cal .50 brg hv bbl	
flex, w/mount.....	3
Tlr amph cgo 1/4-ton 2 wheel...	1
Tlr cgo 3/4-ton 2 wheel.....	2
Tlr cgo 1 1/2-ton 2 wheel.....	3
Tlr tk water 1 1/2-ton 2 wheel...	1
Trk cgo 3/4-ton 4x4.....	2
Trk cgo 2 1/2-ton 6x6 WWN.....	1
Trk cgo 2 1/2-ton 6x6 LWB.....	3
Trk util 1/4-ton 4x4.....	1
Trk wkr mdrn 4-ton 6x6 WWN...	1
Radiometer IM-93/UD.....	2
Radiometer IM-174/PD.....	1
Rdo set AN/VRC-46 mtd in	
trk 3/4-ton cargo.....	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton.....	1

3 STAFF SECTION

1 CPT	Asst S2	9301	11
1 CPT	Asst S3	2162	11
1 CPT	Asst S3 Air	2163	11
1 CPT	Asst S4	4010	11
3 CPT	Chaplain	5310	56
1 WO	Food Svc Tech	941A0	
1 E-9	Op Sgt	11F50	11
1 E-8	Chief Sup Sgt	76K50	
1 E-8	Asst Op Sgt	11F50	
1 E-8	Intel Sgt	11F50	11
1 E-8	Mat Readiness		
	NCO	64C50	
1 E-7	Asst Intel Sgt	11F40	
1 E-7	Asst Mat		
	Readiness		
	NCO	64C40	

1 E-7	Per# Stf NCO	71H40	
2 E-5	Tm Chief	05C40	
4 E-4	Chaplain's		
	Asst	71M20	01
2 E-4	Clerk Typist	71B30	01
1 E-4	Sr Rdo Op	05B20	48
1 E-4	Med Aidman	91B20	01
1 E-4	Op Asst	11F20	
4 E-4	RATT Op	05C20	57
5 E-3	Lt Trk Dvr	11B10	46
1 E-3	Sup SP	76A10	
1 E-3	Rdo Op	05B20	01
	Tlr cgo 1/4-ton 2 wheel.....		4
	Tlr cgo 3/4-ton 2 wheel.....		3
	Tlr cgo 1 1/2-ton 2 wheel.....		2
	Trk cgo 3/4-ton 4x4.....		3
	Trk util 1/4-ton 4x4.....		7
	Trk van shop 2 1/2-ton 6x6.....		2
	Radiac set AN/PDR-27J.....		1
	Radiometer IM-93/UD.....		4
	Radiometer IM-174/PD.....		2
	Rdo set AN/GRC-106 mtd in		
	trk 3/4-ton cgo.....		1
	Rdo set AN/GRR-5 mtd in		
	trk 3/4-ton cgo.....		1
	Rdo set AN/PRC-25.....		3
	Rdo set AN/VRC-12 mtd in		
	trk 1/4-ton.....		1
	Rdo set AN/VRC-24 mtd in		
	trk 3/4-ton cgo.....		1
	Rdo set AN/VRC-46 mtd in		
	trk 1/4-ton.....		2
	Rdo set AN/VRC-46 mtd in		
	trk 3/4-ton cgo.....		1
	Rdo set AN/VRC-46 mtd in		
	trk shop van.....		4
	Rdo set AN/VRC-47 mtd in		
	trk 1/4-ton.....		4

Rdo set con gp AN/GRA-39 1
 RATT set AN/GRC-46 2
 Speech acty equip TSEC/KY-8 3

④ LIAISON SECTION

2 CPT Ln Off 1542
 2 E-3 Lt Trk Dvr 11B10 47

Tlr amph cgo 1/4-ton 2 wheel 2
 Trk util 1/4-ton 4x4 2
 Rdo set AN/VRC-46 mtd in
 trk 1/4-ton 2

⑤ COMMUNICATIONS PLATOON HEADQUARTERS

1 LT Plat Ldr 0200
 1 E-8 Comm Chief 31F50
 1 E-3 Mgr 36A10 01

Tlr amph cgo 1/4-ton 2 wheel 1
 Trk util 1/4-ton 4x4 1
 Radiacmeter IM-93/UD 2
 Rdo set AN/VRC-49 mtd in
 trk 1/4-ton 1
 Rdo set con gp AN/GRA-39 2

⑥ MESSAGE CENTER AND WIRE SECTION

1 E-6 Sec Sgt 31F40 42
 2 E-5 Tm Chief 31F40
 1 E-4 Sr Msg Clerk 36A10 01
 1 E-4 Sr Swbd Op 36A10
 2 E-4 Sr Wireman 36A10
 3 E-4 tt Op 05C20 42
 1 E-3 Msg Clerk 36A10 42
 2 E-3 Mtr Mgr 36A10

3 E-3 Swbd Op 36A10 01
 6 E-3 Wireman 36A10 51

Cipher mach, TSEC/KL-7 2
 Tlr amph cgo 1/4-ton 2 wheel ... 6
 Tlr cgo 3/4-ton 2 wheel 1
 Trk cgo 3/4-ton 4x4 3
 Trk util 1/4-ton 4x4 6
 Swbd tel manual SB-22/PT 2
 Tel set TA-264/PT 2
 Tel set TA-312/PT 24
 tt set AN/GGC-3 2
 tt set AN/PGC-1 2

⑦ RADIO SECTION

1 E-5 Sec Chief 05C40 61
 2 E-5 Tm Chief 05C40
 1 E-5 Sr Rdo Mech 31B20
 1 E-4 Rdo Mech 31B20 01
 6 E-4 RATT Op 05C20 57

Tlr amph cgo 1/4-ton 2 wheel ... 1
 Tlr cgo 3/4-ton 2 wheel 3
 Trk cgo 3/4-ton 4x4 3
 Trk util 1/4-ton 4x4 1
 Rdo set AN/VRC-47 mtd in
 trk 1/4-ton 1
 Rdo set con gp AN/GRA-39 1
 Rdo set con gp OA-1754/GRC 3
 RATT set AN/GRC-46 3

⑧ AVIATION SECTION

1 CPT Sec Comd 1981 52
 3 WO RW Aviator 062B0 17
 1 E-5 Sr Hel Mech 67N20
 1 E-4 Petrl Stor SP 56C20 01, 12
 1 E-4 Obsn Hel Mech 67N20 01

Tlr cgo 3/4-ton 2 wheel 1
 Tlr cgo 1 1/2-ton 2 wheel 1
 Trk cgo 3/4-ton 4x4 WVN 1
 Trk tk fuel svc 2 1/2-ton 6x6 ... 1
 Radiacmeter IM-93/UD 2
 Radiacmeter IM-174/PD 3
 Rdo set AN/GRR-5 mtd in
 trk 3/4-ton cgo 1
 Rdo set AN/VRC-47 mtd in
 trk 3/4-ton cgo 1
 Tel set TA-312/PT 1
 Hel obsn OH-6A 4
 Armt subsystem XM27 4

⑨ RIFLE PLATOON HEADQUARTERS

1 LT Plat Ldr 1542
 1 E-7 Plat Sgt 11B40
 1 E-3 RATEL Op 11B10

Metascope assy image infrared
 transistorized 1
 Radiacmeter IM-93/UD 2
 Radiacmeter IM-174/PD 1
 Rdo set AN/PRC-6 2
 Rdo set AN/PRC-25 1
 Tel set TA-1/PT 6

⑩ RIFLE SQUADS (3)

3 E-6 Sqd Ldr 11B40
 6 E-5 Tm Ldr 11B40
 6 E-4 Auto Rifleman 11B20
 6 E-4 Grenadier 11B20 12
 9 E-3 Rifleman 11B10

Rdo set AN/PRC-6 3
 Starlight scope 6

*For remarks, see page 173

DATA FOR FIGURE 51 - (continued)

11 WEAPONS SQUAD

1 E-6 Sqd Ldr 11B40
2 E-4 Gnr 11B20 11
2 E-4 Mach Gnr 11B10 11
2 E-3 Asst Mach Gnr 11B10 11
2 E-3 Asst Gnr 90mm Rifle 11B10 11
2 E-3 Ammo Bearer 11B10

Gun mach 7.62mm lt flex 2
Rifle 90mm..... 2
Rdo set AN/PRC-6 1

12 AIR CONTROL TEAM

1 E-6 Air Op Sgt 11F40
1 E-4 Sr Rdo Op 05B20
1 E-3 Rdo Op 05B20 01

Tlr cgo 3/4-ton 2 wheel..... 1
Trk cgo 3/4-ton 4x4 1
Con rdo set C-2299/VRC..... 1
Rdo set AN/GRC-106 1
Rdo set AN/PRC-25 1
Rdo set AN/VRC-24 1
Rdo set AN/VRC-46 1
Rdo set con gp AN/GRA-39..... 1
Tel set TA-312/PT..... 1

REMARKS:

All personnel except chaplains, armed with rifle 7.62mm lt bbl unless otherwise indicated.
01 Also light truck driver.
08 Also troop education specialist.
11 Armed with pistol automatic cal .45.
12 Armed with launcher grenade 40mm and pistol automatic cal .45.
17 Armed with revolver cal .38.
28 Also motor officer.
31 Information officer.
40 May be MOS 01193, 01203, 01210, or 1542.
41 May be MOS 11G50, 11D50, or 13B50
42 Also cryptographic equipment operator.
43 One EM also light truck driver.
45 Remark 47 applies to 1 EM.
46 Remark 12 applies to 2 EM.
47 Also radiotelephone operator.
48 Two EM serve with S3 Air.
49 Also mail delivery clerk.
51 Two EM also light truck driver.
52 Also brigade aviation officer.
56 May be lieutenants.

57 Remark 01 applies to 1 EM per radio teletype team.
58 One EM also wrecker operator.
59 Remark 40 applies. When authorized by DA, brigadier commander will be brigadier general, MOS 0002, otherwise grade of colonel applies. In addition, one aide, no branch requirement, MOS 2030, lieutenant, and one orderly, MOS 1110, E-4 authorized only when brigadier general is authorized.
61 Also acts as team chief.

- (3) Senior helicopter mechanic. The senior helicopter mechanic acts as section sergeant for the section and supervises and augments the work of the mechanic on the assigned aircraft. He schedules and coordinates section maintenance. He normally remains at the section base of operations which is in the brigade command post.
- (4) Helicopter mechanic. The helicopter mechanic in conjunction with the senior helicopter mechanic performs organizational maintenance within individual skill levels and tool availability, to include armament on their assigned aircraft. They refuel and service organic and transient aircraft. They are trained to operate the section radios. The helicopter mechanic drives the section's 3 1/4-ton truck.
- (5) Petroleum storage specialist. The petroleum storage specialist drives the organic tanker or truck and is responsible for POL resupply for the section aircraft. He assists the senior helicopter mechanic in maintaining technical publications and records pertinent to the aircraft and other equipment of the section.

f. Concept of Employment.

- (1) Principle of employment. The organic aircraft of the aviation section will be employed in the performance of those aviation tasks which the brigade commander considers of greatest importance to the successful accomplishment of his mission. Operational missions for the section are assigned by the brigade S3, through the section commander, based on priorities and guidance established by the brigade commander. As a matter of high priority, organic aircraft are employed primarily for command and control purposes by the brigade and attached battalion commanders and staffs. Brigade units request Army aviation support through the brigade S3.
- (2) Base of operations. During the conduct of tactical operations, the section normally operates from a base of operations in the vicinity of the brigade command post. Some brigade aircraft are normally placed under operational control of the attached elements of the brigade. The section base of operations consists of a heliport and a small maintenance area.
- (3) Displacement. During displacement, the ground elements of the section move with the headquarters and headquarters company. Aircraft and aviators displace with supported units. Nonflyable aircraft remain in the old area with sufficient maintenance personnel to repair them. The transportation aircraft maintenance company will evacuate the aircraft when necessary.

g. Maintenance. Every opportunity for maintenance should be exploited to avoid excessive downtime.

- (1) Maintenance beyond the capability of the organic maintenance personnel is performed by the transportation aircraft maintenance (TAM) company, maintenance battalion. If the aircraft requires extensive maintenance, it is flown to the TAM company. If this is impossible, the TAM company

accomplishes recovery and evacuation of the aircraft. Replacement aircraft are made available within the policies established by the major commander concerned.

- (2) Repair parts are requested from the headquarters and main support company maintenance battalion through the headquarters and headquarters company of the brigade.

h. Administrative Support. The administrative support for the aviation section is accomplished by the brigade headquarters and headquarters company.

i. Supply. Resupply for all classes of supply, except classes II, IIIA, and IV, for the aviation section is accomplished through normal resupply procedures and is provided by the brigade headquarters and headquarters company. When the aviation section personnel and equipment are operating with a subordinate element, the subordinate element provides resupply to the maximum extent possible.

41. TRANSPORTATION AIRCRAFT MAINTENANCE COMPANY, MAINTENANCE BATTALION, INFANTRY DIVISION

a. Composition. The composition of the transportation aircraft maintenance company, infantry division maintenance battalion, is shown in figure 52.

b. Mission. The mission of the transportation aircraft maintenance company, infantry division maintenance battalion, is to provide direct-support aircraft maintenance capability as an integral part of the support command of the infantry division.

c. Assignment. The transportation aircraft maintenance company, infantry division maintenance battalion, is organic to the maintenance battalion, infantry division.

d. Capabilities. The transportation aircraft maintenance company, infantry division maintenance battalion, has the following capabilities:

- (1) Providing 9,400 man-hours per month for direct support maintenance to aircraft of the division to which assigned, operating on a two-shift basis.
- (2) Providing contact teams for on-site repair of downed aircraft.
- (3) Maintaining an organic shop supply limited to 3 days of parts required for shop operations.
- (4) Performing direct support maintenance on avionic equipment and aircraft armament systems.
- (5) The company is 100-percent mobile.
- (6) Engaging in effective, coordinative defense of unit's area or installation.

Note. This unit is dependent upon the division administration company for personnel administration.

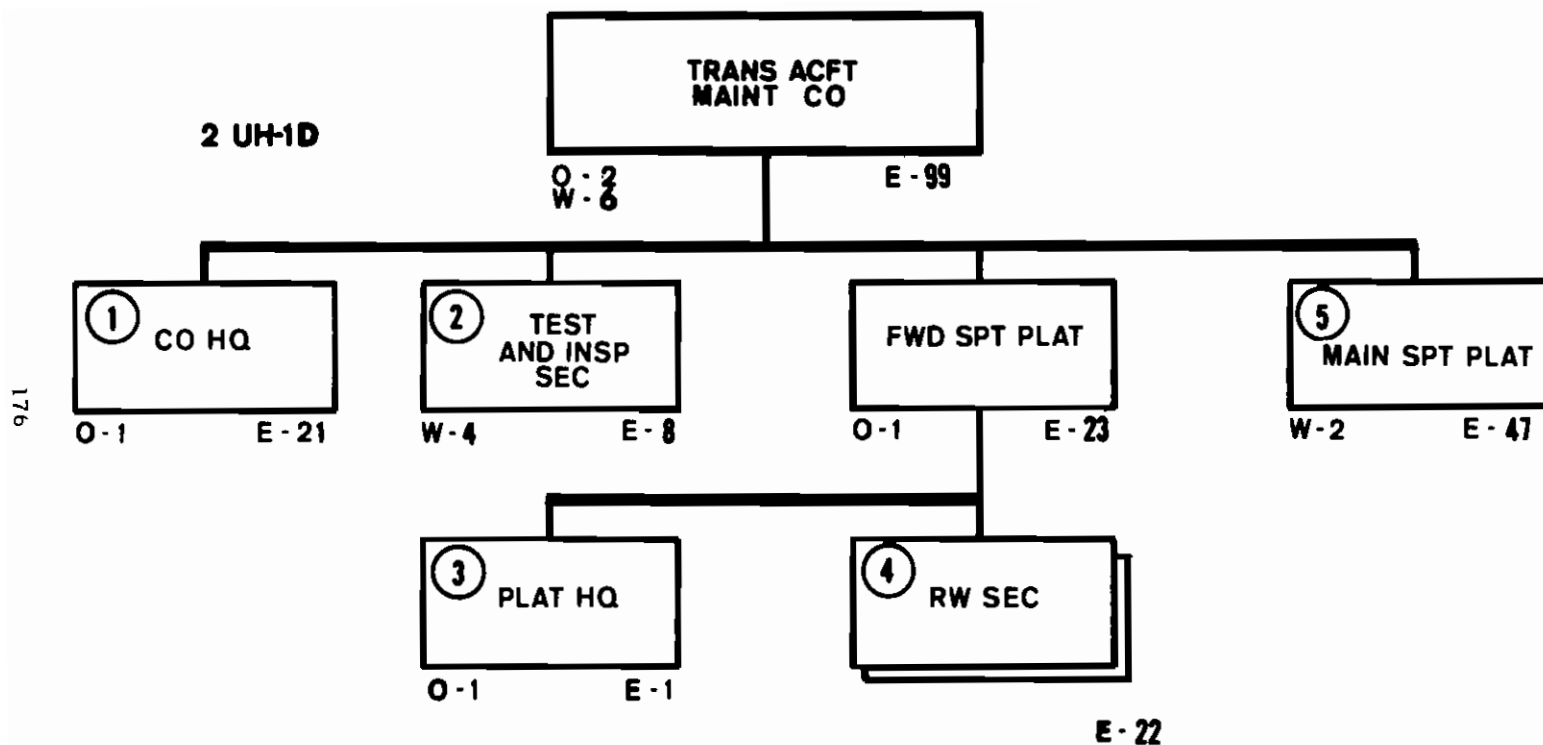


Figure 52. Transportation aircraft maintenance company, maintenance battalion, infantry division (TOE 55-89G).

DATA FOR FIGURE 52*

1 COMPANY HEADQUARTERS

1 CPT	Co Comd	64823	13
1 E-8	First Sgt	67250	
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	05
1 E-5	Mtr Sgt	63B40	
2 E-5	First Cook	94B20	
2 E-4	Maint Data SP	71B20	
1 E-4	Parts Sup SP	76D20	
1 E-4	Powerman	52B20	
1 E-4	Sup SP	76N20	
2 E-4	tt Op	72B20	41
2 E-4	Wheel Veh Mech	63B20	
1 E-3	Cook's Helper	94A10	01
1 E-3	Lt Trk Dvr	71A10	
1 E-3	Wheel Veh Mech		
	Helper	63A10	01
1 E-4	Co Clerk	71H20	04
1 E-4	Cook	94B20	

Gun mach 7, 62mm lt w/mount....	2
Tlr amph cgo 1/4-ton 2 wheel....	1
Tlr cgo 3/4-ton 2 wheel.....	1
Tlr cgo 1 1/2-ton 2 wheel.....	2
Tlr tk water 1 1/2-ton 2 wheel ...	1
Trk cgo 3/4-ton 4x4.....	1
Trk cgo 2 1/2-ton 6x6.....	2
Trk cgo 2 1/2-ton 6x6 WWN.....	1
Trk util 1/4-ton 4x4.....	1
Radiacmeter IM-93/UD.....	2
Radiacmeter IM-174/PD.....	1
Rdo set AN/GRR-5.....	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton.....	1
Swbd tel manual SB-22/PT.....	1
Tel set TA-312/PT.....	2
tt set AN/GGC-3.....	1

tt set AN/PGC-1.....	1
Tg tml gp AN/TCC-14.....	1

2 TEST AND INSPECTION SECTION

2 WO	Acft Maint Tech	671C0	42
2 WO	Hel Plt	062B0	13
3 E-6	Hel Tech Insp	67W2F	
2 E-5	Hel Crew Chief	67N2F	
2 E-4	Hel Mech	67N20	
1 E-3	Hel Mech Helper	67A10	01
Tlr amph cgo 1/4-ton 2 wheel....	1		
Trk util 1/4-ton 4x4.....	1		
Rdo set AN/PRC-25.....	1		
Tel set TA-312/PT.....	1		
Hel util UH-1D.....	2		

3 FORWARD SUPPORT PLATOON HEADQUARTERS

1 LT	Plat Comd	64823	11
1 E-7	Plat Sgt	67240	01
Tlr amph cgo 1/4-ton 2 wheel....	1		
Trk util 1/4-ton 4x4.....	1		
Radiacmeter IM-174/PD.....	1		
Radiac set AN/PDR-27.....	1		

4 ROTARY WING SECTION (2)

1 E-6	Sec Chief	67Z40	
6 E-5	Sr Hel Rpmn	67Q20	
4 E-4	Airframe Rpmn	68Q20	
8 E-4	Hel Rpmn	67Q20	
1 E-3	Hel Rpmn Helper	67A10	01

Tlr cgo 1 1/2-ton 2 wheel.....	2
Trk cgo 2 1/2-ton 6x6.....	2

5 MAIN SUPPORT PLATOON

1 WO	Acft Maint Tech	671B0	43
1 WO	Asst Acft Maint		
	Tech	671B0	43
1 E-7	Acft Rep Supv	67Z40	
2 E-6	Asst Acft Rep		
	Supv	67Z40	
3 E-5	Avn Elct Equip		
	Rpmn	31Q30	
1 E-5	Machinist	44E20	
2 E-5	Sr Acft Armt		
	Rpmn	45J20	
2 E-5	Sr Acft Eng		
	Rpmn	68B20	
1 E-5	Sr Airframe		
	Rpmn	68G20	
4 E-5	Sr Hel Rpmn	67Q20	
1 E-5	Sr Powertrain		
	Rpmn	68D20	
1 E-5	Sr Rotor-Prop		
	Rpmn	68E20	
2 E-4	Acft Armt Rpmn	45J20	01
2 E-4	Acft Eng Rpmn	68B20	
1 E-4	Acft Inst Rpmn	68J20	
2 E-4	Acft Parts SP	76H20	01
3 E-4	Airframe Rpmn	68G20	44
2 E-4	Elec Rpmn	68F20	01
4 E-4	Hel Rpmn	67Q20	02
1 E-4	Hyd Sys Rpmn	68H20	
2 E-4	Maint Data SP	71B20	01
2 E-4	Powertrain		
	Rpmn	68Q20	01
1 E-4	Rotor-Prop		
	Rpmn	68E20	40

DATA FOR FIGURE 52 - (continued)

1 E-4 Supply Parts SP 76G20 01
 1 E-3 Airframe Rpmn
 Helper 68A10 01
 1 E-3 Hel Rpmn Helper 67A10 01
 1 E-3 Shop Clerk 71A10 01
 2 E-3 Toolroom Keeper 68A10 01
 1 E-3 Sup Clerk 76A10 01

 Inst rep shop trk mtd 2 1/2-ton
 6x6 1
 Radiac set AN/PDR-27 1
 Radiacmeter IM-93/UD 2
 Semitr low bed wkr 12-ton
 4 wheel 40 ft 1
 Semitr stake 12-ton 4 wheel 2
 Semitr van cgo 12-ton 4 wheel 2
 Shop equip org rep lt trk mtd 1
 Shop set GM sys fld maint (SS-11) .. 1
 Shop set acft maint fxd base gnd
 hlg and svc set A 1
 Shop set acft maint semitr mtd
 A-1 toolcrib elec flaw detector... 1
 Shop set acft maint semitr mtd
 A-2 sheet metal welder hyd 1
 Shop set spare parts stor fld
 maint set no 1 5
 Shop set spare parts stor fld
 maint set no 2 2
 Tel set TA-312/PT 1
 Tlr cgo 1/4-ton 2 wheel 2
 Tlr cgo 3/4-ton 2 wheel 1
 Tlr cgo 1 1/2-ton 2 wheel 6
 Trk cgo 3/4-ton 4x4 1
 Trk cgo 2 1/2-ton 6x6 6
 Trk trac 5-ton 6x6 6
 Trk wkr 5-ton 6x6 WVN 1
 Trk util 1/4-ton 2
 Trk van shop 2 1/2-ton 6x6 4
 Trk van shop 2 1/2-ton 6x6 WVN... 1

REMARKS:

01 Also light truck driver.
 02 Also heavy truck driver.
 04 Also switchboard operator.
 05 Also armorer.
 11 Armed with pistol auto cal .45.
 13 Armed with pistol cal .38.
 40 Also wrecker operator.
 41 Remark 01 applies to 1 EM.
 42 Must be qualified as test pilot
 in rotary wing aircraft.
 43 MOS 671C0 may be substituted
 for MOS 671B0.
 44 Remark 02 applies to 3 EM.

e. Organization. The organization of the transportation aircraft maintenance company, infantry division maintenance battalion, is basically the same for all four types of divisions. The company contains a company headquarters, a test and inspection section, a forward support platoon, and a main support platoon.

- (1) Company headquarters. The company headquarters contains the company commander, first sergeant, supply sergeant, motor sergeant, and sufficient enlisted personnel to perform the administrative, mess, and supply functions of the company. Trucks are provided to accomplish administrative and supply functions and to transport the unit mess. Personnel administration for the company is provided by the division administrative company. FM radio is the normal means of communications within the company and with the battalion headquarters. An internal company wire net may be established within the assembly or bivouac areas. Because of the distances involved, the elements of the forward support platoon are not directly connected by wire lines and must enter into the wire system of supported units or a signal center in the division communications system. The company headquarters normally will be established in an area located near the division instrumented airfield.
- (2) Test and inspection section. This section contains two aircraft maintenance technicians, two helicopter pilots, three technical inspectors, and two helicopter crew chiefs. It operates under the control of the senior aircraft maintenance technician. Test flights performed by designated flight test personnel verify suspected deviations from maintenance standards, detect deficiencies, and after repairs are completed, assure that the aircraft is airworthy. The test and inspection section performs the initial inspection of an aircraft when it is received for repairs. The purpose of this inspection is to determine the nature and extent of repairs, and the type and quantity of repair parts needed. Aircraft records are inspected to determine whether they are correct and complete. The section assures quality control by inspecting each job during the maintenance process, and by performing a final inspection upon completion of repairs.
- (3) Forward support platoon. This platoon consists of a platoon headquarters and two rotary wing sections. It operates under the supervision of the platoon commander who is a qualified Army aviator. The platoon provides mobile work parties which perform on-site field maintenance repairs of unflyable aircraft. The repair functions of the forward support platoon are performed by the rotary wing sections. Each of these sections is supervised by an enlisted section chief. The sections may be augmented by additional maintenance personnel drawn from the main support platoon and from the test and inspection section. Each section is provided a vehicle which transports section personnel, individual aircraft mechanic tool sets, and a limited number of less bulky and more frequently used repair parts. The platoon commander is provided with a vehicle and, in an emergency, has access to the two utility helicopters which are organic to the test and inspection section.
 - (a) The forward support platoon operates in the forward support area. The number of sections in this platoon does not permit attachment of a section to each divisional unit with organic aircraft. Therefore, it is normal practice to locate a section where it can best

support the aircraft of a particular area. The platoon headquarters is located so that the platoon commander can best supervise and coordinate the activities of his sections.

- (b) The forward support platoon commander determines the extent of repairs required to restore damaged aircraft to flyable condition and, if extensive repairs are indicated, requests assistance of the company maintenance officer. He determines the parts and personnel required to make the aircraft flyable, directs the formation of the repair team (work party), and requests the main support platoon to furnish additional personnel, parts, and equipment that may be required.
 - (c) On-site direct support repairs are normally emergency repairs and, except in unusual circumstances, will not be extensive. Rather, the aircraft will be made safe for a one-time flight to the site of the main support platoon where additional repairs may be accomplished.
 - (d) Repair parts, other than minor high usage items, are furnished by the main support platoon upon request of the forward support platoon. They are flown to the site of downed aircraft by the two utility helicopters which are organic to the company. When a disabled aircraft is located in an area where ground transportation is impractical, the helicopters are used for rapid transportation of the platoon commander and of repair section personnel.
- (4) Main support platoon. This platoon contains an aircraft maintenance technician, assistant aircraft maintenance technician, aircraft repair supervisor, two assistant aircraft repair supervisors, and sufficient enlisted repairmen to accomplish the normal maintenance functions of the platoon. Under the supervision of the aircraft maintenance technician who is a qualified Army aviator, the platoon operates the company maintenance shop, and performs the bulk of the direct support maintenance received by the company. It provides direct support aircraft maintenance to units operating in the division support area, direct support repairs to aircraft evacuated to the division support area, and backup maintenance support to the repair sections of the forward support platoon.
- (a) The company maintenance shop includes personnel with specialized skills required to perform allied trades (welding, sheet metal work, parts fabrication, etc.). Equipment organic to the section includes special tools, maintenance kits, van-mounted shop sets, and aircraft recovery and evacuation equipment. It is established close to or on the division instrumented airfield.
 - (b) The maintenance shop provides all facilities directly involved in the control and performance of aircraft maintenance in the company area. It assists in the overall supervision of the on-site maintenance performed by the forward support platoon and coordinates the production effort with the test and inspection section.

- (c) The maintenance shop should be physically organized to provide for the logical and orderly movement of work from the time it is received by the company until it is returned to the user. The type of maintenance performed will determine the location of certain activities (e. g. , the paint shop should be located in a dust-free area; the shop office and inspection section should be convenient both to the repair area and to the aircraft parking area).

f. Concept of Employment.

- (1) The transportation aircraft maintenance company is employed as directed by the maintenance battalion commander. The company, minus elements of the forward support platoon, is normally located on or near the division instrumented airfield. Both wire and radio communications are furnished the company to support its operations and link it with higher headquarters and with supported units. Radio communications between the sections of the forward support platoon and the company headquarters must be provided by the supported unit or by the area communications system.
- (2) The transportation aircraft maintenance company provides direct support aircraft maintenance and repair parts supply to divisional units having organic aircraft. The company may perform organizational maintenance for a supported unit in emergencies, or when the repairs include both organizational and direct support maintenance.
- (3) The inherent characteristics of aircraft operations and maintenance support require the closest working relationship between the supported and the supporting organizations; therefore, technical matters relating to support activities between this unit and its supporting or supported units are resolved directly. The company advises and assists supported units in every way possible, to include the acceptance of organizational maintenance overflow. When possible, the supported unit advises the company of anticipated requirement for normal support, special assistance, support of unusual operational aircraft requirements, and critical parts requirements; thereby assisting the company commander in planning and controlling his activities to make the maximum use of the time, skills, and parts available to him.

g. Supply.

- (1) General. The technical supply element, composed of supply personnel of the main support platoon, requisitions, stocks, and processes all transportation aircraft items required for direct support maintenance support of the aircraft organic to the division. It maintains a 3-day stock level based on demands generated by its own shop, the direct support platoon, and supported unit emergency requirements. In addition to emergency aircraft repair parts support, it provides electronic requisitioning facilities to its supported units. The company performs three types of supply operations: organizational, shop, and technical supply. It is not authorized a shop supply section and has no separate supply element.

- (2) Main support platoon. Initial stockage of aircraft repair parts is based upon allowance factors established in the five-part technical manuals for the type of aircraft supported. However, these allowances are computed for the support of a hundred items for a 15-day period. Since the transportation aircraft maintenance company is authorized only a 3-day stockage level, the allowance factors should be further computed on the basis of 20 percent of the 15-day allowance for a hundred aircraft, multiplied by the total number of type aircraft to be supported, and divided by 100. Fractional values of .5 or higher are to be rounded off to the next higher whole number, while fractional values below .5 will be disregarded. A minimum quantity of one is authorized when the computed total allowance results in an authorized quantity of less than one. The 3-day stock level is outlined in FM 9-30.
- (3) Forward support platoon. The forward support platoon receives its backup supply support from the main support platoon. Repair sections use the division area communications system or the communications facilities of the supported unit in requesting parts. Verbal requests are substantiated by submission of DD Form 9-79, which the technical supply element retains as a receipt. Emergency delivery of repair parts may be made to the repair sections by the main support platoon, using the helicopters assigned to the test and inspection section.
- (4) Supported units.
- (a) When a repair part which is authorized for use at organizational level is required on an emergency basis, the supported unit may draw the part from the supporting repair section of the forward support platoon. If the part is not available in the forward area, a requirement is placed upon the main support section. If the part is not available in the main support section, an attempt is made to provide a suitable substitute, or if appropriate, to provide the next higher assembly or component or to manufacture the part locally. If the requirement still cannot be filled, the company transmits the request by radio teletypewriter to the supporting supply source. The parts are shipped to the transportation aircraft maintenance company or, in emergencies, directly to the requesting unit, with the company being informed of the action taken.
- (b) For normal replenishment requisitions, or requisitions for anticipated requirements such as scheduled component replacements, the supported unit follows the same procedure of informing the supporting element of the company, by the most expeditious means, of the parts that are needed. The main support section then places the requirement upon the supporting supply activity, using the radio teletypewriter located in company headquarters. The parts are normally shipped to the company which effects issue to the supported unit.
- (5) Direct exchange and shop supply. Direct exchange and shop supply functions are performed by the supply personnel organic to the main support platoon.

(a) Direct exchange.

1. Repair parts authorized for direct exchange are so indicated in the applicable five-part technical manual. Direct exchange items are coded as "R" under the "Recoverability Code" column for the level of maintenance at which their replacement is authorized.
2. The transportation aircraft maintenance company carries only a 3-day stockage level of repair parts to support its forward support platoon, its own shop mission in the main support platoon, and emergency supply support of the supported units. It is evident therefore, that its direct exchange service to the supported units will be limited by the relatively small quantities of parts carried. However, if the part required is not in stock, the transportation aircraft maintenance company will contact the supporting nondivisional supply facility and secure the part for the supported unit. For parts required in support of its own level of maintenance and coded "R," the company may go to its supporting supply facility.

- (b) Shop supply. Although a shop supply section does not exist in the transportation aircraft maintenance company, common hardware items such as nuts, bolts, screws, safety wire, and other fast-moving items are maintained in bins, centrally located within the shop areas of the main support platoons, where they are readily available to maintenance personnel.

h. Recovery and Evacuation of Aircraft.

- (1) General. Whenever possible, unflyable aircraft are repaired in place if only to the extent that they can be cleared for a one-time flight to more suitable repair facilities. The structural characteristics of an aircraft do not adapt it to extensive movement, other than in its own environment, and under its own power. Movable control surfaces, airfoils, structural members, and other sensitive areas are easily damaged during land transport, or external air transport. Normally, the dismantling and special rigging required for evacuation of an aircraft requires more personnel and time than if the aircraft were repaired and flown out. However, the extent of required repairs, or the nature of the aircraft site may leave no alternative but evacuation.

(2) Responsibilities.

- (a) Supported unit. The supported unit has no responsibility for recovery or evacuation of aircraft, other than to render such assistance as may be appropriate in consideration of personnel, equipment, and time availability. However, the supported unit is responsible for requesting assistance from the repair team supporting the aircraft. If the requesting unit considers recovery operations necessary, it will be so indicated in the initial request for assistance. The request will include the following information:

1. Location of aircraft.
 2. Type and identification of aircraft.
 3. Name and unit of individual making the request.
 4. Parent unit of aircraft.
 5. Description of damage.
- (b) Forward support platoon. The platoon commander, accompanied by the chief of the appropriate repair section, will make a preliminary survey of the disabled aircraft. If he decides that the craft can be repaired in place, he determines the required parts and personnel, and initiates action to secure any assistance he may require from the main support platoon. He also advises the supported unit of his decision, and if possible, furnishes the unit with an estimated time of completion. If, upon preliminary survey of the aircraft, the platoon commander decides that the aircraft should be evacuated, he informs the main support platoon, furnishing all pertinent information including the location of the aircraft, the nature and extent of damage, and a preliminary classification as to the category of repair. Again, he advises the supported unit of the action he has taken.
- (c) Main support platoon. The main support platoon is responsible for performing the actual recovery and evacuation of the aircraft. Aircraft may be recovered by helicopter lift, by loading the aircraft on the company's 12-ton stake semitrailer, which is towed by the 5-ton tractor wrecker or by suspension of the disabled craft from the boom of the wrecker. The physical means employed is a decision to be made by the maintenance officer, and will vary with the situation. Each method requires its own degree of dismantling of the aircraft, and its own methods of rigging and securing as described in the technical manual applicable to the aircraft.

Section III. AIRBORNE DIVISION AVIATION

42. THE AIRBORNE DIVISION AVIATION BATTALION

a. General.

- (1) Composition. The composition of the airborne division aviation battalion is shown in figure 53.
- (2) Mission. The mission of the airborne division aviation battalion is to provide aviation support for the division headquarters, division support command, and other units without organic aircraft; general support and reinforcement to units with organic aircraft; and aviation staff personnel for the division headquarters.

4 OH-6A
 6 UH-1B/C (XM21)
 (M5)
27 UH-1D
 37 TOTAL AIRCRAFT

185

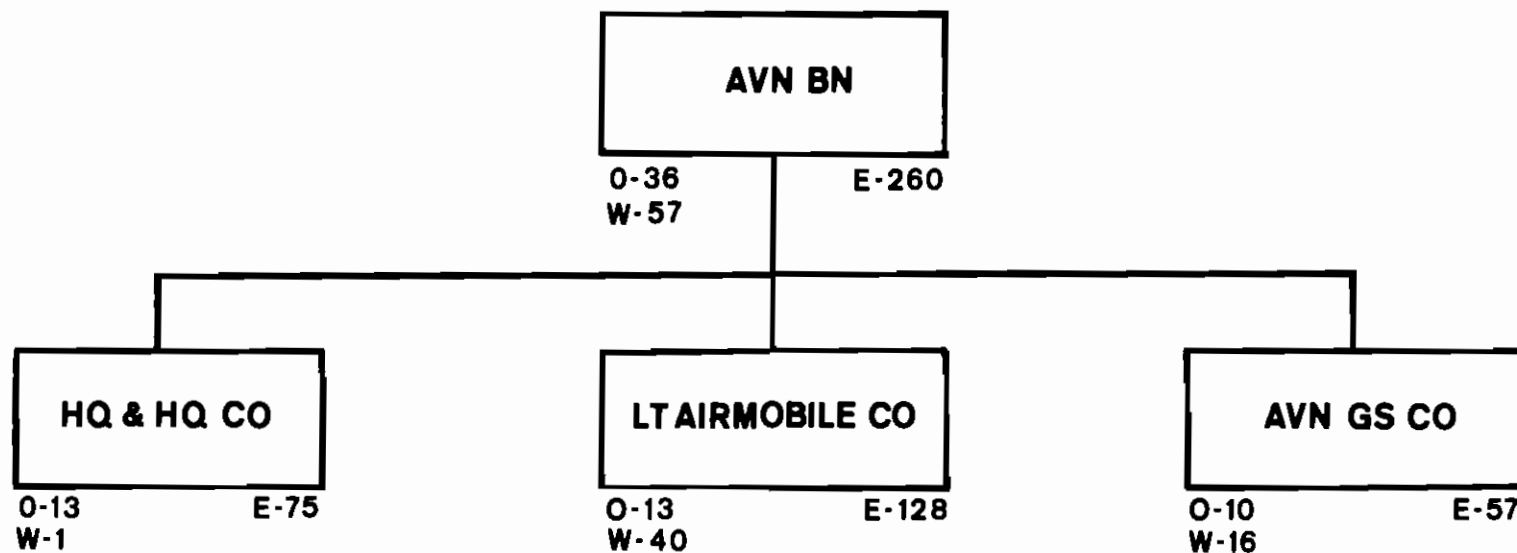


Figure 53. Aviation battalion, airborne division (TOE 1-55G).

- (3) Assignment. The aviation battalion is organic to the airborne division, TOE 57.
- (4) Capabilities. At full strength, the airborne division aviation battalion provides -
- (a) Command, control, staff planning, communications, and operational supervision for companies of the battalion and attached units.
 - (b) Limited aviation special staff personnel for the division headquarters.
 - (c) Personnel to supervise battalion supply, maintenance, and administration for organic and attached units.
 - (d) Operation of one instrumented airfield with terminal flight facilities to include ground controlled approach (GCA).
 - (e) Air messenger service, aerial radio relay, and field wire laying service by aircraft as required by the division headquarters.
 - (f) Airlift for one airborne rifle company in one airlift, using organic aircraft.
 - (g) Aeromedical evacuation augmentation of medical air ambulance elements.
 - (h) Helicopters to support the division headquarters, division support command, and other units without organic aircraft.
 - (i) Personnel who can engage in effective, coordinated defense of the unit's area or installation.
 - (j) An organic pathfinder section to provide the airmobile company and/or the general support company with the capability to reconnoiter and mark drop or landing sites to insure accurate delivery of personnel and material by paradrop or landing operations, and to assist in navigation and control of Army aircraft in the objective area.

Note. Units of this battalion are dependent upon the division administration company for personnel administration.

- (5) Limitations. The airborne division aviation battalion has the following limitations:
- (a) Operation of the instrumented airfield is influenced by the surrounding terrain and enemy electronic countermeasures.
 - (b) When the unit is operating from multiple areas, defensive measures must be closely coordinated with adjacent units.

- (6) Organization. The airborne division aviation battalion consists of a headquarters and headquarters company, a light airmobile company, and an aviation general support company. The aviation battalion headquarters functions as the tactical and controlling headquarters for the employment of aviation units assigned or attached to the aviation battalion. The organic pathfinder section provides -
- (a) Marking of aerial delivery and landing facilities with visual and electronic navigational aids.
 - (b) Assistance in navigation and control of Army aircraft within its area of operation.
 - (c) For the establishment and operation of one of the following pioneer landing facilities:
 - 1. One airplane landing zone.
 - 2. One helicopter landing zone containing eight helicopter landing sites.
 - 3. Two drop zones.
 - (d) Assistance on a reduced team basis to two supported units operating in the division area.
- (7) Concept of employment. The airborne division aviation battalion is not normally employed as a whole unit; instead, its elements are assigned missions within their capabilities to provide continuous support to units of the division.

b. Aviation Battalion Headquarters. The airborne division aviation battalion headquarters is normally located in the vicinity of the division instrumented airfield. To reduce vulnerability to guerrilla action, subordinate units of the battalion, particularly the light airmobile company, are usually dispersed close to the division reserve.

- (1) The airborne division aviation battalion commander assigns specific tasks to appropriate aviation companies of the battalion based on their capabilities and the type of mission to be performed. He may, when directed by the division commander, exercise operational control over all other organic aviation elements of the division in order to increase the total organic aviation capability. In addition, he advises the division staff on all matters pertaining to aviation in the division and, whenever feasible, recommends the integration of aviation in support of division operations.
- (2) The airborne division aviation battalion commander is also the airborne division aviation officer. While filling both positions, he is responsible for keeping the division commander informed and advised on all matters concerning the employment of elements of the battalion and all other organic and nonorganic Army aviation units and elements supporting the division.

- (3) As division aviation officer, the airborne division aviation battalion commander prepares the aviation annex of all division orders, and recommends to the division G3 the allocation of Army aviation means to support the requirements of the division.
- (4) The division aviation officer may exercise operational control, when delegated by the division commander, of all Army aviation units and elements assigned, attached, or under operational control of the command.
- (5) Upon receipt of a specific mission, the aviation battalion commander assigns it to the appropriate aviation company. The company commander will analyze the requirement and assign it to the appropriate platoon, insuring that timely planning and coordination are effected between elements of the units concerned. It is the aviation unit commander's responsibility to effect liaison with the supported unit when assigned a mission. When assigned the mission, the platoon and section commanders of the aviation companies coordinate with and advise the supported unit commander on all aviation matters. Planning will be accomplished to insure coordination and communication between the supported commander and the supporting aviation company.

c. Headquarters and Headquarters Company.

- (1) Composition. The composition of the headquarters and headquarters company, airborne division aviation battalion, is shown in figure 54.
- (2) Mission. The mission of the headquarters and headquarters company, airborne division aviation battalion, is to furnish command, control, administration, communications, battalion-level organizational maintenance, and supply for the aviation battalion.
- (3) Assignment. The headquarters and headquarters company is organic to the aviation battalion, airborne division, TOE 1-55G.
- (4) Capabilities. At full strength, the headquarters and headquarters company provides -
 - (a) Command, control, staff planning, communications, and operational supervision for companies of the battalion and attached units.
 - (b) Aviation special staff personnel for the division headquarters.
 - (c) Personnel to supervise battalion supply, maintenance, and administration for organic and attached units.
 - (d) Operation of one instrumented airfield with terminal flight facilities to include ground controlled approach.
 - (e) Mess facilities for the aviation general support company.
 - (f) Unit medical service to the division base airfield and elements of the aviation battalion.

- (g) Capabilities to reconnoiter and mark drop or landing sites to insure accurate delivery of personnel and material by paratroop or landing operations, and to assist in navigation and control of Army aircraft in the objective area.
- (5) Limitations. The headquarters and headquarters company has the following limitations:
- (a) Operation of the instrumented airfield is influenced by surrounding terrain and enemy electronic countermeasures.
 - (b) A limited defense capability against hostile ground and air attack.
 - (c) The special staff must be augmented by personnel from the resources of the battalion to provide 24-hour capability of the Army aviation element in the divisional tactical operations center (DTC).
- (6) Organization. The headquarters and headquarters company, airborne division aviation battalion, consists of the battalion headquarters and the headquarters company. The battalion headquarters contains the battalion commander and his staff. The headquarters company contains the company headquarters, battalion headquarters section, airfield terminal control section, battalion communications section, battalion maintenance section, medical section, and pathfinder section.
- (a) Battalion headquarters. The battalion headquarters includes the battalion commander, executive officer, assistant division aviation officer, battalion staff officers and assistants, and the battalion sergeant major. These personnel provide the supervision for staff sections found in any tactical headquarters. Liaison with supported units is provided by attached or assigned aviation organizations. The assistant division aviation officer is assigned to the battalion; however, his principal duty is as a division aviation special staff officer. He operates the Army aviation element (AAE) in the DTC. Command vehicular transportation, communications, and other mission items of equipment for the battalion commander and staff are found in the appropriate sections of the headquarters company. Command aerial transportation is provided by the aviation general support company as required.
 - (b) Headquarters company.
 - 1. Company headquarters. The company headquarters contains the company commander, first sergeant, supply sergeant, material readiness NCO, mess personnel, armorer, and clerk.
 - 2. Battalion headquarters section. The battalion headquarters section contains the operations sergeant, intelligence sergeant, chemical sergeant, and sufficient operations specialists and clerical personnel to operate the battalion headquarters section, battalion supply, and the division aviation

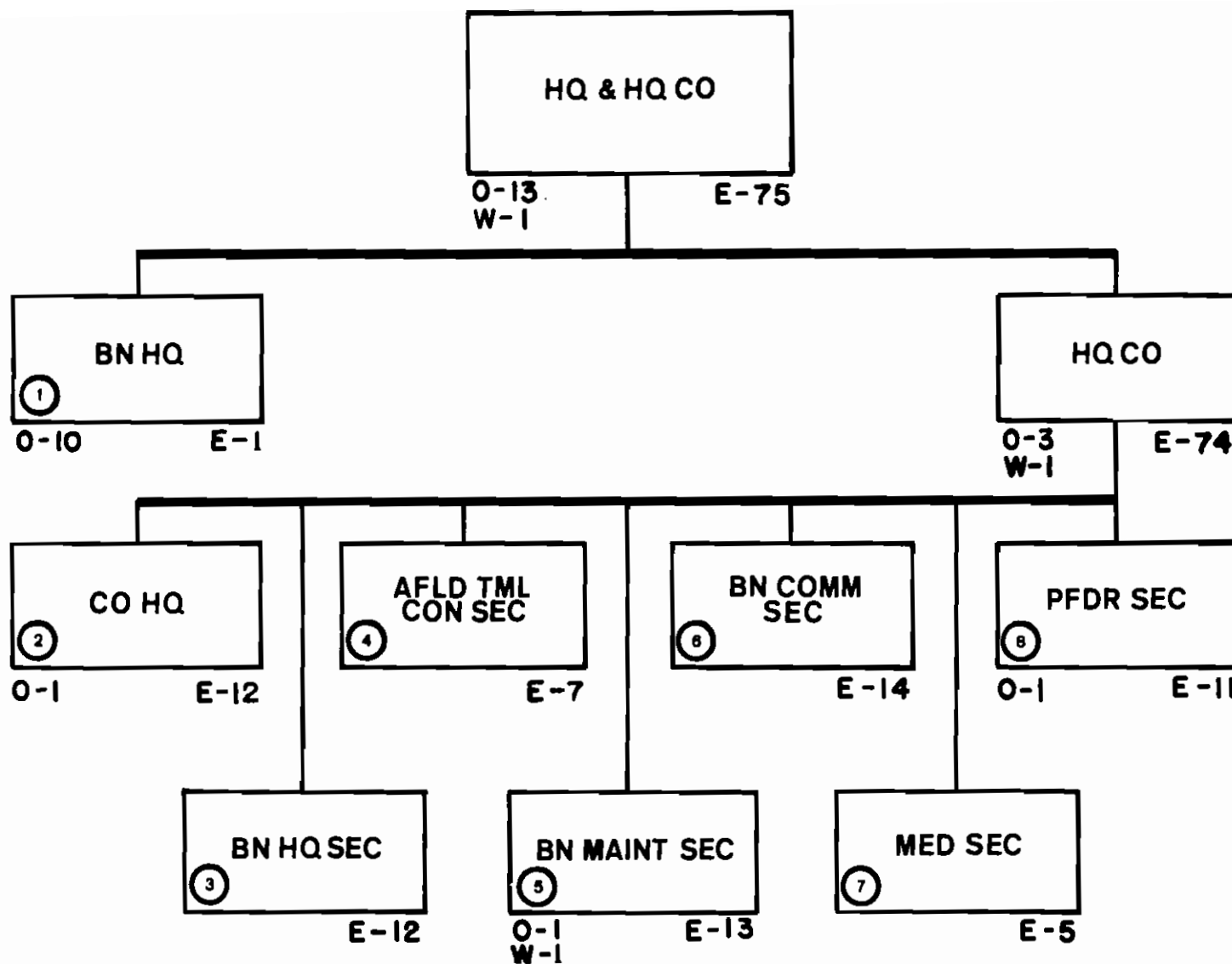


Figure 54. Headquarters and headquarters company, aviation battalion, airborne division (TOE 1-56G).

DATA FOR FIGURE 54*

1 BATTALION HEADQUARTERS

1 LTC	Bn Comd	1983	13
1 MAJ	XO	1983	13
1 MAJ	Asst Div Avn Off	2518	40
1 MAJ	S3	62162	13
1 MAJ	Avn Safety Off	67423	13
1 CPT	S1-Adj	62110	13
1 CPT	S2	69301	13
1 CPT	S4	64010	13
1 CPT	Sig Off	60210	13
1 CPT	Surf	73160	13
1 E-9	Sgt Maj	67N5P	08

2 COMPANY HEADQUARTERS

1 CPT	Co Comd	01983	13
1 E-8	First Sgt	67N5P	
1 E-7	Mat Readiness		
	NCO	67N4P	
1 E-6	Mess Steward	94B4P	
1 E-6	Sup Sgt	76N4P	
3 E-5	First Cook	94B2P	
1 E-4	Armorer	76K3P	
1 E-4	Co Clerk	71H2P	01
2 E-4	Cook	94B2P	42
1 E-3	Cook's Helper	94A1P	01

Radiometer IM-93/UD	6
Radiometer IM-174/PD	1
Tel set TA-1/PT	1
Tlr cgo 3/4-ton 2 wheel	2
Tlr tk water 400-gal 2 wheel	1
Trk cgo 3/4-ton 4x4	2
Trk cgo 2 1/2-ton 6x6	1

3 BATTALION HEADQUARTERS SECTION

1 E-8	Op Sgt	71P5P	07
1 E-7	Intel Sgt	71P4P	
1 E-7	Per Staff NCO	71H4P	
1 E-7	Sup Sgt	76K4P	
1 E-6	Cml NCO	54E4P	
1 E-5	Sr Op SP	71P2P	01
2 E-5	Clerk Typist	71B2P	01
1 E-4	Op SP	71P2P	01
1 E-4	Gen Sup SP	76K2P	
1 E-3	Lt Trk Dvr	71A1P	01
1 E-3	Sup Clerk	76A1P	

Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	1
Tlr cgo 1/4-ton 2 wheel	4
Tlr cgo 3/4-ton 2 wheel	2
Trk cgo 3/4-ton 4x4	2
Trk util 1/4-ton 4x4	4

4 AIRFIELD TERMINAL CONTROL SECTION

1 E-6	Sec Chief	93B4P	
1 E-5	GCA Equip Rpmn	26G2P	01
1 E-5	Sr Con Tower Op	93B2P	
1 E-5	Sr GCA Op	93B3P	
2 E-4	GCA Op	93B3P	01
1 E-4	Landing Con Op	93B2P	

Multimeter ME-26/U	1
Multimeter TS-352/4	1
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-46 mtd in	
trk 3/4-ton	1
Tel set TA-312/PT	1
Test set rdr AN/UPM-33	1

Test set rdr TS-488/UP	1
Test set rdo AN/ARM-8	1
Tlr cgo 3/4-ton 2 wheel	2
Tlr cgo 1 1/2-ton 2 wheel	1
Trk cgo 3/4-ton 4x4	3
Trk cgo 2 1/2-ton 6x6	1
Wind measuring set	
AN/PMQ-3D	1
Landing con cen AN/TSQ-71	1

5 BATTALION MAINTENANCE SECTION

1 CPT	Maint Off	66823	13
1 WO	Acft Rep Tech	671C0	13
1 E-7	Maint Supv	67N4P	
1 E-6	Hel Tech Insp	67H2F	
1 E-5	Mtr Sgt	63B4P	
2 E-4	Acft Parts SP	76H2P	
1 E-4	Maint Data SP	71B3P	
1 E-4	Powerman	52B2P	
1 E-4	Shop Clerk	71B2P	01
2 E-4	Wheel Veh Mech	63B2P	01
1 E-3	Sup Clerk	76A1P	
2 E-3	Wheel Veh Mech		
	Helper	63A1P	42

Tlr cgo 3/4-ton 2 wheel	3
Trk cgo 3/4-ton 4x4	3
Trk cgo 2 1/2-ton 6x6	1

6 BATTALION COMMUNICATIONS SECTION

1 E-6	Comm Chief	31F4P	
1 E-5	Sr Rdo Mech	31B2P	
1 E-4	Precise		
	Powerman	52B2P	01
1 E-4	Rdo Mech	31B2P	01

DATA FOR FIGURE 54 - (continued)

1 E-4 Sr Msg Clerk 36A1P
 1 E-4 Sr Rdo Op 05B2P
 1 E-4 Sr Swbd Op 36A1P
 2 E-4 Teletype Op 72B2P
 1 E-3 Msg Clerk 36A1P 01
 2 E-3 Rdo Op 05B2P
 1 E-3 Swbd Op 36A1P
 1 E-3 Wireman 36A1P 01

Elct typewriter acty equip

TSEC/KW-7 1
 Inverter vibrator PP-68/4 1
 Multimeter AN-URM-105 2
 Multimeter TS-352/4 1
 Rdo set AN/GCR-106 mtd in
 trk 3/4-ton 2
 Rdo set AN/GRR-5 mtd in
 trk 3/4-ton 1
 Rdo set AN/VRC-46 mtd in
 trk 1/4-ton 1
 Rdo set AN/VRC-49 mtd in
 trk 3/4-ton 1
 Rdo set con gp AN/GRA-39 2
 Rdo set con gp AN/GRA-74 2
 Speech acty equip TSEC/KY8 1
 Swbd tel manual SB-22/PT 2
 Tel set TA-312/PT 11
 tt AN/TGC-15 1
 Tml Tg-Tel AN/TGC-29 1
 Tlr cgo 1/4-ton 2 wheel 1
 Tlr cgo 3/4-ton 2 wheel 3
 Xmtr ir AN/CVX-1 1
 Trk cgo 3/4-ton 4x4 WWN 3
 Trk util 1/4-ton 4x4 1
 tt set AN/TGC-14 1

7 MEDICAL SECTION

1 E-6 Sec Sgt 91B4P
 1 E-6 Med Asst 91C2P
 1 E-5 Sr Med Aidman 91B3P
 1 E-4 Amb Dvr 91B2P 01
 1 E-4 Med Aidman 91B2P

Radiac set AN/PDR-27 1
 Tlr cgo 3/4-ton 2 wheel 1
 Trk amb 1/4-ton 4x4 1
 Trk cgo 3/4-ton 4x4 1

8 PATHFINDER SECTION

1 LT Pfdr Off 71542
 1 E-6 Pfdr Sgt 11B4P
 4 E-4 Sr Pfdr 11B4P
 6 E-3 Pfdr 11B1P 42

Radiacmeter IM-93/UD 4
 Radiacmeter IM-174/PD 1
 Rdo set AN/PRC-25 5
 Tel set TA-312/PT 1
 Tlr cgo 1/4-ton 2 wheel 1
 Xmtr ir AN/CVX-1 2
 Trk util 1/4-ton 4x4 1

REMARKS:

All personnel armed with rifle,
 5.56mm, unless otherwise
 indicated.

01 Also light truck driver.
 07 Also information NCO.
 08 Also education NCO.
 13 Armed with revolver cal .38,
 4-in. barrel.
 40 Remark 13 applies.
 42 Remark 01 applies to 1 EM.

office. The necessary wheeled vehicles, drivers, and FM radios to support the battalion headquarters are organic to this section.

3. Airfield terminal control section. The airfield terminal control section contains a section chief and the necessary personnel to provide air traffic control at the instrumented airfield and terminal flight facilities.
4. Battalion communications section. The battalion communications section contains the communications chief, radio operators, radio teletypewriter (RATT) operators, and communications repair personnel to provide battalion communications. This section operates in the division /CG command net, intelligence net, administrative /logistics net (AM-RATT), division warning broadcast net, and corps flight operations net. It establishes and operates a battalion communications center which serves as a message center and focal point for all battalion command radio and wire communication nets. FM radio is the normal means of communication with other elements of the company and battalion. An internal company wire net may be established within assembly or bivouac areas. Personnel of the section operate assigned vehicles as an additional duty.

Note. The communications system is not designed to install elaborate systems of wire communications. Maximum use must be made of other communication facilities, i.e., area communications system.

5. Battalion maintenance section. The battalion maintenance section contains the maintenance officer, aircraft repair technician, maintenance supervisor, battalion motor sergeant, and sufficient technical inspectors to provide assistance to aircraft and vehicle mechanics assigned to the battalion. Wheeled vehicle mechanics and helpers perform maintenance as directed. The aircraft maintenance officer, aircraft repair technician, maintenance sergeant, technical inspector, parts specialist, and shop clerk provide the battalion commander with supervisory and inspection personnel for aviation maintenance. The maintenance section will normally operate in the vicinity of the division instrumented airfield as an integral unit. Downtime per wheeled vehicle is reduced to a minimum by maintaining section integrity at one location, and by pooling equipment, spare parts, and skills. The quantity and quality of section maintenance and supply is governed by the technical skills of assigned personnel, by organic equipment, and by backup supply. This section provides backup organizational maintenance for the wheeled vehicles assigned to the airmobile and general support companies.

6. Medical section. This section contains the section sergeant, a medical assistant, and three enlisted personnel to assist the battalion surgeon in accomplishing the section's mission. The section provides emergency medical treatment, medical support to the battalion headquarters and subordinate units, and medical supervision of sanitation within the battalion. It also operates a battalion aid station. The enlisted personnel assist the battalion surgeon in keeping records and preparing reports and correspondence. The medical section is normally located near the aviation battalion command post and is employed as a unit.
7. Pathfinder section. The section contains a pathfinder officer and the pathfinder personnel required to support the aviation battalion. This section gives the aviation battalion the capability of reconnoitering and marking drop or landing sites to insure accurate delivery of personnel and material by parachute or landing operations, and of assisting in navigation and control of Army aircraft in the objective area.
- (7) Concept of employment. The headquarters and headquarters company is employed as directed by the battalion commander and normally operates from the division instrumented airfield. The aviation general support company and the headquarters and headquarters company establish and operate the division instrumented airfield together. Messing facilities for the aviation general support company are provided by the headquarters company. Organization of the sections within the company permits flexible employment to meet operational requirements. Terrain, the enemy situation, or the division's mission may require that the company operate at more than one location. Employment of the company at more than one location will require additional communications equipment and personnel.

Light Airmobile Company, Airborne Division Aviation Battalion.

- (1) Composition. The composition of the light airmobile company, airborne division aviation battalion, is shown in figure 55.
- (2) Mission. The mission of the light airmobile company is to provide tactical air movement of combat troops in airmobile operations, and tactical air movement of combat supplies and equipment in airmobile operations.
- (3) Assignment. The light airmobile company is organic to the aviation battalion, airborne division, TOE 1-55G.
- (4) Capabilities. At full strength, the light airmobile company provides -

 - (a) Continuous (day and night) operations during visual weather conditions and limited operations under nonvisual weather conditions in support of the force in the combat zone.
 - (b) In a single lift, airlift for one airborne rifle company.

- (c) Aerial movement of troops, supplies, and equipment within the division area.
 - (d) Aeromedical evacuation augmentation of medical air ambulance elements.
 - (e) Company level organizational maintenance on organic equipment.
- (5) Limitations. The light airmobile company has the following limitations:
- (a) It is partially dependent on higher headquarters or adjacent units for local security.
 - (b) It can offer only limited resistance against a hostile ground attack or enemy guerrilla action.
- (6) Organization. The light airmobile company consists of the company headquarters, three airlift platoons, and a service platoon.
- (a) Company headquarters. The company headquarters includes the company commander, executive officer, flight operations officer, first sergeant, flight operations chief, supply sergeant, mess steward, and sufficient personnel to perform the administrative, mess, and supply functions. Trucks are provided for administrative and supply functions and to transport the unit mess. FM radio is the normal means of communication within the company and the battalion. An internal company wire net may be established within the assembly or bivouac areas. The company normally disperses by platoon within the assembly area. The company headquarters normally will be established in an area which is centrally located in relation to the airlift platoons with distance depending on terrain and probability of nuclear attack. A company heliport will be established for use by the command post group and the service platoon. The service platoon will be located in proximity to the command post area.
 - (b) Airlift platoons (3). Each of the three platoons consists of a platoon headquarters and two airlift sections of four helicopters each. They have the personnel to operate the 24 UH-1 utility helicopters. In addition, they perform a portion of the organizational maintenance on these helicopters. These helicopters mount weapons kits for aerial fire support. The airlift platoons will be placed under operational control or in direct support of a unit, and will usually require limited administrative support from that unit. When not supporting a unit, a platoon area and heliport will be established close enough to the company command post and service elements to use the company's administrative support. The distance from the company command post will depend on the terrain and the possibility of nuclear attack. Usually, each platoon heliport is located within 6 kilometers or 15 minutes by vehicle from the company command post. The dispersal of helicopters reduces vulnerability to air or artillery attack; however, overdispersion must be avoided because of increased communication and security

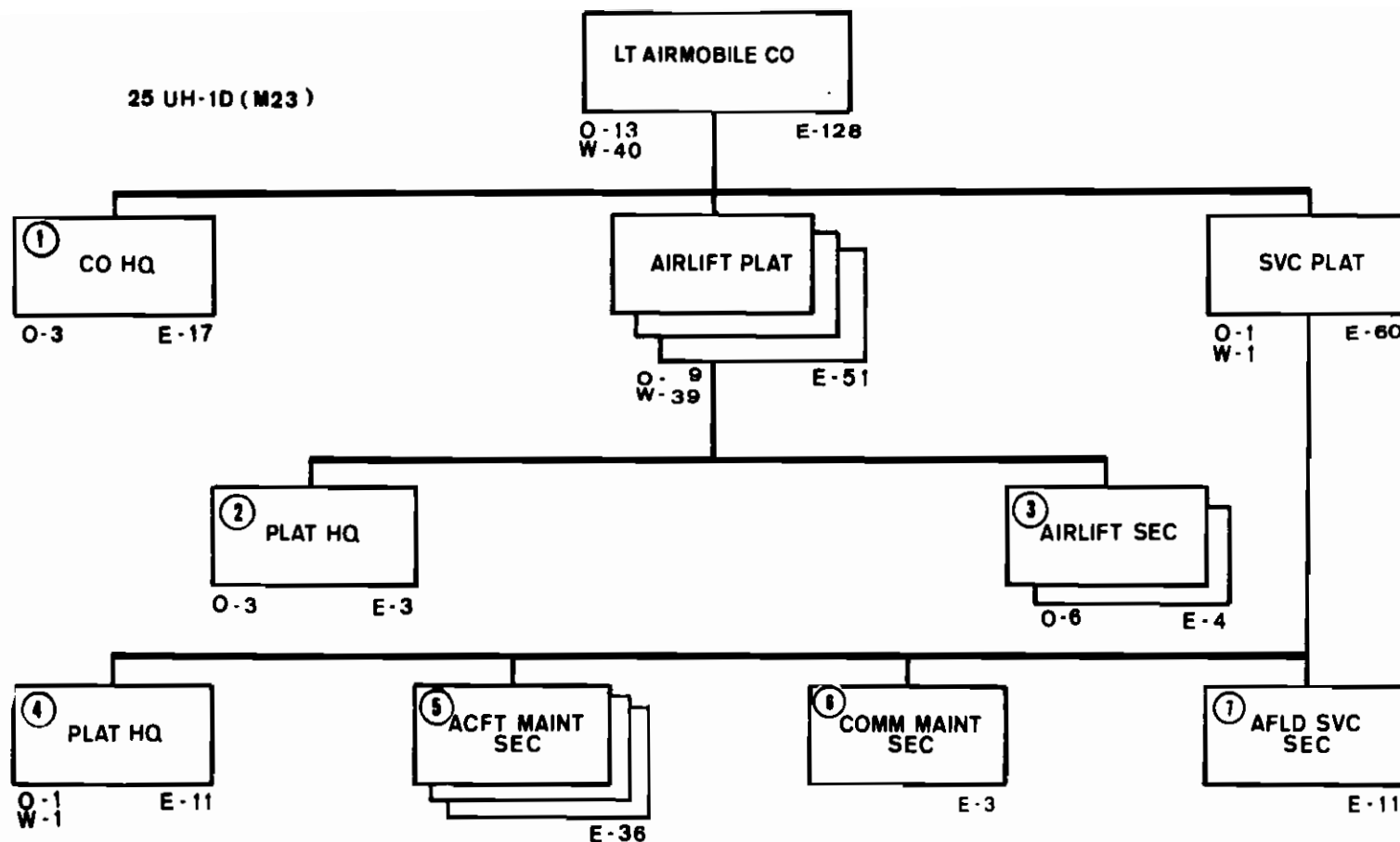


Figure 55. Light airmobile company, aviation battalion, airborne division (TOE 1-57G).

DATA FOR FIGURE 55*

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983	13
1 CPT	XO	1983	13
1 LT	Flt Op Off	1982	13
1 E-8	First Sgt	67R5P	
1 E-7	Flt Op Chief	71P4P	
1 E-6	Mess Steward	94B4P	
1 E-6	Sup Sgt	76K4P	
2 E-5	First Cook	94B2P	
1 E-4	Armorer	76K3P	01
1 E-4	Co Clerk	71H2P	01
3 E-4	Cook	94B2P	
1 E-4	Powerman	52B2P	
1 E-4	Sr Rdo Op	05B2P	01
1 E-4	Swbd Op	36A1P	
1 E-4	Cook's Helper	94A1P	01
1 E-4	Rdo Op	05B2P	
1 E-4	Wireman	36A1P	01

Radiac set AN/PDR-27.....	1
Radiacmeter IM-93/UD.....	2
Radiacmeter IM-174/PD.....	1
Rdo set AN/GRC-106 mtd in	
trk 1/4-ton.....	1
Rdo set AN/GRR-5 mtd in	
trk 3/4-ton.....	1
Rdo set AN/PRC-25.....	3
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton.....	1
Rdo set AN/VRC-46 mtd in	
trk 3/4-ton.....	1
Rdo set AN/VRC-49 mtd in	
trk 1/4-ton.....	1
Swbd tel manual SB-22/PT.....	1
Tel set TA-1/PT.....	1
Tel set TA-312/PT.....	4
Tlr cgo 3/4-ton 2 wheel.....	1
Tlr cgo 3/4-ton 2 wheel.....	3

Tlr tk water 400-gal	
1 1/2-ton 2 wheel.....	1
Trk cgo 3/4 ton 4x4.....	3
Trk cgo 2 1/2-ton 6x6.....	1
Trk util 1/4-ton 4x4.....	1

2 AIRLIFT PLATOON HEADQUARTERS (3)

1 CPT	Plat Comd	1981	13
1 E-6	Plat Sgt	67R4P	
	Tel set TA-1/PT.....	3	
	Tel set TA-312/PT.....	3	

3 AIRLIFT SECTION (6)

6 LT	Sec Comd	1981	13, 40
39 WO	Hel Pilot	062B0	13
24 E-5	Crew Chief	67N2F	13
24 E-4	Mach Gnr	11B2F	

Dispenser riot con agt hel or	
veh mtd.....	1
Kit, 2.75-in rkt, XM3.....	2
Kit mg quad M6.....	2
Rdo set AN/URC-10.....	4
Hel util tac trans.....	4
Armt subsystem hel 7.62mm	
gun mach door mtd.....	24
Hel util UH-1D.....	24

4 SERVICE PLATOON HEADQUARTERS

1 CPT	Plat Comd	64823	13
1 WO	Acft Maint Tech	671C0	13
1 E-7	Plat Sgt	67R4P	
2 E-6	Hel Tech Insp	67W2P	
1 E-5	Crew Chief	67N2F	
1 E-4	Acft Sup SP	76H2P	

1 E-4	Hel Mech	67N2P	
1 E-4	Mach Gnr	11B2F	
2 E-4	Maint Data SP	71B3P	
1 E-4	Shop Clerk	71B2P	
1 E-4	Wheel Veh Mech	63B2P	01

Armt subsystem hel 7.62mm	
gun mach door mtd.....	1
Hel util UH-1D.....	1
Radiacmeter IM-93/UD.....	2
Tel TA-312/PT.....	1
Tlr cgo 1 1/2-ton 2 wheel.....	1
Transporter airmobile hyd.....	
lift for shelter and container..	1
Trk cgo 2 1/2-ton 6x6 WVN.....	1

5 AIRCRAFT MAINTENANCE SECTION

3 E-6	Maint Supv	67R4P	
12 E-5	Sr Hel Mech	67N2P	
15 E-4	Hel Mech	67N2P	
6 E-3	Hel Mech		
	Helper	67A1P	44
	Tlr cgo 3/4-ton 2 wheel.....	3	
	Trk cgo 3/4-ton 6x6.....	3	

6 COMMUNICATIONS MAINTENANCE SECTION

1 E-5	Comm Chief	31F4P	
2 E-4	Avn Elct Equip		
	Mech	31Q2P	
	Inverter vibrator PP-68/U.....	1	
	Multimeter TS 352/U.....	2	

*For remarks, see page 198.

DATA FOR FIGURE 55 - (continued)

⑦ AIRFIELD SERVICE SECTION

REMARKS:

1 E-5	Sec Chief	67R40		01	Also light truck driver.
2 E-4	Crash Rsq SP	51M20	43	13	Armed with revolver cal .38, 4-inch barrel.
6 E-4	Acft Fuel Handler SP	56C20	01	40	Must be qualified rotary wing commander.
	Rdo set AN/GRC-125 mtd in 3/4-ton trk		1	43	Remark 01 applies to 1 EM.
	Tel set TA-312/PT		1	44	Remark 01 applies to 3 EM.
	Xmtr ir AN/CVX-1		1		
	Trk cgo 3/4-ton 4x4 WWN		1		
	Trk cgo 2 1/2-ton 6x6 WWN		6		

problems. The airlift platoons provide tactical air movement of troops, supplies, and equipment; aerial movement of artillery or infantry weapons into or out of firing positions; a means of vertical infiltration for behind-the-lines raiding parties, special forces personnel and patrols, and for recovering them on short notice from small predesignated areas; support and reinforcement missions as directed; and facilities for movement of engineer or chemical teams and munitions.

1. Platoon headquarters. Each platoon contains a platoon commander and a platoon sergeant.
2. Airlift sections. Each of the two sections contains a section commander who pilots one of the helicopters and supervises the training of the section. There are sufficient rotary wing aviators and crew chiefs to operate the helicopters assigned to each section.

(c) Service platoon. This platoon consists of a platoon headquarters (equipped with a UH-1D helicopter), aircraft maintenance section, communications maintenance section, and an airfield service section. It provides organizational maintenance services for the airmobile company's helicopters, vehicles, small arms, and communications equipment. The platoon headquarters and its maintenance and service elements will normally be located in the same general area as the light airmobile company command post. The degree of dispersion will depend upon the tactical situation. Because of the large number of items of equipment in the area, all personnel should be thoroughly trained in camouflage techniques and camouflage discipline. A heliport will be established for the joint use of the command group and the service elements.

1. Platoon headquarters. The platoon headquarters contains the platoon commander, aircraft maintenance technician, platoon sergeant, helicopter technical inspector, crew chief, wheeled vehicle mechanic, helicopter mechanic, an aircraft supply specialist, a shop clerk, machine gunner, and maintenance data specialist. This section supervises and inspects the organizational maintenance of helicopters and stocks the required helicopter parts and supplies. Officers from the flight platoons will be designated by the company commander as assistant maintenance officer, aircraft supply officer, and airfield service officer. They perform these additional duties under the supervision of the service platoon commander.
2. Aircraft maintenance section (3). Each of these three sections contains a maintenance supervisor and helicopter mechanics to perform the organizational maintenance of the company. Individual crew chiefs in the airlift platoons assist the personnel of the maintenance section in performing maintenance. Each section has a 3/4-ton truck with trailer assigned.

3. Communications maintenance section. This section contains a communications chief and two repairmen to accomplish the functions of the section. The section performs organizational maintenance on communications equipment assigned to the company.
4. Airfield service section. This section contains a section chief and personnel to provide crash and rescue service, refueling service, parking and mooring service, and general assistance to helicopters using the company heliport. The airfield service section is equipped with six 2 1/2-ton trucks for servicing helicopters on the heliports. A 3/4-ton truck is required to transport, install, and maintain a field lighting set. Additional personnel to assist the airfield service section may be detailed from other elements of the company.

(7) Concept of employment.

- (a) The light airmobile company is most effective when used as a unit, but can be fragmented if necessary. With assistance from its parent or supported unit, a platoon or section can operate in a detached status from its parent unit for an extended period. The efforts of the remaining sections in the company are directed toward support of the airlift platoons. The company operates from its own dispersal or assembly area in the division rear area within the perimeter of one of the tactical units of the division reserve. It is habitually employed in support of the division in forward areas of the combat zone. Prepared landing areas are not required for its operations.
- (b) The planning and coordination necessary for the support of a unit will vary according to the mission of the supported unit. The airmobile company commander can best maintain his unit in a state of readiness through close and continuous coordination with the division aviation battalion commander. When the company is assigned an airlift mission, the commander will take immediate steps to effect liaison with the supported unit. The planning sequence to be coordinated is listed below.
 1. The mission and tactical plan, to include the strength and composition of the supported unit.
 2. The landing plan, which includes landing sites, time of arrival, and order of arrival.
 3. The air movement plan, which includes routes to and from the objective area.
 4. The loading plan.
- (c) If the operation is to be supported by Army pathfinders and/or terminal guidance personnel, team leaders and aviators must coordinate radio aids and frequencies and other required landing

aids; i. e. , colored smoke, panels, ground-handling personnel, etc.

e. Aviation General Support Company.

- (1) Composition. The composition of the aviation general support company, airborne division aviation battalion, is shown in figure 56.
- (2) Mission. The aviation general support company provides aviation support for the division headquarters, division support command, and other units without organic aircraft. In addition, it provides limited general support and reinforcement to units with organic aircraft, limited aerial escort for airmobile operations, and limited supplemental aerial fire support to combat elements of the division.
- (3) Assignment. The aviation general support company is organic to the aviation battalion, airborne division.
- (4) Capabilities. At full strength, the aviation general support company provides -
 - (a) Continuous (day and night) operations during visual weather conditions and limited operations under nonvisual weather conditions.
 - (b) Aerial observation, reconnaissance, and surveillance (day and night) of enemy areas for the purposes of locating, verifying, and evaluating targets, terrain study, and fire adjustment.
 - (c) Radiological survey.
 - (d) Command control, liaison, reconnaissance, and communications.
 - (e) Aeromedical evacuation augmentation of medical air ambulance elements and aeromedical evacuation for the aviation battalion.

Note. This unit is dependent upon the division administration company for personnel administration and upon the headquarters and headquarters company, aviation battalion, for mess.

- (5) Limitations. The aviation general support company has the following limitations:
 - (a) It is partially dependent on higher headquarters or adjacent units for local security.
 - (b) It can offer only limited resistance against hostile ground attack or enemy guerrilla action.
- (6) Organization. The aviation general support company consists of a company headquarters, general support platoon, and service platoon.
 - (a) Company headquarters. The company headquarters contains the company commander, executive officer, flight operations officer,

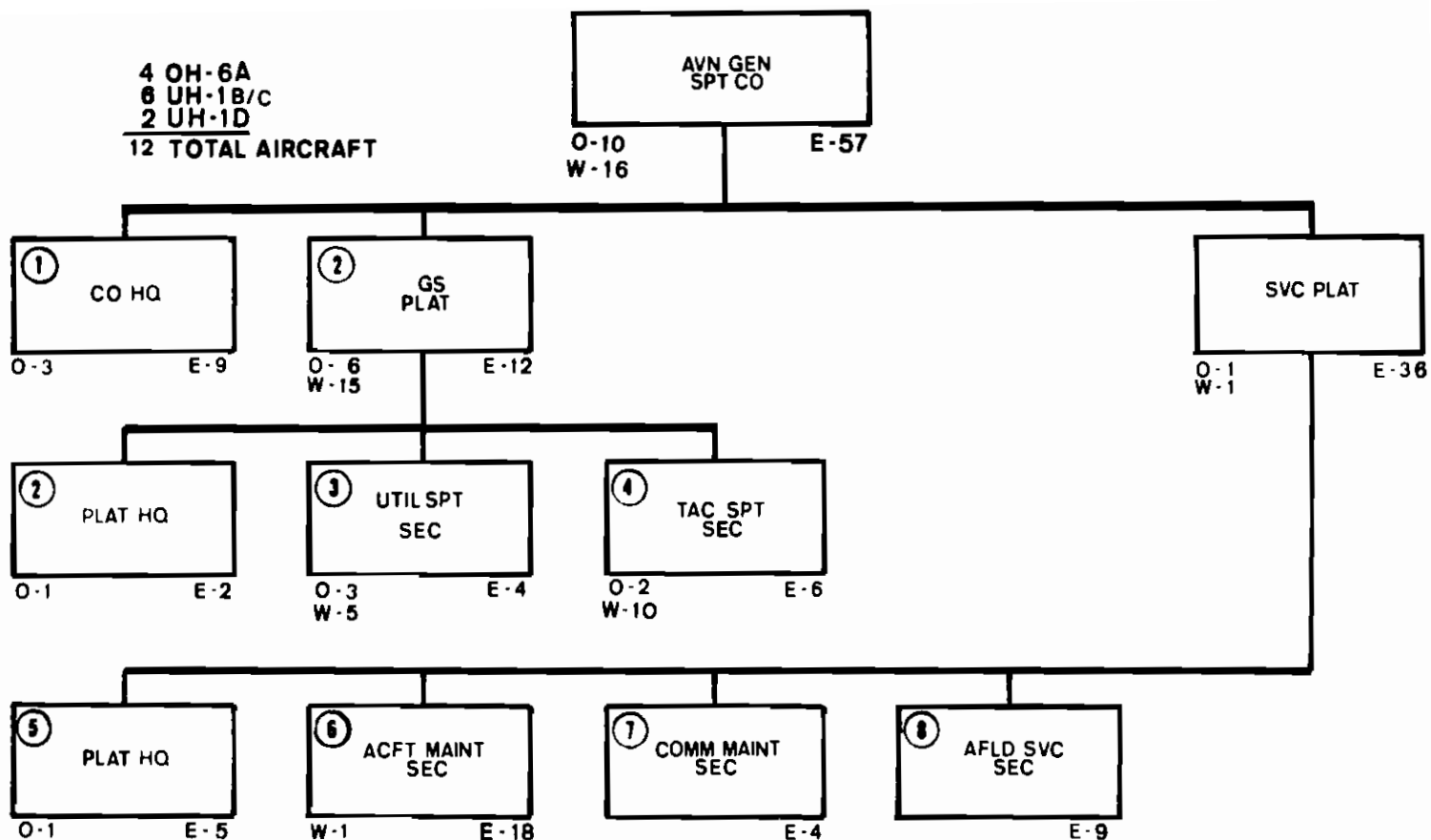


Figure 56. Aviation general support company, airborne division aviation battalion (TOE 1-58E).

DATA FOR FIGURE 56*

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983	13
1 CPT	XO	1983	13
1 LT	Flt Op Off	1982	13
1 E-8	First Sgt	67R5P	
1 E-7	Flt Op Chief	71P4P	
1 E-6	Sup Sgt	76K4P	
1 E-4	Armorer	76K3P	
1 E-4	Co Clerk	71H2P	
1 E-4	Sr Rdo Op	05B2P	
1 E-4	Swbd Op	36A1P	
1 E-4	Rdo Op	05B2P	01
1 E-3	Wireman	36A1P	01

Radiac set AN/POR-27	1
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Rdo set AN/GRC-106 mtd in	
trk 1/4-ton	1
Rdo set AN/GRR-5 mtd in	
trk 1/4-ton	1
Rdo set AN/PRC-25	3
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1
Rdo set con gp AN/GRA-39	2
Rdo set con gp AN/GRA-74	1
Swbd tel manual SB-22/PT	1
Tel set TA-312/PT	4
Tlr cgo 3/4-ton 2 wheel	1
Trk cgo 3/4-ton 4x4	1
Trk util 1/4-ton 4x4	1

2 GENERAL SUPPORT PLATOON HEADQUARTERS

1 CPT	Plat Comd	1981	13, 40
1 E-6	Plat Sgt	67N4P	
1 E-3	Lt Trk Dvr	67A1P	

Radiacmeter IM-93/UD	2
Tel set TA-312/PT	1
Trk util 1/4-ton 4x4	1

3 UTILITY SUPPORT SECTION

1 LT	Sec Ldr	1981	13
1 LT	LOH Flt Ldr	1981	13
1 LT	Util Flt Ldr	1981	13
5 WO	Hel Pilot	062B0	13
2 E-5	Hel Crew Chief	67N2F	13
2 E-5	LOH Crew Chief	67N2P	
Hel ohsn OH-6A	4		
Hel util UH-1D	2		
Radiacmeter IM-174/PD	5		

4 TACTICAL SUPPORT SECTION

1 LT	Sec Ldr	1981	13
1 LT	Flt Ldr	1981	13
10 WO	Hel Pilot	062B0	13
6 E-5	Hel Crew Chief	67N2F	
Armt subsystem XM21	6		
Armt subsystem M5	6		
Hel util UH-1B/C	6		

5 SERVICE PLATOON HEADQUARTERS

1 CPT	Plat Comd	64823	13
1 E-7	Plat Sgt	67N4P	
1 E-6	Hel Tech Insp	67W2F	
1 E-4	Powerman	52B2P	01
1 E-4	Acft Rep Parts		
SP	76H2P		
1 E-4	Wheel Veh Mech	63B20	01

Multimeter TS 352/U	1
Radiacmeter IM 93/UD	2
Tel set TA-312/PT	1
Tlr cgo 3/4-ton 2 wheel	2
Trk cgo 3/4-ton 4x4	2

6 AIRCRAFT MAINTENANCE SECTION

1 WO	Acft Maint Tech	671C0	13
1 E-7	Maint Supv	67R4P	
2 E-5	Acft Armt Rpmn	45J2P	
4 E-5	Sr Hel Mech	67N2P	
3 E-4	Acft Armt Rpmn	45J2P	
5 E-4	Hel Mech	67N2P	
1 E-4	Maint Data SP	71B3P	
2 E-4	Hel Mech Helper	67A10	42

Tlr cgo 3/4-ton 2 wheel	2
Transporter airmobile hyd	
lift for shelter and container	1
Trk cgo 3/4-ton 4x4	2

7 COMMUNICATIONS MAINTENANCE SECTION

1 E-5	Comm Chief	31F4P	
2 E-4	Avn Elct Equip		
Mech	31Q2P		
1 E-4	Rdo Mech	31B2P	01

Inverter vibrator PP-68/U	2
Multimeter AN/URM-105	1
Multimeter TS-352/U	4
Tlr cgo 3/4-ton 2 wheel	1
Trk cgo 3/4-ton 4x4	1

DATA FOR FIGURE 56 - (continued)

8 AIRFIELD SERVICE SECTION

REMARKS:

1 E-5	Sec Chief	67N4P	
1 E-5	Crash Rsq		
	Chief	51M4P	41
4 E-4	Acft Fuel Hdlg		
	SP	56C2P	01
1 E-4	Ammo Storage		
	SP	55B2P	01
2 E-4	Crash Rsq SP	51N2P	43

01	Also light truck driver.
13	Armed with revolver cal .38, 4-inch barrel.
40	Must be qualified rotary wing instrument examiner.
42	Remark 01 applies to 2 EM.
43	Remark 01 applies to 1 EM.

Rdo set AN/GRC-125 mtd in	
trk 3/4-ton.....	1
Tel set TA-312/PT	1
Tlr cgo 3/4-ton 2 wheel	1
Trk cgo 3/4-ton 4x4.....	1
Trk cgo 3/4-ton 4x4 WVN	1
Trk cgo 2 1/2-ton 6x6 WVN.....	4

first sergeant, flight operations chief, supply sergeant, and the personnel to perform administrative, operational, and supply functions for the company. Assigned trucks provide transportation to accomplish these functions. FM radio is the normal means of communication within the company and the battalion. An internal company wire net may be established within the assembly or bivouac areas. The company normally disperses by platoon in the vicinity of the division instrumented airfield.

- (b) General support platoon. The general support platoon contains the platoon commander and sufficient personnel to operate the four light observation helicopters, and eight utility helicopters assigned to the platoon. In addition, this platoon performs organizational maintenance on these helicopters. The platoon is composed of a platoon headquarters, a utility support section, and a tactical support section. The platoon provides aircraft to support the division headquarters, division support command, and other division units without organic aircraft; limited general support and reinforcement to division units with organic aircraft; and the aerial mobility required for command, control, liaison, observation, augmentation of aeromedical evacuation means, reinforcement for airmobile operations, and limited logistical transport service. The platoon commander and the company operations officer exercise necessary control to prevent duplication of missions and to insure maximum utilization of assigned aircraft.
1. Platoon headquarters. The platoon headquarters contains the platoon commander, platoon sergeant, and a light truck driver. These personnel perform the administrative, operational, and supply functions for the general support platoon.
 2. Utility support section. The utility support section contains a section leader, LOH flight leader, utility flight leader, and the aviators and crew chiefs to man and maintain the four OH-6A and two UH-1D helicopters organic to the section. This section furnishes aviation support for divisional units without organic aircraft, and, within its capabilities, provides tactical aerial movement of combat supplies, equipment, and replacements upon request. It supplements aeromedical evacuation from the immediate battlefield area, and augments tactical airlift in support of divisional airmobile operations. The section also supports and augments, on a limited scale, the aviation requirements of division units with organic aircraft. Elements of the section can be employed individually or by section in support of a unit. The section may be employed to augment the airlift capability of the light airmobile company for company-size airmobile operations. Aircraft of this section are usually assigned missions of reconnaissance support, including aerial radiological survey, courier, and command transport services.
 3. Tactical support section. The tactical support section contains a section leader, flight leader, and the aviators to man

and maintain the six organic UH-1B/C helicopters. These helicopters are armed with the XM21 and M5 armament sub-systems. This section affords limited aerial fire support to divisional units in both offensive and defensive operations. It also provides aerial escort and aerial fire support for airmobile operations. The tactical support section normally operates from the division airfield.

- (c) Service platoon. The service platoon consists of the service platoon headquarters, aircraft maintenance section, communications maintenance section, and airfield service section. It provides organizational maintenance for organic avionics and sensor equipment, aircraft parts resupply, and refueling service. The platoon headquarters and its maintenance and service elements will normally be located in the same general area as the company headquarters. The tactical situation will dictate the degree of dispersion required. All personnel must be thoroughly trained in camouflage techniques and discipline.
1. Platoon headquarters. This headquarters contains the platoon commander, platoon sergeant, helicopter technical inspector, aircraft repair parts specialist, powerman, and a wheeled vehicle mechanic. The section supervises and inspects the organizational maintenance of aircraft, and stocks the required aircraft parts and supplies. Officers from the flight platoons will be designated by the company commander as assistant maintenance officer, aircraft supply officer, and airfield service officer. They perform these additional duties under the supervision of the service platoon commander.
 2. Aircraft maintenance section. The aircraft maintenance section contains an aircraft maintenance technician, a maintenance supervisor, an armament repairman, a maintenance data specialist, and aircraft mechanics to perform the organizational maintenance for the company. Individual crew chiefs in the flight platoons assist the personnel of the maintenance section in performing maintenance. Minimum vehicles for required day-to-day operations are assigned to the section.
 3. Communications maintenance section. This section contains the communications chief and communications repairmen to accomplish the functions of the section. The section performs organizational maintenance on the communications and electronic equipment assigned to the company.
 4. Airfield service section. This section contains an airfield service chief and personnel to provide crash and rescue service, refueling service, parking and mooring service, and general assistance to aircraft using the Army airfield. The airfield service section is equipped with six 2 1/2-ton trucks and four 500-gallon collapsible drums with pump system for

servicing aircraft on the Army airfields. Two 3/4-ton trucks are required to transport, install, and maintain a field lighting set and to support other related airfield activities. Additional personnel to assist the airfield service section may be detailed from other elements of the company.

(7) Concept of employment.

- (a) The aviation general support company is employed as directed by the aviation battalion commander and operates from the division instrumented airfield. The aviation battalion headquarters and headquarters company and the aviation general support company establish and operate the division instrumented airfield together. Messing facilities are provided by the headquarters company. The company contains the personnel and equipment necessary to provide continuous and responsive aviation support to the division. It performs its own organizational maintenance, and provides its own supply and communications, but depends upon the division administration company for personnel administration. Organization of the sections within the company permits flexible employment to meet operational requirements. The general support platoon provides aviation support for those divisional units without organic aircraft, or limited reinforcement for those units with organic aircraft. The company establishes and maintains a heliport adjacent to the division main command post to support the division commander and his staff. This responsibility is normally assigned to the general support platoon commander. He coordinates the location of the heliport with the division headquarters commandant.
- (b) The company commander must anticipate plans for the employment of his company. To insure proper coordination, he maintains close liaison with the S3 of the battalion. The success of a mission depends upon the planning and coordination between the supported and supporting commanders. The supporting commander establishes and maintains liaison with the supported unit. Liaison officers act as technical advisors in all matters pertaining to their respective units. The amount and type of planning and coordination will vary with each mission. To maximize the effect of the available aviation support, close and continuous coordination with supported unit commanders is required.

43. AIR CAVALRY TROOP, AIRBORNE DIVISION

The air cavalry troop, airborne division, has the same structure, missions, capabilities, and concepts of employment as the air cavalry troop of the infantry division. See paragraph 38 for a discussion of this unit.

44. AVIATION SECTION, AIRBORNE DIVISION ARTILLERY

a. The aviation section, headquarters division artillery of the airborne division, has the same personnel assignments, capabilities, organization, and concepts of employment as the aviation section, infantry division artillery. See paragraph 39 for a discussion of this unit.

b. Authorized major items of equipment are different. The major items organic to the aviation section, airborne division artillery, are listed below:

Drum collapsible fuel 500-gal.....	1	Tel set TA-312/PT.....	1
Hel OH-6A.....	9	Tlr cgo 1/4-ton.....	1
Hel UH-1B/C.....	2	Tlr cgo 3/4-ton.....	1
Radiacmeter IM-93/UD.....	2	Tlr cgo 1 1/2-ton.....	1
Radiacmeter IM-174/PD.....	10	Trk cgo 3/4-ton.....	1
Rdo set AN/GRR-5 mtd in trk 3/4-ton..	1	Trk cgo 2 1/2-ton WWN.....	1
Rdo set AN/VRC-46 mtd in trk 3/4-ton.	1	Trk tk fuel svc 2 1/2-ton.....	1
		Trk util 1/4-ton.....	1

45. BRIGADE AVIATION SECTION, AIRBORNE DIVISION

The aviation section of the airborne brigade is capable of performing the same missions as the brigade aviation section of the infantry division. Their organization and concepts of employment are the same. See paragraph 40 for a discussion of this unit. The personnel and major items of equipment organic to the brigade aviation section, airborne division, are shown in figure 57.

46. TRANSPORTATION AIRCRAFT MAINTENANCE COMPANY, MAINTENANCE BATTALION, AIRBORNE DIVISION

a. The mission, organization, and structure of the transportation aircraft maintenance company, airborne division, is essentially the same as for the transportation aircraft maintenance company, infantry division. See paragraph 41 for a discussion of this unit.

b. A slight difference occurs in the authorized major items of equipment. The major items for the transportation aircraft maintenance company, airborne division, are as follows:

COMPANY HEADQUARTERS

Gun mach 7.62mm.....	2
Radiacmeter IM-93/UD.....	2
Radiacmeter IM-174/PD.....	2
Rdo set AN/GRR-5 mtd in	
trk 1/4-ton.....	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton.....	1
Swbd tel SB-993/GT.....	1
Tel set TA-312/PT.....	2
Tlr cgo 1/4-ton.....	1
Tlr cgo 3/4-ton.....	1
Tlr cgo 1 1/2-ton.....	1
Tlr tk water 400-gal.....	1
Trk cgo 3/4-ton.....	1
Trk cgo 2 1/2-ton.....	1
Trk util 1/4-ton.....	2

TEST AND INSPECTION SECTION

Armt subsystem M23.....	2
Hel UH-1D.....	2
Rdo set AN/PRC-25.....	1
Rdo set AN/URC-10.....	2

FORWARD SUPPORT PLATOON HEADQUARTERS

Radiacmeter IM-93/UD.....	2
Tel set TA-312/PT.....	1
Tlr cgo 1/4-ton.....	1
Trk util 1/4-ton.....	1

ROTARY WING SECTION (2)

Tlr cgo 3/4-ton.....	2
Trk cgo 3/4-ton WWN.....	2

MAIN SUPPORT PLATOON

Radiac set AN /PDR-27.....	1
Radiacmeter IM-93 /UD	2
Shop set acft maint elec inst.....	1
Shop set acft maint mach	
and eng	1
Shop set acft maint prop	
and rotor.....	1
Tel set TA-312 /PT.....	1

MAIN SUPPORT PLATOON (continued)

Tlr cgo 3 /4-ton.....	2
Tlr cgo 1 1 /2-ton	6
Transporter airmobile: Hyd lift	
for shelter and X-4 container..	7
Trk cgo 3 /4-ton	2
Trk cgo 2 1 /2-ton.....	8
Trk util.....	1
Trk wkr crane 2 1 /2-ton WWN ..	1

Section IV. AVIATION OF MECHANIZED AND ARMORED DIVISIONS**47. GENERAL**

Aviation organic to the mechanized and armored divisions differs from the previously discussed divisional aviation in that it has no aviation battalion. Aviation staff personnel are found in the division aviation section. The command aviation section provides limited aviation support to the division, and the aviation support detachment operates the division instrumented airfield.

48. AVIATION SECTION, MECHANIZED AND ARMORED DIVISIONS

a. Mission. The mission of the aviation section is to provide aviation special staff personnel for the division headquarters.

b. Organization. The division aviation section contains an aviation officer, an assistant aviation officer, an operations officer, a safety officer, an operations sergeant, a clerk typist, and two light truck drivers.

c. Employment. The aviation section is collocated with the division headquarters. Its personnel may be split for operations at both rear and forward CP locations as the situation dictates.

- (1) **Aviation officer.** The aviation officer (or assistant aviation officer in his absence) is responsible for keeping the division commander informed and advised on all matters relative to the employment of all organic and nonorganic Army aviation units and elements supporting the division.
- (2) **Operations officer.** The operations officer is responsible for the preparation of the aviation annex for division orders, and the operation of the aviation section.
- (3) **Aviation safety officer.** The aviation safety officer is responsible for the establishment of the command aviation safety program and is also advisor for matters relating to aviation safety.
- (4) **Operations sergeant.** The operations sergeant supervises the administration of the aviation office and the three assigned administrative personnel.

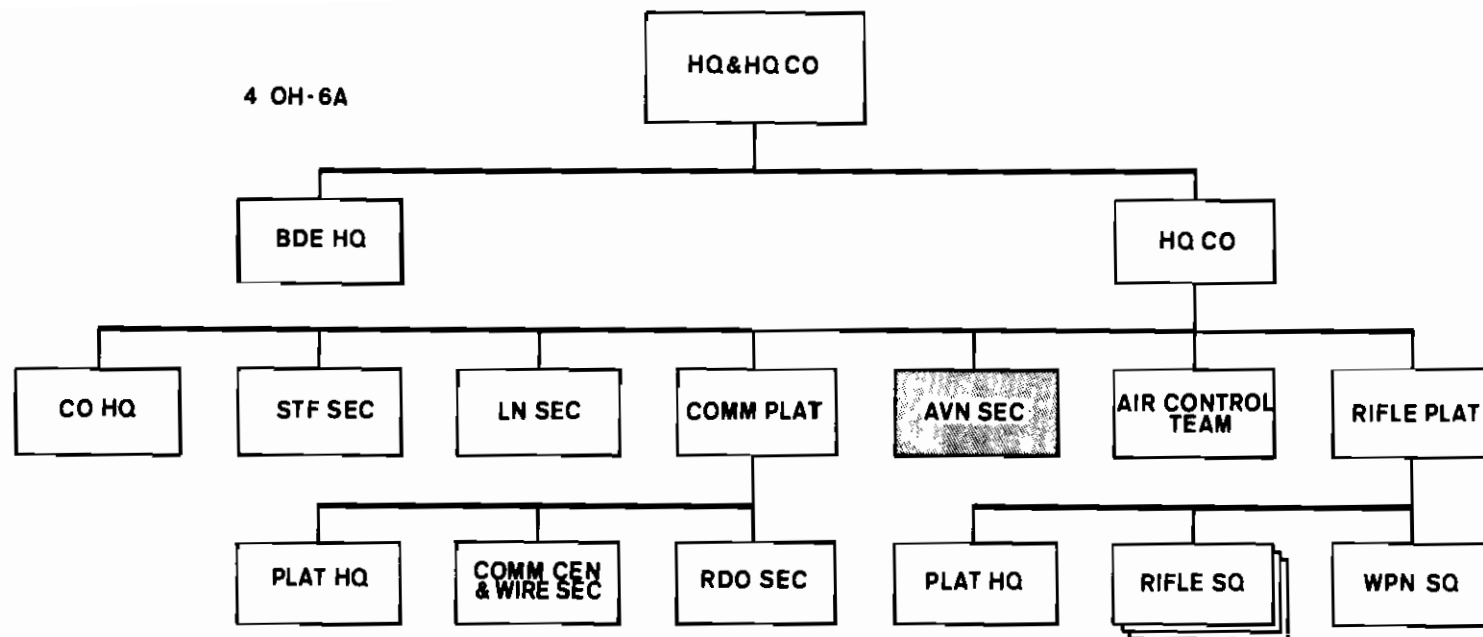


Figure 57. Headquarters and headquarters company, airborne division brigade (TOE 57-42G).

DATA FOR FIGURE 57 (AVIATION SECTION ONLY)

1 CPT Sec Comd 61981 13, 52
 3 WO RW Aviator 062B0 13
 2 E-5 Crew Chief 67N2P 13, 51, 55
 1 E-4 Fuel Handling
 SP 56C2P 01, 12
 1 E-3 Lt Trk Dvr 67A1P 54

Drum collapsible fuel 500-gal..... 2
 Hel OH-6A..... 4
 Pump assy fuel trf..... 2
 Rdr set AN/PDR-27 1
 Radiacmeter IM-93/UD 2
 Radiacmeter IM-174/PD 3
 Rdo set AN/VRC-24 mtd in
 trk 3/4-ton 1
 Rdo set AN/VRC-47 mtd in
 trk 1/4-ton 1
 Tlr cgo 3/4-ton 2
 Transporter airmobile X-4 container .. 1
 Trk cgo 3/4-ton 2
 Yoke towing and collapsible drum
 500-gal..... 2

REMARKS:

01 Also light truck driver.
 12 Armed with launcher grenade
 40mm and pistol automatic
 cal .45.
 13 Armed with revolver cal .38.
 51 One EM also light truck driver.
 52 Also brigade aviation officer.
 54 Also radio operator.
 55 One EM also radio operator.

d. Data. Data for the division aviation section, mechanized division (TOE 37-47G), and armored division (TOE 17-4G) is shown below:

<u>PERSONNEL</u>				<u>EQUIPMENT</u>
1 LTC	Avn Off	2518	17	Radiacmeter IM-93/UD..... 2
1 MAJ	Asst Avn Off	2518	17	Rdo set AN/VRC-46 mtd in
1 MAJ	Div Op Off	1982	17	trk 1/4-ton..... 2
1 CPT	Avn Safety Off	67423	17	Trk util 1/4-ton 2
1 E-8	Op Sgt	71P50		
1 E-4	Clerk Typist	71B30		<u>REMARKS:</u>
2 E-3	Lt Trk Dvr	11B10		17 Armed with revolver cal .38.

49. COMMAND AVIATION SECTION, MECHANIZED AND ARMORED DIVISIONS

a. Mission. The mission of the command aviation section is to provide limited aviation support to the mechanized and armored divisions.

b. Assignment. The command aviation section is organic to headquarters and headquarters company, armored division.

c. Capabilities. The command aviation section provides aircraft for command and control, aerial observation and reconnaissance, aerial radio relay, radiological survey, limited resupply, and augmentation for medical evacuation.

d. Organization. The command aviation section contains sufficient personnel to assist the commander in supervising and controlling the aviation section operations.

(1) Section commander. The section commander is responsible for the training, discipline, control, maintenance, and employment of the command aviation section.

(2) Observation and transport flight leaders. The observation and transport leaders are responsible for training, operations, and control of their respective flights.

e. Data. Data for the command aviation section, mechanized division (TOE 37-47G), and armored division (TOE 17-4G), is shown below:

<u>PERSONNEL</u>				<u>EQUIPMENT</u>
1 CPT	Sec Comd	1981	17	Drum collapsible 500-gal..... 1
1 LT	Obsn Flt Ldr	1981	17	Fuel fil sep 50 gpm 75 psi 1
1 LT	Trans Flt Ldr	1981	17	Hel OH-6A 4
1 WO	Acft Rep Tech	671C0	17	Hel UH-1D..... 2
4 WO	Hel Pilot	62B0	17	Pump assy fuel transfer..... 1
1 E-6	Tech Insp	67W2F		Radiacmeter IM-93/UD 2
2 E-5	Crew Chief	67N20		Radiacmeter IM-174/PD 3
2 E-4	Crew Chief	67N2F		Rdo set AN/VRC-24 mtd in
1 E-5	Sr Hel Mech	67N20		trk 3/4-ton 1
1 E-4	Acft Fuel	56C20		Rdo set AN/VRC-46 mtd in
	Handling SP			trk 3/4-ton 1

1 E-4	Avionics Equip		Tel set TA-312 /PT	3
	Rpmn	31Q20	Tlr cgo 1 /4-ton	1
2 E-4	Hel Mech	67N20	Tlr cgo 3 /4-ton	1
			Trk cgo 3 /4-ton	1
			Trk tk fuel 2 1 /2-ton	1
			Trk util 1 /4-ton	1

REMARKS:

17 Armed with revolver cal .38.

50. DIVISION AVIATION SUPPORT DETACHMENT, MECHANIZED DIVISION (TOE 37-100G), AND ARMORED DIVISION (TOE 1-87G)

- a. Composition. The division aviation support detachment is shown in figure 58.
- b. Mission. The mission of the division aviation support detachment is to furnish airfield support to the armored or infantry division (mechanized).
- c. Assignment. The division aviation support detachment is organic to supply and transport battalion, armored division and infantry division (mechanized), TOE 29-65.
- d. Capabilities. At full strength, the aviation support detachment provides for -
 - (1) Establishment and operation of one division instrumented airfield with terminal flight facilities, to include ground controlled approach (GCA) 24 hours a day.
 - (2) Minimum refueling support for transient aircraft.
 - (3) Emergency maintenance for transient aircraft.
 - (4) Flight plan communications, and air traffic control communications with corps.

Note. This unit is dependent upon the division administration company for personnel administration.

- e. Limitations. The division aviation detachment has the following limitations:
 - (1) It is partially dependent on higher headquarters or adjacent units for local security.
 - (2) It is dependent upon the headquarters and headquarters company, supply and transport battalion, for mess.
- f. Organization. The aviation support detachment consists of a detachment headquarters, flight operations section, airfield terminal control section, maintenance section, communications section, and an airfield service section.
 - (1) Detachment headquarters. The detachment headquarters contains the detachment commander, detachment sergeant, supply surgeant, a first cook, a clerk, and a light truck driver. Headquarters personnel

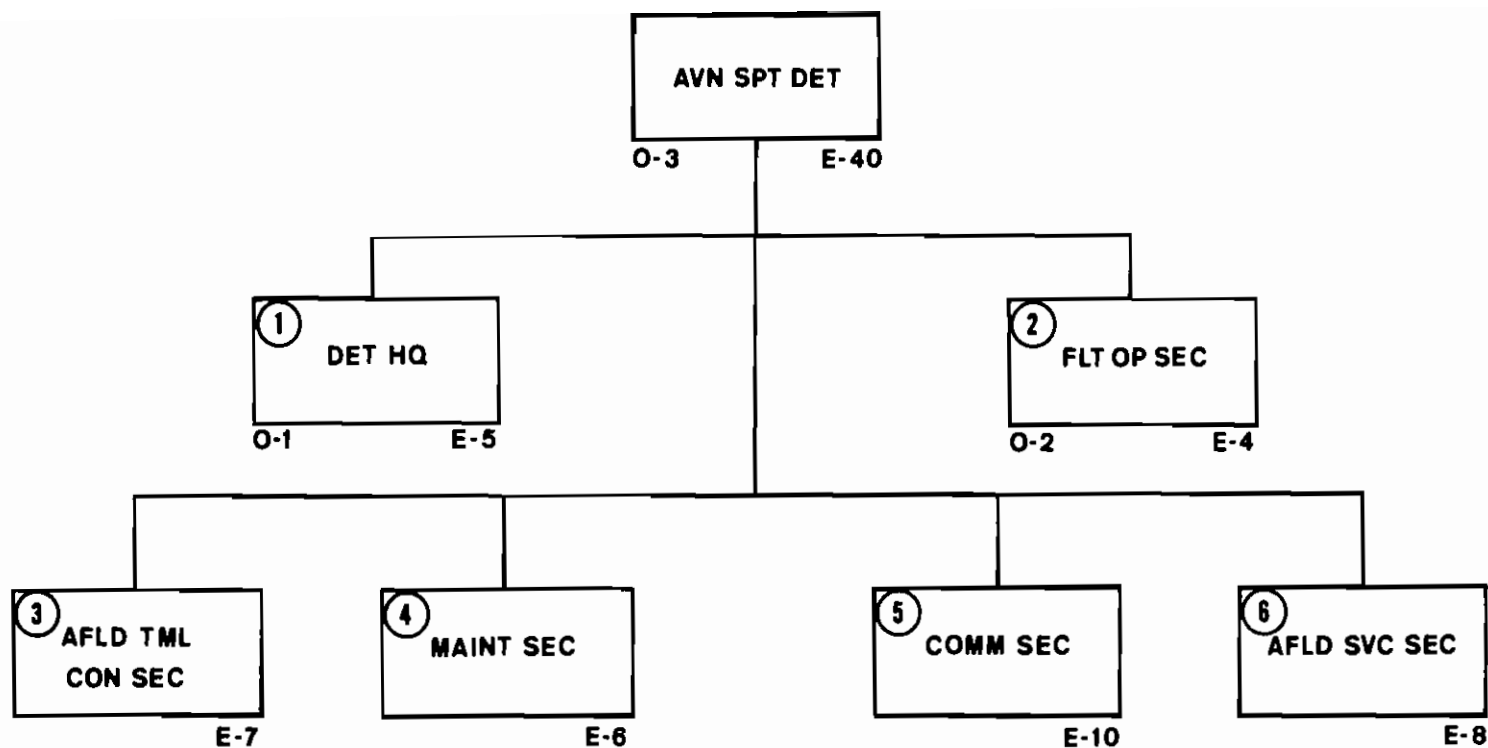


Figure 58. Division aviation support detachment, mechanized division (TOE 37-100G), and armored division (TOE 1-87G).

DATA FOR FIGURE 58*

1 DETACHMENT HEADQUARTERS

1 CPT	Det Comd	1983	13
1 E-7	Det Sgt	71P40	
1 E-6	Sup Sgt	76K40	
1 E-5	First Cook	94B20	01
1 E-4	Det Clerk	71H20	01
1 E-3	Lt Trk Dvr	71A10	40

Radiometer IM-93/UD.....	4
Radiometer IM-174/PD.....	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton.....	1
Tel set TA-312/PT.....	3
Tlr cgo 1/4-ton 2 wheel.....	1
Tlr cgo 3/4-ton 2 wheel.....	2
Trk cgo 3/4-ton 4x4.....	2
Trk util 1/4-ton.....	1

2 FLIGHT OPERATIONS SECTION

1 CPT	Op Off	1982	13
1 LT	Asst Op Off	1982	13
1 E-7	Flt Op Chief	71P40	
1 E-4	Clerk Typist	71B30	
1 E-4	Flt Op Coord	71P20	
1 E-3	Lt Trk Dvr	71P20	40

Rdo set AN/GRR-5 mtd in	
shop van.....	1
Rdo set AN/VRC-49 mtd in	
shop van.....	1
Speech sety equip TSEC/KY-8.....	1
Tel set TA-264/PT.....	1
Tel set TA-312/PT.....	3
Tlr cgo 1 1/2-ton 2 wheel.....	1
Trk van shop 2 1/2-ton 6x6.....	1

3 AIRFIELD TERMINAL CONTROL SECTION

1 E-6	Sec Chief	93B40
1 E-5	Sr Con Tower Op	93B20
1 E-5	Sr Landing Con	
	Op	93B30
1 E-4	Con Tower Op	93B20 01
2 E-4	Landing Con Op	93B30 42
1 E-3	Con Tower Op	
	Helper	93B20 01

Beacon set AN/GRN-6.....	1
Rdr set AN/TPN-8.....	1
Radiometer IM-174/PD.....	1
Rdo set AN/ARC-51.....	1
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton.....	1
Rdo set AN/VRC-47 mtd in	
trk 3/4-ton.....	1
Tel set TA-312/PT.....	2
Tlr cgo 1 1/2-ton 2 wheel.....	2
Trk cgo 3/4-ton 4x4.....	1
Trk cgo 2 1/2-ton 6x6.....	2
Wind measure set AN/PMQ-3D.....	1

4 MAINTENANCE SECTION

1 E-5	Motor Sgt	63B40
1 E-5	Sr Hel Mech	67N20
1 E-4	Hel Mech	67N20 01
1 E-4	Maint Data SP	71B30
1 E-4	Wheel Veh Mech	63B20
1 E-3	Wheel Veh Mech	
	Helper	63A10 01
Gun mach 7, 62mm lt flex.....	1	
Tel set TA-312/PT.....	2	
Tlr cgo 3/4-ton 2 wheel.....	1	

Tlr cgo 1 1/2-ton 2 wheel.....	1
Trk cgo 3/4-ton 4x4.....	1
Trk cgo 2 1/2-ton 6x6 WWN.....	1

5 COMMUNICATIONS SECTION

1 E-5	Comm Chief	31F40
1 E-4	GCR Mech	26D20
1 E-4	Precise	
	Powerman	52B30 01
1 E-4	Rdo Mech	31B20
1 E-4	Sr Swbd Op	36A10
1 E-4	Teletype Op	72B20 42
1 E-3	Swbd Op	36A10
1 E-3	Wireman	36A10 42

Cipher machine	
TSEC/KL-7.....	2
Elect tt sety equip	
TSEC/KW-7.....	2
Gun mach 7, 62mm lt flex.....	1
Rdo tt AN/GRC-46.....	1
Swbd tel manual SB-22/PT.....	1
Tel set TA-312/PT.....	4
Tlr cgo 3/4-ton 2 wheel.....	1
Trk cgo 3/4-ton 4x4.....	2
Trk van shop 2 1/2-ton 6x6.....	1

6 AIRFIELD SERVICE SECTION

1 E-5	Sec Chief	67R40
1 E-4	Crash Rsq	
	Chief	51M40 42
2 E-4	Crash Rsq SP	51M20
3 E-4	Petrl Stor SP	56C20 01
1 E-3	Afld Svc Crmn	67A10 01

DATA FOR FIGURE 58 - (continued)

Drum collapsible fuel
 500-gal. 3
 Gun mach 7.62mm lt flex. 1
 Pump assy bulk trf. 2
 Rdo set AN/VRC-53 1
 Tlr cgo 3/4-ton 2 wheel 1
 Tlr cgo 1 1/2-ton 2 wheel 3
 Trk cgo 3/4-ton 4x4 1
 Trk tk fuel svc 3

REMARKS:

01 Also light truck driver.
 13 Armed with revolver cal .38.
 40 Also radio telephone operator.
 42 Remark 01 applies to 1 EM.

accomplish the detachment administration. The detachment will normally be located at the division instrumented airfield.

- (2) Flight operations section. A flight operations officer, an assistant operations officer, a flight operations chief, and three additional enlisted men comprise the flight operations nucleus of the aviation support detachment. This section, located on the division airfield, provides flight plan communications and air traffic control communications with corps.
- (3) Airfield terminal control section. This section contains a section chief and sufficient control tower personnel for air traffic control in the vicinity of the division airfield. Personnel are also included to provide the instrument flight facilities for the division airfield.
- (4) Maintenance section. The maintenance section contains the motor sergeant, helicopter mechanics, maintenance data specialist, and wheel vehicle mechanics. This section provides organizational maintenance for assigned vehicles and emergency maintenance for transient aircraft.
- (5) Communications section. The detachment communications section includes a communications chief, a precise powerman, switchboard operators, a teletype operator, and repair personnel to maintain the organic communications and air traffic control equipment. This section is the focal point for the detachment's internal wire and radio communications, and establishes an internal wire net.
- (6) Airfield service section. The airfield service section contains a section chief, crash rescue personnel, petroleum storage specialists, and an airfield service crewman. Their main functions are to provide for crash rescue, aircraft servicing, and transient service at the division airfield.

51. BRIGADE AVIATION SECTION, ARMORED DIVISION

The aviation section, headquarters and headquarters company, armored division brigade, is identical to the like section in the infantry brigade. The missions, capabilities, organization, and concept of employment are the same. See paragraph 40 for a discussion of this unit.

52. AVIATION SECTION, ARMORED DIVISION ARTILLERY

The aviation section, headquarters division artillery, armored division, is identical to the sister section in the infantry division. The missions, capabilities, organization, and concepts of employment are the same. See paragraph 39 for a discussion of this unit.

53. AIR CAVALRY TROOP, MECHANIZED/ARMORED DIVISION

The air cavalry troop, mechanized/armored division, has the same structure, missions, capabilities, and concepts of employment as the like unit of the infantry division. See paragraph 38 for this discussion.

54. TRANSPORTATION AIRCRAFT MAINTENANCE COMPANY, MAINTENANCE BATTALION, ARMORED OR MECHANIZED DIVISIONS

a. Composition. The composition of the transportation aircraft maintenance company, maintenance battalion, armored or mechanized divisions, is shown in figure 59.

b. Mission. The mission of the TAM company is to provide direct support aircraft maintenance capability as an integral part of the support command of the armored division, or infantry division (mechanized).

c. Assignment. The TAM company is organic to maintenance battalion, mechanized or armored divisions.

d. Capabilities. This unit is capable of -

- (1) Providing 4,600 man-hours per month for direct support of aircraft organic to the division, operating on a two-shift basis.
- (2) Providing two contract teams for on-site repair of downed aircraft.
- (3) Performing 400 man-hours per month for direct support maintenance on avionic equipment and 800 man-hours per month for direct support maintenance on aircraft armament systems.
- (4) Maintaining an organic shop supply limited to 3 days of parts requested for shop operations.

Note. This unit is dependent upon the division administration company for personnel administration.

e. Concept of Employment. The concept of employment of the TAM company, armored and mechanized divisions, is the same as the TAM company supporting the infantry division. See paragraph 41 for a discussion of this unit.

THIS PAGE INTENTIONALLY LEFT BLANK.)

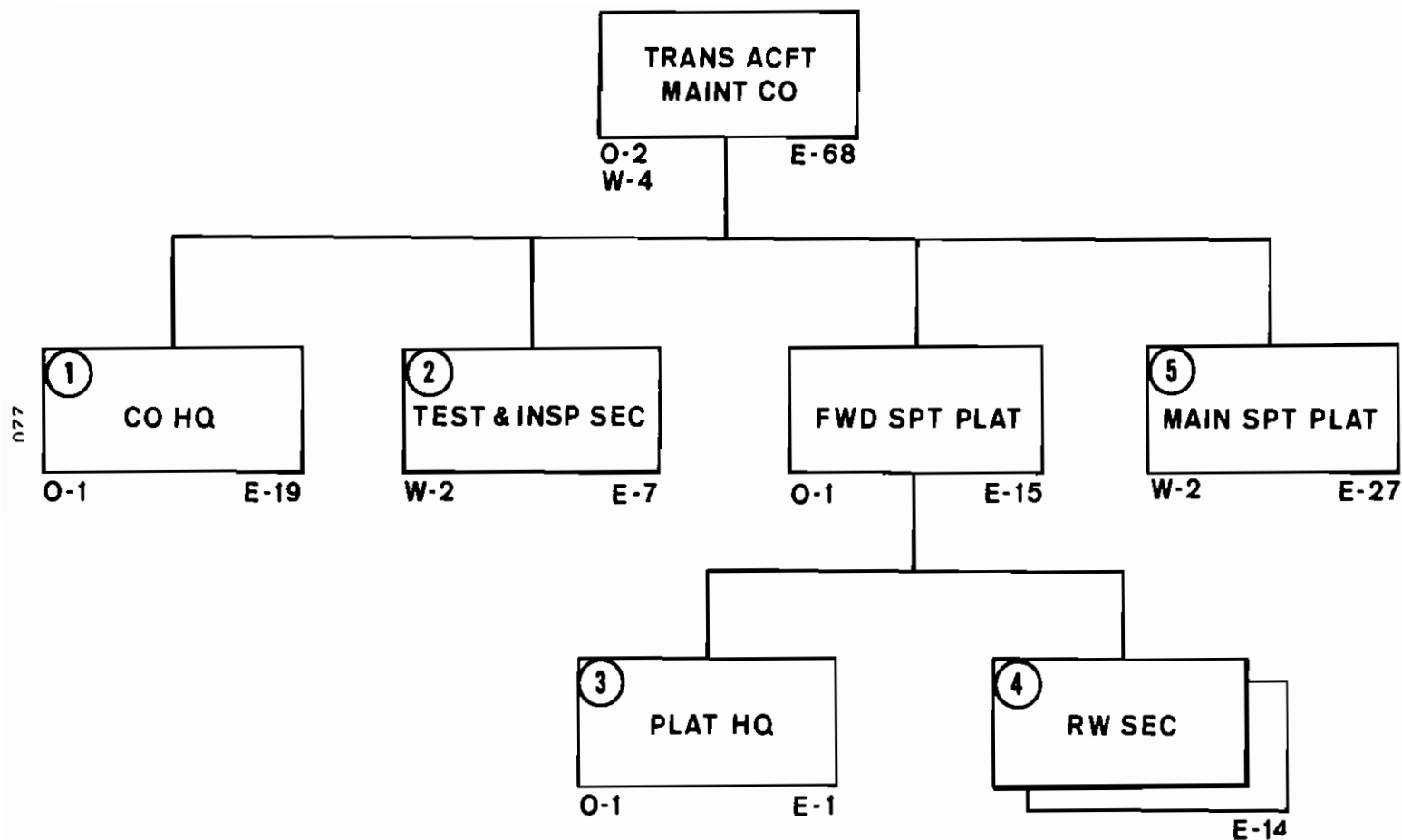


Figure 59. Transportation aircraft maintenance company, maintenance battalion, armored or mechanized divisions (TOE 55-424G).

DATA FOR FIGURE 59*

1 COMPANY HEADQUARTERS

1 CPT	Co Comd	64823	13
1 E-8	First Sgt	67Z50	
1 E-5	Mess Steward	94B40	
1 E-5	Mtr Sgt	63B40	
1 E-6	Sup Sgt	76K40	
2 E-5	First Cook	94B20	
1 E-4	Co Clerk	71H20	04
1 E-4	Cook	94B20	
1 E-4	Maint Data SP	71B20	
1 E-4	Parts Sup SP	76D20	
1 E-4	Powerman	52B20	01
2 E-4	Tt Opr	72B20	
2 E-4	Wheel Veh Mech	63B20	
1 E-3	Cook's Helper	94B10	01
1 E-3	Lt Trk Dvr	71A10	
2 E-3	Wheel Veh Mech Helper	63A10	01

Gun mach 7.62mm	2
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Rdo set AN/GRR-5	1
Rdo set AN/VRC-46 mtd in trk 1/4-ton	1
Swbd tel manual SB-22/PT	1
Tel set TA-312/PT	2
tt AN/GGC-3	1
tt AN/PGC-1	1
Tlr cgo 1/4-ton	1
Tlr cgo 2 1/2-ton	1
Tlr cgo 1 1/2-ton	2
Tlr tk water 400-gal	1
Trk cgo 3/4-ton	1
Trk cgo 2 1/2-ton	2
Trk cgo 2 1/2-ton WVN	1
Trk util 1/4-ton	1

2 TEST AND INSPECTION SECTION

2 WO	Acft Maint Tech	671C0	41
2 WO	Hel Pilot	062B0	13
2 E-6	Hel Tech Insp	67W2F	
2 E-5	Hel Crew Chief	67N2F	13
2 E-4	Hel Mech	67N20	
1 E-3	Hel Mech Helper	67A10	01
Hel UH-1D			2
Rdo set AN/PRC-25			1
Rdo set AN/VRC-10			2
Tel set TA-312/PT			1
Tlr cgo 1/4-ton			1
Trk util 1/4-ton			1

3 FORWARD SUPPORT PLATOON HEADQUARTERS

1 LT	Plat Comd	64823	13
1 E-7	Plat Sgt	67Z40	01
Radiac set AN/PDR-27			1
Radiacmeter IM-174/PD			1
Tlr cgo 1/4-ton			1
Trk util 1/4-ton			1

4 ROTARY WING SECTIONS (2)

2 E-6	Sec Chief	67Z40	
4 E-5	Sr Hel Rpmn	67Q20	
6 E-4	Hel Rpmn	67Q20	
2 E-3	Hel Rpmn Helper	67A10	01
Tlr cgo 1 1/2-ton			2
Trk cgo 2 1/2-ton			2

5 MAIN SUPPORT PLATOON

2 WO	Acft Maint Tech	671B0	42
1 E-7	Acft Rep Supv	67Z40	
2 E-6	Acft Rep Supv	67Z40	
2 E-5	Avn Eltr Equip Rpmn	31Q30	01
1 E-5	Mach	44E20	01
1 E-5	Sr Acft Armt Rpmn	45J20	
1 E-5	Sr Airframe Mech	68G20	
2 E-4	Acft Armt Rpmn	45J20	
2 E-3	Acft Eng Rpmn	68B20	02
1 E-4	Acft Instr Rpmn	68J20	02
2 E-4	Acft Parts SP	76H20	01
2 E-4	Airframe Rpmn	68G20	02
1 E-4	Elct Rpm	68F20	01
1 E-4	Hyd Sys Rpm	68H20	
1 E-4	Maint Data SP	71B20	
1 E-4	Powertrain Rpmn	68D20	01
1 E-4	Rotor Rpmn	68E20	40
1 E-4	Sup Parts SP	76G20	01
1 E-3	Airframe Rpmn Helper	68A10	01
1 E-3	Shop Clerk	71A10	01
1 E-3	Sup Clerk	76A10	01
1 E-3	Tool Room Keeper	68A10	01
Radiacmeter IM-93/UD			1
Stlr low bed wrk 12-ton 4 wheel 401			1
Stlr stake 12-ton 4 wheel			2
Shop equip GM van			1
Shop equip org trk mtd			1
Shop set acft maint stlr mtd A-1 tool crib			1

DATA FOR FIGURE 59 - (continued)

Shop set acft stlr mtd A-2 1
 Tk and pump unit 2
 Tel set TA-312 /PT 1
 Tlr cgo 1/4-ton 1
 Tlr cgo 1 1/2-ton 4
 Tlr cgo 3/4-ton 1
 Trk cgo 3/4-ton 1
 Trk cgo 2 1/2-ton 3
 Trk trac 5-ton 5
 Trk trac 5-ton WWN 1
 Trk util 1/4-ton 1
 Trk van shop 2 1/2-ton 3
 Trk van shop 2 1/2-ton WWN 1

REMARKS:

- 01 Also light truck driver.
- 02 Also heavy truck driver.
- 04 Also switchboard operator.
- 13 Armed with cal .38 revolver.
- 40 1 EM also wrecker operator.
- 41 Must be qualified as rotary wing
test pilot. Remark 13 also applies.
- 42 MOS 671C0 may be substituted for
MOS 671B0.

PART THREE

NONDIVISIONAL AVIATION

Section I. AVIATION GROUP

55. GENERAL

a. Composition. The organization of the aviation group is shown in figure 60.

b. Mission. The mission of the aviation group will vary, depending upon the number and types of battalions and/or companies assigned or attached to it.

c. Capabilities. At full strength, the group has the following capabilities:

- (1) It can supervise the activities of three to seven separate aviation battalions.
- (2) Individuals of this organization can engage in effective coordinated defense of the unit's area or installation.
- (3) It is 65 percent mobile.

d. Limitations.

- (1) The group is dependent upon a transportation aircraft direct support company for direct support aircraft maintenance. The AG personnel service unit processes personnel administration actions, to include classification, personnel affairs, maintenance of personnel records, pay actions, personnel accounting, casualty reporting and rosters, and orders affecting personnel actions.
- (2) When this group is operating at distances in excess of 50 miles from corps headquarters and/or subordinate units, augmentation may be made from TOE 11-500 as required to provide adequate communications.

e. Concept of Employment.

- (1) The aviation group is employed as directed by the corps commander. The group headquarters is normally located in close proximity to the alternate tactical operations center. Adequate communications and personnel are available so that the group headquarters may function as an emergency or alternate Army aviation staff section when required. The aviation group headquarters and headquarters company provides the tactical command and control required for the employment of all attached or assigned units.
- (2) The aviation group headquarters is staffed and equipped to be a tactical command and control headquarters. Sufficient personnel are provided to supervise the administrative and logistical functions of the subordinate

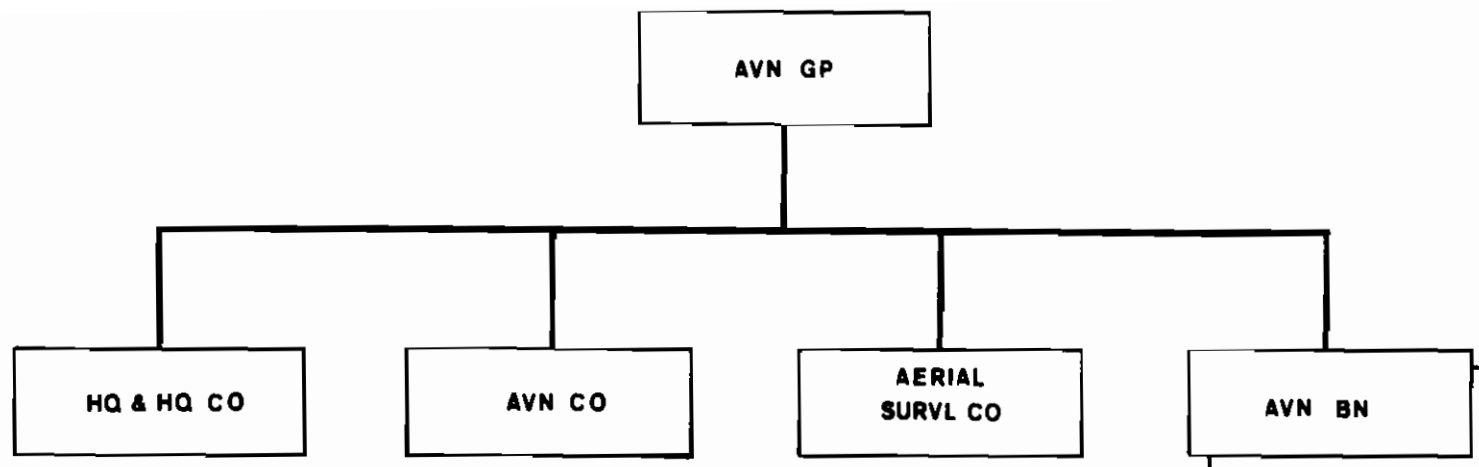


Figure 60. Aviation group.

units. When extended frontages and multiple command posts are indicated in the tactical plan of the corps, the aviation group headquarters can be employed by the corps commander as an auxiliary or forward Army aviation staff headquarters.

- (3) The aviation group headquarters provides tactical command, control, and administrative supervision of attached units, as well as concurrent internal administration. The aviation group commander is responsible for -
 - (a) Training and operation of the aviation group headquarters.
 - (b) Training and testing of attached or assigned units.
 - (c) Tactical command and control of attached or assigned aviation units.
 - (d) Manning alternate corps aviation staff agencies, when directed.
- (4) The aviation group headquarters reduces the corps commander's span of control. Whenever two or more aviation battalions or separate aviation companies are assigned to the corps, the aviation group commander will normally supervise the activities of the battalions or separate companies. Consequently, the number of aviation unit headquarters dealing with the corps headquarters is reduced to one.

56. HEADQUARTERS AND HEADQUARTERS COMPANY, AVIATION GROUP

a. Composition. The composition of the headquarters and headquarters company, aviation group, is shown in figure 61.

b. Mission. The headquarters and headquarters company, aviation group, provides command, staff planning, and control of operations of attached aviation battalions and separate aviation companies.

c. Assignment. The company may be assigned to a field army, corps, field army support command, or task force.

d. Capabilities. The headquarters and headquarters company, aviation group, is capable of commanding, planning, and supervising the activities of three to seven separate aviation battalions.

e. Limitations. When this group is operating at distances in excess of 50 miles radius from brigade headquarters and/or subordinate units, augmentation is needed from TOE 11-500 to provide adequate communications.

Note. This unit is dependent upon the transportation direct support company for direct support aircraft maintenance, and upon the AG personnel service unit for personnel administrative actions.

f. Organization. The headquarters and headquarters company, aviation group, consists of a group headquarters and a headquarters company. The group headquarters contains the group commander and his staff. The headquarters company contains the

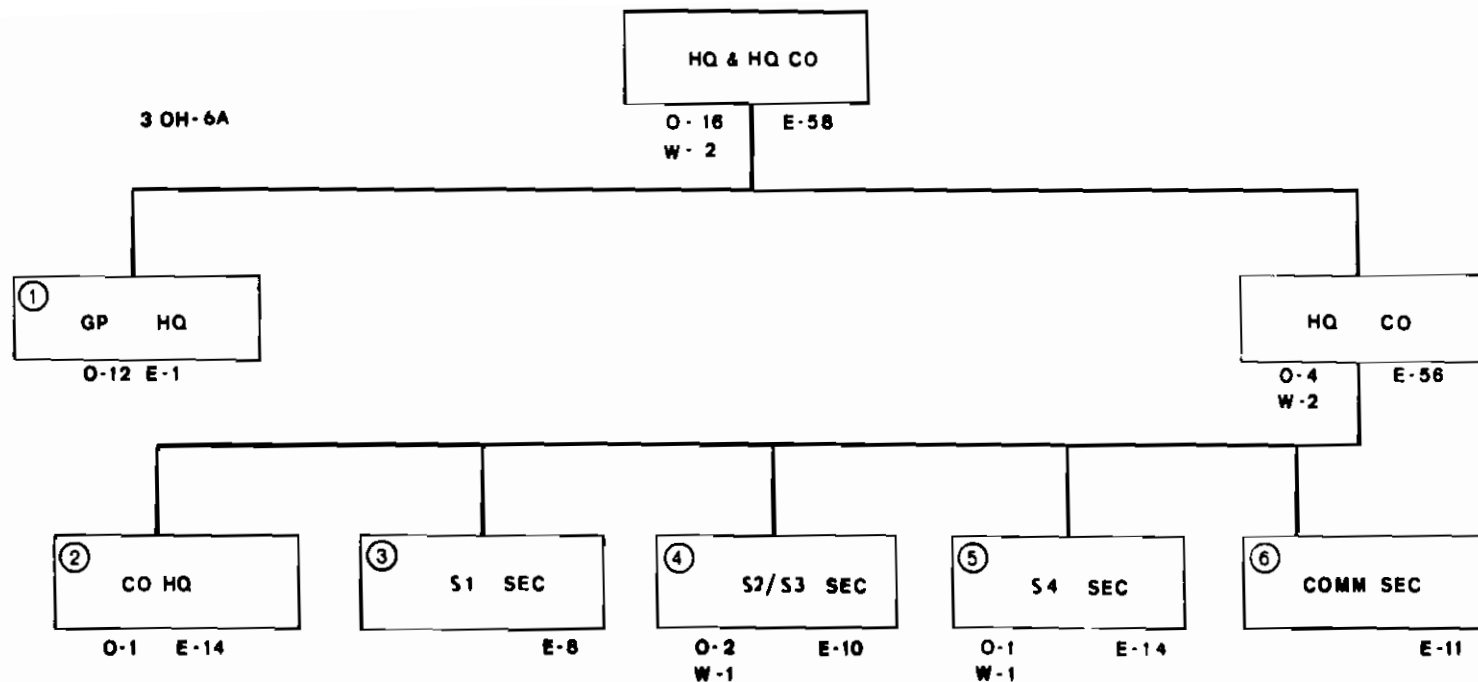


Figure 61. Headquarters and headquarters company, aviation group (TOE 1-252G).

DATA FOR FIGURE 61*

1 GROUP HEADQUARTERS

1 COL	Gp Comd	1983	13
1 LTC	XO	1983	13
1 MAJ	Avn Safety Off	67423	13
1 MAJ	Ch	5310	
1 CPT	Ch	5310	
1 MAJ	Comm Off	60210	13
1 MAJ	Surg	3160	11
1 MAJ	S1	62110	13
1 MAJ	S2	69301	13
1 MAJ	S3	62162	13
1 MAJ	S4	64010	13
1 E-9	Sgt Maj	67T50	40

2 COMPANY HEADQUARTERS

1 CPT	Co Comd	2900	11
1 E-8	First Sgt	67U50	40
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	
1 E-5	Mtr Sgt	63B40	
2 E-5	First Cook	94B20	12
1 E-4	Co Clerk	71H20	
1 E-4	Cook	94B20	
1 E-4	Powerman	52B20	
2 E-4	Wheel Veh Mech	63B20	
1 E-3	Cook's Helper	94A10	01
1 E-3	Sup Clerk	76A10	
1 E-3	Wheel Veh Mech Helper	63A10	01

Gun mach 7.62mm	4
Radiometer IM-93/UD	4
Radiometer IM-174/PD	2
Tnk liq stor metal 600-gal	1
Tel set TA-312/PT	2
Tlr cgo 1 1/2-ton	1
Tlr tk water 400-gal	1

Trk cgo 2 1/2-ton	2
Trk util 1/4-ton	1

3 S1 SECTION

1 E-7	PSNCO	71H40	
1 E-5	Ch Asst	71M20	01
2 E-4	Ch Asst	71M20	01
2 E-4	Clerk Typist	71B30	
1 E-4	Stenographer	71C20	42
1 E-3	Lt Trk Dvr	70A10	
Tel set TA-312/PT	3		
Tlr cgo 1/4-ton 2 wheel	3		
Trk util 1/4-ton	4		
Rdo set AN/VRC-47 mtd in trk 1/4-ton	1		

4 S2/S3 SECTION

1 CPT	Op Plans Off	62162	13
1 CPT	Op Off	62162	13, 31
1 WO	Hel Pilot	062B0	13
1 E-8	Intel Sgt	96B50	
1 E-8	Op Sgt	71P50	
1 E-7	Asst Op Sgt	71P40	
1 E-6	Cml NCO	54E40	
1 E-5	Sr Mov SP	71N20	12
2 E-4	Clerk Typist	71B30	
1 E-4	Draftsman	81A10	
1 E-4	Mov SP	71N20	01, 12
1 E-3	Lt Trk Dvr	70A10	42

Light set acft 1/2 kw heliport	1
Light set afd ptbl	1
Tlr cgo 1/4-ton	2
Trk util 1/4-ton	2
Rdo set AN/VRC-46 mtd in trk 1/4-ton	1
Tel set TA-312/PT	4

5 S4 SECTION

1 CPT	Acft Maint Off	64823	13
1 WO	Food Advisor	941A0	
1 E-8	Acft Maint Sgt	67Z50	
1 E-8	Mat Readiness NCO	67Z50	
1 E-8	Sup Sgt	76K50	
1 E-7	Asst Sup Sgt	76H40	
1 E-7	Food Svc Supv	94Z50	
1 E-7	Mat Readiness NCO	67Z40	
2 E-6	Hel Tech Insp	67W20	01
3 E-5	Hel Crew Chief	67N20	41
2 E-4	Clerk Typist	71B30	12
1 E-3	Lt Trk Dvr	71A10	42

Tlr cgo 1/4-ton	2
Tlr cgo 3/4-ton	3
Tlr cgo 1 1/2-ton	1
Trk cgo 3/4-ton	3
Trk cgo 2 1/2-ton	1
Trk util 1/4-ton	2
Hel OH-6A	3
Tel set TA-312/PT	3

6 COMMUNICATIONS SECTION

1 E-8	Comm Chief	31G50	
1 E-5	RATT Tm Chief	05C40	
1 E-4	Rdo Mech	31B20	
2 E-4	RATT Op	05C20	41
1 E-4	Sr Msg Clerk	36C20	01
1 E-4	Sr Swbd Op	36C20	43
2 E-4	tt Op	72B20	
1 E-3	Msg Clerk	36C20	01
1 E-3	Swbd Op	36C20	43

*For remarks, see page 228.

DATA FOR FIGURE 61 - (continued)

COMMUNICATIONS SECTION

Cipher mach TSEC /KL-7 1
 tt sety equip TSEC /KW-7 1
 Rdo set AN /GRR-5 mtd in
 trk 3/4-ton 1
 Rdo set AN /VRC-47 mtd in
 trk 3/4-ton 1
 Rdo set AN /VRC-49 mtd in
 trk 3/4-ton 1
 RATT set AN /GRC-142 1
 Swbd SB-22 /PT 2
 Tape reader TSEC /HC-1 1
 Tel set TA-312 /PT 2
 tt set AN /PGC-1 1
 Tg tel set AN /TCC-29 1
 Tlr cgo 1/4-ton 2
 Tlr cgo 3/4-ton 1
 Trk cgo 3/4-ton 1
 Trk cgo 3/4-ton 2

REMARKS:

01 Also light truck driver.
 11 Armed with pistol cal .45.
 12 Armed with launcher grenade 40mm
 and pistol cal .45.
 13 Armed with revolver cal .38.
 31 Also information and education officer.
 40 MOS 67Z or 67T may be substituted.
 41 Remark 01 applies to 1 EM.
 42 Also radio telephone operator.
 43 Also wireman.

company headquarters, the S1 section, the S2 /S3 section, the S4 section, and the communications section.

- (1) Group headquarters. This headquarters contains the group commander, executive officer, staff officers and assistants, and the sergeant major. These personnel provide the supervision for the normal staff sections found in a tactical headquarters, and supervisory assistance to subordinate units. Vehicular transportation and equipment for personnel of the group headquarters are in the various staff sections of the group. Aircraft support for necessary command, control, and liaison is provided by three observation helicopters located in the company headquarters.
- (2) Headquarters company.
 - (a) Company headquarters. This company headquarters contains the company commander, first sergeant, supply sergeant, supply clerk, mess steward and cooks, company clerk, motor sergeant, powerman, and vehicle mechanics to accomplish the administrative, mess, and maintenance functions of the headquarters and headquarters company. Sufficient vehicles are authorized to meet transport requirements of the company commander, company supply, and mess. Three observation helicopters are authorized for command and liaison with subordinate elements deployed in support of committed units. FM radio and wire nets are the normal means of communication with other elements of the company and group. The company commander may be designated as the group headquarters commandant. If so, he is responsible for operations pertaining to the internal arrangement of the group command post, its movement under the direction of the group executive officer, and for its security. In addition, he is charged with the responsibility of providing messing facilities for attached or supporting personnel, such as liaison officers. He may be required to assume temporarily the duties of any member of the group staff.
 - (b) S1 section. The S1 section contains the personnel staff NCO, three chaplain's assistants, two clerk typists, a stenographer, and a light truck driver.
 - (c) S2 /S3 section. The S2 /S3 section contains the operations plans officer, operations officer, helicopter pilot, intelligence sergeant, operations sergeant, assistant operations sergeant, and sufficient enlisted personnel to carry out the S2 and S3 functions of the aviation group headquarters. It assists in the planning and coordination necessary for the employment of attached or assigned aviation units throughout the army area. This section implements the requirements for aviation support as established by the group commander. In addition, this section must provide the intelligence coordination required of a tactical headquarters. Status and availability of subordinate units must be constantly provided to appropriate staff agencies of the field army. The operations and intelligence section is the center of activity within the aviation group, and the successful and economical employment of the subordinate aviation units throughout the army area is dependent upon the planning and coordination accomplished within this section.

- (d) S4 section. The S4 section contains the aircraft maintenance officer, food advisor, aircraft maintenance sergeant, supply sergeant, and sufficient enlisted personnel to carry out the functions of the section. In this section, specialists assist the supervisory personnel of the group headquarters in providing logistical support and supervisory control of subordinate aviation units. This section is designed specifically to inspect, supervise, and coordinate the aircraft and vehicular supply and maintenance requirements of attached or assigned aviation units.
- (e) Communications section. The communications section contains the communications chief and all wire and radio personnel of the aviation group headquarters. The section is supervised by the group communications officer and contains sufficient specialists, equipment, and organic transportation to install, operate, and maintain the group communications system. Following the instructions of the group communications officer, the communications chief supervises the assignment and activities of the section's radioteletypewriter and radio operators, and the message handling, wire, and maintenance personnel. One 1/4-ton truck is used by the wire team to lay internal and external land lines. AN/VRC-49, AN/GRC-47, and AN/GRR-5 radio sets are mounted in the communication section's 3/4-ton truck. This truck, with all of its radios, is the signal center of the group headquarters.

g. Concept of Employment. The headquarters and headquarters company provides personnel and equipment for tactical command, control, and administrative supervision of assigned or attached aviation units. It does not establish or operate an airfield. Normally, this headquarters is employed from the vicinity of an airfield established by one of the units that is attached or assigned to the aviation group. A minimum number of aircraft are provided to assure command and liaison with the attached units that are deployed forward in support of committed ground units. Terrain, enemy situation, or the mission may require that the company headquarters operate from more than one location. This will require additional communications equipment and personnel for proper exercise of command and control. Because of the limited amount of wire organic to the unit, the primary means of communication established with the attached units is radio. For wire communication, the headquarters and headquarters company uses the nearest signal communications center in its area.

57. AVIATION COMPANY, AVIATION GROUP

- a. Composition. The composition of the aviation company, aviation group, is shown in figure 62.
- b. Mission. The aviation company, aviation group, provides the corps headquarters and subordinate units with immediately available and responsive aviation support.
- c. Capabilities. At full strength, the aviation company is capable of providing -
- (1) Aerial transportation for the corps commander and staff.
 - (2) Air movement of specialist teams, critical items, and critical supplies and parts.

- (3) Augmentation to the Army Medical Service for aeromedical evacuation.
- (4) Aircraft support for aerial observation, reconnaissance, battlefield illumination, aerial photography (both day and night), column control, radio relay, and courier and messenger service.
- (5) Communications and airfield terminal control facilities for the company instrumented airfield.

d. Organization. This aviation company consists of a company headquarters, operations platoon, flight operations center, fixed wing platoon, rotary wing platoon, and service platoon. This organization provides the company with the flexibility to meet the operational requirements necessary to support the corps headquarters.

- (1) Company headquarters. The company headquarters contains a company commander, first sergeant, mess steward, supply sergeant, motor sergeant, and sufficient enlisted personnel to provide command, control, and normal unit administration, messing, supply, operation, and maintenance of assigned vehicles. The company command post will normally be located near the company instrumented airfield. The security of the company instrumented airfield and company headquarters is the responsibility of the company commander. However, the operations officer will normally make the detailed security plans for the company and effect the necessary coordination with adjacent units to provide an integrated defense. The defense perimeter is manned on order of the company commander and all personnel at the company airfield will be required to fight as infantrymen in defense of the airfield. All crew-served weapons of the company are assigned to this section for distribution as required by the organization and occupation of the unit airfield. Equipment (e. g. , cameras) periodically used by other elements of the company on a mission basis is organic to the company headquarters. Except for the company commander's FM radio, wire is the normal means of communication with other elements of the company.
- (2) Operations platoon. The operations platoon consists of a platoon headquarters, flight dispatch section, air traffic control section, approach control section, and a communications section.
 - (a) Platoon headquarters. The platoon headquarters contains the operations officer, assistant operations officer, and a flight operations chief. In addition to overall supervision of operations and administration of the platoon, minimum personnel are assigned to maintain airfield operations and control facilities on a 24-hour basis.
 - (b) Flight dispatch section. This section contains a senior flight operations specialist, two flight operations specialists, one teletypewriter operator, and a flight operations helper. This section effects coordination and assignment of flight missions. It is the center of activity within the aviation company, and successful accomplishment of the flight missions is dependent upon planning and coordination by this section. The flight dispatch section must

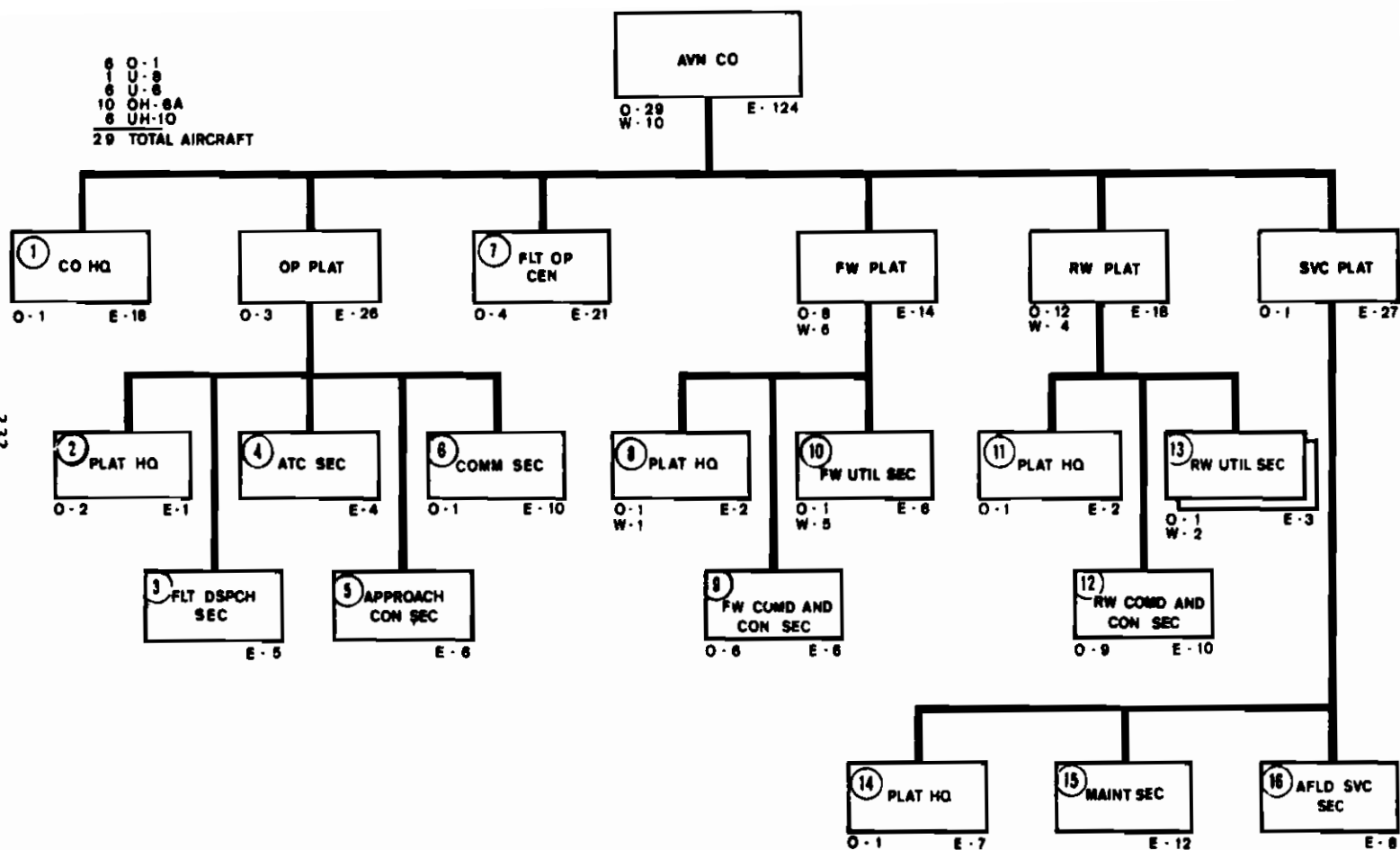


Figure 62. Aviation company, aviation group (TOE 1-127D).

DATA FOR FIGURE 62*

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983	11
1 E-8	First Sgt	67N50	
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	47
1 E-5	Mtr Sgt	63B40	
3 E-5	First Cook	94B20	
1 E-4	Armorer	76K30	
1 E-4	Co Clerk	71H20	
2 E-4	Cook	94B20	
1 E-4	Pers Admin SP	71H20	
2 E-4	Wheel Veh Mech	63B20	
1 E-3	Cook's Helper	94A10	01
1 E-3	Lt Trk Dvr	70A10	48
1 E-3	Sup Clerk	76A10	01
1 E-3	Wheel Veh Mech		
	Helper	63A10	

Tlr amph cgo 1/4-ton 2 wheel 1
Tlr cgo 3/4-ton 2 wheel..... 1
Tlr tk water 1 1/2-ton 2 wheel.... 1
Trk cgo 3/4-ton 4x4 1
Trk cgo 2 1/2-ton 6x6 LWB WVN .. 1
Trk util 1/4-ton 4x4 1
Rdo set AN/VRC-9 1

2 OPERATIONS PLATOON HEADQUARTERS

1 CPT	Op Off	1982	11
1 LT	Asst Op Off	1982	11
1 E-7	Flt Op Chief	71P40	

(No major items of equipment)

3 FLIGHT DISPATCH SECTION

1 E-5	Sr Flt Op SP	71P20	
2 E-4	Flt Op SP	71P20	46
1 E-4	tt Op	72B20	
1 E-3	Flt Op Helper	71P20	
	tt set AN/FGC-21X.....		1
	tg tml gp AN/TCC-14.....		1

4 AIR TRAFFIC CONTROL SECTION

1 E-5	Sr Con Tower Op	93B20	
1 E-4	Con Tower Op	93B20	
1 E-4	Powerman	52B20	01
1 E-3	Con Tower Op		
	Helper	93A10	01

Tlr cgo 3/4-ton 2 wheel..... 2
Trk cgo 3/4-ton 4x4 2
Beacon set rdo AN/GRN-6 1
Projector cloud height - 121..... 1
Rdo set AN/ARC-44 2
Rdo set AN/ARC-73 2
Rdo set AN/GRR-5..... 1
Rdo set AN/PRC-10 1
Rdo set AN/TRC-68..... 2
Wind meas set AN/PMQ-3 1

5 APPROACH CONTROL SECTION

3 E-5	Sr Ldg Con Op	93B30	
3 E-4	Ldg Con Op	93B30	01

Tlr cgo 3/4-ton 2 wheel..... 2
Tlr cgo 1 1/2-ton 2 wheel..... 1
Trk cgo 3/4-ton 4x4 2
Trk cgo 2 1/2-ton 6x6 LWB..... 1
Rdr set AN/TPN-8 1
Rdo set AN/ARC-44 2

Rdo set AN/ARC-73.....	2
Rdo set AN/TRC-68.....	2

6 COMMUNICATIONS SECTION

1 LT	Comm Off	0200	
1 E-5	Comm Chief	31G40	
1 E-5	GCA Equip Mech	26G60	01
1 E-5	Sr Rdo Mech	31B20	
1 E-4	Rdo Mech	31B20	01
2 E-4	RATT Op	05C20	
1 E-4	Sr Swbd Op	36K20	41
1 E-3	Swbd Op	36K20	
2 E-3	Wireman	36K20	41

Tlr cgo 3/4-ton 2 wheel 2
Trk cgo 3/4-ton 4x4..... 2
Rdo set AN/VRQ-2..... 1
RATT set AN/GRC-46..... 1

7 FLIGHT OPERATIONS CENTER

1 CPT	FOC Comd	1982	11
3 LT	Flt Op Con Off	1982	11
2 E-6	Chief Air Tfc Con	93B40	
4 E-5	Sr Air Tfc Con	93B20	
4 E-4	Air Tfc Con	93B20	49
1 E-3	Rdo Op	05B20	
1 E-4	Rdo Mech	31B20	01
4 E-4	RATT Op	05C20	
4 E-3	Air Tfc Con Helper	93B20	40
1 E-4	Sr Rdo Op	05B20	

Tlr amph cgo 1/4-ton 2 wheel 1
Tlr cgo 1 1/2-ton 2 wheel..... 2
Trk cgo 2 1/2-ton 6x6 LWB WVN.. 2
Trk trac 5-ton 6x6 SWB 2
Trk util 1/4-ton 4x4..... 1
Flt op central AN/MSW-6..... 2

8 FW PLATOON HEADQUARTERS

1 CPT	Plat Comd	1980	45
1 WO	Airplane Pilot	061B0	11
1 E-6	Plat Sgt	67E40	
1 E-5	Crew Chief	67G20	01

Tlr amph cgo 1/4-ton 2 wheel	....	1
Trk util 1/4-ton 4x4	.....	1
Rdo set AN/URC-4	.....	1
Rdo set AN/VRC-9	.....	1
Airplane staf trans (U-8)	.....	1

9 FW COMMAND AND CONTROL SECTION

1 LT	Sec Comd	1980	45
5 LT	FW Aviator	1980	11
6 E-4	Crew Chief	67B20	

Rdo set AN/URC-4	.....	6
Airplane obsn lt (O-1)	.....	6

10 FW UTILITY SECTION

1 LT	Sec Comd	1980	11
5 WO	Airplane Pilot	061B0	11
6 E-5	Crew Chief	67B20	

Rdo set AN/URC-4	.....	6
Airplane util (U-6)	.....	6

11 RW PLATOON HEADQUARTERS

1 CPT	Plat Comd	1981	44
1 E-6	Plat Sgt	67N40	
1 E-3	Lt Trk Dvr	67A10	

Tlr amph cgo 1/4-ton 2 wheel	.....	1
Trk util 1/4-ton 4x4	.....	1
Rdo set AN/VRC-9	.....	1

12 RW COMMAND AND CONTROL SECTION

1 LT	Sec Comd	1981	44
8 LT	RW Aviator	1981	11
10 E-5	Crew Chief	67M20	

Rdo set AN/URC-4	.....	10
Hel obsn	.....	10

13 RW UTILITY SECTION (2)

1 LT	Sec Comd	1981	
2 WO	Hel Pilot	062B0	11
3 E-5	Crew Chief	67N20	

Rdo set AN/URC-4	.....	3
Hel util	.....	3

14 SERVICE PLATOON HEADQUARTERS

1 CPT	Plat Comd	64823	11
1 E-7	Plat Sgt	67N40	
1 E-6	Airplane Tech Insp	67F20	
1 E-6	Hel Tech Insp	67W20	
1 E-4	Clerk Typist	71B20	
1 E-4	Trans Sup SP	76H20	
1 E-3	Lt Trk Dvr	76A10	
1 E-3	Sup Clerk	76A10	

Tlr amph cgo 1/4-ton 2 wheel	.....	1
Trk util 1/4-ton 4x4	.....	1
Rdo set AN/VRC-9	.....	1

15 MAINTENANCE SECTION

1 E-6	Maint Supv	67E40
2 E-5	Sr Airplane Mech	67G20
2 E-5	Sr Hel Rpmn	67N20
2 E-4	Airplane Mech	67B20 42
1 E-4	Airplane Mech	67G20 01
2 E-4	Hel Mech	67N20 43
1 E-3	Airplane Mech Helper	67A10 01
1 E-3	Hel Mech Helper	67A10 01

Tlr cgo 1 1/2-ton 2 wheel	.....	2
Trk cgo 2 1/2-ton 6x6 LWB	.....	1
Trk trac wkr 5-ton 6x6	.....	1
Trk van shop 2 1/2-ton 6x6	.....	2
Tool set org maint set C	.....	1
Tool set gen mech	.....	9

16 AIRFIELD SERVICE SECTION

1 E-5	Afld Svc Supv	67N40
1 E-5	Crash Rescue Chief	51M40
2 E-4	Crash Rescue SP	51M20 41
1 E-4	Powerman	52B20 01
3 E-3	Acft Fuel Hdldg SP	56C20 01

Fftg equip set trk mtd Army acft	...	1
Forced entry and rescue equip set acft crash	.....	1
Light set 1.5 kw afld rnwy	.....	1
Light set .5 kw heliport	.....	1
Light set marker emerg rnwy ptbl	..	2
Tlr cgo 3/4-ton 2 wheel	.....	1
Trk cgo 3/4-ton 4x4 WVN	.....	1
Trk tk fuel svc 2 1/2-ton 6x6	.....	3
Rdo set AN/VRC-9	.....	1

*For remarks, see page 235.

DATA FOR FIGURE 62 - (continued)

REMARKS:

- 01 Also light truck driver.
- 02 Also heavy truck driver.
- 11 Armed with pistol cal .45.
- 40 Remark 01 applies to 2 EM.
- 41 Remark 01 applies to 1 EM.
- 42 Remark 01 applies at reduced strength.
- 43 1 EM also wrecker operator.
- 44 Must be rotary wing instrument flight
examiner. Remark 11 applies.
- 45 Must be qualified as rotary wing instrument
flight examiner.
- 46 1 EM also teletypewriter operator.
- 47 Also armorer at reduced strength.
- 48 Also radio telephone operator.
- 49 Remark 02 applies to 2 EM.

coordinate with the flight elements of the company which accomplish the required missions. Aircraft availability and status reports must be made continuously to the flight dispatch section for coordination with mission requirements. The section normally operates in the vicinity of the platoon headquarters, and the communications and air traffic control sections.

- (c) Air traffic control section. This section contains three control operators and a powerman, and is equipped with the air traffic control set. The section operates the air traffic control equipment from a location on the company airfield selected by the operations officer as most effective for control of takeoffs, landings, and other airfield activity. The air traffic control section contains all communications, signals, and aids required to conduct its control functions.
 - (d) Approach control section. This section contains six landing control operators and is equipped with a ground controlled approach (GCA) radar set. The GCA is located at a point on the airfield selected by the operations officer as most effective for tracking aircraft approaches under low-visibility conditions. The GCA operating console, with necessary communications, is located adjacent to the air traffic control section.
 - (e) Communications section. This section contains the communications officer, communications chief, radio and switchboard operators, GCA and radio mechanics, and wiremen. It provides communications and maintains navigational facilities for the company instrumented airfield and the aviation company. Sufficient equipment and personnel are included to operate in both the FM aircraft control radio net and the battalion command FM net, and to communicate with aircraft making GCA approaches. The section maintains communications equipment in the control tower, the GCA, and the radio beacon set of the aviation company. In addition, it performs message center functions for the company. Sufficient vehicles are assigned to transport the electronic equipment. The section operates in the vicinity of the platoon headquarters.
- (3) Flight operations center. The flight operations center contains the flight operations center commander, 3 flight operations control officers, 10 air traffic controllers, 4 air traffic control helpers, 2 radio operators, 4 radio teletypewriter operators, and a radio mechanic. The center provides aircraft flight following, adequate separation of aircraft under instrument conditions, and identification of friendly aircraft to friendly air defense agencies. The center normally operates traffic in the corps sector and forward to a designated navigational fix in the division sector.
- (4) Fixed wing platoon. This platoon consists of a platoon headquarters, a fixed wing command and control section, and a fixed wing utility section. It provides direct aviation support to the corps commander and staff for command and liaison visits, and aerial reconnaissance and observation.

It supports various corps units in carrying out missions which are best supported by airplanes. This platoon normally operates from the company instrumented airfield; however, it is designed to operate as a separate echelon if required. Flight missions are assigned by the operations officer.

- (a) Platoon headquarters. This section contains a platoon commander, an airplane pilot, a platoon sergeant, and a crew chief. The platoon headquarters is located immediately adjacent to the operations platoon of the company. An FM radio, mounted on a vehicle, permits the platoon commander to communicate in the company radio net or with airplanes organic to the flight.
 - (b) Fixed wing command and control section. This section contains a section commander, five fixed wing aviators, and a crew chief for each of the section's six observation airplanes. The command airplanes of the section are used to transport one to four passengers between instrumented airfields. Continuing transport to remote landing areas is accomplished by the rotary wing section or by aircraft organic to units located at the destination airfields. The observation airplanes are used primarily in a courier role, carrying one passenger or light cargo. They are used effectively in column control, observation, and aerial photography (using cameras assigned to company headquarters). Normal employment of the section is on a mission request basis to the army staff or subordinate units. However, scheduled courier service may be established when required.
 - (c) Fixed wing utility section. This section contains a section commander, five airplane pilots, and a crew chief for each of the six utility airplanes. It is capable of moving small specialist teams and of limited aerial resupply of critical supplies and parts. Normal employment is by single airplane on a mission basis. However, recurring courier flights requiring multiplace airplanes may be established on a scheduled basis. Airplanes of this section are equipped for day, night, or low-visibility flight missions. If detached from the aviation company, the section must depend upon the supported unit for mess and local security; if detached for extended periods, additional maintenance personnel are required.
- (5) Rotary wing platoon. The rotary wing platoon consists of a platoon headquarters, a rotary wing command and control section, and two rotary wing utility sections. The platoon provides aviation support to the corps commander and his staff, and to corps units when such support can be accomplished better by helicopters than by airplanes. The platoon normally operates from the company instrumented airfield, but is designed to operate separately when required. Flight missions are assigned by the operations platoon.
- (a) Platoon headquarters. This headquarters contains a platoon commander, platoon sergeant, and a light truck driver. The platoon commander is also the aviator of 1 of the 10 observation helicopters in the rotary wing command and control section. A 1/4-ton

truck equipped with FM command radio permits the platoon commander to communicate in the company command radio net and with all helicopters organic to the platoon.

- (b) Rotary wing command and control section. This section contains a section commander, 8 rotary wing aviators, and 10 helicopter crew chiefs to operate the 10 observation helicopters assigned to this section. It provides a rotary wing command transport and reconnaissance capability to the corps commander and his staff. The rotary wing (or fixed wing) command and control section is not intended to duplicate or augment a similar capability found in other aviation units assigned or attached to field army elements; it is intended to provide an immediately available and responsive aerial means of accomplishing command functions.
 - (c) Rotary wing utility sections (2). Each utility section contains a section commander, two helicopter pilots, and three crew chiefs and is equipped with three utility helicopters. The sections are designed to provide limited rotary wing lift for the corps headquarters and units subordinate to the corps. When detached from the corps aviation company, the section must rely on the supported unit for mess and local security. If detached for extended periods, additional maintenance personnel must be provided. Mission capabilities of these sections are similar to those of the fixed wing utility section, except that helicopters can be employed in areas inaccessible to airplanes. No communications equipment is available to the sections other than the radios installed in the helicopters; therefore, for control purposes, the sections must retain their identity with the flight except when individual helicopters are assigned separate missions.
- (6) Service platoon. The service platoon consists of a platoon headquarters, a maintenance section, and an airfield service section. This platoon is designed to provide aviation supplies, organizational aircraft maintenance, and airfield service for the aviation company (corps). The mission of the platoon dictates that it operate from the company instrumented airfield in the vicinity of the operations platoon.
- (a) Platoon headquarters. This section contains the platoon commander, platoon sergeant, airplane and helicopter technical inspectors, transportation supply specialist, clerk typist, a light truck driver, and a supply clerk. It supervises and inspects the organizational maintenance of aircraft and stocks the required aircraft parts and supplies. A 1/4-ton truck mounting an FM radio permits communication in the company radio net. Officers from the flight platoons will be designated by the company commanders as assistant maintenance officer, aircraft supply officer, and airfield service officer. They perform these additional duties under the supervision of the service platoon commander.
 - (b) Maintenance section. This section contains a maintenance supervisor and adequate airplane and helicopter mechanics to perform organizational maintenance. Individual crew chiefs in the flight

platoons assist the personnel of the maintenance section in performing maintenance. Minimum vehicles for required day-to-day operations are assigned to the section.

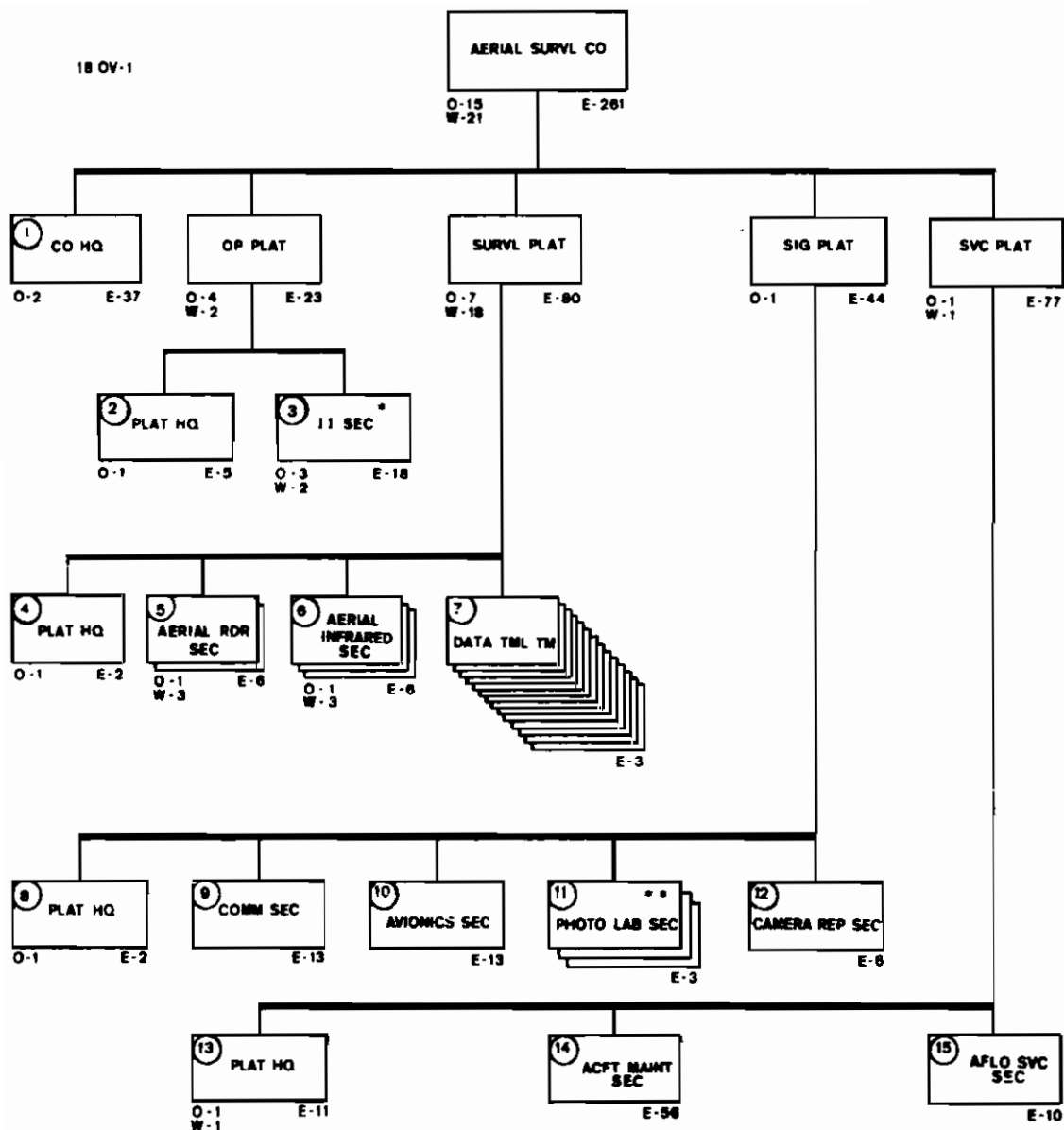
- (c) Airfield service section. This section contains an airfield service supervisor and personnel to provide crash and rescue service, refueling service, parking and mooring service, and general assistance to aircraft using the airfield. A truck equipped with fire-fighting and rescue equipment and an FM radio is on continuous standby in the vicinity of the control tower. When this vehicle is dispatched from the aviation company airfield for crash and rescue purposes, it is augmented by a detail from other sections of the company. The airfield service section is equipped with three gasoline tank trucks for servicing aircraft on the army airfield. A 3/4-ton truck is required to transport, install, and maintain a field lighting set. Additional personnel to assist the airfield service section may be detailed from other elements of the company.

e. Concept of Employment.

- (1) The aviation company will normally be employed as directed by the aviation group commander. Adequate navigational and lighting equipment is available within the company to permit the company to establish and operate the corps instrumented airfield. When extended frontages and multiple command posts preclude operation from the corps instrumented airfield, the company commander will establish another airfield for the company and employ the company in echelon. Each echelon should contain a command element and an adequate number of personnel, equipment, and communications to permit sustained operation separate from the remainder of the company.
- (2) The aviation company is organized on the principle of grouping the aircraft by types and mission. The headquarters and service elements of the company will operate the company instrumented airfield and, when feasible, all flight elements should operate from this airfield. However, the flight elements of the company are organized to permit decentralization of operations to satellite landing areas. Minimum communications are authorized to provide continuing company control under decentralized conditions.
- (3) With the exception of aircraft maintenance and supply, the aviation company receives its administrative support from the aviation group. Echelons of maintenance beyond the capabilities of the company are provided by direct support transportation aircraft maintenance units. Supply of aircraft parts, components, expendables, and evacuation of nonflyable aircraft are the responsibility of the supporting aircraft maintenance units.

58. AERIAL SURVEILLANCE COMPANY, AVIATION GROUP

a. Composition. The composition of the aerial surveillance company, aviation group, is shown in figure 63.



NOTES: * 1. IMAGERY INTERPRETATION SECTION

* 2. A PHOTO LAB SUPERVISOR PROVIDES SUPERVISION FOR THE THREE PHOTO LAB SECTIONS.

Figure 63. Aerial surveillance company, aviation group (TOE 1-128T) (tentative).

DATA FOR FIGURE 63

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983
1 CPT	XO	1983
1 E-8	First Sgt	67L50
1 E-7	Mess Steward	94B40
1 E-7	Motor Sgt	63B40
1 E-6	Pwr Gen Foreman	52D40
1 E-6	Sup Sgt	76K40
3 E-5	First Cook	94B20
1 E-5	Sr Pwr Gen SP	52B30
1 E-5	Sr Wheel Veh Mech	63B20
1 E-4	Armorer	76K30
1 E-4	Co Clerk	71H20
3 E-4	Cook	94B20
1 E-4	Ord Parts SP	76D20
4 E-4	Pwr Gen SP	52B30
3 E-4	Powerman	52B20
4 E-4	Wheel Veh Mech	63B20
1 E-4	Wrecker Operator	63B20
1 E-3	Cook's Helper	94A10
1 E-3	Lt Trk Dvr	71A10
3 E-3	Powerman Helper	52A10
1 E-3	Sup Clerk	76A10
3 E-3	Wheel Veh Mech	
	Helper	63A10

Tlr cgo 1/4-ton	1
Tlr cgo 3/4-ton	2
Tlr cgo 1 1/2-ton	3
Tlr tk water 1 1/2-ton 400-gal.	1
Trk cgo 3/4-ton	2
Trk cgo 2 1/2-ton	4
Trk util 1/4-ton	2
Trk trac wkr 5-ton WWN	1
Rdo set AN/VRC-47	1
Rdo set con gp AN/GRA-39	1
Toolkit org maint no. 1 common	1

Toolkit org maint no. 1 suppl	1
Toolkit auto mech	19
Toolkit elec set no. 2	11

2 OPERATIONS PLATOON HEADQUARTERS

1 CPT	Flt Op Off	1982
1 E-7	Op Sgt	71P40
1 E-5	Sr Flt Op SP	71P20
2 E-4	Flt Op SP	71P20
1 E-3	Flt Op Helper	71P20

Tlr cgo 1/4-ton	1
Tlr cgo 3/4-ton	1
Trk cgo 3/4-ton	1
Trk util 1/4-ton	1
Trk van shop 2 1/2-ton	1
Rdo set AN/GRR-5	1
Rdo set AN/VRC-24	1
Rdo set AN/VRC-46	1
Rdo set AN/VRC-47	1
Rdo set con gp AN/GRA-39	1
tt set AN/FGC-21	1
Toolkit acft mech	1

3 IMAGERY INTPR SECTION

1 CPT	Imagery Intptr Off	9309
2 LT	Asst Imagery Intptr Off	9309
2 WO	Imagery Intptr Tech	962A0
1 E-7	Sec Sgt	96D40
2 E-6	Imagery Intptr Sgt	96D40
8 E-5	Imagery Intptr	96D20
1 E-5	Sr FADAC Mech	31B30
1 E-4	Clerk Typist	71B20
1 E-4	FADAC Mech	31B30

3 E-4	Imagery Intptr	96D20
1 E-4	Rept Clerk	71B20

Tlr cgo 3/4-ton	2
Trk cgo 3/4-ton	2
Trk cgo 2 1/2-ton	2
Stereometer photogrammetric	2
Tac imagery intptr fac	
AN/TSQ-43	2

4 SURVEILLANCE PLATOON HEADQUARTERS

1 CPT	Plat Comd	1980
1 E-7	Plat Sgt	26E40
1 E-3	Lt Trk Dvr	67A10

Trk cgo 3/4-ton 4x4	1

5 AERIAL RADAR SECTIONS (2)

1 LT	Sec Ldr	1980
3 WO	FW Aviator	061C0
3 E-5	Aerial Sensor	
	Op	26E2F
3 E-5	Crew Chief	67H20

Trk cgo 3/4-ton	1
Rdo set AN/URC-10	6
Airplane obsn STOL OV-1B	3
Flasher sys photo acft	
LS-59	1
Toolkit acft mech	3
Toolkit rdr and rdo	3

6 AERIAL INFRARED SECTIONS (3)

1 LT	Sec Ldr	1980
3 WO	FW Aviator	061C0
3 E-5	Aerial Sensor Op	26E2F
3 E-5	Crew Chief	67H20

Trk cgo 3/4-ton.....	1
Rdo set AN/VRC-46.....	6
Airplane obsn STOL OV-1C.....	3
Flasher sys photo acft LS-59.....	1
Toolkit acft mech.....	3
Toolkit rdr and rdo.....	3

7 DATA TERMINAL TEAMS (14)

2 E-5	Sr Abn Sensor Op	26E20
1 E-4	Abn Sensor Op	26E20

Trk cgo 3/4-ton.....	2
Rdo set AN/VRC-46.....	2
Rdo set con gp AN/GRA-39.....	2
Surv info center ir AN/TAQ-1....	1
Receiving set rdr data AN/TKQ-1..	1
Toolkit rdr and rdo.....	2

8 SIGNAL PLATOON HEADQUARTERS

1 CPT	Plat Comd	60210
1 E-7	Plat Sgt	35P40
1 E-4	Sig Sup SP	76G20

(No major items of equipment)

9 COMMUNICATIONS SECTION

1 E-6	Comm Chief	31G40
2 E-5	RATT Tm Chief	05C40
4 E-4	Rdo Rpmn	31B20

3 E-4	RATT Op	05C20
1 E-4	Sr Swbd Op	36K20
1 E-3	Swbd Op	36K20
1 E-3	Wireman	36K20

Tlr cgo 3/4-ton.....	2
Trk cgo 3/4-ton.....	2
Rdo set AN/VRC-46.....	2
Rdo set con gp AN/GRA-39.....	2
RATT set AN/GRC-46.....	2
Toolkit rdo rpmn.....	4

10 AVIONICS REPAIR SECTION

1 E-6	Sr Aerial Sensor Rpmn	26E40
3 E-5	Sr Abn Rdr SP	26E20
3 E-5	Sr Avionics Rpmn	35K20
3 E-4	Abn Rdr SP	26E20
3 E-4	Avionics Rpmn	35K20

Test set elec pwr AN/UPM-93....	1
Test set electron tube TV-7/U....	1
Toolkit rdr and rdo.....	6
Toolkit rdo rpmn.....	6

11 PHOTO LAB SECTIONS (3)

*1 E-6	Photo Lab Supv	84G40
1 E-5	Sr Photo Lab SP	84G40
2 E-4	Photo Lab SP	84G40

*Note. The Photo Lab Supv is in one section only.

Tlr tk water 1 1/2-ton 400-gal....	1
Trk cgo 2 1/2-ton.....	2
Photographic darkroom gp ES-38..	1

12 CAMERA REPAIR SECTION

1 E-6	Sec Chief	41H40
2 E-5	Sr Survl Photo Rpmn	41G20
2 E-4	Survl Photo Rpmn	41G20
1 E-3	Survl Photo Rpmn Helper	41G10

Trk van shop 2 1/2-ton.....	1
Test set photographic.....	2
Toolkit photographic repair.....	4

13 SERVICE PLATOON HEADQUARTERS

1 CPT	Plat Comd	4823
1 WO	Airplane Maint Tech	671C0
1 E-7	Plat Sgt	67L40
2 E-6	Airplane Tech Insp	67F2F
1 E-5	Sr Maint Data SP	71B30
1 E-4	Acft Parts SP	76H20
1 E-4	Clerk Typist	71B20
2 E-4	Maint Data SP	71B30
1 E-4	Shop Clerk	76A10
1 E-3	Acft Parts SP	76H20
1 E-3	Acft Sup Clerk	76A10

Tlr cgo 3/4-ton.....	1
Tlr cgo 1 1/2-ton.....	2
Trk cgo 3/4-ton.....	1
Trk cgo 2 1/2-ton.....	2
Trk util 1/4-ton.....	1
Toolkit acft insp: tech.....	2

14 AIRCRAFT MAINTENANCE SECTION

1 E-6	Sec Chief	67L40
22 E-5	Sr Acft Mech	67H20
22 E-4	Acft Mech	67H20
11 E-3	Acft Mech Helper	67A10

DATA FOR FIGURE 63 - (continued)

Tlr cgo 3/4-ton 1
 Tlr cgo 1 1/2-ton 2
 Trk cgo 3/4-ton 1
 Trk cgo 2 1/2-ton 2
 Trac wheeled acft towing, SP elec . 1
 Toolkit acft mech 56
 Toolset org maint Army acft:
 Set C 1

15 AIRFIELD SERVICE SECTION

1 E-5 Sec Chief 67L40
 1 E-5 Crash Rescue Chief 51M40
 6 E-4 Acft Fuel Hand SP 56C20
 2 E-4 Crash Rescue SP 51M20

Stlr trk: fuel servicing, 5,000-gal . 1
 Tlr cgo 1 1/2-ton 5
 Tlr oxygen servicing 3 wheel 1
 Trk cgo 3/4-ton 1
 Trk tk fuel servicing 2 1/2-ton 4
 Trk trac 5-ton 1
 Fftg equip sct: trk mtd 1

b. Mission. The mission of the aerial surveillance company is to provide combat surveillance and target acquisition capabilities to corps and/or division units through the use of organic aircraft, sensory equipment, and ground data stations.

c. Assignment. The company is assigned to corps, field army, or separate task force, as required.

d. Capabilities. At level 1, this unit has the following capabilities:

- (1) Providing sustained near-all weather, day or night, surveillance of that portion of the field army area of influence for which the Army has primary aerial surveillance responsibility.
- (2) Conducting aerial reconnaissance of routes, zones, and areas using visual, photographic, side-looking aerial radar (SLAR), and aerial infrared systems.
- (3) Acquiring target acquisition information by aerial means.
- (4) Acquiring information for post-strike analysis of nuclear weapons effects.
- (5) Acquiring information for CBR survey.
- (6) Individuals of this organization can engage in effective, coordinated defense of the unit's area or installation.

Note. This unit is one hundred percent mobile utilizing air and ground vehicles.

e. Limitations.

- (1) The company must be deployed at an airfield which has airfield services to include instrument approach facilities or be augmented with personnel and equipment to provide these services.
- (2) The use of the ground data stations is limited by the requirement for line-of-sight between the sensor stations and the aircraft conducting a mission.
- (3) This unit is dependent upon its parent higher headquarters for administrative and logistical support.

f. Organization. The aerial surveillance company consists of a company headquarters, operations platoon, surveillance platoon, signal platoon, and service platoon.

- (1) Company headquarters. The company headquarters contains the company commander, executive officer, first sergeant, and the necessary personnel to perform company administrative, mess, supply, and vehicle maintenance. The power generator foreman and the powerman are necessary to maintain the auxiliary ground power equipment organic to the company.

- (2) Operations platoon. The operations platoon consists of a platoon headquarters and an imagery interpretation section. The platoon is the focal point for scheduling, briefing, debriefing, interpreting, producing, and reporting aerial surveillance mission accomplishments.
- (a) Platoon headquarters. The platoon headquarters contains a flight operations officer and sufficient personnel to provide continuous flight operations scheduling.
- (b) Imagery interpretation section. The imagery interpretation section contains intelligence specialists trained in the techniques of extracting information from imagery produced by sensors. The section is organized to man two AN/TSQ-43 (tactical imagery interpretation facility) in two 12-hour shifts.
- (3) Surveillance platoon. The surveillance platoon consists of a platoon headquarters, 2 aerial radar sections, 3 aerial infrared sections, and 14 ground data terminal teams.
- (a) Platoon headquarters. The platoon headquarters contains the platoon commander, platoon sergeant, and one light truck driver. The platoon commander and platoon sergeant exercise supervisory control over officers and enlisted personnel of the component sections.
- (b) Aerial radar sections (2). Each radar section contains a section leader, three surveillance aviators, three aerial sensor operators, and three crew chiefs for the section's three airplanes. The aerial radar sections perform aerial reconnaissance, surveillance, and target acquisition missions using OV-1B airplanes equipped with radar and photographic devices. The airborne radar surveillance system (AN/APS-94) is a long-range, side-looking radar which can be used effectively at night or during periods of poor weather conditions. Extreme weather (heavy rain, sleet, or snow) will limit its effectiveness. The system can relay target data information to the AN/TKQ-1 ground sensor terminal and if the SLAR system is equipped with the RO-166 rapid data processor, the airborne operator can view the imagery while it is being produced. Permanent imagery can be made in the airplanes. All airplanes are equipped with the Doppler navigational system which permits pinpoint target location. Sensor operators are jointly trained as both infrared and radar operators. While the aviator-observer team is normally employed during periods of good visibility, the SLAR is particularly valuable during inclement weather when the quality of black and white photography and infrared imagery is greatly reduced.
- (c) Aerial infrared sections (4). Each aerial infrared section is organized identically to an aerial radar section with the exception of the aircraft and its associated equipment. The aerial infrared sections perform aerial reconnaissance and target acquisition missions using the OV-1C airplane equipped with photographic and infrared devices. It provides air-to-ground infrared surveillance

of routes, zones, or areas within enemy territory and acquires targets therein. The aerial infrared sections may be employed on day or night aerial reconnaissance and target acquisition missions, with procedures and techniques determined by the type of mission. The AN/UAS-4 infrared system includes a data link transmitter/receiver which operates similar to the radar system. The aerial infrared surveillance system is not an all-weather system. For best results with photographic or infrared detectors, airplanes should fly below cloud levels in the target area.

- (d) Ground data terminal teams (14). Each ground data terminal team consists of three airborne sensor specialists (two E-5's and one E-4). Equipment in the team includes one TKQ-1 radar data receiving set and one TAQ-1 infrared surveillance information center. Each of these is mounted on a 3/4-ton truck and has a generator mounted on a 3/4-ton trailer. Each vehicle has an AN/VRC-46 radio to operate in the company command net or with the airplane. The ground data stations receive electronic data from the airplane and convert it into imagery while the airplane is in flight. The station must have radio line-of-sight to the airplane while receiving data from it. The TKQ-1 receives data from the OV-1B airplane SLAR. The data is transferred to film and then the film is developed by using the RO-166 processor. The film is ready for viewing in about 3 minutes. The TAQ-1 provides a visual presentation on a small cathode-ray tube and exposes a film in the ground sensor terminal simultaneously as the infrared-equipped OV-1C flies over the terrain. Unlike the TKQ-1, this film must be developed in a photo lab after completion of the infrared mission. It is then viewed by an image interpreter. The recommended employment of the 14 teams is 3 teams to each of the 3 divisions in a corps; 3 teams to support the corps headquarters; 1 team to the armored cavalry regiment; and 1 team to the corps separate brigade.
- (4) Signal platoon. The signal platoon consists of a platoon headquarters, communications section, avionics repair section, three photo lab sections, and a camera repair section.
 - (a) Platoon headquarters. The platoon headquarters contains a platoon commander, platoon sergeant, and a signal supply specialist who accomplishes the necessary signal supply functions for the company.
 - (b) Communications section. The communications section contains a communications chief, two radio teletype teams, four radio repairmen, two switchboard operators, and one wireman. The radio teletype teams operate the section's two radio teletypewriter (RATT) sets which comprise the aerial surveillance/liaison net. One set is normally at the location of the supported G2 (Air), and the second at the company's operations.

- (c) Avionics repair section. The section contains a senior aerial sensor repairman who acts as section chief, and the necessary personnel to perform organizational maintenance on the avionics, SLAR, and infrared equipment found in the OV-1 airplane.
 - (d) Photographic laboratory sections (3). Each section contains a senior photo lab specialist and two photo lab specialists. One photo lab supervisor is provided to supervise all three sections. The sections process all exposed film for the company and produce photo prints as required using ES-38 photographic darkrooms. The sections are normally collocated with the imagery interpretation section to reduce delivery time.
 - (e) Camera repair section. This section contains a section chief, four surveillance photo repairmen, and a surveillance photo repairman helper. These individuals preflight the airborne photographic surveillance systems to be used on photo missions. They also perform organizational maintenance of the photographic surveillance systems installed on the company's aircraft.
- (5) Service platoon. The service platoon consists of a platoon headquarters, aircraft maintenance section, and airfield service section. The platoon schedules and supervises aircraft maintenance, aircraft servicing, and crash rescue activities.
- (a) Platoon headquarters. The platoon is commanded by an aircraft maintenance officer. He is assisted by an airplane maintenance technician who is qualified to supervise aircraft maintenance and perform test flights. The platoon sergeant supervises the enlisted personnel of the platoon. Others in the platoon headquarters are tech inspectors, maintenance data specialists, aircraft parts specialists, aircraft supply clerk, shop clerk, and typist. The headquarters maintains a technical library, aircraft records, aircraft parts supply; it also conducts technical inspections. The headquarters maintains quality control over the activities of organic sections and coordinates with the direct support maintenance unit assigned to support the company.
 - (b) Aircraft maintenance section. This section contains a section chief who is a qualified airplane mechanic and 55 aircraft mechanics and helpers. They perform organizational maintenance on the assigned aircraft to include periodic inspections; MWO's; testing, adjusting, or replenishing airplane systems; and replacing major components. The section can work in shifts to support day and night operations.
 - (c) Airfield service section. The section contains a section chief who is a qualified fuel handling specialist, six aircraft fuel handling specialists, and a team of three crash rescue specialists. The section fuels and defuels assigned aircraft, and performs forced entry and rescue from crashed aircraft. It also replenishes the aircraft's oxygen and oil lubrication systems. It has four 2 1/2-ton truck and trailer combinations, each capable of transporting 1,500 gallons of aviation fuel; and one 5,000-gallon tanker.

g. Concept of Employment.

- (1) The aerial surveillance company performs aerial reconnaissance, surveillance, and target acquisition missions in support of the corps, field army, or separate task force to which it is assigned. It is normally employed as an integral unit at an instrumented airfield within the supported unit's area of operation. It will normally be employed in general support of the corps with direct support to subordinate units being provided on a mission basis. Whatever the unit to which assigned, the company will be under the operational control of that echelon's G2. As principal assistant to the G2, the G2 (Air) directs the surveillance effort through the assignment of specific missions and priorities for accomplishment. A representative of the G2 (Air), the air reconnaissance liaison officer (ARLO) is provided to the company to conduct briefings of the aircrews on requirements for missions and debriefing of the crews upon their return. The information obtained is passed to the G2 (Air) and the requesting headquarters.
- (2) With the exception of aircraft maintenance and supply, the company receives its administrative support from the aviation group headquarters. Echelons of aircraft maintenance beyond the capabilities of the company are provided by direct support transportation aircraft maintenance units. Supply of aircraft parts, components, and expendables, and evacuation of nonflyable aircraft are the responsibility of the supporting aircraft maintenance units.

59. THE AIRMOBILE BATTALION, AVIATION GROUP

- a. Composition.** The composition of the airmobile battalion, aviation group, is shown in figure 64.
- b. Mission.** The mission of the airmobile battalion is to provide command, control, staff planning, and administrative supervision for three to seven transport aviation companies.
- c. Assignment.** When the primary mission is tactical transport, the airmobile battalion is assigned to the field army or corps aviation group; when the primary mission is logistical support, it is assigned to the field army support command aviation group.
- d. Capabilities.** This unit is capable of performing the following functions:

- (1) Planning and supervising the employment of attached or assigned Army aviation companies.
- (2) Supervising organizational maintenance and logistical functions of assigned or attached units.
- (3) Providing medical services to include emergency medical treatment, operation of aid station, evacuation of sick and injured, and supervision of sanitation.

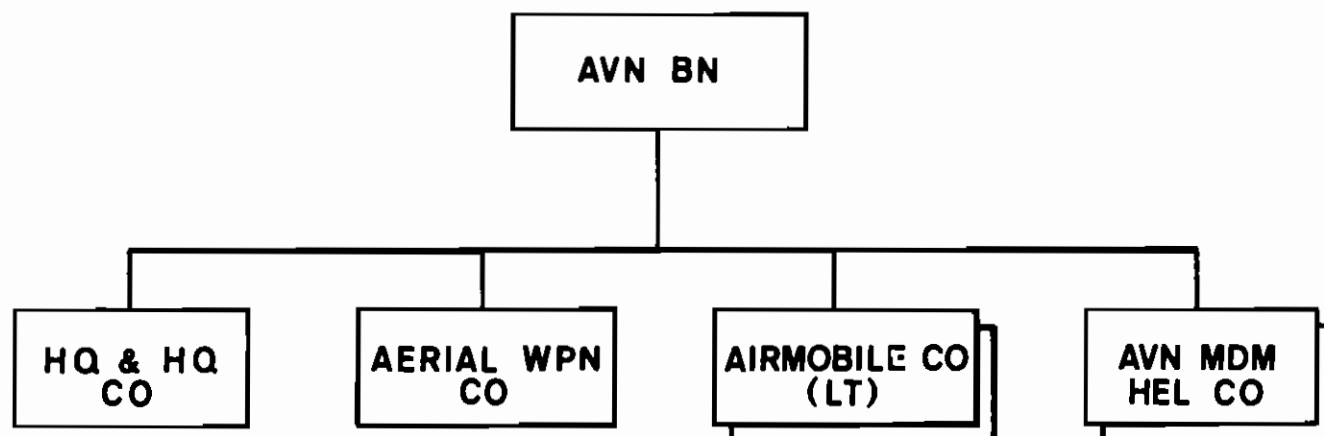


Figure 64. Airmobile battalion, aviation group.

e. Limitations.

- (1) This unit is dependent upon attached companies for motor maintenance facilities.
- (2) This unit is dependent upon the AG personnel services unit for processing personnel administrative actions.

f. Organization. The airmobile battalion consists of a headquarters and headquarters company, an aerial weapons company, two airmobile companies (light), and two aviation medium helicopter companies.

g. Concept of Employment.

- (1) The airmobile battalion is employed as directed by the aviation group commander. It is most effective when employed as a unit; however, companies, platoons, or sections may be attached to or placed under operational control or in support of other units on a mission basis.
- (2) The airmobile battalion headquarters is normally located in close proximity to one of the aviation medium helicopter companies. The two aviation medium helicopter companies and the two airmobile companies (light) are normally employed from their own heliports. No prepared heliports or dispersal areas are required to employ the rotary wing companies. The battalion headquarters is normally employed as a single unit; however, its organization at full strength is sufficiently flexible to allow the staff to split for operations at more than one location.
- (3) Employment of the battalion at more than one location will require additional communications equipment and personnel for proper exercise of command and control. The battalion is also capable of operating independently. An administration and personnel section is authorized by augmentation to provide administration and personnel services for the battalion when it does operate independently.

60. HEADQUARTERS AND HEADQUARTERS COMPANY, AVIATION BATTALION, AVIATION GROUP

a. Composition. The composition of the headquarters and headquarters company, aviation battalion, aviation group, is shown in figure 65.

b. Mission. The mission of the headquarters and headquarters company is to provide command, control, staff planning, and administrative supervision for three to seven transport aircraft and/or helicopter companies.

c. Assignment. The headquarters and headquarters company is assigned to the aviation battalion of the aviation group.

d. Capabilities. This unit performs the following functions:

- (1) Planning and supervising the employment of attached or assigned Army aviation companies.

- (2) Supervising organizational maintenance and logistical functions of assigned or attached units.
- (3) Providing medical service to include emergency medical treatment, operation of aid station, evacuation of sick and injured, and supervision of sanitation.

e. Organization. The headquarters and headquarters company, aviation battalion, aviation group (fig. 65) consists of a battalion headquarters and a headquarters company. The battalion headquarters contains the battalion commander and his staff. The headquarters company contains the company headquarters, S1 section, S2/S3 section, communications section, medical section, and S4 section.

- (1) Battalion headquarters. This headquarters contains the battalion commander, executive officer, adjutant (S1), intelligence officer (S2), operations officer (S3), logistics officer (S4), aviation medical officer, safety officer, and signal officer. Two liaison officers are provided to maintain liaison with supported units. Command vehicular transportation, communications, and other items of equipment for the battalion commander and his staff are in the appropriate sections of the headquarters company. Aircraft support for necessary command and control is provided by three observation helicopters located in the company headquarters.
- (2) Headquarters company.
 - (a) Company headquarters. This headquarters contains the company commander, first sergeant, supply sergeant, mess steward, and sufficient personnel to provide administration, mess, vehicular maintenance, supply functions, and transportation for the unit mess. FM radio is the normal means of communications with other elements of the battalion. An internal company wire net is established within assembly or bivouac areas. The company commander may be designated as the battalion headquarters commandant. As such, he is responsible for operations pertaining to the internal arrangement of the battalion command post, its movement under the direction of the battalion executive officer, and its security. In addition, he is responsible for providing messing facilities for attached or supporting personnel, such as liaison officers. He may be required to temporarily assume the duties of any member of the battalion staff.
 - (b) S1 section. The S1 section contains the personnel staff NCO, a legal clerk, a clerk typist, and a light truck driver. These individuals provide personnel administration for the battalion. The section consolidates the administrative matters of the attached or assigned companies. The supporting AG personnel service unit provides appropriate personnel administrative actions for the battalion to include classification, personnel affairs, maintenance of personnel records, pay actions, personnel accounting, casualty reporting, rosters, and orders affecting personnel actions. It relieves the attached companies of much of their administrative requirements. When operating independently and augmented with a

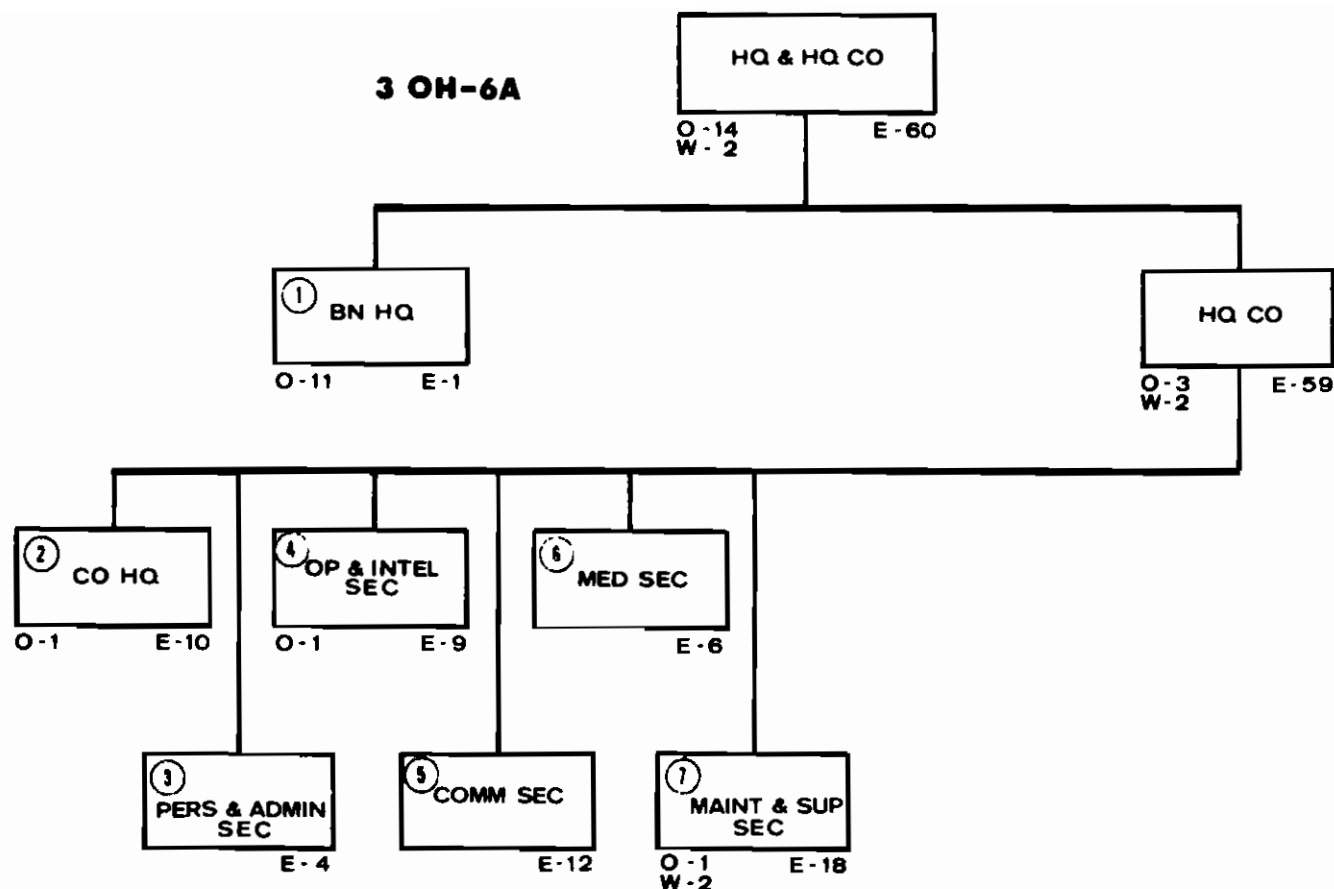


Figure 65. Headquarters and headquarters company, aviation battalion, aviation group (TOE 1-256G).

DATA FOR FIGURE 65

1 BATTALION HEADQUARTERS

1 LTC	Bn Comd	1983	13
1 MAJ	XO	1983	13, 31
1 MAJ	S3	62162	13
1 CPT	S2	69310	13
1 CPT	S4	64010	13
1 CPT	S1, Adjutant	2110	11
1 CPT	Avn Safety Off	67423	13
1 CPT	Sig Off	60210	13
1 CPT	Surg	3160	41
2 LT	LO	60694	13
1 E-9	Sgt Maj	67U50	40, 08

2 COMPANY HEADQUARTERS

1 CPT	Co Comd	2900	11, 42
1 E-8	First Sgt	67U50	40
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	05
2 E-5	First Cook	94B20	43
1 E-4	Co Clerk	71H20	01
2 E-4	Cook	94B20	43
1 E-4	Unit Sup SP	76K20	12
1 E-3	Cook's Helper	94A10	01

Gun mach 7, 62mm	3
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	2
Tlr cgo 3/4-ton	1
Tlr cgo 1 1/2-ton	1
Tlr tk water 1 1/2-ton 400-gal	1
Trk cgo 3/4-ton	1
Trk cgo 2 1/2-ton	2
Trk util 1/4-ton	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1
Tel set TA-312/PT	1

3 S1 SECTION

1 E-7	Pers Staff NCO	71H40
1 E-6	Legal Clerk	71D20
1 E-4	Clerk Typist	71B30
1 E-3	Lt Trk Dvr	71A10
Tel set TA-312/PT	3	
Tlr cgo 3/4-ton	1	
Trk cgo 3/4-ton	1	
Rdo set AN/VRC-47 mtd in		
trk 3/4-ton	1	

4 S2/S3 SECTION

1 CPT	Asst S3	62162	13, 22
1 E-8	Op Sgt	71P50	
1 E-7	Asst Op Sgt	71P40	
1 E-7	Intel Op Sgt	96B40	
1 E-5	Sr Mov SP	71N20	
2 E-4	Clerk Typist	71B30	12
1 E-4	Gen Draftsman	81A10	
2 E-4	Mov SP	71N20	43

Tel set TA-312/PT	2
Tlr cgo 1/4-ton	2
Trk util 1/4-ton	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1

5 COMMUNICATIONS SECTION

1 E-6	Comm Chief	31G40	
1 E-5	RATT Tm Chief	05C40	
2 E-4	RATT Op	05C20	
1 E-4	Sr Swbd Op	36K20	12
2 E-4	Man tt Op	72B20	
1 E-4	Rdo Mech	31B20	12

1 E-4	Sr Mag Clerk	36K20	01
1 E-3	Msg Clerk	36K20	01
1 E-3	Swbd Op	36K20	12
1 E-3	Wireman	36K20	01

Cipher mach TSEC/KL-7	1
Tel set TA-312/PT	1
Tlr cgo 1/4-ton	1
Tlr cgo 3/4-ton	2
Trk cgo 3/4-ton	1
Trk cgo 3/4-ton WWN	1
Trk util 1/4-ton	1
Rdo set AN/GRR-5 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1
RATT set AN/GRC/42	1
tt set AN/GGC-3	1
tt set AV/PGC-1	1
Tg tel AN/TCC-29	1
Test set rdo AN/VRM-1	1

6 MEDICAL SECTION

1 E-6	Sec Sgt	91B40	
1 E-6	Fld Med Asst	91C20	
1 E-5	Sr Med Aidman	91B30	
1 E-4	Amb Dvr	91B20	
1 E-4	Med Aidman	91B20	01
1 E-4	Med Rec SP	71G20	01

Tel set TA-312/PT	1
Trk amb 3/4-ton	1
Trk util 1/4-ton	1

DATA FOR FIGURE 65 - (continued)

7 S4 SECTION

1 CPT	Avn Maint Off	64823	13
1 WO	Unit Sup Tech	761A0	11
1 WO	Auto Maint Tech	631A0	11
1 E-7	Maint Supv	67U40	
1 E-7	Bn Sup Sgt	76K40	
1 E-7	Mat Readiness		
	NCO	67U40	
1 E-6	Trans Parts-Sup		
	Sgt	76H40	
1 E-5	Mtr Maint Sgt	63B40	
3 E-6	Tech Insp	67W20	
3 E-5	Hel Crew Chief	67M20	
1 E-5	Ration Distr Sgt	56D20	
1 E-4	Gen Sup SP	76K20	

1 E-4	Maint Data SP	71B20	
1 E-4	Sig Parts-Sup SP	76G20	12
1 E-4	Trans Parts-Sup		
	SP	76H20	12
1 E-4	Wheel Veh Mech	63B20	01
1 E-3	Sup Clerk	76A10	01
1 E-3	Wheel Veh Mech		
	Helper	63A10	01
	Tel set TA-312 /PT		1
	Tlr cgo 1/4-ton		1
	Tlr cgo 3/4-ton		1
	Trk cgo 3/4-ton		1
	Trk cgo 2 1/2-ton WVN		1
	Trk util 1/4-ton		1
	Rdo set AN/URC-10		3
	Hel OH-6A		3

personnel and administration section, the battalion will be capable of performing its own personnel administrative actions.

- (c) S2/S3 section. The S2/S3 section contains the assistant S3 and sufficient enlisted personnel to perform the normal operations and intelligence functions over a sustained period. It provides the bulk of enlisted personnel for the staff sections and part of the vehicles and equipment needed for the command and control of the battalion.
- (d) Communications section. The communications section is commanded by the battalion communications officer, and contains specialist personnel, equipment, and organic transport to install, operate, and maintain the battalion communications system. The communications chief supervises the assignment and activities of the section's radio teletypewriter and radio operators, and the message-handling, wire, and maintenance personnel. The section has organic one 1/4-ton truck and two 3/4-ton trucks.
- (e) Medical section. The medical section is commanded by the battalion aviation medical officer, and contains the section sergeant and medical specialists to provide required unit-level medical support to the battalion and attached units. It establishes and operates the battalion aid station and provides medical aid and evacuation for the attached companies in emergency medical treatment and evacuation of casualties to the aid station. It assists in technical instruction in emergency medical care, field sanitation, and related subjects, and carries out technical inspections of a medical and sanitation nature.
- (f) S4 section. The maintenance and supply section contains the battalion aircraft maintenance officer, unit supply technician, automotive maintenance technician, supply sergeant, maintenance supervisor, and sufficient maintenance and supply technicians to accomplish the functions of the section. It provides staff planning and supervision of the maintenance and supply functions of the battalion. It coordinates the maintenance and supply functions of attached units and supporting maintenance elements.

f. Concept of Employment. The headquarters and headquarters company is employed as directed by the battalion commander. The company is organized with personnel and equipment for tactical command, control, and administrative supervision of assigned and attached units. The company headquarters is usually located close to the battalion command post. Terrain, enemy situation, or the mission may require additional communications equipment and personnel for proper exercise of command and control.

61. AERIAL WEAPONS COMPANY (ESCORT)

a. Composition. The composition of the aerial weapons company (escort) is shown in figure 66.

b. Mission. The mission of this unit is to provide security for airmobile forces and to participate in offensive, defensive, and delaying actions as part of a highly mobile combined arms team.

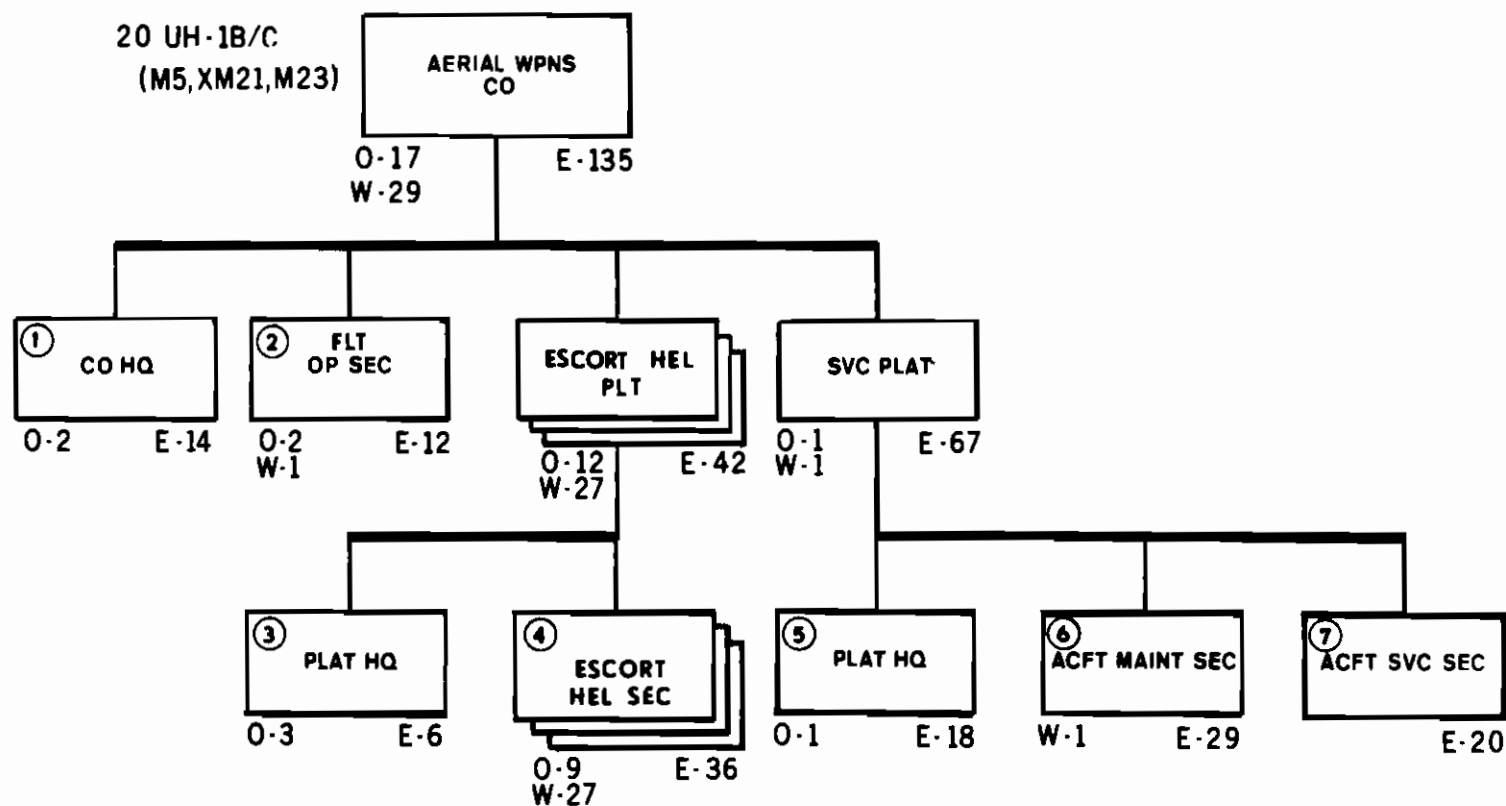


Figure 66. Aerial weapons company (escort) (TOE 1-111T).

DATA FOR FIGURE 66*

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983	13
1 CPT	XO	1983	13, 43
1 E-8	First Sgt	67N50	08
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	
2 E-5	First Cook	94B20	
1 E-4	Armorer	76K30	01
1 E-4	Co Clerk	71H20	12
2 E-4	Cook	94B20	
2 E-4	Pers SP	71H20	
1 E-3	Cook's Helper	94A10	01
1 E-3	Lt Trk Dvr	56A10	
1 E-3	RATT Op	05C20	01

Gun mach 7. 62mm lt flex	4
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Rdo set AN/PRC-25	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	1
Rdo set con gp AN/GRA-39	1
Tel set TA-312/PT	2
Tlr cgo 1/4-ton 2 wheel	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	1
Tlr tk water 400-gal 1 1/2-ton	
2 wheel	1
Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6	2
Trk util 1/4-ton 4x4	1

2 FLIGHT OPERATIONS SECTION

1 CPT	Op Off	1982	13, 37
1 LT	Asst Op Off	1982	13
1 WO	Hel Pilot	062B0	13, 37

1 E-7	Flt Op Chief	71P40
1 E-5	Comm Chief	31F40
1 E-5	Crew Chief	67N2F 13
1 E-5	Sr Flt Op SP	71P20
1 E-4	Aerial Gnr	11B2F 13
1 E-4	Clerk Typist	71B30
1 E-4	Flt Op SP	71P20 01
1 E-4	Sr Swbd Op	36A10 12
1 E-3	Rdo Op	05B20
1 E-3	Swbd Op	36A10 01
1 E-3	Wireman	36A10 01

Armt subsystem M23	1
Armt subsystem XM21	1
Hel UH-1B/C	1
Rdo set AN/GRC-106 mtd in	
trk 3/4-ton	1
Rdo set AN/GRR-5 mtd in	
trk 3/4-ton	1
Rdo set AN/PRC-25	3
Rdo set AN/URG-10	1
Rdo set AN/VRC-24 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-47 mtd in	
trk 3/4-ton	1
Rdo set con gp AN/GRA-39	2
Speech acty equip TSEC/KY-8	1
Swbd Tel SB-22/PT	9
Tlr cgo 1/4-ton 2 wheel	1
Tlr cgo 3/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	1
Xmtr ir AN/CVX-1	1
Trk cgo 3/4-ton 4x4	1
Trk cgo 2 1/2-ton 6x6	1
Trk util 1/4-ton 4x4	1
Beacon rdo 100-watt	1

3 ESCORT HELICOPTER PLATOON HEADQUARTERS (3)

3 CPT	Plat Comd	1981	13
3 E-7	Plat Sgt	67N40	13
3 E-3	Lt Trk Dvr	56A10	

Radiacmeter IM-93/UD	6
Radiacmeter IM-174/PD	3
Rdo set AN/PRC-25	3
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	3
Tel set TA-1/PT	3
Tel set TA-312/PT	3
Tlr cgo 1/4-ton 2 wheel	3
Trk util 1/4-ton 4x4	3

4 ESCORT HELICOPTER SECTION (9)

9 LT	Sec Comd	1981	13
27 WO	Hel Pilot	062B0	13
18 E-5	Crew Chief	67N2F	13
18 E-4	Aerial Gnr	11B2F	13

Armt subsystem M23	18
Armt subsystem XM21	18
Armt subsystem M5	18
Hel UH-1B/C	18
Rdo set AN/PRC-25	9
Rdo set AN/URG-10	18

5 SERVICE PLATOON HEADQUARTERS

1 CPT	Plat Comd	64823	13, 28
1 E-7	Plat Sgt	67N40	
1 E-5	Mtr Sgt	63B40	
2 E-6	Hel Tech Insp	67W2F	

*For remarks, see page 258.

DATA FOR FIGURE 66 - (continued)

1 E-5 Avn Elct Equip
Rpmn 31Q30
1 E-5 Crew Chief 67N2F 13
2 E-4 Avn Elct Equip
Mech 31Q20
1 E-4 Acft Parts SP 76H20 02
1 E-4 Door Gnr 11B2F 13
2 E-4 Maint Data SP 71B30
1 E-4 Shop Clerk 71B20 01
3 E-4 Wheel Veh Mech 63B20 40, 41
1 E-3 Powerman 93B20 12
1 E-3 Wheel Veh Mech
Helper 63A10 01

Armt subsystem M23 1
Armt subsystem XM21 1
Armt Subsystem M5 1
Hel UH-1B/C 1
Radiacmeter IM-93/UD 2
Radiacmeter IM-174/UD 1
Rdo set AN/VRC-47 mtd in
trk 3/4-ton 1
Tlr cgo 3/4-ton 2 wheel 1
Tlr cgo 1 1/2-ton 2 wheel 1
Trk cgo 3/4-ton 4x4 1
Trk cgo 2 1/2-ton 6x6 WVN 1
Trk wkr 5-ton 6x6 WVN 1

6 AIRCRAFT MAINTENANCE SECTION

1 WO Hel Rep Tech 671C0 13, 29
1 E-7 Sec Sgt 67N4F
1 E-6 Maint Supv 67N40
11 E-5 Sr Hel Mech 67N30
11 E-4 Hel Mech 67N30 40
5 E-4 Hel Mech
Helper 67A10 01

Radiac set AN/PDR-27 1
Tlr cgo 3/4-ton 2x2 1
Tlr cgo 1 1/2-ton 2 wheel 1
Trk cgo 3/4-ton 4x4 1
Trk cgo 2 1/2-ton 6x6 1

7 AIRCRAFT SERVICE SECTION

1 E-7 Acft Armorer Supv 45J40
1 E-5 Acft Armorer
Fman 45J40
2 E-5 Sr Acft Armorer 45J20
1 E-5 Crash Rsg Chief 51M40
3 E-4 Acft Armorer 45J20
3 E-4 Ammo Stor SP 55B20 40
4 E-4 Acft Rfl SP 56C20 01
3 E-4 Crash Rsg SP 51M20 40
1 E-3 Acft Armorer
Helper 45A10 01
1 E-3 Lt Trk Dvr 56A10

Drum collapsible 500-gal 3
Fftg equip set trk mtd
Army acft 1
Rdo set AN/PRC-25 mtd in
crash trk 1
Tnk and pump unit 4
Tnk unit dispensing, tlr mounting 4
Tel set TA-312/PT 1
Tlr cgo 3/4-ton 2 wheel 1
Tlr cgo 1 1/2-ton 2 wheel 5
Trk cgo 3/4-ton 4x4 1
Trk cgo 1 1/2-ton 6x6 WVN 5

REMARKS:

01 Also light truck driver.
02 Also heavy truck driver.
08 Also education NCO.
12 Armed with grenade launcher
and cal .38 revolver.
13 Armed with cal .38 revolver.
28 Also motor officer.
29 Also munitions officer.
37 Must be qualified rotary wing
instrument examiners.
40 Remark 01 applies to 1 EM.
41 Remark 02 applies to 1 EM.
43 Also aviation safety officer.

c. Assignment. This unit is assigned to corps.

d. Capabilities. At full strength, this unit has the following capabilities:

- (1) Provides armed, aerial escort, and aerial suppressive fire support for airmobile forces.
- (2) Participates in semi-independent operations as required.
- (3) Provides effective aerial suppressive fires for antiguerrilla forces.
- (4) Augments aeromedical evacuation from the immediate battlefield.

e. Limitations. The aerial weapons company has the following limitations:

- (1) It is dependent upon its parent unit headquarters for personnel administration.
- (2) It is partially dependent upon higher headquarters or adjacent units for local security.

f. Organization. The aerial weapons company is composed of a company headquarters, a flight operations section, three escort helicopter platoons, and a service platoon. The company or sections thereof are assigned missions as required.

- (1) Company headquarters. The company headquarters consists of a company commander, executive officer, first sergeant, mess steward, supply sergeant, and sufficient personnel to provide adequate supply, mess, and administrative activities.
- (2) Flight operations section. This section contains an operations officer, assistant operations officer, a helicopter pilot, a flight operations chief, and a communications chief. Sufficient personnel are also authorized to effect dispatch and administration related to flight operations and to establish and man the internal radio and wire communications of the company. The UH-1B/C helicopter, with crew, organic to the flight operations section is used for coordination and control of active and pending operations.
- (3) Escort helicopter platoon (3). Each of the escort helicopter platoons is composed of a platoon headquarters and three escort helicopter sections.
 - (a) The platoon headquarters is authorized a platoon commander, platoon sergeant, and a light truck driver.
 - (b) Each escort helicopter section includes a section commander, three WO aviators, two crew chiefs, and two aerial gunners. There are two UH-1B/C helicopters with M5 and XM21 armament subsystems authorized per escort helicopter section.
- (4) Service platoon. The service platoon is comprised of the platoon headquarters, aircraft maintenance section, and aircraft service section.

- (a) The platoon headquarters contains the platoon commander, platoon sergeant, motor sergeant, helicopter technical inspectors, and sufficient personnel to accomplish company wheel vehicle maintenance, aviation electronic repairs, aircraft supply, and related administration.
- (b) The aircraft maintenance section contains a helicopter repair technician, a section sergeant, and helicopter maintenance personnel.
- (c) The aircraft service section's mission is aircraft armament maintenance and repair, ammunition storage, aircraft refueling, and crash rescue services. An aircraft armorer supervisor and a sufficient number of qualified personnel are authorized to effect this mission.

g. Concept of Employment.

- (1) The company is a self-contained unit capable of independent operation, and habitually operates from its own dispersal or assembly area. Equipment is lightweight, and only absolutely essential items are authorized. With the exception of 3/4-ton and 2 1/2-ton trucks, all equipment is air transportable by helicopters of the assigned assault helicopter companies. During movements, additional ground vehicles and/or aircraft are required to transport the company. When on the ground, telephone is the normal means of communications among all elements of the company. Single side band (SSB) and high frequency (HF) voice radio is used for communications with higher headquarters, flight operations center, liaison officers, supported units, and distant in-flight elements of the battalion. Frequency modulated (FM) and ultra high frequency (UHF) voice radio provides communication with relatively near in-flight elements.
- (2) The company is organized and equipped to operate as a unit; however, platoon-size teams may be tailored to accomplish a given mission. Therefore, only those elements essential for successful accomplishment of a mission are committed. The company can be employed independently to attack enemy-held positions, and as part of a highly mobile combined arms team in offensive, defensive, and delaying actions, in addition to the role of escort for airmobile forces.

62. AIRMOBILE COMPANY (LIGHT), AVIATION BATTALION, AVIATION GROUP

a. General. The composition, mission, assignment, capabilities, and organization of the airmobile company (light), aviation battalion, aviation group, is the same as the airmobile company (light) of the infantry division aviation battalion (para 37d and fig. 47).

b. Concept of Employment. The airmobile company (light) is employed as directed by the aviation battalion commander. Although the company is organic to the aviation battalion (nondivisional), it performs its mission identically to the airmobile company (divisional). This unit may be employed as part of the battalion in airmobile operations, or it may be placed under operational control of a division to augment the airlift capability

of the division. Another common mission is the movement of the corps reserve units in tactical operations.

63. AVIATION MEDIUM HELICOPTER COMPANY, AVIATION BATTALION, AVIATION GROUP

a. Composition. The composition of the aviation medium helicopter company, aviation battalion, aviation group, is shown in figure 67.

b. Mission. The mission of the aviation medium helicopter company is to provide logistical and tactical airlift for movement of troops and supplies.

c. Assignment. This company is assigned as required. Normally, it is attached to headquarters and headquarters company, aviation battalion, TOE 1-256.

d. Capabilities. The company provides -

- (1) The operation of one heliport with facilities for visual and instrument terminal air traffic control.
- (2) Transport for troops and/or supplies, under day, night, or limited visibility conditions.
- (3) Aerial mobility and aerial supply and resupply of Army forces.
- (4) Aeromedical evacuation augmentation of Army medical service elements.
- (5) Transport of one of the following or combination thereof, in one lift as maximum effort, with all helicopters available and operating, within 100-nautical mile radius at sea level, standard day conditions:

<u>Type Helicopter</u>	<u>Troops (240 pounds)</u>	<u>Cargo (tons)</u>	<u>Litter</u>
CH-47	528	48	384

For sustained effort, the above capabilities are reduced or adjusted by an aircraft availability factor which is dependent upon the duration of the operation.

e. Limitations. This unit is dependent upon the transportation aircraft direct support company for direct support aircraft maintenance, and upon the AG personnel service unit for processing personnel administrative actions.

f. Organization. The aviation medium helicopter company consists of a company headquarters, an operations platoon, two helicopter platoons, and a service platoon.

- (1) Company headquarters. The company headquarters contains the company commander, first sergeant, supply sergeant, mess steward, and personnel to perform the administrative, mess, and supply functions. Trucks are provided for company administrative and supply functions, and to transport the unit mess. FM radio is the normal means of communications with other elements of the company and the battalion. An internal company wire net may be established within assembly or bivouac

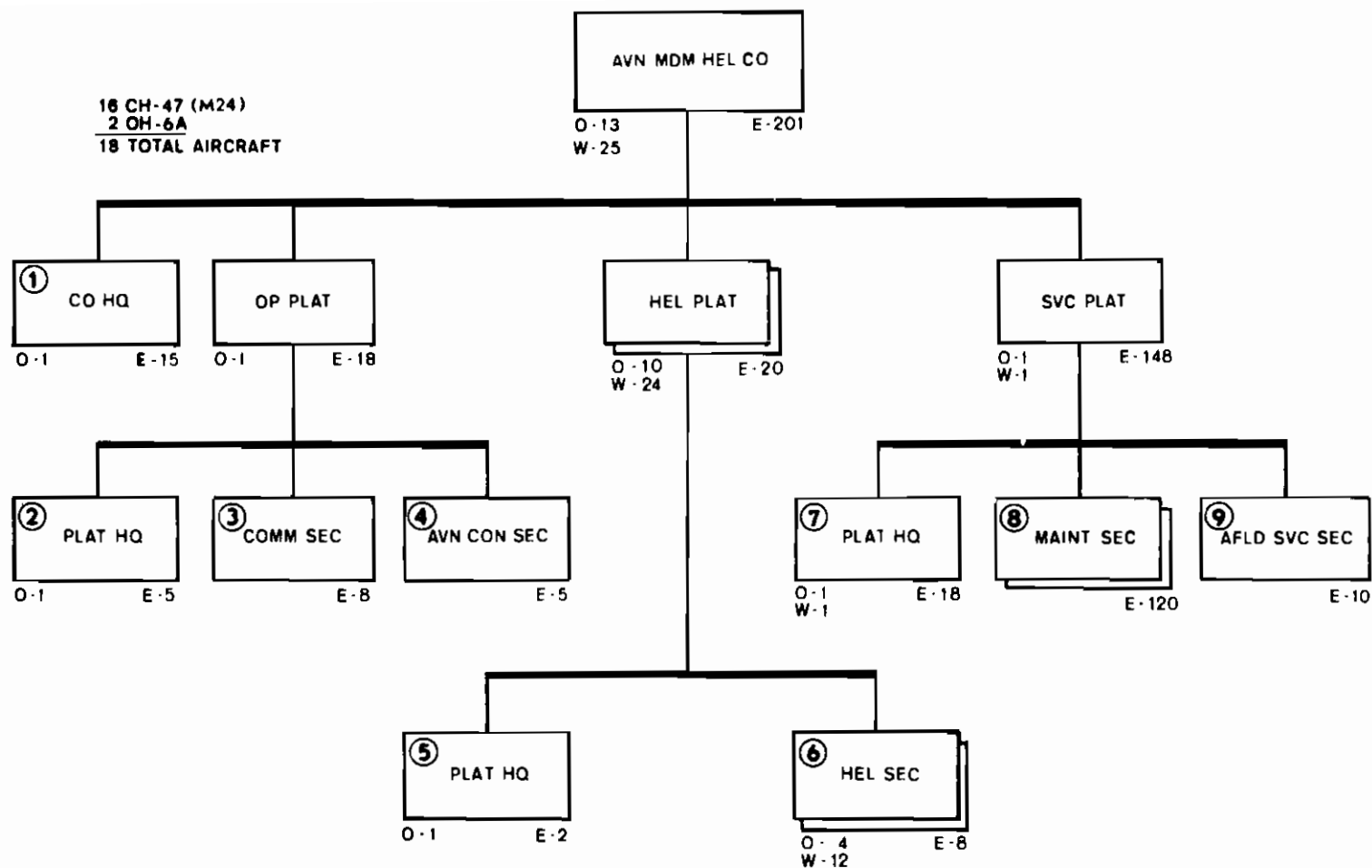


Figure 67. Aviation medium helicopter company, aviation battalion, aviation group (TOE 1-258G).

DATA FOR FIGURE 67*

1 COMPANY HEADQUARTERS

1 MAJ Co Comd 1983 13
 1 E-8 First Sgt 67U50 41
 1 E-6 Mess Steward 94B40
 1 E-6 Sup Sgt 76K40
 4 E-5 First Cook 94B20
 1 E-4 Armorer 76K30 01, 12
 1 E-4 Co Clerk 71H20 01, 12
 4 E-4 Cook 94B20
 1 E-3 Cook's Helper 94A10
 1 E-3 Sup Clerk 76A10 01, 47

Gun mach 7, 62mm..... 4
 Radiacmeter IM-93/UD..... 2
 Radiacmeter IM-174/UD..... 2
 Rdo set AN/VRC-47 mtd in
 trk 1/4-ton..... 1
 Tel set TA-312/PT..... 2
 Tlr cgo 1/4-ton..... 1
 Tlr cgo 1 1/2-ton..... 1
 Tlr tk water 400-gal..... 1
 Trk cgo 2 1/2-ton..... 1
 Trk cgo 2 1/2-ton WWN..... 1
 Trk util 1/4-ton..... 1

2 OPERATIONS PLATOON HEADQUARTERS

1 CPT Flt Op Off 1982 13, 32, 36
 1 E-7 Flt Op Chief 71P40
 1 E-5 LOH Crew Chief 67N20
 1 E-5 Sr Flt Op SP 71P20
 1 E-4 Clerk Typist 71B30 01, 47
 1 E-4 Flt Op SP 71P20

Hel OH-6A..... 2
 Rdo set AN/VRC-47 mtd in
 trk 1/4-ton..... 1
 Tel set TA-312/PT..... 1
 Tlr cgo 1/4-ton..... 1
 Trk util 1/4-ton..... 1

3 COMMUNICATIONS SECTION

1 E-5 Comm Chief 31E40
 1 E-5 RATT Tm Chief 05C40
 1 E-4 Fld Rdo Mech 31B20 01
 1 E-4 Gnd Con Rdr Mech 26020
 2 E-4 RATT Op 05C20
 1 E-4 Sr Fld Swbd Op 36C20
 1 E-3 Fld Swbd Op 36C20 46

Cipher mach TSEC/KL-7..... 1
 Elec tt acty equip TSEC/KW-7..... 1
 Rdo set AN/GRR-5 mtd in
 trk 3/4-ton..... 1
 RATT set AN/GRC-142..... 1
 Swbd tel SB-22/PT..... 1
 Tape reader TSEC/AL-1..... 1
 Tel set TA-312/PT..... 1
 Tlr cgo 3/4-ton..... 1
 Trk cgo 3/4-ton..... 1

4 AVIATION CONTROL SECTION

2 E-5 Sr ATC Op 93B20
 2 E-4 ATC Op 93B20 40
 1 E-3 ATC Op Helper 93B20 01
 Beacon rdo AN/TRN-24..... 1
 Rdr set AN/TPN-8..... 1
 Rdo set AN/VRC-24..... 1

Rdo set AN/VRC-24 mtd in
 trk 2 1/2-ton..... 1
 Rdo set AN/VRC-46..... 2
 Rec set rdo R-511/ARC..... 1
 Tel set TA-312/PT..... 1
 Tlr cgo 1 1/2-ton..... 1
 Trk cgo 3/4-ton..... 1
 Trk cgo 2 1/2-ton..... 1
 Wind meas set AN/PMQ-30..... 1

5 HELICOPTER PLATOON HEADQUARTERS (2)

2 CPT Plat Comd 1981 13, 48
 2 E-7 Plat Sgt 67U40 41
 2 E-3 Lt Trk Dvr 67A10

Rdo set AN/VRC-46 mtd in
 trk 1/4-ton..... 2
 Tel set TA-312/PT..... 2
 Tlr cgo 1/4-ton..... 2
 Trk util 1/4-ton..... 2

6 HELICOPTER SECTIONS (4)

4 CPT Sec Comd 1981 13, 33
 4 LT Asst Sec Comd 1981 13
 24 WO RW Aviator 062D0 13
 16 E-6 Trans Hel Flt Engr 67U20 14, 41

Armt subsystem M24..... 16
 Hel CH-47A..... 16
 Rdo set AN/URC-10..... 16
 Tel set TA-312/PT..... 4

*For remarks, see page 264.

DATA FOR FIGURE 67 - (continued)

7 SERVICE PLATOON HEADQUARTERS

1 CPT Plat Comd 64823 13
 1 WO Hel Rep Tech 671C0 13
 1 E-7 Plat Sgt 67U40 41
 1 E-5 Mtr Sgt 63B40
 2 E-6 RW Tech Insp 67W20
 2 E-5 Sr Avionics
 Mech 35K20
 2 E-4 Acft Parts SP 76H20
 2 E-4 Avionics Mech 35K20
 2 E-4 Maint Data SP 71B20
 1 E-4 Shop Clerk 71B20
 1 E-4 Wheel Veh
 Mech 63B20
 1 E-4 Wkr Op 63B20
 2 E-3 Sup Clerk 76A10 01, 47
 1 E-3 Wheel Veh
 Mech Helper 63A10

Radiometer IM-93/UD..... 2
 Rdo set AN/VRC-46 mtd in
 trk 1/4-ton 1
 Tel set TA-312/PT 1
 Tlr cgo 1/4-ton 1
 Tlr cgo 1 1/2-ton 1
 Trk util 1/4-ton 1
 Trk van shop 2 1/2-ton 1
 Trk wkr 5-ton WWN 1

8 MAINTENANCE SECTIONS (2)

2 E-7 Maint Sup 67U40 41
 2 E-6 Asst Maint
 Supv 67U40 41
 46 E-5 Sr Trans Hel
 Mech 67U20 41

46 E-4 Trans Hel
 Mech 67U20 41
 24 E-3 Hel Mech
 Helper 67A10 42
 Sling cgo net 5,000-lb cap 16
 Sling set cgo set no. 1 16
 Tlr cgo 1 1/2-ton 2
 Trk cgo 2 1/2-ton WWN 2

9 AIRFIELD SERVICE SECTION

1 E-5 Afld Svc Supv 67U40
 1 E-5 Crash Rsq SP 51M40
 4 E-4 Fuel Hdlg SP 56C20 01
 2 E-4 Crash Rsq SP 51M20
 1 E-4 Petrol Stor SP 56C20
 1 E-4 Powerman 52B20 01
 Firefighting equip set trk mtd.. 1
 Rdo set AN/VRC-46..... 1
 Tk and pump unit trk mtd..... 4
 Tk liq ator 600-gal 1
 Tk liq dispensing tlr mtd 4
 Tel set TA-312/PT 1
 Tlr cgo 3/4-ton 1
 Tlr cgo 1 1/2-ton 4
 Trk cgo 3/4-ton WWN 1
 Trk cgo 2 1/2-ton 4
 Yoke towing and lifting 500-gal
 drum..... 1

REMARKS:

01 Also light truck driver.
 12 Armed with launcher grenade
 40mm and pistol cal .45.
 13 Armed with revolver cal .38.
 14 Armed with launcher grenade 40mm
 and revolver cal .38.
 32 Also executive officer.
 33 May be lieutenant.
 36 Also air safety officer.
 40 Remark 01 applies to 1 EM.
 41 MOS 67U and 67T are interchange-
 able based on grade and type
 aircraft assigned.
 42 Remark 01 applies to 2 EM.
 46 Also wireman.
 47 Also radio telephone operator.
 48 One must be qualified as RW instru-
 ment flight examiner.

areas. The company headquarters will normally be established in an area which is centrally located to the helicopter platoons. The distance from the platoons will vary according to the terrain and probability of nuclear attack. Radio communications will be used until wire lines have been installed.

- (2) Operations platoon. The operations platoon contains a flight operations officer, flight operations sergeant, and enlisted personnel to perform normal flight operations, aircraft maintenance, airfield service, and communications functions over a sustained period. Platoon personnel operate and maintain the company wire and radio communications; they control all arriving and departing air traffic within their control area. The operations platoon establishes and operates the company heliport; installs, maintains, and assists in the operation of the communications equipment used at the company heliport; and provides terminal air traffic control. Two observation helicopters are provided for reconnaissance and control. The operations platoon coordinates and assigns flight missions. It operates at the base airfield near the company headquarters. The status of aircraft within the company is made continuously available to the flight dispatch section to permit coordination with various mission requirements. Since the operations platoon contains a minimum number of personnel, its various sections may be augmented with personnel from other elements of the company to provide for operations on a 24-hour basis. The operations platoon is included in the company security plan, and platoon personnel perform security duties as required.
- (3) Communications section. The communications section contains a communications chief and sufficient personnel to provide operation of the organic radio teletypewriter set and to provide organizational maintenance on the signal equipment organic to the company, including the ground control radar set.
- (4) Aviation control section. The aviation control section consists of a senior air traffic control operator and sufficient personnel to provide adequate air traffic control for the instrumented airfield. The radio beacon AN/TRN-24 and radar set AN/TPN-8 are organic to this section.
- (5) Helicopter platoons (2). Each helicopter platoon consists of a platoon headquarters and two helicopter sections. These platoons provide the air transport capability of the company. When the platoons are attached or placed under operational control or in direct support of a unit, they will require limited administrative support from that unit. When not supporting a unit, the platoon will establish a platoon area and heliport close enough to the company command post and service elements to use the company's administrative support. The actual distance from the company command post will depend on the terrain and the possibility of nuclear attack. Within the platoon area, the dispersal of aircraft assists in providing cover and concealment and reduces vulnerability to air or artillery attack. Communications and security problems increase with the distance between elements. Therefore, overdispersion must be avoided.

- (a) Platoon headquarters. This platoon headquarters contains a platoon commander, platoon sergeant, and a light truck driver. The platoon commander is responsible for the efficient operation of his platoon. He reports the operational status of his platoon to the operations officer and assists the company commander and the operations officer in formulating plans for both routine and special missions involving his platoon.
 - (b) Helicopter sections (4). Each helicopter section contains a section commander, assistant section commander, six rotary wing aviators, and four flight engineers. Each section is equipped with four medium cargo helicopters. The section commanders are responsible to the platoon commander for the successful operation of the helicopter sections. They insure that aviators performing missions are properly briefed on such aspects of operations as flight formations, alternate routes, weather, and communications frequencies. Flight missions are assigned by the platoon commander or the section commander. The aviators, when not flying, are assigned additional duties within the company.
- (6) Service platoon. The service platoon consists of a platoon headquarters, two maintenance sections, and an airfield service section. This platoon is designed to provide aviation supplies, organizational aircraft maintenance, and airfield service for the medium helicopter company. The mission of the platoon dictates that it operate from the company heliport in the vicinity of the operations platoon.
- (a) Platoon headquarters. This platoon headquarters contains the platoon commander, helicopter repair technician, platoon sergeant, motor sergeant, helicopter technical inspectors, aircraft parts specialists, shop clerk, and wheel vehicle mechanics. This section supervises and inspects the organizational maintenance of aircraft, performs organizational maintenance on wheeled vehicles, and stocks the required aircraft parts and supplies. A 1/4-ton truck mounting an FM radio permits communication in the company radio net. Officers from the flight platoons will be designated by the company commander as assistant maintenance officer, aircraft supply officer, and airfield service officer. They perform these additional duties under the supervision of the service platoon commander.
 - (b) Maintenance sections (2). Each maintenance section contains a maintenance supervisor and adequate rotary wing mechanics to perform organizational maintenance. The maintenance sections are organized and equipped to accompany and support individual flight sections when the flight sections are attached to, or placed under operational control of, supported units. Individual crew chiefs in the flight platoons assist the personnel of the maintenance section in performing maintenance. Required direct support is performed by the direct support transportation aircraft maintenance units supporting the company. Minimum vehicles for required day-to-day operations are assigned to the section.

- (c) Airfield service section. The airfield service section contains an airfield service supervisor and personnel to provide crash and rescue service, refueling service, parking and mooring service, and general assistance to aircraft using the Army airfield. A truck equipped with firefighting and rescue equipment and an FM radio is on continuous standby in the vicinity of the control tower. When this vehicle is dispatched from the company heliport for crash and rescue purposes, it is augmented by a detail from other sections of the company. The airfield service section is equipped with 4 each 2 1/2-ton trucks equipped for servicing aircraft on the company heliport. A 3/4-ton truck is required to transport, install, and maintain a field lighting set. Additional personnel to assist the airfield service section may be detailed from other elements of the company when required.

g. Concept of Employment. The aviation medium helicopter company is normally assigned to an airmobile battalion and is employed as directed by the battalion commander. The corps aviation group commander, under direction of the corps commander, will control the allocation of the capabilities of this unit. Each helicopter platoon, with sufficient organizational maintenance personnel, is capable of being attached to a supported unit for specific missions. The company is dependent on a Transportation aircraft direct support company for direct support maintenance.

- (1) The aviation medium helicopter company contains the personnel and equipment to control and supervise company operations, and to provide its own administrative and mess support. The company normally operates under the control of the airmobile battalion commander and provides transportation of troops and supplies for units conducting airmobile operations. The company is normally employed as an integral unit in support of the battalion mission; however, the helicopter platoons may be attached to, placed in direct support of, or placed under the operational control of troop units for specific missions.
- (2) The company may be attached to a major corps unit and employed with corps troops. When employed with corps troops, the company may be further attached, placed in direct support of, or placed under the operational control of, subordinate corps units.
- (3) The company will be further placed in direct support of, or under operational control of, echelons of command capable of providing adequate communications and control facilities. This is normally at division level. In addition, for special or separate missions for a short period of time, the company may be placed under operational control at brigade level. When operating from the company heliport, the platoons are included in the company security plan. When operating away from the company, security must be provided by the supported unit.
- (4) Both radio and wire communications are organic to the aviation medium helicopter company. The communications equipment of the unit provides the capability for the unit to support its operations and link it with higher headquarters. The communications center operates at the company heliport immediately adjacent to the company headquarters and serves as a message center and a focal point for all company command radio and wire communications nets.

Section II. AVIATION COMPANY, SEPARATE BRIGADE

64. GENERAL

a. Composition. The organization of the aviation company, separate brigade, is shown in figure 68.

b. Mission. The aviation company, separate brigade, provides aviation support for the brigade headquarters, the brigade support battalion, and other brigade units without organic aircraft. In addition, the aviation company provides general support and reinforcement to units with organic aircraft.

c. Assignment. This unit is organic to the separate armored brigade, separate infantry brigade, and separate mechanized brigade.

d. Capabilities. This unit is capable of providing -

- (1) Aviation special staff personnel for the brigade headquarters.
- (2) Aircraft to support the brigade headquarters, brigade support battalion, and other units without organic aircraft.
- (3) Aircraft for general support and reinforcement to units with organic aircraft.
- (4) Operation of a central aircraft communications and control facility.
- (5) Participating in airmobile combat operations. One reinforced dismounted platoon can be airlifted in one airlift using organic aircraft.
- (6) Operating one VFR airfield with terminal flight facilities.
- (7) Operating forward landing sites.
- (8) Augmenting aerial medical evacuation.

e. Limitations. This unit is dependent upon the brigade administration company for personnel administration and the brigade headquarters and headquarters company for unit-level medical support.

65. ORGANIZATION

The aviation company, separate brigade, consists of a company headquarters, a general support platoon, an aero scout platoon, and a service platoon.

a. Company Headquarters. The company headquarters contains the company commander, executive officer, flight operations officer, first sergeant, mess steward, and the enlisted personnel to accomplish administration, mess, and supply. Aviation special staff personnel are included for the brigade headquarters.

b. General Support Platoon. The general support platoon consists of a platoon headquarters, an airlift section, and a tactical support section.

- (1) General support platoon headquarters. The general support platoon headquarters contains the platoon commander, platoon sergeant, and a light truck driver.
- (2) Airlift section. The airlift section contains a section leader, 17 helicopter aviators, and 9 crew chiefs. This section has organic nine UH-1D helicopters.
- (3) Tactical support section. The tactical support section contains a section leader, eight helicopter aviators, and eight crew chiefs. Nine OH-6A helicopters are organic to this section. Each helicopter is equipped with the XM27 armament subsystem.

c. Aero Scout Platoon. The aero scout platoon consists of a platoon headquarters, two aero scout sections (light), and an aero scout section (heavy).

- (1) Aero scout platoon headquarters. The aero scout platoon headquarters contains a platoon commander, a helicopter aviator, a crew chief, and a light truck driver. The platoon has organic one OH-6A helicopter which is equipped with the XM27 armament subsystem.
- (2) Aero scout sections (light) (2). Each aero scout section (light) contains a section commander, three helicopter aviators, and four crew chiefs. Each section has organic four OH-6A helicopters which are equipped with XM27 armament subsystems.
- (3) Aero scout section (heavy). The aero scout section (heavy) contains a section commander, seven helicopter aviators, and four crew chiefs. This section has organic four UH-1B/C helicopters which are equipped with XM21 armament subsystems.

d. Service Platoon. The service platoon consists of a platoon headquarters, an aircraft maintenance section, an electronics maintenance section, and an airfield service section.

- (1) Service platoon headquarters. The service platoon headquarters contains the platoon commander, platoon sergeant, motor sergeant, helicopter technical inspector, and the enlisted personnel to accomplish the functions of the platoon headquarters. This headquarters has organic one UH-1D helicopter which is equipped with the XM27 armament subsystem.
- (2) Aircraft maintenance section. The aircraft maintenance section contains an aircraft maintenance technician, maintenance supervisor, 13 senior helicopter mechanics, 13 helicopter mechanics, and 7 helicopter mechanic helpers.
- (3) Electronics maintenance section. The electronics maintenance section contains a section chief, two aviation electronics equipment mechanics, and one radio mechanic.
- (4) Airfield service section. The airfield service section contains a section chief, an aircraft armorer foreman, two senior aircraft armorers,

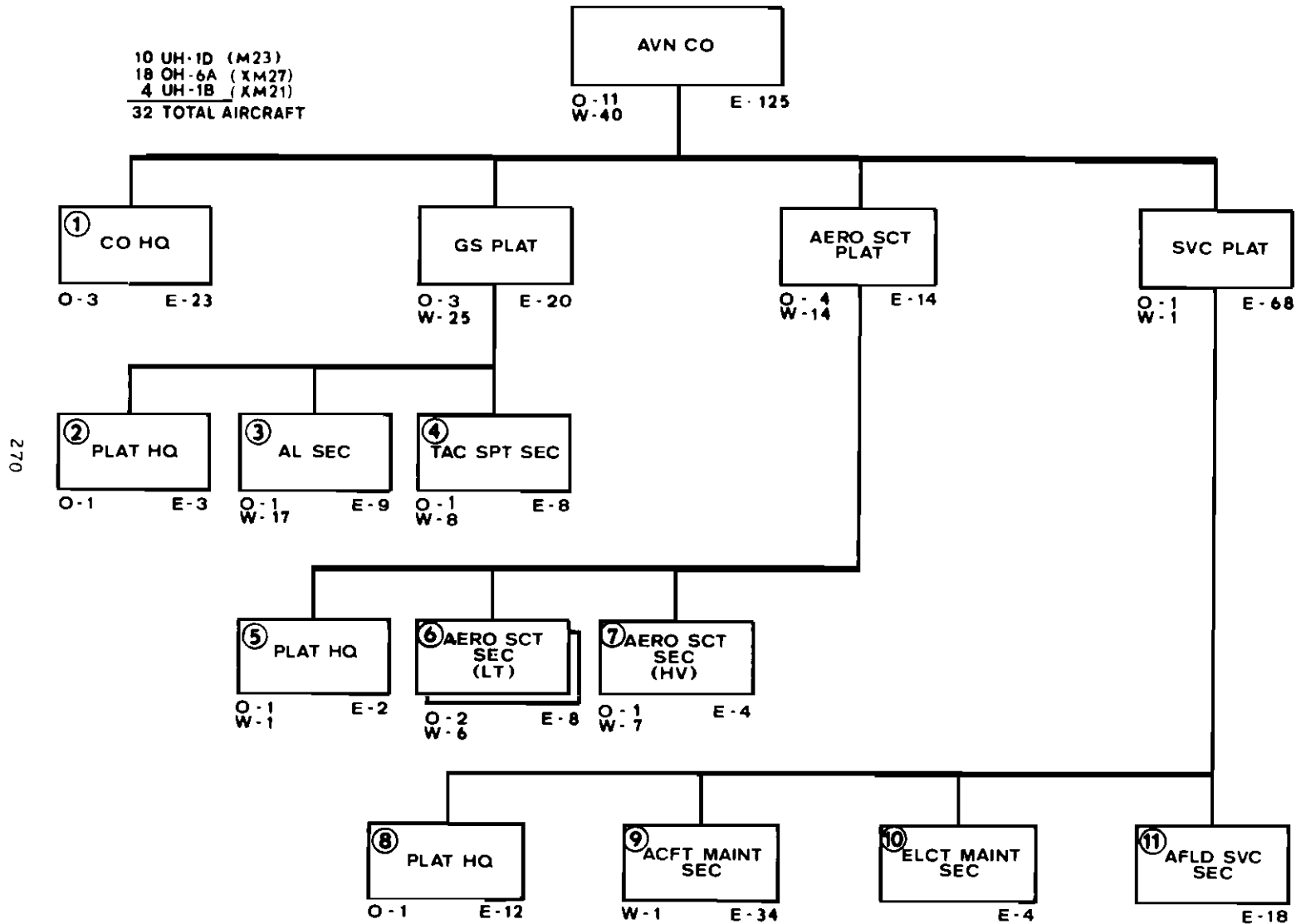


Figure 68. Aviation company, separate brigade (TOE 1-47G).

DATA FOR FIGURE 68*

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983	13, 40
1 CPT	XO	1983	13, 40
1 CPT	Flt Op Off	1982	13, 31
1 E-8	First Sgt	67R50	08
1 E-7	Flt Op Chief	71P40	07
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	
1 E-5	Tm Chief	05C40	
2 E-5	First Cook	94B20	
1 E-5	Sr Aftd Con Op	93B20	
1 E-4	Armorer	93B20	
1 E-4	Aftd Con Op	93B20	
1 E-4	Co Clerk	71H20	
3 E-4	Cook	94B20	
1 E-4	Flt Op SP	71P20	01
2 E-4	RATT Op	05C20	40
1 E-4	Swhd Op	36A10	
1 E-3	Aftd Con Op		
	Helper	93B20	
1 E-3	Cook's Helper	94A10	01
1 E-3	Wireman	36A10	01
2 E-3	Lt Trk Dvr	71A10	

Mg 7.62mm lt flex	2
Tlr amph cgo 1 1/4-ton	2
Tlr cgo 1 1/2-ton	2
Tlr tk water 400-gal 1 1/2-ton	1
Trk cgo 3/4-ton WVN	1
Trk cgo 2 1/2-ton	2
Trk util 1 1/4-ton	2
Trk van shop 2 1/2-ton	1
Rdo set AN/GRR-5 mtd in	
shop van	1
Rdo set AN/VRC-24 mtd in	
shop van	1

Rdo set AN/VRC-46 mtd in	
trk 3/4-ton	1
Rdo set AN/VRC-47 mtd in	
trk 1/4-ton	1
Rdo set AN/VRC-49 mtd in	
shop van	1
RATT set AN/GRC-46	1
Swhd tel SB-22 /PT	1
Tel set TA-312 /PT	3
Radiacmeter IM-93 /UD	2
Radiacmeter IM-174 /PD	2

2 GENERAL SUPPORT PLATOON HEADQUARTERS

1 CPT	Plat Comd	1981	13
1 E-6	Plat Sgt	67R40	
2 E-3	Lt Trk Dvr	67A10	

Radiacmeter IM-93 /UD	2
Tlr cgo 3/4-ton	1
Trk cgo 3/4-ton	1
Trk cgo 2 1/2-ton WVN	1
Rdo set AN/VRC-47 mtd in	
trk 3/4-ton	1
Tel set TA-312 /PT	1

3 AIRLIFT SECTION

1 CPT	Sec Ldr	1981	13
17 WO	Hel Pilot	062B0	13
9 E-5	Crew Chief	67N2F	13

Rdo set AN/URC-10	9
Hel UH-1D	9
Armt subsystem M23	9

4 TACTICAL SUPPORT SECTION

1 CPT	Sec Ldr	1981	
8 WO	Hel Pilot	062B0	13
8 E-5	Crew Chief	67M20	

Radiacmeter IM-174 /PD	9
Rdo set AN/URC-10	9
Hel OH-6A	9
Toolkit acft mech gen	8
Armt subsystem XM27	9

5 AERO SCOUT PLATOON HEADQUARTERS

1 CPT	Plat Comd	61204	13
1 WO	Hel Pilot	062B0	13
1 E-5	Crew Chief	67M20	
1 E-3	Lt Trk Dvr	67A10	

Radiacmeter IM-174 /PD	1
Radiacmeter IM-93 /UD	2
Trk cgo 2 1/2-ton WVN	1
Rdo set AN/URC-10	1
Rdo set AN/PRC-25	1
Hel OH-6A	1
Armt subsystem XM27	1

6 AERO SCOUT SECTION (LIGHT) (2)

2 LT	Sec Comd	61204	
6 WO	Hel Pilot	062B0	
8 E-5	Crew Chief	67M20	

Radiacmeter IM-93 /UD	8
Radiacmeter IM-174 /PD	8
Rdo set AN/URC-10	8

*For remarks, see page 272.

DATA FOR FIGURE 68 - (continued)

AERO SCOUT SECTION (LIGHT) (2)

Rdo set AN /PRC-25 2
Hel OH-6A 8
Armt subsystem XM27 8

7 AERO SCOUT SECTION (HEAVY)

1 LT Sec Comd 61204 13
7 WO Hel Pilot 062B0 13
4 E-5 Crew Chief 67N2F 13

Rdo set AN /URC-10 6
Rdo set AN /PRC-25 1
Hel UH-1B /C 4
Toolkit acft mech gen 4
Armt subsystem XM21 4
Radiacmeter IM-93 /UD 4
Radiacmeter IM-174 /PD 4

8 SERVICE PLATOON HEADQUARTERS

1 CPT Plat Comd 64823 13
1 E-7 Plat Sgt 67R40
1 E-5 Mtr Sgt 63B40
1 E-6 Hel Tech Insp 67W20
1 E-5 Crew Chief 67N2F 13
1 E-4 Acft Sup SP 76H20
2 E-4 Maint Data SP 71B20
1 E-4 Powerman 52B20 01
2 E-4 Wheel Veh Mech 63B20
1 E-3 Sup Clerk 76A10 01
1 E-3 Wheel Veh Mech Helper 63A10 01

Tlr amph cgo 1/4-ton 1
Tlr cgo 1 1/2-ton 2
Trk cgo 2 1/2-ton WVN 2

Trk util 1/4-ton 1
Tel set TA-312 /PT 1
Radiacmeter IM-93 /UD 2
Rdo set AN /URC-10 1
Rdo set AN /VRC-46 mtd in
trk 1/4-ton 1
Hel UH-1D 1
Armt subsystem M23 1

9 AIRCRAFT MAINTENANCE SECTION

1 WO Acft Maint Tech 671C0 13
1 E-6 Maint Supv 67R40
13 E-5 Sr Hel Mech 67N20
13 E-4 Hel Mech 67N20 41
7 E-3 Hel Mech Helper 67A10

Tel set TA-312 /PT 1
Tlr cgo 3/4-ton 2
Tlr cgo 1 1/2-ton 1
Trk cgo 3/4-ton 2
Trk cgo 2 1/2-ton WVN 1

10 ELECTRONICS MAINTENANCE SECTION

1 E-5 Sec Chief 31F40
2 E-4 Avn Elet Equip Mech 31Q20
1 E-4 Rdo Mech 31B20 01

Tel set TA-312 /PT 1
Tlr cgo 1 1/2-ton 1
Trk van shop 2 1/2-ton 1
Test set rdo AN /VRM-1 1
Multimeter AN /URM-105 3
Test set rdo AN /ARM-8 1

11 AIRFIELD SERVICE SECTION

1 E-6 Sec Chief 67R40
1 E-6 Acft Armorer Foreman 45J40
2 E-5 Sr Acft Armorer 45J20
3 E-4 Acft Armorer 45J20
1 E-4 Ammo Stor SP 55B20
3 E-4 Crash Rescue SP 51M20 40
5 E-4 Petrl Disp SP 56C20 01
1 E-3 Acft Armorer Helper 45A10
1 E-3 Lt Trk Dvr 56A10

Ext fire CO₂ 15 lb 2
Ext fire liq 1 gal 2
Fftg equip set trk mtd DS CL 530B 1
Lt set heliport 1
Lt set afld 2
Tlr cgo 3/4-ton 1
Tlr cgo 1 1/2-ton 6
Trk cgo 3/4-ton 1
Trk cgo 2 1/2-ton WVN 1
Trk tk fuel svc 2 1/2-ton 5
Drum fabric fuel 500-gal 5
Pumping assy flammable liq trf 2
Tk unit tlr mtd 5
Rdo set AN /PRC-25 mtd in crash trk 1
Tel set TA-312 /PT 1

REMARKS:

01 Also light truck driver.
07 Also information NCO.
08 Also education NCO.
13 Armed with revolver cal .38 4 in. barrel.
31 Also information officer.
40 Must be qualified as rotary wing instrument examiner.
41 Remark 01 applies to 1 EM.

three aircraft armorers, one aircraft armorer helper, one ammunition storage specialist, three crash rescue specialists, five petroleum dispenser specialists, and one light truck driver.

66. CONCEPT OF EMPLOYMENT

a. Principle of Employment. The organic aircraft of the brigade aviation company will be employed in the performance of those aviation tasks which the brigade commander considers of greatest importance to the successful accomplishment of his mission. Operational missions for the company are assigned by the brigade S3 through the flight operations element of the company headquarters. Missions will be based on priorities and guidance established by the brigade commander. As a matter of priority, the tactical support section is employed primarily for command and control purposes, while the air-lift section is used for the movement of troops and supplies in airmobile operations. The aero scout platoon will be employed to augment the reconnaissance and security capability of the brigade armored cavalry troop.

b. Capabilities. The brigade aviation company is capable of providing support to all units of the brigade. Types of support include, but are not limited to - command control; observation; movement of personnel, equipment, and supplies; security; illumination; radio relay; wire laying; and target damage assessment. Aviation support beyond the capabilities of this company, especially for airmobile operations, must be requested from the next higher headquarters. The unit provides its own organizational maintenance and receives direct support maintenance from the support battalion.

c. Base of Operations. During the conduct of tactical operations, the aviation company normally operates from a base of operations (company heliport) in the vicinity of the support battalion area. The tactical support section will establish and operate the brigade heliport in close proximity to the brigade command post. The aero scout platoon, although dependent on the company for maintenance and fuel, will operate from forward heliports in the brigade zone. The company has sufficient control personnel and equipment to operate a VFR heliport with terminal facilities. The direct support unit of the brigade support battalion is collocated with the company.

d. Displacement. During displacement, the ground elements of the company headquarters, aircraft, and aviators displace with supported units. Nonflyable aircraft remain in the rear area with sufficient maintenance personnel to repair them. The direct support maintenance element of the support battalion will evacuate aircraft when necessary.

Section III. ARMORED CAVALRY REGIMENT AVIATION UNITS

67. AVIATION PLATOON, HEADQUARTERS AND HEADQUARTERS TROOP, ARMORED CAVALRY REGIMENT

a. Composition. The composition of the aviation platoon, headquarters and headquarters troop, armored cavalry regiment, is shown in figure 69.

b. Mission. The aviation platoon, headquarters and headquarters troop, armored cavalry regiment provides the regiment (fig. 70) with helicopters for command, control, and liaison; limited troop transport; emergency resupply; and augmentation of the medical evacuation means, when requested.

2 OH-6A
8 UH-1D (M23)
10 TOTAL ACFT

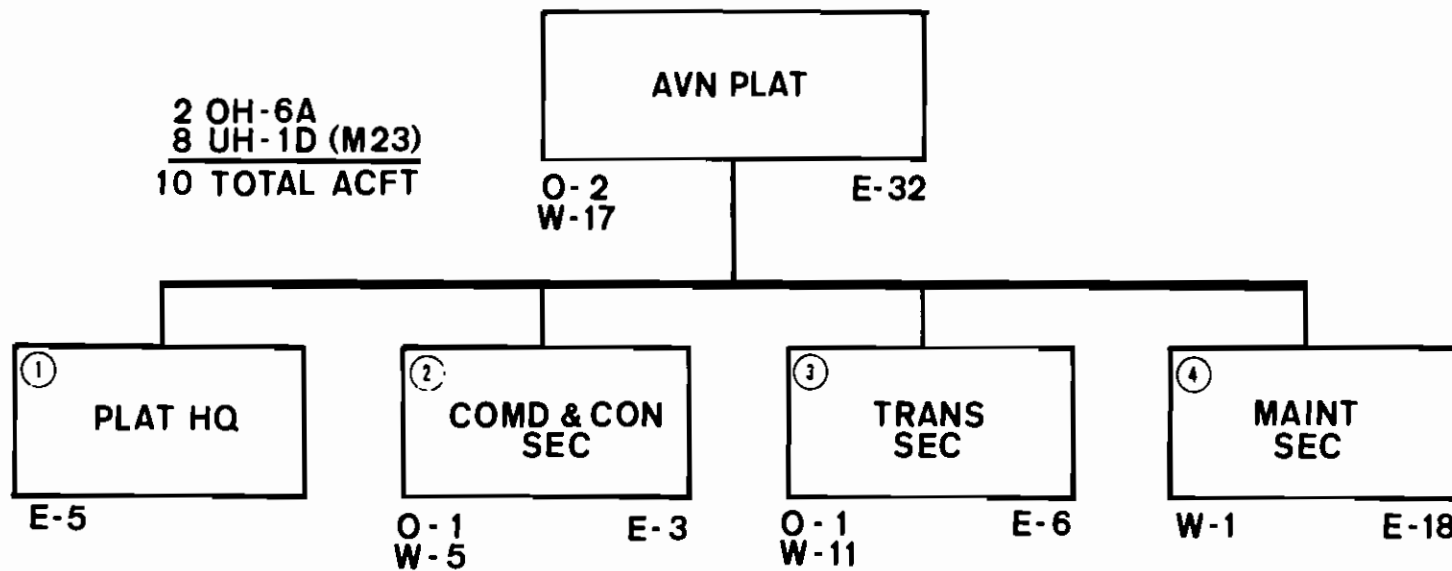


Figure 69. Aviation platoon, headquarters and headquarters troop, armored cavalry regiment (TOE 17-52G).

DATA FOR FIGURE 69 (AVIATION PLATOON ONLY)

1 PLATOON HEADQUARTERS

1 MAJ	Plat Comd (Avn Stf Off)	2518	17
1 E-7	Plat Sgt	67N40	
1 E-6	Flt Op Chief	71P40	
2 E-4	RATT Op and Dvr	05C20	01
1 E-4	Flt Op SP	71P20	01

Beacon set AN/GRN-6	1	
Tlr cgo 1 1/4-ton	1	
Tlr cgo 3/4-ton	1	
Tlr cgo 1 1/2-ton	1	
Trk util 1/4-ton	1	
Trk cgo 3/4-ton	1	
Trk van 2 1/2-ton	1	
Rdo set AN/VRC-47 (1 mtd in shop van, 1 mtd in trk 1/4-ton)	2	
Rdo set AN/VRC-24 mtd in trk 3/4-ton	1	
RATT set AN/GRC-46	1	

2 COMMAND AND CONTROL SECTION

1 LT	Sec Comd	1981	17
5 WO	RW Aviator	062B0	17
1 E-5	Crew Chief	67N20	
2 E-5	Crew Chief	67N2F	17
Rdo set AN/URC-10	4		
Rdo set AN/ARC-54	4		
Rdo set AN/ARR-49	4		
Hel OH-6A	2		
Hel UH-1D	2		

3 TRANSPORT SECTION

1 LT	Sec Comd	1981	17
11 WO	RW Aviator	062B0	17
6 E-5	Crew Chief	67N2F	17
Hel UH-1D	6		
Armt subsystem M23	2		

4 MAINTENANCE SECTION

1 WO	Maint Off	671C0	11
1 E-6	Sec Chief	67R40	
1 E-6	Tech Insp	67W2F	17
4 E-5	Sr Hel Mech	67N20	
5 E-4	Hel Mech	67N20	
1 E-4	Avn Elct Equip Mech	35K20	
2 E-4	Acft Fuel Hdlg SP	56C20	02
1 E-4	Trans Parts SP	76H20	01
2 E-3	Hel Mech Helper	67A10	01
1 E-4	Maint Data SP	71B20	

Tlr 3/4-ton	1
Tlr 1 1/2-ton	3
Trk van shop 2 1/2-ton	1
Trk cgo 5-ton w/trk mtd fuel unit	2
Trk cgo 2 1/2-ton WWN	1
Trk cgo 3/4-ton	1
Drum collapsible fuel 500-gal	2
Filter separator 50 gpm	1
Pump assy liq trf	1
Tank and pump unit	2

REMARKS:

01	Also light truck driver.
02	Also heavy truck driver.
11	Armed with pistol cal .45.
17	Armed with revolver cal .38.

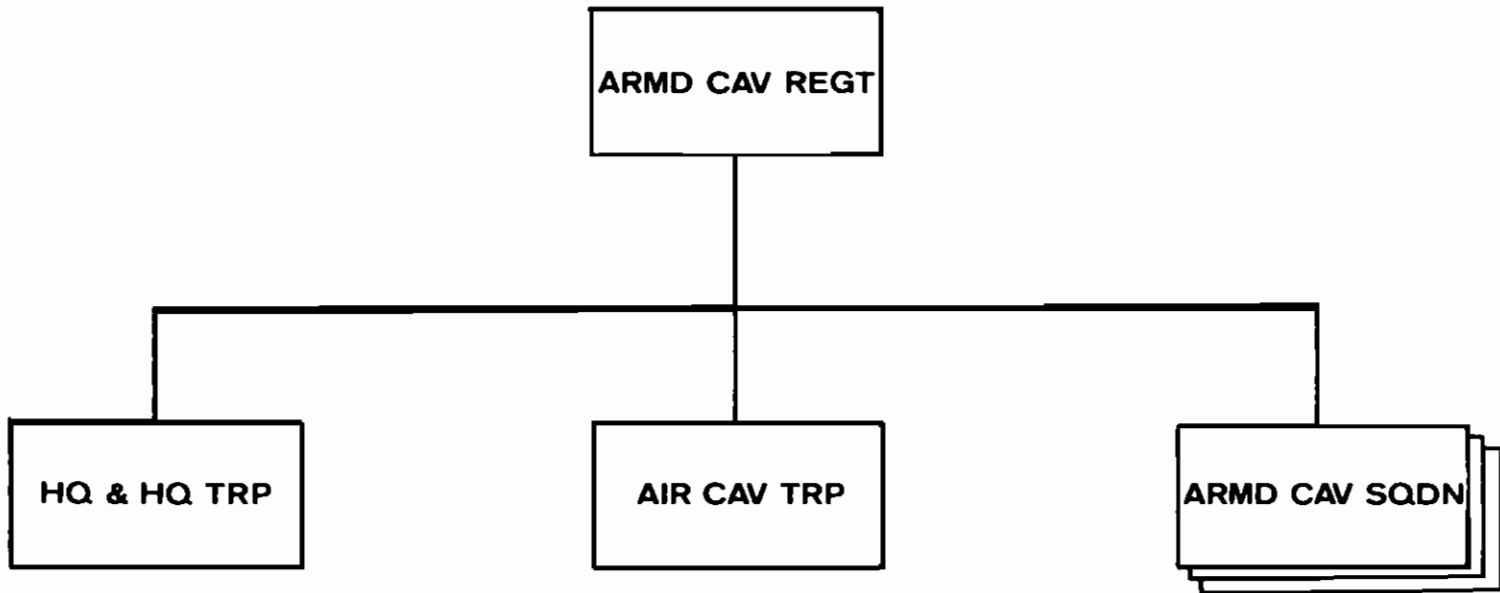


Figure 70. Armored cavalry regiment (TOE 17-51G)

c. Assignment. The aviation platoon is organic to the headquarters and headquarters troop, armored cavalry regiment (TOE 17-52G).

d. Capabilities. The regimental aviation platoon is capable of providing limited aerial transport for troops, equipment, and supplies; helicopters for command and control; aerial observation and reconnaissance; wire laying; radio relay; radiological survey; emergency medical evacuation; and limited battle area illumination.

e. Organization. The aviation platoon, headquarters and headquarters troop, armored cavalry regiment consists of a platoon headquarters, command and control section, transport section, and maintenance section.

- (1) Platoon headquarters. The platoon headquarters contains the platoon sergeant and the enlisted personnel to perform the administrative and operational functions of the platoon. The regimental aviation officer is also the aviation platoon commander. He advises the regimental commander on all matters pertaining to the employment of Army aviation - organic or supporting. He is responsible for the training, discipline, control, and employment of the aviation platoon.
- (2) Command and control section. The command and control section consists of a section commander and the personnel and equipment to operate and maintain the two observation helicopters and two utility helicopters assigned to the section. The aircraft from the command control section furnish aviation support to the regimental headquarters on a mission request basis. If the situation requires, the two utility helicopters may augment the transport section during airmobile operations and resupply missions.
- (3) Transport section. The transport section contains a section commander and the personnel and equipment to operate and maintain the six utility helicopters of the section. The transport section, with its six utility helicopters, provides units of the regiment with limited aerial movement of troops, supplies, and equipment on a mission request basis. Elements of this section can be employed individually or by section in support of a unit. Normally, the section will be employed as a unit to transport troops, equipment, and supplies. Since the section will habitually operate in areas where it is likely to encounter enemy ground fires, the helicopters are equipped with automatic weapons kits and are capable of mounting and firing aerial rockets from detachable pods.
- (4) Maintenance section. The maintenance section contains a maintenance officer and the enlisted personnel to provide the aviation platoon with organizational maintenance for organic helicopters, parts resupply, and refueling service. The maintenance section will normally be located in the same general area as the aviation platoon headquarters. Individual crew chiefs in the flight sections assist personnel of the maintenance section in performing organizational maintenance. Required direct support maintenance is performed by the direct support transportation aircraft maintenance unit supporting the regiment. Minimum vehicles required for day-to-day operations are assigned to the section.

f. Concept of Employment. The principle governing employment of the aviation platoon is that the organic aircraft will perform those aviation tasks which the regimental commander considers most important to accomplish his mission. Operational missions of the platoon, assigned by the aviation officer, are based on priorities and guidance established by the commander. To provide maximum aviation support, the aviation officer is required to exercise close and continuous coordination with the regimental S2 and S3 and the armored cavalry squadrons of the regiment.

- (1) To provide maximum aviation support, the aviation platoon operates from the vicinity of the regimental command post. Portions of the platoon may be attached to, or placed in direct support of, the cavalry squadrons.
- (2) The platoon heliport should be located close to the regimental command post for maximum use and control of unit air operations. Under combat conditions, the heliport should be located within the defensive perimeter of the regimental headquarters and headquarters troop. The site must be chosen so that the approach of the aircraft, as well as the site, will be hidden as much as possible from enemy surveillance, and located so that it can be easily protected from encirclement or from infiltration by the enemy. Dusty sites should be avoided because dust will reveal the operations of the aircraft and create a hazard to safe operations. Natural cover for concealment of dispersed parking areas, maintenance areas, etc., is desirable, and the heliport should be located in an area which is defiladed from enemy fire and ground observation. In general, a site should be selected at the lowest altitude consistent with other requirements.
- (3) During displacement, the ground elements of the platoon move with the headquarters and headquarters troop. Helicopters and aviators displace with supported units. Nonflyable aircraft remain in the old area with sufficient maintenance personnel to repair them. If evacuation is necessary, adequate personnel remain to provide security for the helicopters until evacuation is effected. Under exceptional circumstances, these helicopters may have to be evacuated on regimental vehicles.

g. Maintenance.

- (1) Every opportunity for maintenance should be exploited to avoid excessive downtime.
- (2) Maintenance beyond the capability of the aviation platoon is performed by the forward support platoon of the direct support transportation aircraft maintenance company supporting the regiment. Recovery and evacuation of disabled helicopters is a responsibility of the direct support transportation aircraft maintenance company. Evacuated helicopters are replaced when replacements are available and within the policies established by the major commander concerned.
- (3) The direct support transportation aircraft maintenance company provides aircraft repair parts support to the aviation platoon. Requests for emergency parts support is submitted by the platoon to the supporting forward support platoon by the most expeditious means. For other

than emergency support, the maintenance supervisor requests repair parts from the supply section of the supporting direct support transportation aircraft maintenance company by the most expeditious means (radio, telephone, or personal contact).

- (4) Helicopters which require maintenance beyond the platoon capability are repaired on-site, on an emergency basis, by mobile repair teams of the forward support platoon of the direct support transportation aircraft maintenance company. If the helicopter requires extensive maintenance, it is made safe for a one-time flight to the main support platoon of the direct support transportation aircraft maintenance company. If this is impossible, the main support platoon accomplishes recovery and evacuation of the aircraft.

h. Administrative Support. The administrative support for the aviation platoon is accomplished by regimental headquarters and headquarters troop.

i. Supply. Resupply for all classes of supply, except class IIIA, is accomplished through normal resupply procedures and is provided by the regimental headquarters and headquarters troop. When aviation platoon personnel and equipment are operating with a subordinate element, the subordinate element provides resupply to the maximum extent possible, including at least classes I and V. The helicopters normally return to the aviation platoon base of operations or another appropriate aviation facility for refueling.

68. AVIATION SECTION, HEADQUARTERS AND HEADQUARTERS TROOP, ARMORED CAVALRY SQUADRON

a. Composition. The composition of the aviation section, headquarters and headquarters troop, is shown in figure 71.

b. Mission. The mission of the aviation section, headquarters and headquarters troop, armored cavalry squadron is to provide the squadron with aircraft for command, control, liaison, limited troop transport, and emergency supply and evacuation.

c. Assignment. The aviation section is organic to the armored cavalry squadron.

d. Capabilities. The aviation section is capable of providing helicopters for command, control, and liaison; observation and reconnaissance; wire laying; radio relay; radiological survey; limited resupply; and emergency medical evacuation.

e. Organization. The aviation section, headquarters and headquarters troop, armored cavalry squadron contains a section commander, five rotary wing aviators, and seven enlisted personnel who perform the maintenance and operational functions of the section. The section contains two OH-6A helicopters and two UH-1D helicopters. The section has organic a 2 1/2-ton truck and trailer upon which a 500-gallon fuel bladder and pump are mounted to provide refueling of section helicopters. Communication is provided by an AN/VRC-46 radio mounted in the section's 3/4-ton truck.

- (1) Section commander. The section commander (LT) is also the squadron aviation officer and advises the squadron commander on all matters pertaining to the employment of Army aviation - organic or supporting. He is responsible for the training, discipline, control, and employment of the squadron aviation section. He operates under the staff supervision of the squadron S3 and is also the pilot of one of the helicopters.

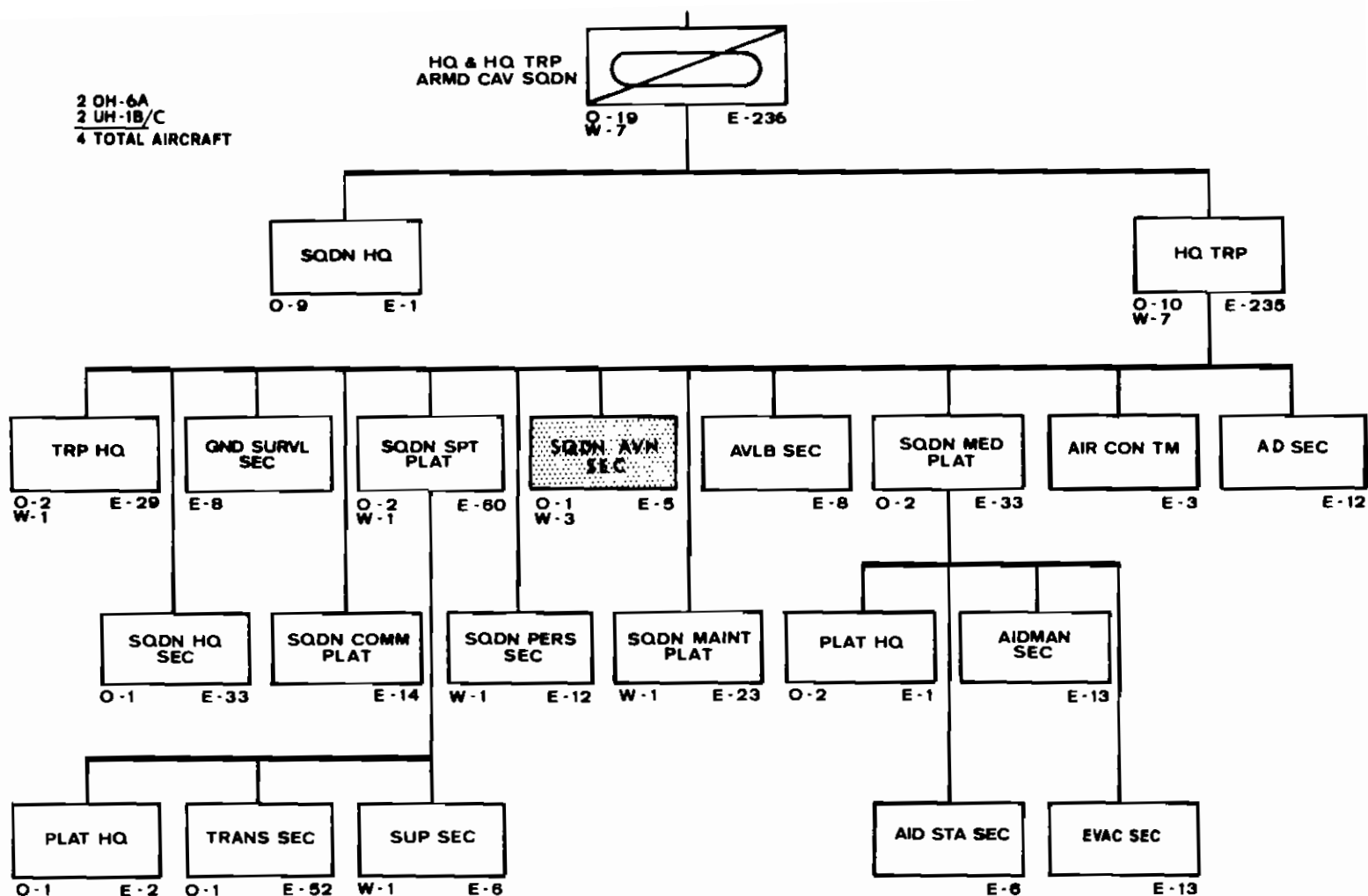


Figure 71. Headquarters and headquarters troop, armored cavalry squadron (TOE 17-56E).

- (2) Rotary wing aviator (5). The five rotary wing aviators (WO's) pilot the section helicopters. When supporting any of the elements of the squadron, they coordinate with the troop commanders or staff officers on matters of communications, security, and certain of the logistical support for their aircraft.

f. Concept of Employment.

- (1) The principle governing employment of the aviation section is that the organic helicopters will perform those aviation tasks which the squadron commander considers most important to accomplish his mission. Operational missions of the section are assigned by the squadron S3 through the section leader, and are based on priorities and guidance established by the commander. Organic helicopters are employed primarily for command and control purposes by the squadron commander and staff. Squadron units request additional aviation support through the squadron S3.
- (2) During the conduct of tactical operations, the section normally operates from a base of operations in the vicinity of the squadron command post. If the situation dictates, squadron aircraft may be placed under operational control of elements of the squadron. The section base of operations consists of a heliport and a small maintenance area.
- (3) During displacement, the ground elements of the section move with the headquarters and headquarters troop. Helicopters and aviators displace with supported units. Nonflyable helicopters remain in the old area with sufficient maintenance personnel to repair them. If evacuation is necessary, adequate personnel remain to provide security for the helicopters until evacuation is effected. Under exceptional circumstances, these helicopters may have to be evacuated on squadron vehicles.

69. AIR CAVALRY TROOP, ARMORED CAVALRY REGIMENT

a. Composition. The composition of the air cavalry troop, armored cavalry regiment, is shown in figure 72.

b. Mission. The mission of the air cavalry troop is to extend by aerial means the reconnaissance and security capabilities of armored cavalry units; to engage in offensive, defensive, or delaying actions within its capability; and to seize and dominate lightly defended areas or terrain features.

c. Assignment. The air cavalry troop is organic to the armored cavalry regiment.

d. Capabilities. This unit has the following capabilities:

- (1) Performs air and ground reconnaissance and provides security for unit to which assigned or attached.
- (2) Engages in offensive, defensive, or delaying actions.
- (3) Conducts independent action when properly reinforced.

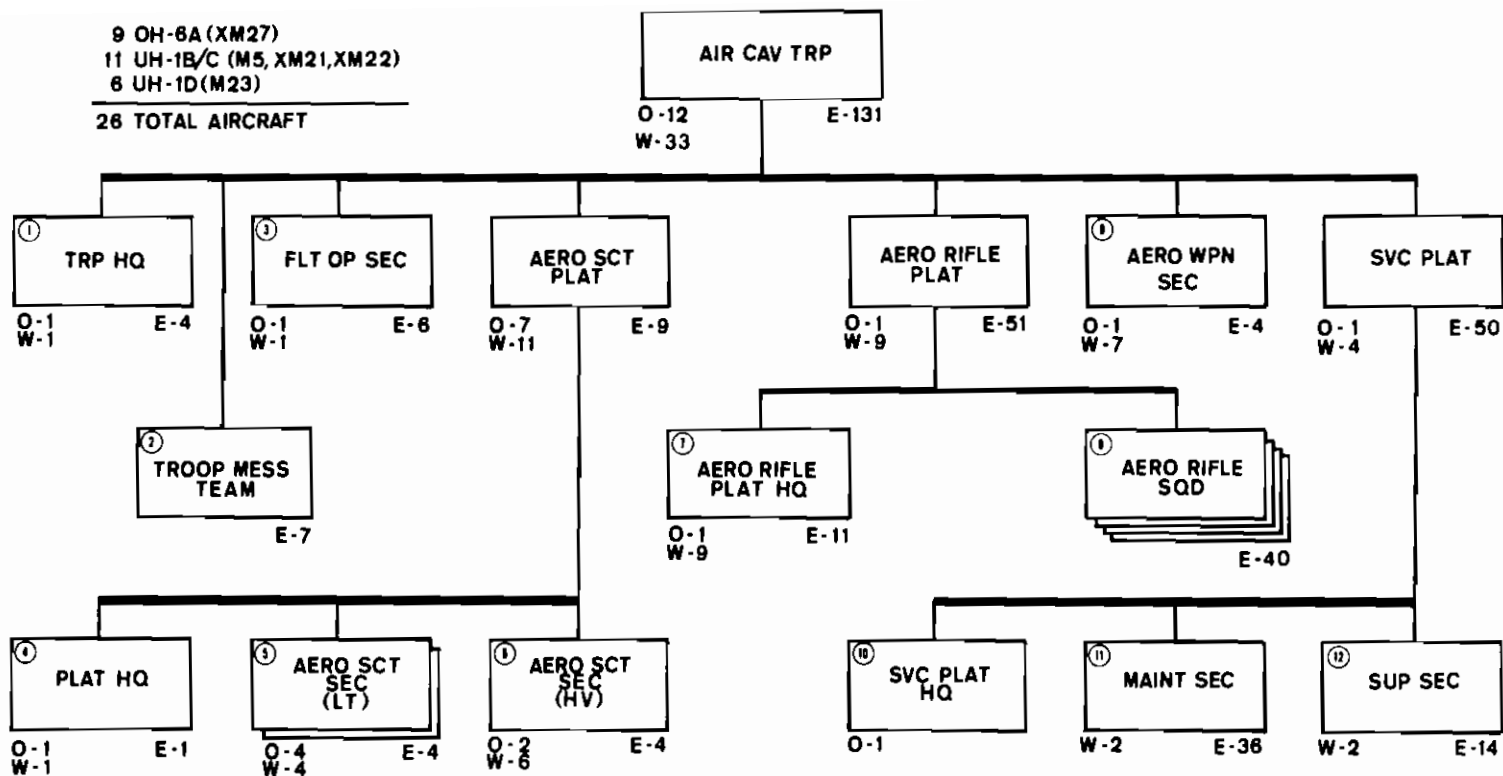


Figure 72. Air cavalry troop, armored cavalry regiment (TOE 17-58G).

DATA FOR FIGURE 72*

1 TROOP HEADQUARTERS

1 MAJ Trp Comd 61204
 1 WO Hel Pilot 62B0
 1 E-8 First Sgt 67N50 15
 1 E-5 Crew Chief 67N2F 46
 1 E-4 Door Gnr 11B2F
 1 E-4 Trp Clerk 71H20 01, 12, 41

Armt subsystem M23 1
 Hel UH-1D 1
 Radiacmeter IM-93/UD 2
 Radiacmeter IM-174/PD 1
 Rdo set AN/VRC-47 mtd in
 trk 1/4-ton 1
 Tlr 1/4-ton 1
 Trk util 1/4-ton 1

2 TROOP MESS TEAM

1 E-6 Mess Steward 94B40 15
 3 E-5 First Cook 94B20 15
 2 E-4 Cook 94B20 15
 1 E-3 Cook's Helper 94A10 01, 15

Gun mach cal .50 hvy 1
 Tlr tk water 400-gal
 1 1/2-ton 1
 Trk cgo 2 1/2-ton 1

3 FLIGHT OPERATIONS SECTION

1 CPT Flt Op Off 61204 32
 1 WO Hel Pilot 062B0
 1 E-7 Avn Op Sgt 71P40 15
 1 E-5 Comm Chief 31G40 15
 1 E-5 Avn Op SP 11020 15
 1 E-5 Crew Chief 67N2F 46

1 E-4 Sr Rdo Op 05B20 01, 04, 15
 1 E-3 Rdo Op 05B20 01, 15

Armt subsystem XM21 1
 Armt subsystem M5 1
 Hel UH-1B/C 1
 Radiacmeter IM/93-UD 3
 Rdo set AN/GRC-106 mtd in
 trk 2 1/2-ton 1
 Rdo set AN/GRR-5 mtd in
 trk 2 1/2-ton 1
 Rdo set AN/VRC-24 mtd in
 trk 2 1/2-ton 1
 Rdo set AN/VRC-47 mtd in
 trk 1/4-ton 1
 Rdo set AN/VRC-47 mtd in
 trk 2 1/2-ton 1
 Swbd tel manual SB-22/PT ... 1
 Tel set TA-312/PT 7
 Tlr cgo 1/4-ton 1
 Tlr cgo 1 1/2-ton 1
 Trk cgo 2 1/2-ton WWN 1
 Trk util 1/4-ton 1

4 AERO SCOUT PLATOON HEADQUARTERS

1 CPT Plat Comd 61204
 1 WO Hel Pilot 062B0
 1 E-5 Crew Chief 67N20 11

Armt subsystem XM27 1
 Hel OH-6A 1
 Radiacmeter IM-93/UD 2
 Radiacmeter IM-174/PD 1
 Rdo set AN/PRC-25 1

5 AERO SCOUT SECTION (LT) (2)

2 LT Sec Comd 61204
 2 LT Tm Ldr 61204
 4 WO Hel Pilot 062B0
 4 E-5 Crew Chief 67N20 11

Armt subsystem XM27 8
 Hel OH-6A 8
 Radiacmeter IM-93/UD 8
 Radiacmeter IM-174/PD 8
 Rdo set AN/PRC-25 2

6 AERO SCOUT SECTION (HV)

1 LT Sec Comd 61204
 1 LT Tm Ldr 61204
 6 WO Hel Pilot 062B0
 4 E-5 Crew Chief 67N2F 46

Armt subsystem XM22 4
 Hel UH-1B/C 4
 Radiacmeter IM-93/UD 4
 Radiacmeter IM-174/PD 2
 Rdo set AN/PRC-25 1

7 AERO RIFLE PLATOON HEADQUARTERS

1 CPT Plat Comd 61204
 9 WO Hel Pilot 62B0
 1 E-7 Plat Sgt 11B40 15
 5 E-5 Crew Chief 67N2F 46
 5 E-4 Door Gnr 11B2F

Armt subsystem M23 5
 Hel UH-1D 5
 Radiacmeter IM-93/UD 2

*For remarks, see page 285.

AERO RIFLE PLATOON
HEADQUARTERS

Radiacmeter IM-174/PD.....	1
Rdo set AN/PRC-25.....	1
Tel set TA-1/PT.....	5

8 AERO RIFLE SQUAD (4)

4 E-6 Sq Ldr	11B40	15
8 E-5 Tm Ldr	11B40	15
8 E-4 Auto Rifleman	11B20	10
8 E-4 Grenadier	11B20	12
12 E-3 Rifleman	11B10	15

Gun mach 7.62mm lt	4
Radiacmeter IM-93/UD.....	4
Rdo set AN/PRC-25.....	4
Starlight scope	8

9 AERO WEAPONS SECTION

1 LT Sec Comd	61204
7 WO Hel Pilot	62B0
4 E-5 Crew Chief	67N2F 46

Armt subsystem XM21.....	4
Armt subsystem M5.....	4
Hel UH-1B/C.....	4
Radiacmeter IM-93/UD.....	4
Radiacmeter IM-174/PD.....	1
Rdo set AN/PRC-25.....	1

10 SERVICE PLATOON HEADQUARTERS

1 CPT Plat Comd	64823

11 MAINTENANCE SECTION

1 WO Sec Chief	671C0
1 WO Hel Pilot	62B0
1 E-7 Maint Supv	67N40 15
1 E-6 Tech Insp	67W2F
1 E-5 Avn Elct Equip Mech	35K20 15
1 E-5 Crew Chief	67N20 46
1 E-5 Msl Sys Rpmn	55G20 15
9 E-5 Sr Hel Mech	67N20 15, 46
2 E-4 Acft Armorer	45J20 15
1 E-4 Avn Elct Equip Mech	3K20 15
9 E-4 Hel Mech	67N20 15, 46
2 E-4 Maint Data SP	71B20 01, 15
1 E-4 Rdo Mech	31B20 01, 15
1 E-4 Rep Parts SP	76H20 15
1 E-4 Wheel Veh Mech	63B20 01, 15
4 E-3 Hel Mech Helper	67A10 01, 15
1 E-3 Wheel Veh Mech Helper	63A10 01, 15

Armt subsystem XM21.....	1
Armt subsystem M5.....	1
Hel UH-1B/C.....	1
Gun mach cal .50 hvy.....	2
Radiacmeter IM-93/UD.....	2
Radiacmeter IM-174/PD.....	1
Rdo set AN/VRC-47 mtd in trk 1/4-ton.....	1
Tlr cgo 1/4-ton.....	1
Tlr cgo 3/4-ton.....	2
Tlr cgo 1 1/2-ton.....	3
Trk cgo 3/4-ton.....	2
Trk cgo 2 1/2-ton WWN.....	2
Trk util 1/4-ton.....	1
Trk van shop 2 1/2-ton.....	1

12 SUPPLY SECTION

1 WO Sup Chief	62B0
1 WO Hel Pilot	62B0
1 E-6 Sup Sgt	76K40 15
1 E-5 Crew Chief	67N2F 46
2 E-4 Acft Fuel Hdlg SP	56C20 01, 15
2 E-4 Ammo Storage SP	55B20 15
3 E-3 Afld Svc Crnin	67A10 01, 15
2 E-3 Ammo Storage Helper	55A10 02, 15
1 E-3 Sup Clerk	76A10 15
2 E-3 Pump Op	56C20 01, 15

Armt subsystem XM21.....	1
Armt subsystem M5.....	1
Drum collapsible 500-gal.....	4
Filter separator 50-gpm 75 psi.....	4
Hel UH-1B/C.....	1
Gun mach cal .50 hvy.....	5
Pump assy liq trf.....	2
Tlr ammo 1 1/2-ton.....	2
Tlr cgo 1 1/2-ton.....	3
Trk cgo 2 1/2-ton WWN.....	3
Trk cgo 5-ton WWN.....	2
Trk tk fuel servicing 2 1/2-ton.....	4

*For remarks, see page 285.

DATA FOR FIGURE 72 - (continued)

REMARKS:

- 01 Also light truck driver.
- 02 Also heavy truck driver.
- 04 Also switchboard operator.
- 10 Armed with rifle 7.62mm with bipod.
- 11 Armed with pistol cal .45.
- 12 Armed with launcher grenade 40mm
and pistol cal .45.
- 15 Armed with rifle 7.62mm light bbl.
- 32 Also executive officer.
- 41 Also radio telephone operator.
- 46 MOS 67P20 may be substituted for 67N20
when appropriate.

- (4) Engages in effective, coordinated defense of the unit's area or installation.

Note. This unit requires support from the regimental direct support maintenance areas and is dependent upon the regiment for medical and religious facilities.

e. Organization. The air cavalry troop consists of a troop headquarters, troop mess team, flight operations section, aero scout platoon, aero rifle platoon, aero weapons section, and a service platoon.

- (1) Troop headquarters. The troop headquarters consists of the troop commander, helicopter pilot, first sergeant, crew chief, door gunner, and troop clerk. Command and control is effected by utilization of the assigned UH-1D helicopter or the 1 1/4-ton truck with its mounted radio.
- (2) Troop mess team. The troop mess team contains a mess steward, three first cooks, two cooks, and one cook's helper. This section provides the troop mess facilities and has a 2 1/2-ton truck with water organic for an administrative vehicle.
- (3) Flight operations section. This section contains the flight operations officer, a helicopter pilot, and sufficient personnel to effect planning and coordinating of troop operations as well as providing internal wire and radio communications within the troop. All radio equipment is mounted in the organic vehicles (one 2 1/2-ton truck and one 1 1/4-ton truck). The flight operations section has one UH-1 B/C helicopter, armed with the M5 armament subsystem, which is used for liaison control and other operational missions.
- (4) Aero scout platoon. This platoon contains a platoon headquarters, two aero scout platoons (light), and an aero scout platoon (heavy).
 - (a) Platoon headquarters. The headquarters contains the platoon commander, helicopter pilot, and a crew chief. The commander controls and monitors platoon operations. One OH-6A with XM27 armament subsystem is organic for this purpose.
 - (b) Aero scout section (lt) (2). Each of the two sections has a section commander, a team leader, two helicopter pilots, and two crew chiefs. The mission of these sections is reconnaissance and observation. Each section has four OH-6A helicopters with XM27 armament subsystems organic with which to effect its mission.
 - (c) Aero scout section (hv). This section has a section commander, team leader, six helicopter pilots, and four crew chiefs. Aircraft organic to this section are four UH-1B/C helicopters with XM22 armament subsystem. As the helicopter armament indicates, the aero scout section (heavy) is most effective against armor or mechanized targets.
- (5) Aero rifle platoon. The aero rifle platoon consists of a platoon headquarters and four aero rifle squads.

- (a) Aero rifle platoon headquarters. This headquarters contains a platoon commander, nine helicopter pilots, a platoon sergeant, five crew chiefs, and five door gunners. Their mission is to provide transportation for the four organic rifle squads on operational missions. This troop movement is effected by using the five UH-1D helicopters organic to the platoon headquarters. The UH-1D helicopters are armed with M23 subsystems and piloted by the assigned helicopter pilots and the platoon commander.
 - (b) Aero rifle squad (4). Each of the four rifle squads has a squad leader, two team leaders, two automatic riflemen, two grenadiers, and three riflemen. These squads, either individually or collectively, provide a rapid reaction force which can be used as a security force or a portion of the troop force commitment.
- (6) Aero weapons section. The aero weapons section personnel are a section commander, seven helicopter pilots, and four crew chiefs. The authorized helicopters are four UH-1B/C's, each armed with XM21 and M5 armament subsystems. This section provides the troop with readily available aerial firepower to be used as the mission dictates.
- (7) Service platoon. A platoon headquarters, a maintenance section, and a supply section comprise the service platoon.
- (a) Platoon headquarters. The platoon headquarters is made up of the platoon commander who is responsible to the troop commander for the maintenance and supply activities.
 - (b) Maintenance section. This section includes a section chief, helicopter pilot, maintenance supervisor, and sufficient personnel to provide organizational maintenance on the troop's aircraft, aircraft systems, wheeled vehicles, and communications equipment. A maintenance data specialist and a repair parts specialist are also included. The helicopter pilot is utilized for test flights and as pilot of the UH-1B/C helicopter assigned to the maintenance section.
 - (c) Supply section. The supply section is authorized a section chief, helicopter pilot, supply sergeant, and sufficient personnel to handle unit supply activities, ammunition storage and handling, and fuel and storage handling. Three airfield service crewmen are also authorized.

f. Concept of Employment.

- (1) General.
 - (a) Successful employment of the air cavalry troop is based upon effective use of its characteristics and capabilities and an understanding of its limitations. The air cavalry troop may be employed on various types of tactical missions; however, its primary purpose is to extend the reconnaissance and security capabilities of the armored cavalry regiment. It may also be employed on

independent missions if required. The troop should be employed in close conjunction with ground armored cavalry units so that the capabilities of ground and air elements will complement each other.

- (b) The air cavalry troop is a combat force with combat elements mounted completely in organic aircraft. The unit combines the characteristics of tactical three-dimensional mobility and highly destructive aerial firepower. The troop operates largely in the ground environment (nap-of-the-earth), which is the airspace extending from the ground to a few feet above the immediate terrain, but generally below the level of the surrounding terrain formations. This provides a relatively high degree of protection from enemy ground and air action. Aircraft are armed with antipersonnel, antimateriel, area, and point fire weapons for destruction and suppression of enemy forces.
 - (c) The air cavalry troop is organized and equipped to operate as a unit or with one or more teams composed of aero scout, aero weapons, and aero rifle elements. The capabilities and characteristics of these elements are designed to complement each other. The flexibility of the organization permits rapid organization of platoon teams specifically tailored to accomplish the mission. Only those elements essential to accomplish the mission are committed.
 - (d) The air cavalry troop will operate from one or more assembly areas for the purposes of organizing for combat; refueling, maintenance, and supply; and regrouping after an attack or movement. During attack operations, the combat elements will operate from assembly areas located well forward in the combat zone, and as close to the enemy positions as terrain and enemy activities will permit. During periods of combat, the air cavalry troop service elements may operate from the vicinity of the squadron trains area to accomplish maintenance of vehicles, and helicopter support activities. A high degree of air and ground mobility in the service platoon permits maintenance and supply operations as far forward in the area of operations as possible and avoids lengthy disengagement by combat elements.
 - (e) Air traffic identification of helicopters is of particular importance. The air cavalry troop can tolerate only a minimum of air traffic control measures if the troop is to accomplish assigned missions. The use of airspace in the troop area will require coordination with friendly ground elements, air defense units, and other agencies using airspace in the area of operations. However, the use of nap-of-the-earth flight techniques will minimize the degree of coordination required.
- (2) Fundamentals of employment. Employment of the air cavalry troop is based on the following principles:

- (a) Surprise. The success of combat operations by air cavalry troops will depend mainly on the element of surprise. Such surprise is achieved by using speed, maneuverability, and the troop's capability to cross terrain obstacles to strike the enemy at an unexpected time and from an unexpected direction. Surprise can be achieved by well-executed movements at low altitude, by using available cover and concealment, speed, aggressiveness, and deception.
 - (b) Fire and movement. Air cavalry units use the technique of fire and movement to destroy the enemy and for self-protection. Organic weapons, as well as those of ground elements, must be used to the maximum to provide suppressive fires to protect the movement of aircraft and reduce their exposure to ground fire. Using their speed and maneuverability, air cavalry elements move into unexpected and advantageous positions from which they can be employed to disrupt, disorganize, and destroy the enemy. The psychological effect from the concentrated fire of rapidly advancing armed aircraft is exploited.
 - (c) Teamwork. Air cavalry units normally operate as units or teams composed of aero scout, aero weapons, and aero rifle aircraft. The capabilities and characteristics of these elements are designed to complement each other. The flexibility in the troop organization permits rapid organization of platoon teams specifically tailored to complete the mission. Teamwork between air and ground reconnaissance elements is essential to fully exploit the capabilities of each.
 - (d) Economy of employment. Elements of the air cavalry troop will be employed to insure a maximum flying capability when required. When a mission does not require total troop effort, only those elements necessary to complete the mission are committed. Aircraft not engaged in flying missions are maintained in the highest state of operational readiness commensurate with the situation.
- (3) Factors affecting employment.
- (a) General. As with any combat unit, employment of the air cavalry troop should be based on the factors of METT (mission, enemy situation, terrain and weather, and the troops available).
 - (b) Mission. The primary consideration in the employment of the troop is its assigned mission. The mission affects the organization, combat formations, and scheme of maneuver.
 - (c) Enemy situation. In reconnaissance missions, the troop is normally oriented on the enemy; in security missions, it is oriented on the friendly main body. Employment of the unit in reconnaissance missions is based upon gaining information of the area of operations, finding the enemy forces, conducting surveillance of enemy dispositions, reporting the nature of the enemy located, acquiring targets, and engaging the enemy within its means. Depending in part on the enemy situation (known or unknown), air

b. Mission. The mission of the corps artillery aviation battery is to provide aerial target acquisition support to the corps artillery, and to provide army aviation support to a corps artillery headquarters and to units of corps artillery not having organic aircraft.

c. Assignment. The corps artillery aviation battery is organic to a corps artillery and/or an airborne corps artillery.

d. Capabilities. This unit is capable of providing -

- (1) Aerial observation for detection, identification, and location of targets; fire adjustment; and surveillance of fire.
- (2) Aerial transportation of corps artillery commander and staff.
- (3) Aviation support to corps artillery units not having organic aircraft.
- (4) Continuous (day and night) operations during visual weather conditions and limited operations under instrument weather conditions.
- (5) Rapid spot aerial photography consisting of daylight vertical and oblique photography and night vertical photography.
- (6) Radar search and target acquisition in critical or suspect areas.
- (7) Infrared search and target acquisition in critical or suspect areas.
- (8) Aircraft for wire-laying, radio relay, and courier and messenger services.
- (9) Communication and airfield terminal control facilities for the corps artillery base airfield.
- (10) Limited battlefield illumination and radiological survey.
- (11) Augmented aeromedical evacuation as required.

71. ORGANIZATION

The corps artillery aviation battery is composed of a battery headquarters, operations platoon, general support platoon, aerial surveillance platoon, and a service platoon.

a. Battery Headquarters. The battery headquarters contains the battery commander, first sergeant, mess steward, supply sergeant, and the personnel for administrative and mess functions. It is responsible for establishing local security. Personnel operating at the alternate airstrip will establish local security, and receive assistance from the senior commander within the area in which the airfield is established. Wire is the normal means of communication within the battery, but adequate radios are provided as an alternate means.

b. Operations Platoon. The operations platoon consists of a platoon headquarters, an approach control section, an airfield control section, and a communications section.

9 UH-1D(M23)
 4 OH-6A(XM27)
 6 OV-1
19 TOTAL AIRCRAFT

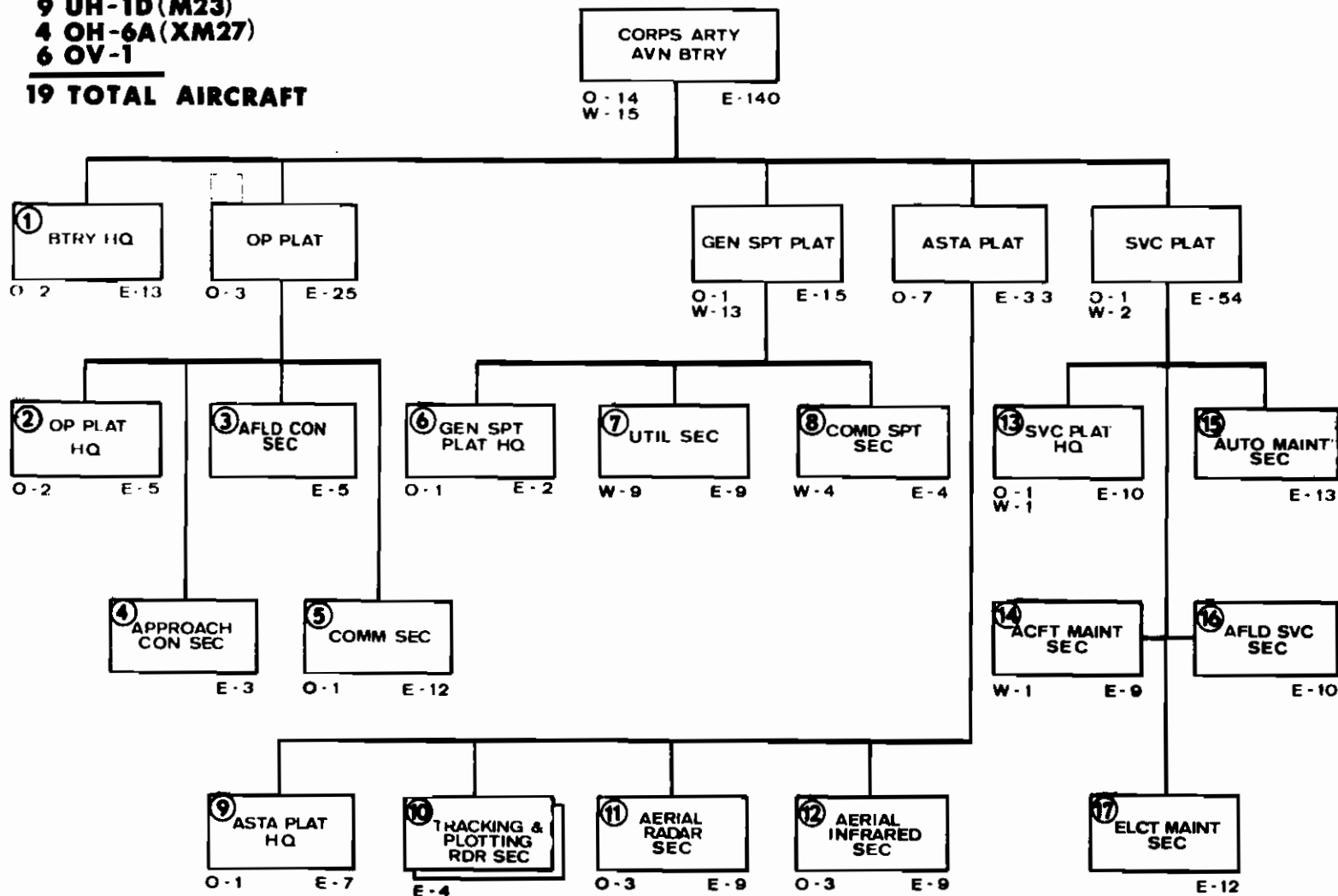


Figure 73. Corps artillery aviation battery (TOE 6-517T).

DATA FOR FIGURE 73

1 BATTERY HEADQUARTERS

1 MAJ	Btry Comd	1983
1 CPT	XO	1983
1 E-8	First Sgt	67R50
1 E-6	Mess Steward	94B40
1 E-6	Sup Sgt	76K40
3 E-5	First Cook	94B20
1 E-4	Armorer	76K30
1 E-4	Btry Clerk	71H20
2 E-4	Cook	94B20
1 E-3	Cook's Helper	94A10
1 E-3	RATEL Op	67A10
1 E-3	Sup Clerk	76A10

Tlr cgo 1/4-ton	2
Tlr cgo 3/4-ton	2
Tlr tk water 1 1/2-ton 400-gal.	1
Trk cgo 3/4-ton	1
Trk cgo 2 1/2-ton	1
Trk util 1/4-ton	2
Rdo set AN/VRC-46	3
Rdo set AN/GRA-39	1

2 OPERATIONS PLATOON HEADQUARTERS

1 CPT	Plat Comd	1982
1 LT	Op Off	1982
1 E-7	Flt Op Chief	71P40
1 E-5	Sr Flt Op SP	71P20
1 E-4	Clerk Typist	71B30
1 E-4	Flt Op SP	71P20
1 E-3	RATEL Op	67A10

Tlr cgo 3/4-ton 2 wheel	1
Tlr cgo 3/4-ton 4x4	2
Rdo set AN/VRC-46	1
RATT set AN/PGC-1	1
Tg transmitter gp AN/TCC-14	1

3 AIRFIELD CONTROL SECTION

1 E-6	Chief Air Tfc Con	93B40
1 E-5	Sr Con Tower Op	93B20
2 E-4	Con Tower Op	93B20
1 E-3	Con Tower Op Helper	93B20

Tlr cgo 3/4-ton	1
Trk cgo 3/4-ton	2
Beacon AN/CVX-1	1
Beacon set AN/GRN-6	1
Con gp AN/GRA-6	2
Rdo set AN/ARC-73	1
Rdo set AN/GRR-5	1
Rdo set AN/VRC-24	1
Rdo set AN/VRC-46	1
Rdo set con gp AN/GRA-39	1

4 APPROACH CONTROL SECTION

1 E-5	Sr Ldg Con Op	93B30
2 E-4	Ldg Con Op	93B30

Tlr cgo 3/4-ton	1
Trk cgo 3/4-ton	1
Trk 2 1/2-ton	1
Con gp AN/GRA-6	2
Rdr AN/TPN-8	1
Rdo set AN/ARC-73	1
Rdo set AN/VRC-24	1
Rdo set AN/VRC-46	1
Rdo set con gp AN/GRA-39	1

5 COMMUNICATIONS SECTION

1 LT	Comm Off	0200
1 E-5	Comm Chief	31H40
2 E-5	RATT Tm Chief	9536
1 E-5	GCA Equip Rpmn	26G20
1 E-4	Rdo Mech	31D20
4 E-4	RATT Op	05C20
1 E-4	Sr Fld Swbd Op	36A10
2 E-3	Fld Wireman	36A10

Tlr cgo 3/4-ton	1
Trk cgo 3/4-ton	4
Toolkit rdr and rdo 47 compl	1
Toolkit rdo rep 32 compl	1
Toolkit suppl rdr and rdo	1
Ant gp AN/GRA-50	2
Con gp AN/GRA-6	2
Multimeter AN/URM-105	2
Rdo set AN/VRC-49	1
Rdo set con gp AN/GRA-39	1
RATT set AN/GRC-46	2
Test set rdo AN/VRM-1	1

6 GENERAL SUPPORT PLATOON HEADQUARTERS

1 CPT	Plat Comd	1981
1 E-6	Plat Sgt	67R40
1 E-3	RATEL Op	67A10

Tlr cgo 1/4-ton	1
Trk util 1/4-ton	1
Rdo set AN/VRC-46	1
Rdo set con gp AN/GRA-39	1

7 UTILITY SECTION

9 WO	RW Aviator	062B0
9 E-5	Crew Chief	67N20
Rdo set AN/URC-10	9	
Hel UH-1D	9	
Toolkit acft mech gen	9	
Armt subsystem M23	9	
Disp wire acft AN/ATE-1	2	

8 COMMAND SUPPORT SECTION

4 WO	RW Aviator	062B0
4 E-5	Crew Chief	67M20
Rdo set AN/URC-10	4	
Hel OH-6A	4	
Toolkit gen mech	4	
Armt subsystem XM27	4	

9 ASTA PLATOON HEADQUARTERS

1 CPT	Plat Comd	1980
1 E-7	Plat Sgt	21770
1 E-5	Sr Still Photo Lab SP	84G20
1 E-5	Survl Photo Equip	
	Rpmn	41G20
2 E-4	Still Photo Lab SP	84G20
1 E-3	Still Photo Lab Asst	84G10
1 E-3	RATEL Op	67A10
Tlr tk water 1 1/2-ton	1	
Trk cgo 2 1/2-ton	2	
Dark room photo ptbl	1	
Rdo set AN/VRC-46	1	

10 TRACKING AND PLOTTING SECTION (2)

1 E-6	Tm Chief	17F40
1 E-5	Rdr Mech	26D20
1 E-5	Sr Rdr Op	17G20
1 E-4	Rdr Op	17G20
Trk cgo 2 1/2-ton	2	
Multimeter AN/URM-105	1	
Rdo set AN/VRC-47	1	
Rdr set AN/MPQ-29	1	

11 AERIAL RADAR SECTION

1 CPT	Sec Ldr	1980
2 LT	FW Aviator	1980
3 E-5	Sr AER Sensor Op	26E20
3 E-5	Crew Chief	67H20
3 E-4	AER Sensor Op	21710

Tlr cgo 3/4-ton	1
Trk cgo 3/4-ton	2
Rdo set AN/URC-10	3
Airplane survl OV-1	3
Toolkit acft mech gen	3
Rec set rdr data AN/TKQ-1	1

12 AERIAL INFRARED SECTION

1 CPT	Sec Ldr	1980
2 LT	FW Aviator	1980
3 E-5	Sr AER Sensor Op	26E20
3 E-5	Crew Chief	67H20
3 E-4	AER Sensor Op	26E20

Tlr cgo 3/4-ton	1
Trk cgo 3/4-ton	2
Rdo set AN/URC-10	3
Survl info cen infrared AN/TAQ-1	1
Airplane cbt survl OV-1	3
Toolkit acft mech gen	3

13 SERVICE PLATOON HEADQUARTERS

1 Capt	Plat Comd	64823
1 WO	Airplane Maint Tech	671C0
1 E-7	Plat Sgt	67R40
1 E-6	Airplane Tech Insp	67F20
2 E-6	Hel Tech Insp	67W20
2 E-4	Acft Parts SP	76H20
1 E-4	Clerk Typist	71B30
1 E-4	Sig Parts SP	76G20
1 E-3	Acft Sup Clerk	76A10
1 E-3	RATEL Op	67A10

Tlr cgo 3/4-ton	1
Trk cgo 3/4-ton	2
Rdo set AN/VRC-46	1
Toolkit acft insp tech	1

14 AIRCRAFT MAINTENANCE SECTION

1 E-6	Sec Chief	67L40
2 E-5	Sr Airplane Mech	67H20
2 E-5	Sr Hel Mech	67N20
2 E-4	Acft Armorer	45J20
2 E-4	Airplane Mech	67H20
3 E-4	Hel Mech	67N20
1 E-3	Hel Mech Helper	67A10

Tlr cgo 1 1/2-ton	3
Trk cgo 2 1/2-ton	1
Trk van shop 2 1/2-ton	2
Test set prop AN/ASM-127	1
Test set fuel AN/AJM-1 ()	2
Toolkit acft mech gen	9
Toolkit eng	1
Toolkit hyd	1
Toolkit prop and rotor	1
Tool set org maint set C	1
Tool set acft armt	2

DATA FOR FIGURE 73 - (continued)

(15) AUTOMOTIVE MAINTENANCE SECTION

1 WO	Auto Maint Tech	631A0
1 E-5	Mtr Sgt	63B40
1 E-4	Ord Parts SP	76D20
1 E-4	Powerman	52B20
2 E-4	Wheel Veh Mech	63B20
1 E-4	Wkr Op	63F20
1 E-3	Lt Trk Dvr	67A10
1 E-3	Wheel Veh Mech Helper	63A10

Toolkit org maint no. 1	1
Toolkit org suppl	1
Tlr cgo 1 1/2-ton	2
Trk cgo 2 1/2-ton	1
Trk cgo 2 1/2-ton WVN	1
Trk wkr lt 2 1/2-ton WVN	1
Tk and pump liq disp	1
Tk liq disp tlr mtd	1
Toolkit auto mech 52 compl	5

(16) AIRFIELD SERVICE SECTION

1 E-6	Sec Chief	67L40
4 E-4	Acft Fuel Hdlg SP	56C20
3 E-4	Crash Rescue SP	51M20
2 E-3	Afld Svc Crmn	67A10

Fil sep liq fuel 50 gpm	2
Fftg equip set trk mtd	1
Forced entry acft crash	1
Light set rnwy	1
Light set hel	1
Light set emerg rnwy	2
Tlr cgo 3/4-ton	1
Tlr cgo 1 1/2-ton	2

Trk cgo 3/4-ton	1
Trk cgo 2 1/2-ton	3
Pump assy 50 gpm	2
Tk and pump trk mtd	3
Tk petrol 300 gal	2

(17) ELECTRONICS MAINTENANCE SECTION

1 E-5	Sec Chief	26460
1 E-5	AER Sensor Rpmn	26610
1 E-5	Avn Elct Equip Rpmn	31Q30
4 E-4	AER Sensor Mech	26E20
5 E-4	Avn Elct Equip Mech	31Q20

Tlr cgo 1 1/2-ton	1
Trk van shop 2 1/2-ton	1
Toolkit photo rep	3
Toolkit rdr and rdo 47 compl	4
Toolkit rdo rep 32 compl	1
Toolkit suppl rdr and rdo	1
Multimeter AN/URM-105	4
Test set flt line AN/ASM-80	1
Test set A-6 photo flash	1
Test set photo preflight	1
Test set rdr AN/GPM-46	1
Test set rdr AN/APM-176	1
Test set rdr AN/APM-156	1
Test tgt thermal AN/AAM-10	1
Toolkit elct rpmn	1
Test set recg set rdr data AN/GKM-2	1
Test set indicator AN/GPM-52	1
Test set rdr map AN/GKM-1	1

- (1) Platoon headquarters. The platoon headquarters contains the platoon commander, operations officer, flight operations chief, and the enlisted personnel necessary to operate the headquarters. It is organized to provide its part of a two-airfield capability. Control, coordination, and assignment of flight missions are accomplished by the operations platoon. Aircraft status and availability within various flight elements must be continuously available for coordination with mission requirements. Officers from the general support platoon will be designated as assistant operations officers to complement personnel requirements.
- (2) Airfield control section. The airfield control section contains a chief air traffic controller, senior control tower operator, two control tower operators, and a control tower operator helper. This section is equipped with an air traffic control set. The section operates the control tower and its equipment from a location at the battery airfield selected by the operations officers as most effective for control of takeoffs, landings, and other airfield activity. This section contains all communications, signals, and aids required to conduct its control functions.
- (3) Approach control section. The approach control section contains a senior landing control operator and two landing control operators. It is equipped with a ground controlled approach (GCA) radar set. The GCA is located at a point on the airfield selected by the operations officer as most effective for tracking aircraft approaches under low-visibility conditions. The GCA operating console, with necessary communications, is located adjacent to the air traffic control section.
- (4) Communications section. The communications section contains the communications officer, communications chief, and the enlisted personnel to provide the communications required by the aviation battery. The section provides FM communication control facilities, corps artillery FM and AM net facilities, and two RATT sets to operate a battery AM net when the battery is operating two airfields. The section contains a limited wire capability. When the battery is operating from two airfields, the section can install the internal wire system of both airfields but may require support, if extended distances are involved, to connect the airfields and extend lines to signal centers. Two radio mechanics are assigned to perform maintenance on FM and AM radios in the battery. The section maintains communications equipment in the control tower, the GCA, and the radio beacon set of the aviation battery. In addition, it performs message center functions for the battery. Sufficient vehicles are assigned to transport the electronic equipment. The section operates in the vicinity of battery headquarters and the flight dispatch section.

c. General Support Platoon. This platoon consists of a platoon headquarters, utility section, and a command support section. The general support platoon is organized to provide immediate aviation support for the corps artillery commander, staff, corps artillery missile and rocket unit not provided aviation support, and field artillery target acquisition battalion. Light observation helicopters are provided for command and liaison functions; utility helicopters, for limited airlift capabilities. The general support platoon operates from corps artillery base airfield and receives its general support missions from the operations platoon.

- (1) Platoon headquarters. The platoon headquarters contains the platoon commander, platoon sergeant, and a radiotelephone operator. The platoon commander devotes full time to supervising the platoon's flight requirements and is not required to perform actual flight missions. His duties are an extension of those of the battery commander and flight operations officer. Hence, the platoon normally operates from the battery airfield, and the headquarters is located immediately adjacent to the operations platoon of the battery. A 1/4-ton vehicle equipped with an FM radio permits the platoon commander to communicate in the company radio net or with aircraft organic to the flight.
- (2) Utility section. The utility section contains nine rotary wing aviators and nine crew chiefs. The section provides for air movement of survey teams, sound and flash platoon personnel and equipment, transportation for critical items and/or personnel, and other general support missions as required. This section has organic nine UH-1D helicopters that may be equipped with the M23 armament subsystem.
- (3) Command support section. The command support section contains four rotary wing aviators and four crew chiefs. The section provides immediate aviation support for the commander, staff, and field artillery units which have no organic aviation. The section has organic four observation helicopters that may be equipped with the XM27 armament subsystem.

d. Aerial Surveillance and Target Acquisition Platoon. The aerial surveillance and target acquisition platoon consists of a platoon headquarters, aerial radar section, two tracking and plotting radar sections, and an aerial infrared section. It performs aerial reconnaissance, surveillance, and target acquisition missions in support of corps artillery units. Using OV-1 airplanes, it extends and supplements the corps artillery ground reconnaissance and surveillance capabilities by means of visual observation or by electronic, photographic, or other sensory devices. This platoon is normally employed from the aviation battery's instrumented airfield. During normal operations, the platoon must rapidly locate and identify area and point targets. Information obtained is forwarded to the corps artillery G2 through the corps artillery intelligence net. The platoon must be employed so that each section can efficiently perform aerial reconnaissance, surveillance, and target acquisition missions. Factors to be considered are - type of mission, coordination of effort, flight planning, proper use of equipment, efficient use of airplanes, proximity and condition of airfields, communications, enemy capabilities, terrain, weather, pilot fatigue, and aircraft availability. Mission control must be exercised through the platoon leader and the company operations officer to minimize duplication of missions and to insure maximum aerial surveillance capability.

- (1) Platoon headquarters. The platoon headquarters contains the platoon commander, platoon sergeant, and photographic laboratory specialists. The platoon headquarters performs the administrative, operational, and supply functions for the aerial target acquisition platoon. The platoon headquarters will be located where it can best exercise centralized control of the aerial surveillance and target acquisition systems. It contains personnel and equipment for developing, storing, and delivering prints of imagery produced by the platoon's electronic or photographic sensors. The platoon commander insures the execution of aerial target acquisition missions assigned to the platoon.

(2) Aerial radar section.

- (a) The aerial radar section contains the section leader, two fixed wing aviators, senior aerial electronic radar sensor operator, three crew chiefs, and three aerial electronic radar (AER) sensor operators. The aerial radar section performs aerial reconnaissance, surveillance, and target acquisition missions in support of the corps artillery. Using three OV-1 airplanes equipped with radar and photographic devices, the section provides surveillance of routes, zones, or areas where enemy movement is suspected, and acquires targets therein. The section may be employed on day or night missions, with procedures and techniques determined by the type of mission. The aviator-observer team is employed during periods of good visibility. The side looking aerial radar (SLAR) is particularly valuable during inclement weather when the quality of black and white photography and infrared imagery is greatly reduced. The side-looking feature of the SLAR permits surveillance deep into enemy territory while flying over friendly terrain. When enemy air defense capability is not too great, medium range observation aircraft may be employed over enemy terrain.
- (b) The aircraft of the aerial radar section are equipped with navigation systems that enable flight during marginal weather and poor visibility, but not necessarily under more severe weather conditions. Since the fixed wing aviators of the aerial radar section are trained to fly in instrument weather conditions, ceiling and visibility criteria must be established. Limited operations during instrument weather conditions (day and night) require an instrumented airfield with terminal flight facilities, including ground controlled approach radar.
- (c) The airborne radar surveillance system is a long-range, side-looking radar. It observes the terrain on both sides of the aircraft simultaneously. The system has a data transfer link to a ground station, which may be located at a considerable distance from the aircraft. Imagery taken by the airborne equipment can be transmitted simultaneously to the ground station. The quick processing capability of this system enables the operator to view the imagery while it is being produced and to relay the information to the commander via radio. It may also be used when the aircraft must fly beyond the range of the data transfer link.

- (3) Aerial infrared section. The aerial infrared section contains the section leader, three senior AER operators, two fixed wing aviators, three aerial electronics radar sensor operators, and three crew chiefs. This section performs aerial reconnaissance, surveillance, and target acquisition missions in support of the corps artillery with three OV-1 airplanes equipped with infrared and photographic devices. The section is employed to provide air-to-ground infrared surveillance of routes, zones, or areas within enemy territory, and to acquire targets therein. The section may be employed on day or night missions, with procedures and techniques determined by the type of mission. When flying within

enemy territory, all techniques should be used to reduce the enemy's capability to detect or engage the aircraft. Some of the infrared sensors are particularly effective at night (in fair weather) when the aircraft is partially concealed from visual observation. The aerial infrared surveillance system is not an all-weather system. For satisfactory results with photographic or infrared detectors, aircraft must fly below cloud levels in the target area.

- (4) Tracking and plotting radar sections (2). Each tracking and plotting radar section contains a team chief, senior tracking radar operator, radar mechanic, and a radar operator. The sections track and vector medium observation aircraft on penetration missions. These radars will normally be employed well forward, on dominant terrain, to obtain a line-of-sight tracking capability. The radar mechanic in each section provides organizational maintenance. When planning a mission using the tracking and plotting radar sections, the following factors must be considered: sensor capabilities and limitations, operating range of the tracking radar system, and air traffic regulation restrictions.

e. Service Platoon. The service platoon consists of a platoon headquarters, aircraft maintenance section, automotive maintenance section, electronics maintenance section, and an airfield service section. This platoon provides aviation supplies, organizational aircraft maintenance, and airfield service for the corps aviation battery. It is located in the vicinity of battery headquarters and the operations platoon.

- (1) Platoon headquarters. The platoon headquarters contains the platoon commander, platoon sergeant, airplane maintenance technician, airplane technical inspector, helicopter technical inspector, clerk typist, and parts specialists. It performs the administrative, operational, and supply functions for the service platoon; supervises and inspects the organizational maintenance of aircraft and vehicles; and stocks the required aircraft and vehicle parts and supplies. An FM radio mounted on a 3/4-ton truck permits communication in the company radio net. Officers from the flight platoons will be designated by the battery commander as assistant maintenance officer, aircraft supply officer, and airfield service officer. They perform these additional duties under the supervision of the service platoon commander.
- (2) Aircraft maintenance section. The aircraft maintenance section contains a section chief, senior airplane mechanic, senior helicopter mechanic, and airplane and helicopter mechanics to perform organizational maintenance. Individual crew chiefs in the flight platoons assist the personnel of the maintenance section. Required direct support maintenance is performed by direct support transportation aircraft maintenance units in support of the aviation battery. Minimum vehicles for required day-to-day operations are assigned to the section.
- (3) Automotive maintenance section. The automotive maintenance section consists of the automotive maintenance technician, motor sergeant, ordnance parts specialists, powerman, two wheel vehicle mechanics, a wrecker operator, a light truck driver, and one wheel vehicle mechanic helper.

- (4) Electronics maintenance section. The electronics maintenance section contains a section chief, aerial electronic radar sensor repairman, aviation electronic equipment repairman, four aerial electronic radar sensor mechanics, and five aviation electronic equipment mechanics.
- (5) Airfield service section. The airfield service section contains a section chief and personnel to provide crash and rescue service, refueling service, parking and mooring service, and general assistance to aircraft using the army airfield. A truck equipped with firefighting and rescue equipment and an FM radio is on continuous standby in the vicinity of the control tower. When this vehicle is dispatched from the company airfield for crash and rescue purposes, it is augmented by a detail from other sections of the battery. The airfield service section is equipped with three gasoline tank trucks for servicing aircraft on the army airfield. A 3/4-ton truck is required to transport, install, and maintain a field lighting set. Additional personnel to assist the airfield service section may be detailed from other elements of the battery when required.

72. CONCEPT OF EMPLOYMENT

The corps artillery aviation battery provides aviation support for the corps artillery headquarters and any of its assigned units not having organic aircraft. The aviation battery normally operates from its instrumented airfield, established in proximity to the corps artillery command post, and is employed as directed by the corps artillery commander.

a. The corps artillery aviation battery is organized on the principle of grouping aircraft by type and mission capabilities. All aircraft use the instrumented airfield as a base of operations for mission assignment, maintenance, and refueling. The general support platoon commander establishes a heliport at the corps artillery command post for the command support section to provide immediate aviation support to the corps artillery commander and his staff. The normal employment of the utility section is in general support of the corps headquarters and units without organic aircraft; however, these aircraft may be placed in direct support of, or under operational control of, the corps subordinate units for specific missions.

b. With the exceptions of aircraft maintenance and supply, the corps artillery aviation battery will receive administrative support in the same manner as other corps artillery units. The transportation aircraft direct support maintenance company will provide direct support, replacement aircraft, aircraft parts and components, and evacuation of disabled aircraft.

Section V. AVIATION UNITS (FIELD ARMY SUPPORT COMMAND)

73. AVIATION GROUP (FASCOM)

a. Composition. The composition of the aviation group (FASCOM) is shown in figure 74.

b. Mission. The mission of the aviation group will vary, depending upon the number and types of battalions and/or companies that are assigned or attached.

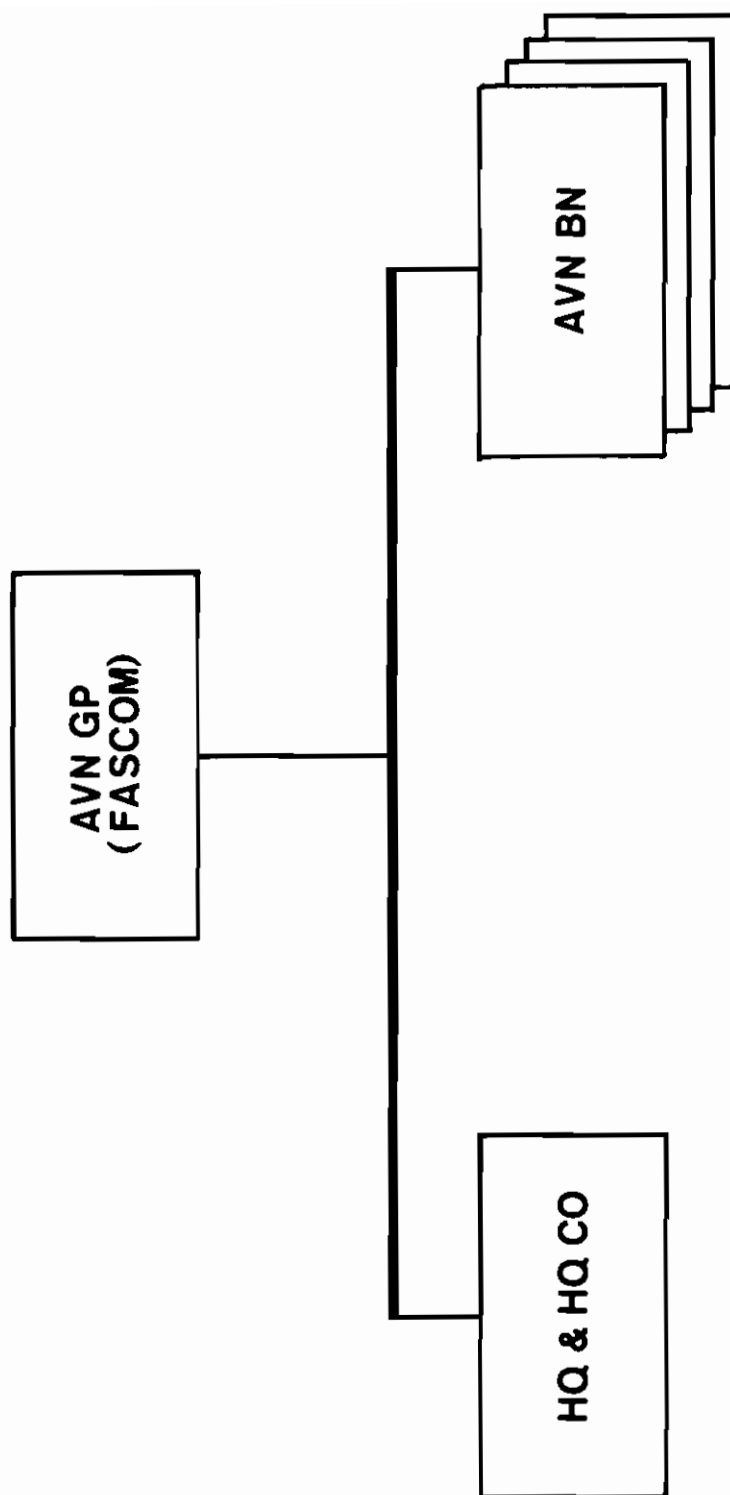


Figure 74. Aviation group (FASCOM).

c. Assignment. The aviation group is assigned to a field army, field army support command, or task force.

d. Capabilities. At full strength, this unit is capable of the following:

- (1) Commanding, planning, and supervising the activities of three to seven separate aviation battalions.
- (2) Individuals can engage in effective, coordinated defense of unit's area or installation.
- (3) The unit is 65-percent mobile.

e. Limitations.

- (1) When the group is operating at distances in excess of a 50-mile radius from brigade headquarters and/or subordinate units, augmentation may be made from TOE 11-500 as required to provide adequate communications.
- (2) This unit is dependent upon the transportation aircraft direct support company, TOE 55-457, for direct support aircraft maintenance. It is dependent upon the AG personnel service unit for processing personnel administrative actions, to include classification, personnel affairs, maintenance of personnel records, pay actions, personnel accounting, casualty reporting, and rosters and orders affecting personnel actions.

f. Organization. The aviation group (FASCOM) consists of a headquarters and headquarters company and four aviation battalions.

g. Concept of Employment.

- (1) The aviation group (FASCOM) is employed as directed by the field army support commander. The group headquarters is normally located near the airfield of one of its subordinate units within the proximity of the transport brigade headquarters (FASCOM). It has the secondary responsibility of acting as an alternate or emergency Army aviation staff for the field army commander.
- (2) The subordinate aviation units assigned or attached to the aviation group (FASCOM) are employed throughout the field army and corps areas. Their bases of operations are governed by the mission assignment priorities established by the FASCOM transportation officer. This officer is responsible for furnishing transportation for the logistical movement of troops and supplies. Operational missions may be issued by the aviation group headquarters, based upon the requirements of the transportation officer, to the subordinate units, or by any of the transportation movement control center teams which may have one or more of the subordinate aviation units operating in their sector.

74. HEADQUARTERS AND HEADQUARTERS COMPANY, AVIATION GROUP (FASCOM)

The composition, mission, assignment, capabilities, organization, and concept of employment of this headquarters and headquarters company are identical to the headquarters and headquarters company, aviation group (fig. 61).

75. AVIATION BATTALION (FASCOM)

a. Composition The composition of the aviation battalion (FASCOM) is shown in figure 75.

b. Mission. The mission of the aviation battalion is to provide logistical and tactical airlift of troops and supplies.

c. Assignment. The aviation battalion is assigned or attached to a field army, corps, or field army support command.

d. Capabilities. The aviation battalion is capable of performing those capabilities listed in each subordinate unit. The capabilities of the headquarters and headquarters company are identical to the headquarters and headquarters company, aviation battalion, aviation group (corps) (fig. 65). The capabilities of the aviation medium helicopter company and aviation fixed wing company are shown in paragraphs 77 and 78.

e. Organization. The aviation battalion is organized into a headquarters and headquarters company, a medium fixed wing company, two medium helicopter companies, and one heavy helicopter company.

f. Concept of Employment.

- (1) The aviation battalion is employed as directed by the aviation group (FASCOM) commander. The battalion may be placed in direct support of, under operational control of, or attached to a corps support brigade or to the Army rear support brigade to provide airlift capability for logistical support.
- (2) The aviation battalion may be employed either as a unit or by individual companies; or it may be employed by a combination of its assigned or attached elements.
 - (a) The battalion headquarters command post will normally be located near one of its subordinate units. For tactical operations, representatives from battalion headquarters will establish a planning staff at the supported unit command post. The company headquarters is located with the battalion headquarters. The company commander acts as headquarters commandant and is responsible for setting up the CP complex.
 - (b) Terrain, enemy situation, or the mission may require the company headquarters to operate from more than one location. Employment of the company at more than one location will require additional communications equipment and personnel for proper exercise of command and control.

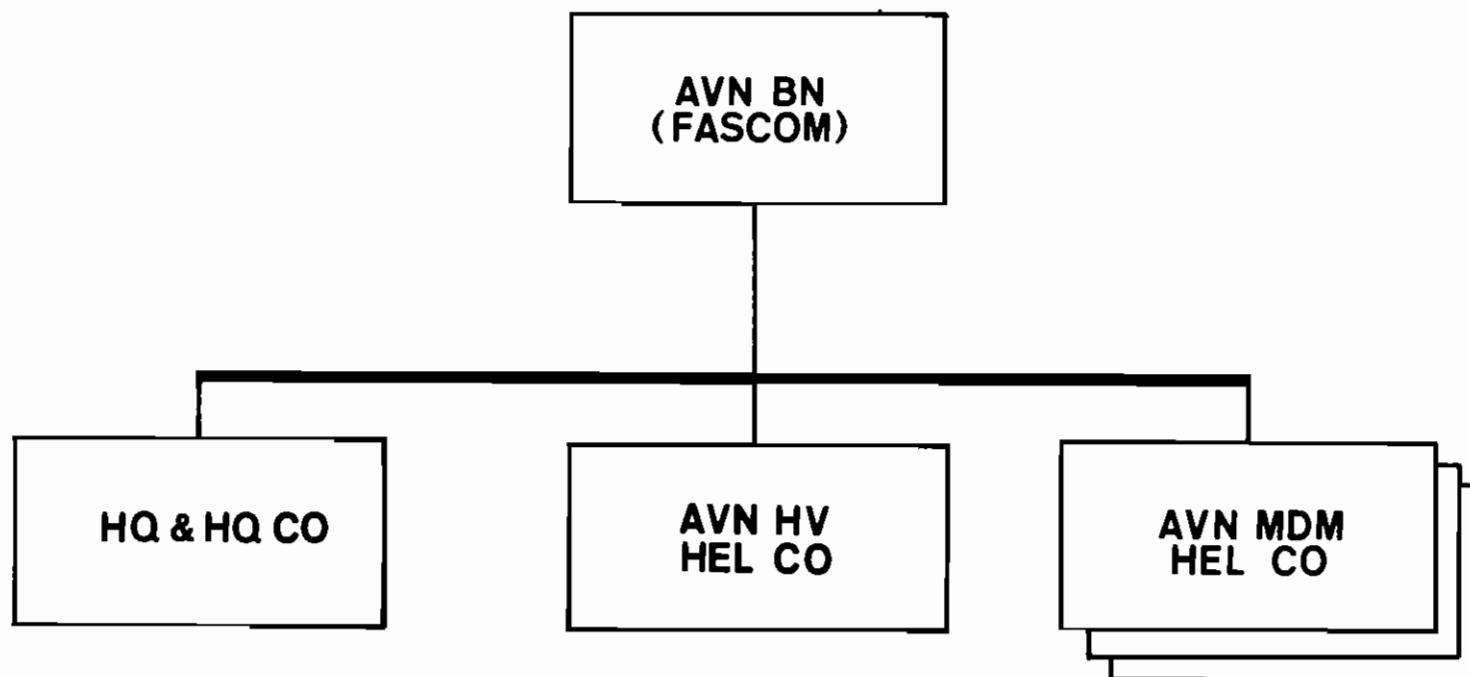


Figure 75. Aviation battalion (FASCOM) (TOE 1-256G).

76. HEADQUARTERS AND HEADQUARTERS COMPANY, AVIATION BATTALION (FASCOM)

The composition, mission, assignment, capabilities, organization, and concept of employment of this headquarters and headquarters company are identical to the headquarters and headquarters company, aviation battalion, aviation group (fig. 65).

77. AVIATION MEDIUM HELICOPTER COMPANY, AVIATION BATTALION (FASCOM)

a. Composition. The composition of the aviation medium helicopter company, aviation battalion (FASCOM), is identical to the aviation medium helicopter company, aviation battalion, aviation group (para 63 and fig. 67).

b. Mission. The mission of the aviation medium helicopter company is to provide logistical and tactical airlift for movement of troops and supplies.

c. Assignment. The aviation medium helicopter company is assigned to a field army aviation group or to a field army support command aviation group. Normally, it is attached to headquarters and headquarters company, aviation battalion, aviation group (FASCOM), TOE 1-256 (para 56 and fig. 61).

d. Capabilities. This unit is capable of performing the following functions:

- (1) Operation of one heliport with facilities for visual and instrument terminal air traffic control.
- (2) Transport of troops and/or supplies, under day, night, or limited visibility conditions.
- (3) Aerial mobility, and aerial supply and resupply of Army forces.
- (4) Augmentation of Army medical service aeromedical evacuation elements.
- (5) Transport of one of the following or combination thereof, in one lift as maximum effort, with all helicopters available and operating, within a 100-nautical-mile radius at sea level, standard day conditions.

<u>Type Helicopter</u>	<u>Troop (240 pounds)</u>	<u>Cargo (tons)</u>	<u>Litter</u>
CH-47	528	48	384

- (6) One hundred percent mobility using organic vehicles and helicopters.

e. Limitations. This unit is dependent upon the transportation aircraft direct support company for direct support aircraft maintenance and upon the AG personnel service unit for processing personnel administrative actions.

f. Organization. The organization of this aviation medium helicopter company is the same as the aviation medium helicopter company, aviation battalion, aviation group (corps) (para 63 and fig. 67).

g. Concept of Employment. The aviation medium helicopter company is assigned to the aviation battalion and is employed as directed by the battalion commander, based on

the missions assigned by the aviation group headquarters. Depending on the policies and SOP's established by the FASCOM commander, missions may be received directly from a transportation movement control team located near the helicopter company's base of operations. The primary mission of the company is to provide logistical airlift for movement of troops and equipment; whereas, the medium helicopter company found in the aviation group (corps) provides tactical airlift for movement of troops and equipment in airmobile operations. When directed by the army commander, the medium helicopter company may augment the tactical airlift capability of the corps and division airmobile companies; however, this will be on a one-time mission basis and non-recurring in nature.

78. AVIATION HEAVY HELICOPTER COMPANY, AVIATION BATTALION (FASCOM)

a. Composition. The composition of the aviation heavy helicopter company is shown in figure 76.

b. Mission. The mission of this company is to provide combat service support airlift for movement of heavy supplies, vehicles, aircraft, and equipment; and, as directed, to provide combat support airlift of combat units and air supply of units engaged in combat operations.

c. Assignment. This unit is assigned to the aviation group, TOE 1-252, and is normally attached to the aviation battalion, TOE 1-256.

d. Capabilities. This unit is capable of performing the following functions:

- (1) Necessary communications and terminal facilities for the operation of the unit airfield.
- (2) Transport of heavy lift items, within a 100-mile radius, under day, night, or limited weather conditions.
- (3) Establishment of local air traffic control at loading and unloading areas.
- (4) Aerial mobility and aerial supply and resupply of combat forces in the combat zone.
- (5) Movement of specialist teams, critical items, supplies, and parts.

e. Organization. The aviation heavy helicopter company consists of a company headquarters, flight operations platoon, three heavy helicopter platoons, and a maintenance platoon.

- (1) Company headquarters. The company headquarters includes the company commander, first sergeant, and sufficient personnel to provide unit mess, supply, administration, and wheel vehicle maintenance. The headquarters has the capability for both FM radio and wire communications. A sufficient number of wheeled vehicles is organic to the company.
- (2) Flight operations platoon. The flight platoon headquarters, communications section, flight operations section, and airfield service section are organic to the flight operations platoon.

- (a) Platoon headquarters. The platoon headquarters contains the platoon commander, platoon sergeant, and a clerk typist. The platoon headquarters acts as a nucleus for both company operations and the operation of the unit airfield.
 - (b) Communications section. The communications section contains a communications chief and personnel to operate the organic teletype and switchboard equipment.
 - (c) Flight operations section. This section contains an airfield operations officer, flight operations personnel, air traffic control personnel, and a GCA equipment repairman. The mission of the flight operations section is to operate the unit airfield.
 - (d) Airfield service section. The airfield service section contains adequate personnel to provide refueling for both unit and transient aircraft and provides crash-rescue service for the unit airfield.
- (3) Heavy helicopter platoon (3). Each of the heavy helicopter platoons contains a platoon commander, three officer rotary wing aviators, five WO helicopter pilots, three flight engineers, and a general clerk. These platoons provide the lift capability of the company, using the three CH-54 helicopters organic to each company. A 1 1/4-ton truck with mounted FM radio is organic to each platoon.
- (4) Maintenance platoon. The maintenance platoon is composed of a platoon headquarters and three maintenance sections.
- (a) Platoon headquarters. The platoon headquarters contains the platoon commander, aircraft maintenance technician, platoon sergeant, two technical inspectors, and sufficient personnel for the supply and administrative functions of the maintenance platoon. Aircraft avionics and signal spare parts are maintained and/or requisitioned through the platoon headquarters.
 - (b) Maintenance section (3). Each of the three maintenance sections contains a maintenance supervisor, three senior helicopter mechanics, three helicopter mechanics, and two helicopter mechanic's helpers. This section structure permits the normal employment of one maintenance section per heavy helicopter platoon; however, the maintenance resources may be combined as required.

f. Concept of Employment. The aviation heavy helicopter company is normally attached to the aviation battalion and is employed as directed by the battalion commander, based on the missions assigned by the aviation group headquarters. Depending on the policies and SOP's established by the FASCOM commander, missions may be received directly from a transportation movement control team located near the helicopter company's base of operations. The primary mission of the company is to provide logistical airlift for movement of troops and equipment. When directed by the army commander, the heavy helicopter company may augment the tactical airlift capability of the corps and division airmobile companies (para 78b).

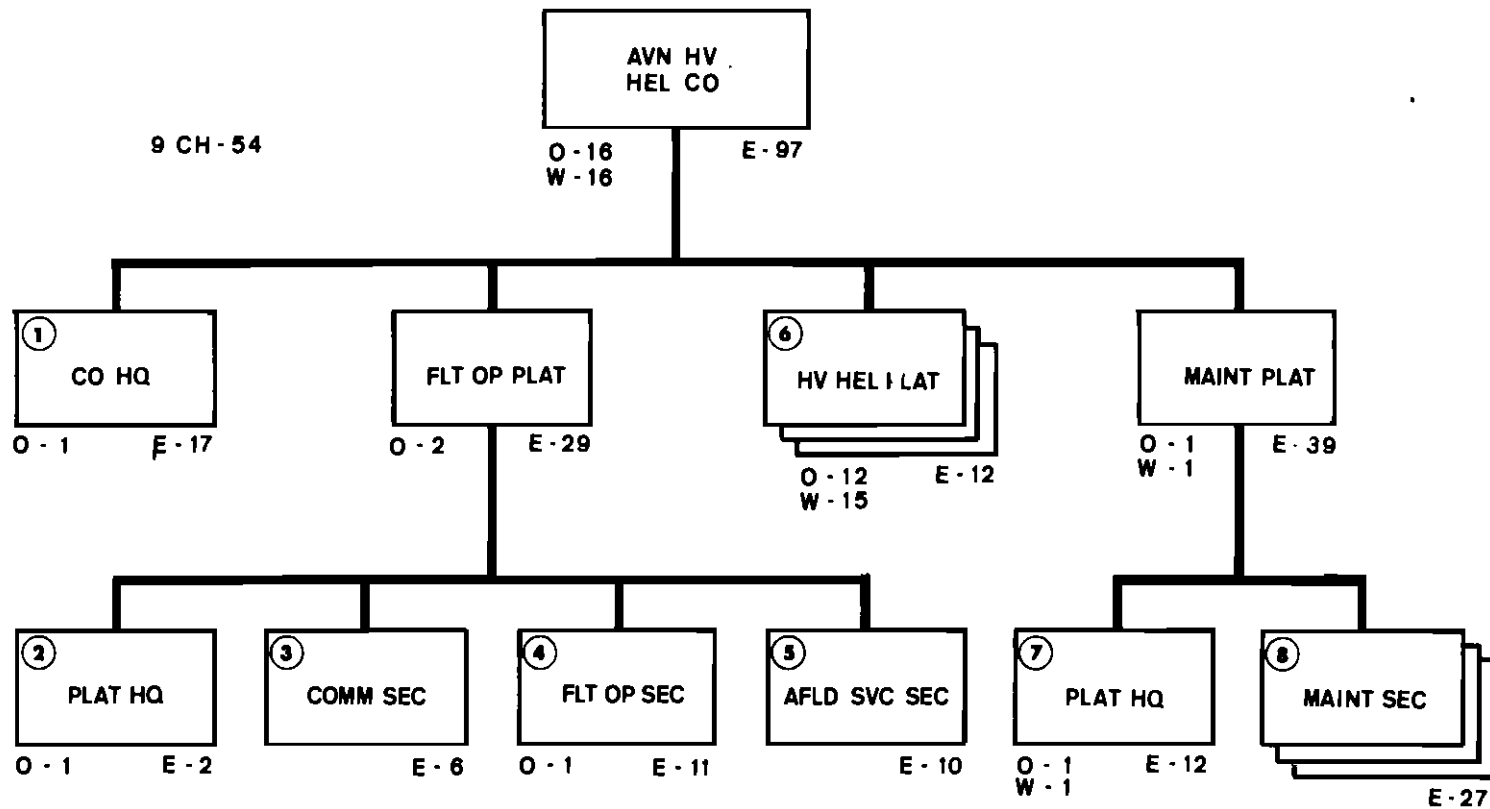


Figure 76. Aviation heavy helicopter company, aviation battalion (FASCOM) (TOE 1-259G).

DATA FOR FIGURE 76*

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983	13
1 E-8	First Sgt	67T50	
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	05
1 E-5	Mtr Sgt	63C40	
2 E-5	First Cook	94B20	
1 E-4	Co Clerk	71H20	
2 E-4	Cook	94B20	
1 E-4	Powerman	52B20	
1 E-4	Unit Sup SP	76K20	01
2 E-4	Wheel Veh Mech	63B20	
1 E-4	Wkr Op	63B20	
1 E-3	Cook's Helper	94A10	01
1 E-3	Powerman's Helper	52A10	01
1 E-3	Wheel Veh Mech Helper	63A10	01

Mg 7.62mm	4
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Rdo set AN/VRC-49 mtd in	
trk 1 1/4-ton	1
Rdo set con gp AN/GRA-39	2
Tel set TA-312/PT	2
Tlr cgo 1 1/4-ton	1
Tlr cgo 3 1/4-ton	1
Tlr cgo 1 1/2-ton	1
Tlr tk water 400-gal 2 1/2-ton	1
Trk cgo 3 1/4-ton	1
Trk cgo 2 1/2-ton	2
Trk util 1 1/4-ton	1
Trk wkr 5-ton WWN	1

2 FLIGHT OPERATIONS PLATOON HEADQUARTERS

1 CPT	Plat Comd	1982	13
1 E-7	Plat Sgt	71P40	
1 E-4	Clerk Typist	71B30	

(No Major Items)

3 COMMUNICATIONS SECTION

1 E-5	Comm Chief	31C40	
1 E-5	RATT Tm Chief	05C40	
2 E-4	RATT Op	05C20	42
1 E-4	Sr Swbd Op	36K20	
1 E-3	Swbd Op	36K20	01

Rdo set AN/GRC-46 mtd in	
trk 3 1/4-ton	1
Rdo set AN/GRR-5 mtd in	
trk 3 1/4-ton	1
Rdo set AN/PRC-25	2
Rdo set AN/VRC-46 mtd in	
trk 3 1/4-ton	2
Rdo set con gp AN/GRA-39	2
Rdo set con gp AN/GRA-74	1
RATT set AN/GRC-46	1
Recur xmtr con gp AN/GRA-6	1
Rec set R-511/ARC	1
Swbd tel SB-22/PT	1
Tel set TA-312/PT	1
Tlr cgo 3 1/4-ton	2
Trk cgo 3 1/4-ton	2

4 FLIGHT OPERATIONS SECTION

1 LT	Afld Op Off	1982	13
1 E-6	Flt Op Chief	71P40	
1 E-5	GCA Equip Rpmn	26D20	

2 E-5	Sr ATC Op	93B20	
1 E-5	Sr Flt Op SP	71P20	
2 E-4	ATC Op	93B20	
2 E-4	Flt Op SP	71P20	42
2 E-4	ATC Op Helper	93B20	01

Beacon rdo AN/TRN-24	1
Beacon set AN/GRN-6	1
Rdr set AN/TRN-8	1
Rdo set AN/VRC-24 mtd in	
trk 2 1/2-ton	2
Rdo set AN/VRC-49 mtd in	
trk 1 1/4-ton	1
Rdo set AN/VRC-49 mtd in	
trk 2 1/2-ton	2
Rdo con gp AN/GRA-39	6
Tel set TA-312/PT	2
Trk cgo 2 1/2-ton	2
Trk util 1 1/4-ton	1
Wind meas set AN/PMQ-3D	1

5 AIRFIELD SERVICE SECTION

1 E-5	Afld Svc Chief	56C40	
1 E-5	Crash Rescue Chief	51M40	
5 E-4	Acft Rfl SP	56C20	43
3 E-4	Crash Rescue SP	51M20	42

Drum collapsible 500-gal	4
Fftg equip set trk mtd DS	
CL 5308	1
Light set acft 1 1/2-kw heliport	1
Pump gas dvr 100-gal	5
Rdo set AN/VRC-47	1
Stlr tk 5,000-gal 12-ton 4 wheel	1
Tk assy collapsible, 1,000-gal	
petrl	2
Tk liq stor metal 600-gal	2

*For remarks, see page 310.

DATA FOR FIGURE 76 - (continued)

Tel set TA-312/PT 1
 Trk cgo 3/4-ton 1
 Trk tk fuel svc 2 1/2-ton 2
 Trk trac 5-ton 1
 Yoke towing and lifting 500-gal
 drum 4

6 HEAVY HELICOPTER PLATOON (3)

3 CPT Plat Comd 1981 13
 9 LT RW Aviator 1981 13
 15 WO Hel Pilot 062D0 13
 9 E-6 Flt Engr 67T2F
 3 E-3 Gen Clerk 70A10 01

Rdo set AN/URC-10 9
 Rdo set AN/VRC-46 mtd in
 trk 1/4-ton 3
 Tlr cgo 1/4-ton 1
 Tel set TA-312/PT 3
 Trk util 1/4-ton 3
 Hel CH-54A 9

7 MAINTENANCE PLATOON
 HEADQUARTERS

1 CPT Plat Comd 4823 13
 1 WO Acft Maint Tech 671C0 13
 1 E-7 Plat Sgt 67T40
 2 E-6 Tech Insp 67W20
 2 E-4 Acft Parts SP 76H20
 3 E-4 Avionics Equip
 Mech 35K20
 1 E-4 Equip Rept Clerk 71T20
 1 E-4 Rept Clerk 71B20
 1 E-4 Sig Parts Clerk 76G20 40
 1 E-3 Sup Clerk 76A10 01

Radiacmeter IM-93/UD 1
 Rdo set AN/VRC-46 mtd in
 trk 1/4-ton 1
 Tlr cgo 1/4-ton 1
 Transport airmobile for X-4
 container 3
 Trk lift fork 6,000-lb cap 1
 Trk util 1/4-ton 1

8 MAINTENANCE SECTION (3)

3 E-6 Maint Supv 67T40
 9 E-5 Sr Hel Mech 67T20
 9 E-4 Hel Mech 67T20
 6 E-3 Hel Mech Helper 67A01 41

Tlr cgo 1 1/2-ton 3
 Tlr platform whs 6,000-lb cap
 108LX48W in pneumatic 3
 Trk cgo 2 1/2-ton 3

REMARKS:

01 Also light truck driver.
 05 Also armorer.
 13 Armed with revolver cal .38.
 40 Operates forklift 6,000 pounds.
 41 Remark 01 applies to 3 EM.
 42 Remark 01 applies to 1 EM.
 43 Remark 01 applies to 3 EM.
 Remark 02 applies to 1 EM.

Section VI. MEDICAL AIR AMBULANCE UNITS (FASCOM)

79. MEDICAL AIR AMBULANCE COMPANY

a. Composition. The composition of the medical air ambulance company is shown in figure 77.

b. Mission. The mission of the medical air ambulance company is to provide aeromedical evacuation of selected patients; to provide emergency movement of medical personnel and accompanying equipment and supplies to meet a critical requirement; and to insure uninterrupted delivery of whole blood, biologicals, and medical supplies when there is a critical requirement.

c. Assignment. The medical air ambulance company is assigned to field army, independent corps, or task force as required.

d. Capabilities. This unit provides -

- (1) Aeromedical evacuation of critically wounded or otherwise nontransportable casualties to the nearest medical unit capable of providing required surgery and medical treatment.
- (2) Pickup of casualties from units in direct support of combat troops, except from an airhead or airborne force objective area that is logistically supported by the United States Air Force.
- (3) Augmentation of ground evacuation units when vehicular evacuation is not feasible or is insufficient.
- (4) Expeditious delivery of medical personnel and material to meet emergency treatment requirements within the combat zone.

e. Organization. The medical air ambulance company consists of a company headquarters, flight operations platoon, a maintenance platoon, and four helicopter platoons.

- (1) Company headquarters. The company headquarters contains the company commander, first sergeant, supply sergeant, mess sergeant, and the personnel to perform the administrative, mess, and supply functions. Trucks are provided to assist in the accomplishment of these functions. FM radio is the normal means of communication with other elements of the company. The commander has an organic AN/VRC-46 radio mounted in his 1/4-ton truck for this purpose. The company headquarters will normally be located in an area which is centrally located in relation to the helicopter platoons. The distance from the platoons will vary according to the terrain and probability of nuclear attack. A utility helicopter organic to the company headquarters is also used by the command post group and the maintenance platoon. The maintenance platoon normally is located in close proximity to the command post area.
- (2) Flight operations platoon. The flight operations platoon contains a flight operations officer, a flight operations chief, and the enlisted personnel

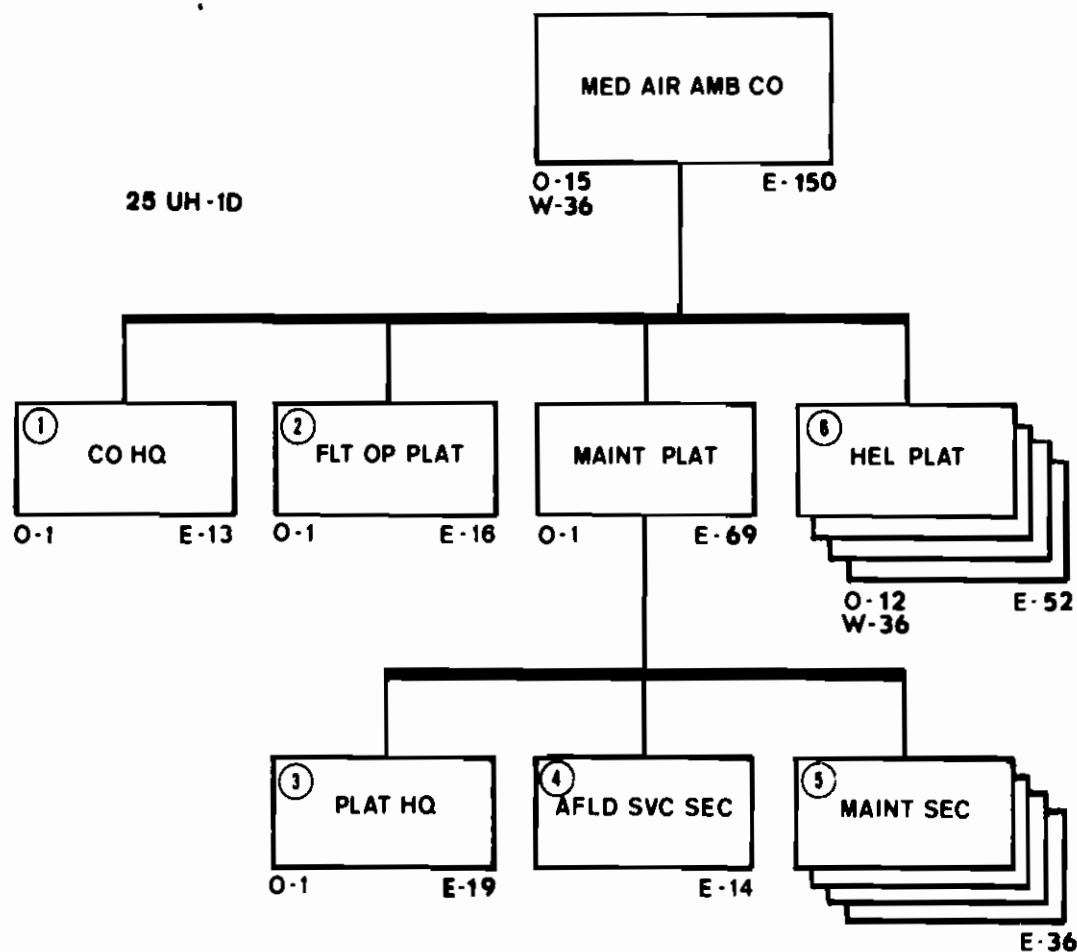


Figure 77. Medical air ambulance company (TOE 8-137G).

DATA FOR FIGURE 77*

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	1983	13
1 E-8	First Sgt	91Z50	
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	
3 E-5	First Cook	94B20	
1 E-5	Hel Crew Chief	67N2F	13
1 E-4	Armorer	76K30	
1 E-4	Co Clerk	71H20	
2 E-4	Cook	94B20	
1 E-3	Cook's Helper	94A10	01
1 E-3	Lt Trk Dvr	71A10	45

Tlr amph cgo 1/4-ton 2 wheel	1
Tlr tk water 400-gal 1 1/2-ton	
2 wheel	1
Trk cgo 2 1/2-ton 6x6	1
Trk util 1/4-ton	1
Rdo set AN/URC-10	1
Rdc set AN/GRR-5	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	1
Hel util UH-1D	1
Radiac set AN/PDR-27	1
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Tel set TA-312/PT	1

2 FLIGHT OPERATIONS PLATOON

1 CPT	Flt Op Off	1982	13
1 E-7	Flt Op Chief	71P40	
1 E-5	Comm Chief	31G40	
1 E-5	Tm Chief	05C40	
1 E-5	Sr Con Tower Op	93B20	
1 E-5	Sr Flt Op SP	71P20	
1 E-5	Sr Ldg Con Op	93B30	
1 E-4	Con Tower Op	93B20	45

1 E-4	Flt Op Clerk	71P20	44
1 E-4	Flt Op SP	71P20	44
1 E-4	Ldg Con Op	93B20	45
2 E-4	RATT Op	05C20	43
1 E-4	tt Op	72B20	46
1 E-3	Con Tower Op		
	Helper	93B20	44
1 E-3	Flt Op Helper	71P20	
1 E-3	Wireman	36K20	46

Beacon set AN/GRN-6	1
Elct tt scy equip TSEC/KW-7	2
Power sup PP-2953/4	2
Rdr set AN/TPN-8	1
Radiacmeter IM-93/UD	2
Rdo set AN/GRR-5 mtd in	
shop van	1
Rdo set AN/VRC-24 mtd in	
shop van	2
Rdo set AN/VRC-46 mtd in	
shop van	2
Rdo set AN/VRC-46 mtd in	
trk 3/4-ton	1
RATT AN/VSC-1	1
Swbd tel manual SB-22/PT	1
Tel set TA-312/PT	2
tt set AN/PGC-1	1
Tlr cgo 3/4-ton 2 wheel	3
Tlr cgo 1/2-ton 2 wheel	1
Trk cgo 3/4-ton 4x4	4
Trk cgo 2 1/2-ton 6x6 WWN	1
Trk van shop 2 1/2-ton 6x6	1

3 MAINTENANCE PLATOON HEADQUARTERS

1 CPT	Plat Ldr	64823	42
1 E-7	Plat Sgt	67R40	
2 E-6	Tech Insp	67W2F	

1 E-5	Mtr Sgt	63B30	
1 E-5	GCA Equip Rpmn	26D20	
4 E-4	Avionics Rpmn	35K20	
1 E-4	Hel Rpmn	67N20	
2 E-4	Maint Data SP	71B20	43
1 E-4	Power Genr SP	52B30	
2 E-4	Rep Parts SP	76H20	43
3 E-4	Wheel Veh Mech	63B20	43
1 E-3	Wheel Veh Mech	63A10	01

Tlr cgo 3/4-ton 2 wheel	1
Tlr cgo 1 1/2-ton 2 wheel	2
Trk cgo 3/4-ton 4x4	1
Trk van shop 2-ton 6x6	1
Trk cgo 2 1/2-ton WWN	1
Radiacmeter IM-93/UD	2
Radiacmeter IM-174/PD	1
Tel set TA-312/PT	1

4 AIRFIELD SERVICE SECTION

1 E-5	Sec Sgt	67N40	
5 E-4	Acft Fueling SP	56C20	01
4 E-4	Crash Rsq SP	51M20	43
4 E-3	Afld Svc Crmn	67A10	01

Forced entry and rsq equip set	
acft crash	3
Light set 1/2-kw heliport	1
Light set rnwy ptbl battery op	4
Tlr amph cgo 1/4-ton 2 wheel	4
Tlr cgo 1 1/2-ton 2 wheel	5
Trk cgo 2 1/2-ton 6x6	5
Trk util 1/4-ton 4x4	4
Rdo set AN/VRC-53 mtd in	
trk 2 1/2-ton	1
Rdo set AN/VRC-46 mtd in	
trk 1/4-ton	4
Tk and pump unit	4

DATA FOR FIGURE 77 - (continued)

5 MAINTENANCE SECTIONS (4)

4 E-6 Sec Sgt 67N40
12 E-5 Sr Hel Mech 67N20
16 E-4 Hel Mech 67N20
4 E-3 Hel Mech Helper 67A10 01

Tlr cgo 1 1/2-ton 2 wheel 4
Trk cgo 2 1/2-ton 6x6 WWN 4
Tel set TA-312/PT 4

6 HELICOPTER PLATOON (4)

4 CPT Plt Ldr 1981 13
8 LT Sec Ldr 1981 13
36 WO Evac Pilot 062B0
24 E-5 Air Amb Aidman 91B2F
24 E-5 Hel Crew Chief 67N2F
4 E-3 Rdo Op 91A10

Tlr cgo 3/4-ton 2 wheel 4
Trk cgo 3/4-ton 4x4 4
Rdo set AN/URC-10 24
Rdo set AN/VRC-47 mtd in
trk 3/4-ton 4
Hel util UH-1D 24
Radiacmeter IM-93/UD 8
Radiacmeter IM-174/PD 4
Tel set TA-312/PT 4

REMARKS:

01 Also light truck driver.
04 Also switchboard operator.
13 Armed with revolver cal .38
4-inch barrel.
41 1 EM also light truck driver.
42 Must be qualified as a rotary
wing aviator.
43 Remark 01 applies to 1 EM.
44 Remarks 01 and 45 apply.
45 Also radio operator.
46 Remarks 01 and 04 apply.

to provide flight dispatch service, air traffic control, ground control approach radar service, and radio and wire communications. The operations platoon effects coordination and assignment of flight missions. It is the center of activity within the air ambulance company and successful accomplishment of the flight missions is dependent upon planning and coordination by this platoon. The operations platoon coordinates air evacuation requirements with the helicopter platoons which accomplish the required missions. Aircraft availability and status reports must be made continuously to the flight operations element for coordination with mission requirements. The platoon normally operates in the vicinity of the company headquarters.

- (a) Command element. The platoon command element contains the flight operations officer and a flight operations chief. The operations officer is the company commander's executive officer. He supervises the training and operation of the company, thereby allowing the company commander to concentrate on the employment of his unit to accomplish the assigned missions. During combat operations, he maintains liaison with medical command headquarters, hospitals, and surgeons of major command concerning the need for aeromedical evacuation and makes recommendations to the company commander pertaining to the employment of the helicopter platoons. Because of the broad duties of the operations officer, the flight operations chief will normally be responsible for the internal functions of the elements within the flight operations platoon. He will insure smooth operation of the flight dispatch, air traffic control, and communication elements.
- (b) Operations elements. The operations elements contain the enlisted personnel to operate the air traffic control equipment for the company; operate and maintain necessary radios to net with supported units; contact the advance helicopter flights by radio when required; and keep the company commander informed as to the status of helicopters, heliports, and alternate sites for heliports. The operations platoon contains all communications, signals, and aids required to conduct its control functions. The control tower and its equipment are operated from a location on the company heliport selected by the operations officers as most effective for control of takeoffs, landings, and other airfield activity. The platoon also includes a ground controlled approach (GCA) radar set and two landing control operators. The GCA is located at a point on the heliport selected by the operations officer as most effective for tracking aircraft approaches under low visibility conditions. The GCA operating console, with necessary communications, is located adjacent to the air traffic control section. The beacon set radio AN/GRN-6 may be positioned on the heliport for terminal ADF approach or from 1 to 3 miles from the heliport for normal ADF approaches. The communications chief supervises the communication activities of the company. He is assisted by the team chief who is primarily responsible for operation of the radio teletypewriter station. With the radio teletypewriter (RATT) set AN/VSC-1, the company is capable of operating in the AM voice and in the CW or RATT communication nets of higher headquarters or supported units.

- (3) Maintenance platoon. This platoon consists of a platoon headquarters, an airfield service section, and four maintenance sections. It is designed to provide aviation supplies, organizational aircraft maintenance, and airfield service for the company. Its mission dictates that it operate at the company heliport in the vicinity of the operations platoon.
- (a) Maintenance platoon headquarters. This headquarters contains a platoon leader, platoon sergeant, motor sergeant, two helicopter technical inspectors, and sufficient personnel to maintain the assigned vehicles and electronic equipment. Personnel of this section also supervise and inspect the organizational maintenance of aircraft, wheeled vehicles, and stock required parts and supplies. In addition, they perform organizational maintenance on the navigational aids and all company radios. Officers from the flight platoons will be designated by the company commander as assistant maintenance officer, aircraft supply officer, and airfield service officer. They perform these additional duties under the supervision of the service platoon commander.
- (b) Airfield service section. This section contains a section sergeant and personnel to provide crash and rescue service, refueling service, parking and mooring service, and general assistance to aircraft using the company airfield or heliport. A truck equipped with firefighting and rescue equipment and an FM radio is on continuous standby in the vicinity of the control tower. When this vehicle is dispatched from the company heliport for crash and rescue purposes, it is augmented by a detail from other sections of the company. The airfield service section is equipped with five gasoline tank trucks for servicing aircraft on the company heliport. Four 1 1/4-ton trucks are assigned to transport equipment in establishing heliports for the helicopter platoons operating away from the company. Equipment assigned includes a portable emergency light set marker, a tank and pump unit liquid dispenser, and four radio sets AN/VRC-46 (one is used for FM air-to-ground communications at the heliport). Each truck is operated by an airfield service crewman. When required, additional personnel to assist the airfield service section may be detailed from other elements of the company.
- (c) Maintenance sections (4). Each of these four sections contains a section sergeant and adequate rotary wing mechanics to perform organizational maintenance. The maintenance sections are organized and equipped so that they are capable of being attached to one of the helicopter platoons to provide organizational maintenance when the platoon is operating away from the company. Individual crew chiefs in the flight platoons assist the personnel of the maintenance section in performing maintenance. Required direct support maintenance is performed by direct support transportation aircraft maintenance units in support of the company. A 2 1/2-ton truck is assigned to each section to transport the section equipment.

- (4) Helicopter platoons (4). Each of the four helicopter platoons contains a platoon leader, two section leaders, nine evacuation pilots, six air ambulance aidmen, six crew chiefs, and one radio operator. These platoons are identical in organizational structure. Each is authorized six helicopters and is capable of independent operations in the forward combat area.
- (a) The helicopter platoons will normally be placed under operational control of or in support of a unit, and will usually require limited administrative support from that unit. When not supporting a unit, the platoon will establish a satellite heliport close enough to the company command post and service elements to use the company's administrative support. The actual distance from the company command post will depend on the terrain and the possibility of nuclear attack. Within the platoon area, the dispersal of helicopters provides cover and concealment and reduces vulnerability to air or artillery attack. Communications and security problems increase with the distance between elements.
- (b) Since the platoons normally will operate at considerable distances from the company headquarters, and in some instances independently, a captain (MSC) serves as both flight and platoon leader. He is responsible for the training, discipline, control, and employment of the platoon and for the maintenance and efficient operation of the helicopters. Each helicopter has an assigned crew chief and is manned by two aviators and a medical aidman, all of whom must be proficient in emergency medical treatment. Each aviator is responsible to the platoon leader for the efficient operation and maintenance of his helicopter. In the absence of a medical officer, the aviator will advise and assist the aidman in treating and preparing the patient for flight.

f. Concept of Employment.

- (1) Aeromedical evacuation within the combat zone is provided by AMEDS units which operate under the overall supervision of the field army surgeon. Normally, direct command of these units is exercised by the medical brigade headquarters of the field army support command.
- (a) Support for forces of corps size or larger is furnished by medical air ambulance companies, augmented as required by helicopter ambulance medical detachments. To insure maximum flexibility and control, these units are normally assigned an area support mission. This does not preclude the initial assignment in a particular operation of a direct support mission (e. g., support of a specific division) to a subordinate platoon of the company or to a detachment.
- (b) Support of forces of brigade or division size which operate independently may be provided by a helicopter ambulance medical detachment or section thereof. The detachment normally operates under direct control of the surgeon of the independent force. If the force operates at an extended distance from its support base,

the attached air ambulance unit normally performs intraforce evacuation missions only. This creates an additional requirement for aeromedical evacuation from the area by the next higher level of medical service.

- (2) Air movement of routine, nonemergency category patients is performed as a secondary mission of AMEDS air ambulance units. Also, upon request of the responsible surgeon, such movement may be performed as a contingent mission of a non-AMEDS unit with appropriate type aircraft. These will be scheduled movements or movements of opportunity.
 - (a) Scheduled movements use backhaul capabilities of regular resupply or reinforcement sorties to transport patients who do not require in-flight medical treatment. These flights will be between points predesignated by the surgeon responsible for that segment of the evacuation system.
 - (b) Movements of opportunity are initiated by the medical officer in the forward facility when a requirement arises that can make use of a nonscheduled aircraft moving to the general area predesignated by the supporting surgeon for these patients. The medical officer must arrange for ambulance pickup of the patients at the destination airfield.
 - (c) Using the same non-AMEDS aircraft, augmenting aeromedical evacuation may be improvised to meet periods of peak requirements when normal means of aeromedical evacuation prove temporarily inadequate.
 - (d) AMEDS personnel and material are provided to furnish in-flight medical treatment to patients on those aircraft whose size and interior configuration permit medical personnel to work effectively. Under extreme emergency conditions, all available aircraft will be used to transport all classes of patients without mandatory provisions for in-flight medical treatment. Regardless of the method used, the responsible surgeon designates the point of origin, the patients to be carried, and the destination point.

g. Procedure for Requesting Service.

- (1) Individual missions are based upon requests from units within the field army requiring medical service and upon reports from members of the medical air ambulance units operating in the forward areas. Since the majority of requests for aeromedical evacuation originate in the division, the basic concept of mission control is oriented on this requirement. Mission requests are placed in medical channels at the lowest possible level, affording the responsible surgeon the control of type patients for air evacuation. Mission requests normally are processed through medical channels, using direct medical communications systems or common user systems, whichever is faster and more reliable. When common user systems are available, a sole user channel should be allocated for expeditious movement of aeromedical evacuation requests.

- (2) If adequate aeromedical evacuation is available at division, requests are approved or disapproved by the division surgeon, who normally will have staff supervision over the supporting medical aviation unit. The division surgeon determines through the division aviation officer if local conditions will affect the air ambulances in reaching the pickup area. If the mission is approved by the division surgeon, it is assigned to the medical aviation unit. The medical air ambulance unit coordinates routes and flight recognition for airspace clearance with the flight coordination center (FCC) or flight operations center (FOC) servicing that division. In addition, the Army aviation element in the division tactical operations center contacts the fire support element, the air defense element, and all other interested elements at division. Upon receipt of the flight plan, FOC will coordinate with the Army Air Defense Command Post (AADCP) to provide aircraft identification information.
- (3) That aeromedical evacuation support which is not immediately available at division becomes a corps or field army responsibility. Requests normally flow from the unit surgeon (e.g., at brigade level) to the division surgeon, thence directly to the headquarters of the supporting air ambulance company or detachment. This last transmission is monitored by the corps surgeon to keep him abreast of current demands for the service. Adjustments in the commitment of evacuation capabilities between supported divisions are made by the air ambulance company commander upon instructions from the commander of the medical brigade and in coordination with the corps surgeon, who establishes priorities for support among subordinate units of his corps. The company commander coordinates and receives flight recognition from the FOC. The requesting surgeon is notified as to the estimated time of arrival of the air ambulances. If medical aviation is not available, the request for support is forwarded to the division army aviation element at the division tactical operations center (DTOC) which determines the availability of aircraft. Coordination for the flight is accomplished and the requesting surgeon is informed of the decision and given all pertinent data concerning the mission by DTOC.

h. Aeromedical Evacuation Requirements.

- (1) Prior to takeoff, the operations officer of the medical aviation units will normally obtain individual flight clearances from flight regulation agencies in order to avoid interference with tactical security, friendly fires, and tactical air support.
- (2) In order for the controlling surgeon to evaluate and establish priorities for evacuation, requests must contain the following pertinent information:
 - (a) Requesting unit.
 - (b) Number of patients to be evacuated.
 - (c) Types of injuries.
 - (d) Exact location of the pickup site by grid coordinates and relation to a prominent terrain feature.

- (e) Marking of pickup site.
 - (f) Time patients will be ready for evacuation.
 - (g) Obstructions of flight and enemy fires in the area.
 - (h) Type of personnel composing the ground party.
 - (i) Requests for emergency resupply or special equipment required.
- (3) The unit requesting air ambulance service is responsible for selecting and properly marking the loading site and for loading the aircraft. Supervision of the aircraft loading is the aviator's responsibility.

80. HELICOPTER AMBULANCE MEDICAL DETACHMENT (FASCOM)

a. Composition. The composition of the helicopter ambulance medical detachment is shown in figure 78.

b. Mission. The helicopter ambulance medical detachment provides for organizational or field medical evacuation by air of casualties requiring immediate definitive medical treatment.

c. Assignment. Normally, the detachment is assigned on the basis of 12 per army or as required. The detachments are assigned to the medical brigade of the field army support command.

d. Capabilities. The detachment is capable of air evacuation of seriously wounded casualties from forward medical installations to hospitals or other medical organizations.

e. Organization. The helicopter ambulance medical detachment is a small, highly mobile, cellular organization which is normally attached to another medical organization for training and administrative support. The detachment may serve as an augmentation unit for the medical air ambulance company or furnish aeromedical evacuation support for small independent task force organizations. Listings of authorized personnel and equipment are contained in current publications of TOE 8-500G (Team RA, Medical Service Organizations). The unit is authorized 4 officers, 10 warrant officers, and 34 enlisted men. It has six utility helicopters.

f. Concept of Employment. The helicopter ambulance medical detachment is employed as directed by the medical brigade commander of the field army support command. The brigade commander, who is also the FASCOM surgeon, will monitor the evacuation requirements of critically ill or injured personnel in the corps and division areas. If the medical air ambulance company in support of each corps becomes overly committed, then sufficient air ambulance detachments can be assigned the mission of augmenting the medical air ambulance companies. The detachments will be employed under the control of the medical group surgeon in each corps area and will operate in an assigned sector.

Section VII. AVIATION COMPANY (ARMY)

81. GENERAL

The composition, mission, assignment, capabilities, and concept of employment of the aviation company (Army) are the same as the aviation company (corps) except that the aviation company (Army) has 4 O-1's, 3 U-8's, and 6 OH-6A's.

82. REFERENCES

For additional detailed information on the aviation company (Army), see paragraph 57 and figure 62.

Section VIII. AVIATION AIR TRAFFIC CONTROL COMPANY

83. GENERAL

a. Composition. The composition of the aviation air traffic control company (AATC) is shown in figure 79. One AATC company is assigned to the field army.

b. Mission. The mission of the AATC company is to provide en route air traffic regulation and identification, navigational aids, air warnings, and other assistance to in-flight aircraft, and assistance to divisions in regulating air traffic in the forward areas.

c. Assignment. The AATC company is organic to field army, separate corps, or communications zone.

d. Capabilities. This unit is capable of providing -

- (1) Continuous (day and night) flight regulation of aircraft operating in the army air traffic regulation system.
- (2) Emergency and routine weather information to aircraft in flight.
- (3) Coordination of air traffic with other services and allied forces as required.
- (4) Facilities to assist divisions in regulating air traffic in the forward areas.
- (5) Aircraft identification to air defense elements.

e. Limitations. The AATC company cannot provide security for all its elements. When operating throughout the field army area, the FOC's and FCC's must collocate with another unit or establish their positions within the perimeter of friendly units. The company commander is unable to make frequent checks on the company elements because of the inherent distances among the sections. The only means of traveling would be by ground vehicle or by aircraft assigned to another unit. The AATC company is not authorized any aircraft. The subordinate elements of the company, when operating in the field army area, are dependent on the nearest units to their locations for messing facilities.

HELICOPTER AMBULANCE MEDICAL DETACHMENT

	<u>OFF</u> 4	<u>WO</u> 10	<u>EM</u> 34	<u>AGGR</u> 48
<u>DUTY POSITION</u>	<u>MOS</u>		<u>GRADE</u>	<u>FULL STR</u>
Det Comd	1983		CPT	1
Flt Op Off	1982		CPT	1
Sec Ldr	1981		LT	2
Evac Plt	062B		WO	9
Maint Sec Chief	671C0		WO	1
Det Sgt	91B40		E-7	1
Maint Supv	67R40		E-6	1
Tech Insp	67W2F		E-6	1
Sup Sgt	76K40		E-5	1
Air Amb Aidman	91B2F		E-5	6
Hel Crew Chief	67N2F		E-5	6
Sr Hel Mech	67N20		E-5	3
Acft Fuel SP	56C20		E-4	1
Avionics Mech	35K20		E-4	1
Det Clerk	71H20		E-4	1
Flt Op SP	71P210		E-4	1
Hel Mech	67N20		E-4	4
Equip Rec Clerk	71T20		E-4	1
RATELO	05C20		E-4	2
Rep Parts Clerk	76H20		E-4	1
Wheel Veh Mech	63B20		E-4	1
Afld Svc Crmn	67A10		E-4	1
Hel Mech Helper	67A10		E-3	1

Figure 78. Helicopter ambulance medical detachment (FASCOM)
(TOE 8-500G (RA)).

EQUIPMENT DATA FOR FIGURE 78

TEAM RA, HELICOPTER AMBULANCE MEDICAL DETACHMENT

Forced entry and rsq equip set acft crash.....	1
Light set 1/2-kw heliport.....	1
Light set rnwy ptbl btry op.....	1
Toolkit org maint no. 1 common.....	1
Tlr amph cgo 1/4-ton 2 wheel.....	2
Tlr cgo 1 1/2-ton 2 wheel.....	3
Trk cgo 3/4-ton 4x4.....	2
Trk cgo 2 1/2-ton 6x6.....	3
Trk util 1/4-ton 4x4.....	2
Toolkit armorers 42 compl.....	1
Toolkit rdo rep 32 compl.....	2
Rdo set AN/URC-10.....	6
Rdo set AN/GRR-5.....	1
Rdo set AN/VRC-24.....	1
Rdo set AN/VRC-46 mtd in trk 1/4-ton.....	1
Rdo set AN/VRC-47 mtd in trk 3/4-ton.....	1
Toolkit acft mech gen.....	10
Toolkit org maint acft set B.....	1
Hel util UH-1D.....	6

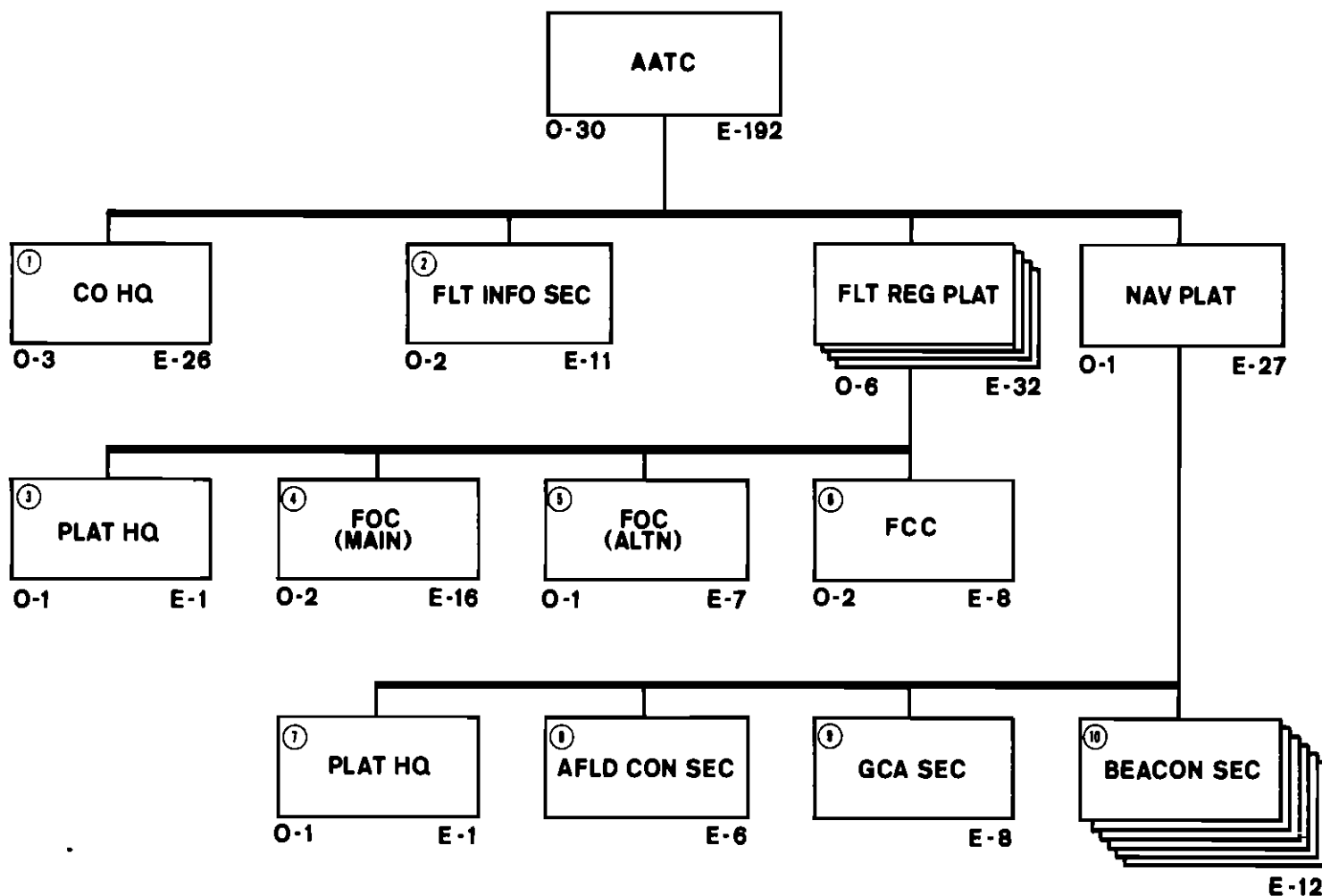


Figure 79. Aviation air traffic control company (TOE 1-207E).

DATA FOR FIGURE 79

1 COMPANY HEADQUARTERS

1 CPT	Co Comd	1983
2 LT	Comm Off	0200
1 E-8	First Sgt	71P50
1 E-6	Mess Steward	94B40
1 E-6	Mtr Sgt	63B40
1 E-6	Sup Sgt	76K40
1 E-5	Comm Chief	63B40
4 E-5	First Cook	94B20
1 E-5	Sr Wheel Veh Mech	63B20
1 E-4	Armorer	76K30
1 E-4	Co Clerk	71H20
3 E-4	Cook	94B20
1 E-4	Pers SP	71J20
1 E-4	Sr Swbd Op	63A10
4 E-4	Wheel Veh Mech	63B20
1 E-3	Cook's Helper	94A10
1 E-3	Swbd Op	63A10
3 E-3	Wheel Veh Mech Helper	63A10

Toolkit org maint no.	1
Toolkit org maint suppl	1
Tlr cgo 1/4-ton	2
Tlr cgo 3/4-ton	1
Tlr cgo 1 1/2-ton	1
Tlr tk water 1 1/2-ton	1
Trk cgo 3/4-ton	1
Trk cgo 2 1/2-ton	2
Trk util 1/4-ton	2
Toolkit autmv maint	8
Toolkit sig parts	1
Rdo set AN/GRR-5	1

2 FLIGHT INFORMATION SECTION

1 LT	Flt Op Off	1982
1 LT	Asst Flt Op Off	1982
1 E-6	Flt Op Chief	71P40
1 E-5	Tm Chief	05C40
1 E-5	Sr Flt Op SP	71P20
2 E-4	Flt Op SP	71P20
2 E-4	Gen Draftsman	81A10
2 E-4	RATT Op	05C20
1 E-3	Gen Draftsman	81A10
1 E-3	Flt Op Helper	71P20

Tlr amph cgo 1/4-ton	1
Tlr cgo 3/4-ton	1
Tlr cgo 1 1/2-ton	1
Trk cgo 3/4-ton	1
Trk cgo 2 1/2-ton	1
Trk util 1/4-ton	1
RATT set AN/GRC-46	1
Tg tml gp AN/TCC-14	1

3 FLIGHT REGULATION PLATOON HEADQUARTERS (4)

1 LT	Plat Comd	1982
1 E-7	Chief Air Tfc Con	93B40
Tlr cgo 1/4-ton	1	
Trk util 1/4-ton	1	

4 FLIGHT OPERATION CENTER (MAIN) (4)

1 LT	Flt Op Off	1982
1 LT	Asst Flt Op Off	1982
1 E-7	Chief Air Tfc Con	93B40

1 E-5	Tm Chief	06560
4 E-5	Sr Air Tfc Con	93B20
4 E-4	Air Tfc Con	93B20
1 E-4	Avn Elct Equip Mech	31Q20
2 E-4	RATT Op	05C20
3 E-3	Air Tfc Con Helper	93B20

Trk cgo 2 1/2-ton	2
Trk trac 5-ton	1
Freq meter AN/URM-32	1
Multimeter AN/URM-105	1
Toolkit rdo rep	1
Toolkit suppl rdr and rdo	1
Flt op cen AN/MSW-6	1

5 FLIGHT OPERATION CENTER (ALTERNATE) (4)

1 LT	Flt Op Off	1982
1 E-5	Sr Air Tfc Con	93B20
2 E-4	Air Tfc Con	93B20
1 E-4	Avn Elct Equip Mech	31Q20
2 E-4	RATT Op	05C20
1 E-3	Air Tfc Con Helper	93B20

Trk cgo 2 1/2-ton	2
Trk trac 5-ton	1
Freq meter AN/URM-32	1
Multimeter AN/URM-105	1
Toolkit rdo rpmn	1
Toolkit suppl rdr and rdo	1
Flt op cen AN/MSW-6	1

DATA FOR FIGURE 79 - (continued)

⑥ FLIGHT COORDINATION CENTER (4)

1 LT	Flt Op Off	1982
1 LT	Asst Flt Op Off	1982
1 E-5	Sr Air Tfc Con	93B20
1 E-5	Sr Flt Op SP	71P20
1 E-4	Air Tfc Con	93B20
1 E-4	Avn Elct Equip Mech	31Q20
1 E-4	Flt Op SP	71P20
2 E-4	RATT Op	05C20
1 E-3	Flt Op Helper	71P20

Tlr ampl cgo 1/4-ton	1
Trk cgo 3/4-ton	1
Trk 2 1/2-ton	1
Trk util 1/4-ton	1
Freq meter AN/URM-32	1
Multimeter AN/URM-105	1
Rdo set AN/ARC-44	2
Rdo set AN/ARC-73	2
Rdo set AN/GRR-5	1
Rdo set AN/PRC-68	2
RATT set AN/GRC-46	1
tt set AN/FGC-21	1
tt set AN/PGC-1	1
Tg tml gp AN/TCC-14	2

⑦ NAVIGATION PLATOON HEADQUARTERS

1 LT	Plat Comd	1982
1 E-7	Plat Sgt	93B40

Tlr cgo 1/4-ton	1
Trk util 1/4-ton	1

⑧ AIRFIELD CONTROL SECTION

2 E-5	Sr Con Tower Op	93B20
2 E-4	Con Tower Op	93B20
2 E-3	Con Tower Helper	93B20

Tlr cgo 3/4-ton	2
Trk cgo 3/4-ton	2
Rdo set AN/ARC-44	2
Rdo set AN/ARC-73	2
Rdo set AN/GRR-5	1
Rdo set AN/TRC-68	2
Wind meas set AN/GMQ-11	1

⑨ GROUND CONTROLLED APPROACH SECTION

1 E-5	GCA Equip Rpmn	26G20
2 E-5	Sr Ldg Con Op	93B30
1 E-4	Avn Elct Equip Mech	31Q20
3 E-4	Ldg Con Op	93B30
1 E-4	Prec Power Genr SP	52B30

Tlr cgo 3/4-ton	2
Tlr cgo 1 1/2-ton	1
Trk cgo 3/4-ton	2
Trk cgo 2 1/2-ton	1
Freq meter AN/URM-32	1
Rdr set AN/TPN-8	1
Multimeter AN/URM-105	1
Rdo set AN/ARC-44	2
Rdo set AN/ARC-73	2
Rdo set AN/TRC-68	2
Toolkit rdo rpmn	1
Toolkit suppl rdr and rdo	1

⑩ BEACON SECTION (6)

1 E-4	Avn Elct Equip Mech	31Q20
1 E-4	Powerman	52B20

Trk cgo 3/4-ton 4x4	1
Beacon set AN/GRN-6	1
Freq meter AN/URN-32	1
Multimeter AN/URM-105	1
Rdo set AN/PRC-25	1
Toolkit rdo rpmn	1
Toolkit suppl rdr and rdo	1

84. ORGANIZATION

a. Company Headquarters. The company headquarters contains a company commander, communications officer, and an assistant communications officer who is also supply and motor officer. The company commander is charged with overall responsibility for security. Enlisted personnel include the first sergeant, mess steward, motor sergeant, supply sergeant, and communications chief. In addition, sufficient personnel are assigned to perform administration and vehicular maintenance, to install and operate the company switchboard and internal communications, and to meet company supply and mess requirements. The company headquarters may be located near the tactical operations center (TOC), the Army main flight operations center, Army air defense command post, and the control and reporting center (FOC-AADCP-CRC) complex, or elsewhere in the service area of the field army as the situation dictates. The company headquarters normally operates in close proximity to, and is protected by, the perimeter defense of the headquarters to which it is attached.

b. Flight Information Section. This section contains a flight operations officer, assistant flight operations officer, flight operations chief, team chief, senior flight operations specialist, and sufficient enlisted personnel to operate the section. The section assists the AATC company commander in planning, collecting, evaluating, and editing all flight information to include all instrument approach procedures required by aviators and operations personnel in the field army. The section's equipment is housed in an S-141/G shelter mounted on a 2 1/2-ton truck. Information is disseminated to flight operations centers (FOC's), flight coordination centers (FCC's), and airfields by the area communications system, with the AN/GRC-46 radio teletypewriter set and courier as backup. The section is normally located in the company headquarters area and is included in the company security plan.

c. Flight Regulation Platoon (4). The AATC company has organic four flight regulation platoons. Each platoon consists of a platoon headquarters, flight operations center (FOC) (main), flight operations center (alternate), and a flight coordination center (FCC). Within their capabilities, the platoons provide air traffic regulation, identification, warning, and in-flight assistance for all aircraft operating in the field army.

- (1) Platoon headquarters (4). Each platoon headquarters contains a platoon commander who is also the chief flight operations officer for the main FOC, and a chief air traffic controller who is also the chief controller for the main FOC. The platoon headquarters is located at the main FOC's.
- (2) Flight operations center (main) (4). Each FOC (main) contains a flight operations officer, an assistant flight operations officer, one chief air traffic controller, a team chief, four senior air traffic controllers, four air traffic controllers, three air traffic controller helpers, two radio-teletype operators, and one aviation electronic equipment mechanic. The main FOC's are established in field army service areas and corps rear areas. The FOC located at field army is the heart of the AATC system and assists the army aviation staff officer in AATC system planning. It coordinates all elements in the system to provide aircraft flight-following, adequate separation of aircraft under instrument conditions, and identification of friendly aircraft to friendly air defense agencies. FOC's are located adjacent to Army air defense command posts, and their sectors of responsibility coincide. Normally, the field army FOC

regulates air routes in the field army service area and those entering the corps area, to the first navigational fix within the corps sector. Corps FOC's normally regulate traffic in the corps sector and forward to a designated navigational fix in the division sector. FOC's must be included in the overall security plan of the headquarters to which attached. Because of operational requirements and limited personnel, security support will be required.

- (3) Flight operations center (alternate) (4). Each FOC (alternate) contains a flight operations officer, a senior air traffic controller, two air traffic controllers, one air traffic controller helper, two radioteletype operators, and an aviation electronic equipment mechanic. The alternate FOC's provide a regulating capability during displacement of the main FOC's or when the main FOC's are inoperative. These FOC's include only enough personnel for single-shift operation. To establish this regulating capability, they must monitor all air traffic continuously. The alternate FOC's are located with the alternate Army air defense command posts (AADCP's) or adjacent to air defense battalion fire distribution systems. Whenever possible, alternate FOC's must be located where security support can be provided by a larger unit.
- (4) Flight coordination center (FCC) (4). Each flight coordination center contains a flight operations officer, an assistant flight operations officer, a senior air traffic controller, a senior flight operations specialist, one air traffic controller, one flight operations specialist, and the personnel to assist in the daily operations of the FCC. The FCC is a forward extension of the main FOC. The FCC serves as a communication relay center between forward area airfields, FOC's, other FCC's, and aircraft; accepts flight plans from forward area airfields and aircraft; issues clearances for aircraft in forward areas to enter the en route system; keeps track of aircraft under control of AATC which are operating within its area of responsibility; passes regulation of aircraft operating in the en route system to terminal (destination) airfields; passes available friendly aircraft information to forward area air defense units; and provides FOC's with identification and position information as required. The FCC is normally located in the forward area of the corps or a division rear area, and is sited to provide the optimum communication capability. An FCC may sometimes be situated to provide service to two forward divisions.

d. Navigational Platoon. This platoon consists of a platoon headquarters, airfield control section, ground controlled approach (GCA) section, and six beacon sections. The platoon is capable of providing navigational facilities for the establishment of one alternate major airfield (beacon, airfield control, and ground controlled approach (GCA) radar). Alternate airfields can be used before and during displacement of elements. The platoon's navigation equipment can also be used to expand the capabilities of other airfields, and to assist in establishing navigational fixes (radio beacons) to augment or supplement established flight routes.

- (1) Platoon headquarters. The platoon headquarters contains a platoon commander and a platoon sergeant who supervise the installation and operation of all platoon facilities.

- (2) Airfield control section. This control section contains six enlisted control tower operators and equipment required to provide terminal control of an airfield during displacement. Direct communication is required at all times between the tower section and FOC or FCC.
- (3) Ground controlled approach (GCA) section. This section contains five landing control operators, one GCA equipment repairman, one radio mechanic, and a precision power generator specialist to operate and maintain a radar set which provides radar controlled approaches or other assistance to aircraft in flight. The GCA section will be used to maintain the GCA capability of an aviation unit when its organic radar set is inoperative, or for displacement of an airfield when a GCA instrument approach capability is required. This section includes the required radios to communicate with aircraft desiring a ground controlled approach.
- (4) Beacon sections (6). Each of the six beacon sections contains an aviation electronic equipment mechanic and a powerman, and is equipped with a nondirectional radio beacon with the necessary vehicle and trailer to provide transportation. These sections provide the primary navigational aid for establishment and operation of Army air routes. A beacon section may be used as a terminal beacon during displacement of an airfield.

85. CONCEPT OF EMPLOYMENT

The aviation air traffic control company will be employed as directed by the Army commander, and is normally under the staff supervision of the field army aviation officer. The company headquarters and the flight information section will normally be located at the army aviation company airfield in the vicinity of the army tactical operations center (TOC), where they can keep abreast of the tactical situation and air traffic regulation and identification measures. The platoon headquarters of the flight regulation platoons supervise and participate in the operation of main FOC's. They also supervise the operation of alternate FOC's and the flight coordination center (FCC's) of each platoon. When the company is supporting a field army, one flight regulation platoon normally serves the field army service area and one serves each corps. The main and alternate FOC's of each platoon operate in the corps service area and the FCC operates in the corps forward area or in a division support area as a forward extension of the corps FOC. The navigational platoon headquarters is normally located in the vicinity of the main airfield of the command it is supporting in order for the platoon commander to use general support aircraft for navigational system checks. The company commander communicates with elements of his company by using the area communications system, or by radio relay when proximity of elements eliminates the requirement to use the area communications system. In addition, FOC's, FCC's, airfields, and the flight information section are interconnected by the area communications system with high frequency radio (voice and RATT) used as a backup.

a. Basic considerations in the assignment of areas of responsibility to FOC's and FCC's are - boundaries of supported ground forces, sectors of air defense counter-parts, range of air-ground radio sets, and location of navigational checkpoints (air routes).

b. The field army FOC normally will regulate air traffic in the field army service area forward to the first navigational checkpoint along air routes in the corps service area.

c. The corps FOC normally will regulate air traffic in that area forward of the field army FOC area to the first navigational checkpoint within the division area.

d. One or more FCC's extend the corps FOC capability forward into division areas to assist the division commanders in coordinating and identifying their in-flight aircraft, keeping track of drone activity, and to provide for aircraft entry into, and departure from, the en route system.

86. COMMUNICATIONS

Communications in the AATC system must be fast, direct, and uninterrupted. AATC communications include air and ground radio between aircraft and FOC's, FCC's, or airfields; and ground-to-ground communications between FOC's and FCC's, airfields, the flight information section, sources of weather information, air defense command posts, forward air defense firing units, and tactical operations centers. The area communications system is the primary means of communicating on the ground, but radio (RATT and voice) is provided as backup.

a. Area Communications System. AATC elements may enter the area communications system by wire or by radio (through radio-wire integration). Sole user (allocated) circuits are provided by the area communications system to insure uninterrupted service between all AATC elements.

- (1) Wire communications. Wire link between AATC elements and the nearest switching central (Signal Center) in the area communications system is provided by the signal unit which supports the command to which the AATC elements are attached or assigned, or by the signal unit which operates the area center.
- (2) Radio communications. The FOC (shelters) used in main and alternate FOC's include UHF-AF, VHF-AM, and VHF-FM radio transceivers to communicate with aircraft in flight. Single sideband radios will be employed when available. These same radios are used in the S-141/G shelter in the FCC, and in the 3/4-ton trucks of the airfield control and GCA sections. These sets are used to communicate position reports, flight clearances, and instructions and warnings to aviators. High frequency (HF) radios are provided as backup for the area system. Voice and radio teletype circuits are established between FOC's, FCC's, the flight information section, and airfields for filing flight plans, issuing clearances, transmitting position and identification information, coordinating flights, and exchanging information with the flight information section. High frequency receivers are employed in the FOC's, FCC's, and at airfields to receive Army air defense information service warnings of enemy air activity and nuclear weapons employment. Warnings are retransmitted over air-ground radios to aircraft in flight.

b. Communication Between Company Elements. To stay abreast of the tactical situation and monitor air traffic regulation and identification problems, company headquarters and the flight information section will normally be located in the vicinity of the tactical operations center (TOC). The platoon headquarters of the flight regulation platoons supervise and participate in the operation of the main FOC's. From the main FOC's, they also supervise the operation of alternate FOC's and the FCC's of each platoon. When the company is employed by a field army, one platoon normally serves the

field army service area and one serves each corps. In the platoons serving each corps, the main and alternate FOC's operate in the corps rear area and the FCC operates in a division area as a forward extension of the corps FOC. The navigational platoon headquarters normally is located in the vicinity of the main airfield of the command, to enable the platoon commander to use general support aircraft for system checks. The company commander communicates with elements of his company by using the area communications system or direct radio circuits when proximity of elements precludes the use of the area system. In addition, FOC's, FCC's, airfields, and the flight information section are interconnected by the area system with high frequency voice radio and RATT backup.

Section IX. TRANSPORTATION AIRCRAFT MAINTENANCE AND SUPPLY ACTIVITIES

87. GENERAL

Aircraft maintenance is a complex and demanding support requirement mainly because of the complexity of aircraft and supporting equipment, and the wide distribution of the aircraft throughout the field army. Maintenance requirements generated by type aircraft flying the combat programmed flying hours (table IV, SB 1-1) are shown in table 1. The organization of the aircraft maintenance and supply activities is as follows:

a. Divisional aircraft receive direct support maintenance from their organic transportation aircraft maintenance company, which is located within the maintenance battalion of the support command (fig. 52).

b. Nondivisional aircraft in the corps areas receive direct support maintenance from the transportation aircraft direct support company, TOE 55-457G, located in the corps support brigade. General support maintenance is provided by the transportation aircraft maintenance general support company, TOE 55-458G, also located in the corps support brigade (fig. 80).

c. Aviation units in the army rear area receive direct support maintenance from the transportation aircraft direct support companies, TOE 55-457G, located within the army rear support brigade. General support aircraft maintenance for the aviation units located within the army rear area is provided by the transportation aircraft maintenance general support companies, TOE 55-458G, located within the army rear support brigade (fig. 81).

d. In addition to the support listed in c above, the transportation aircraft maintenance general support companies, TOE 55-458G, located in the army rear support brigade, provide all the general support aircraft maintenance support to the divisional units of the field army and backup general support aircraft maintenance to units in the corps area.

e. The channels of aircraft maintenance support within the field army are shown in figure 82.

Table 1. Maintenance to Flying Hour Ratio.

Flying hours in active combat areas and the organizational and field aircraft maintenance man-hours required to support 1 flying hour, by aircraft, as computed by CDC, Fort Eustis, Virginia, and confirmed by USCONARC are as follows:

<u>Type Aircraft</u>	<u>Flying Hours*</u>	<u>Organizational**</u>	<u>Field Maintenance**</u>	<u>Total Field Maintenance***</u>	<u>General Support***</u>	<u>Direct Support***</u>
Airplane, light obsn	80	3	2	160	58	102
Airplane, utility	80	4	3	240	87	153
Airplane, command	80	6	4	320	115	205
Airplane, light cargo	80	6	4	320	115	205
Airplane, mdm cargo	80	7.5	5.5	440	158	282
Airplane, mdm obsn	80	7	4	320	115	205
Helicopter, obsn	40	4	5	200	72	128
Helicopter, utility	56	6	9	504	181	323
Helicopter, mdm cargo	48	15.6	20	960	346	614

*Programed combat flying hours per aircraft, per SB 1-1.

**Maintenance by type required per flying hour.

***Total maintenance per aircraft required to support one aircraft programed flying time, mobilization SB 1-1 (general support and direct support) is shown with a 36 percent General Support, 64 percent Direct Support responsibility indicated.

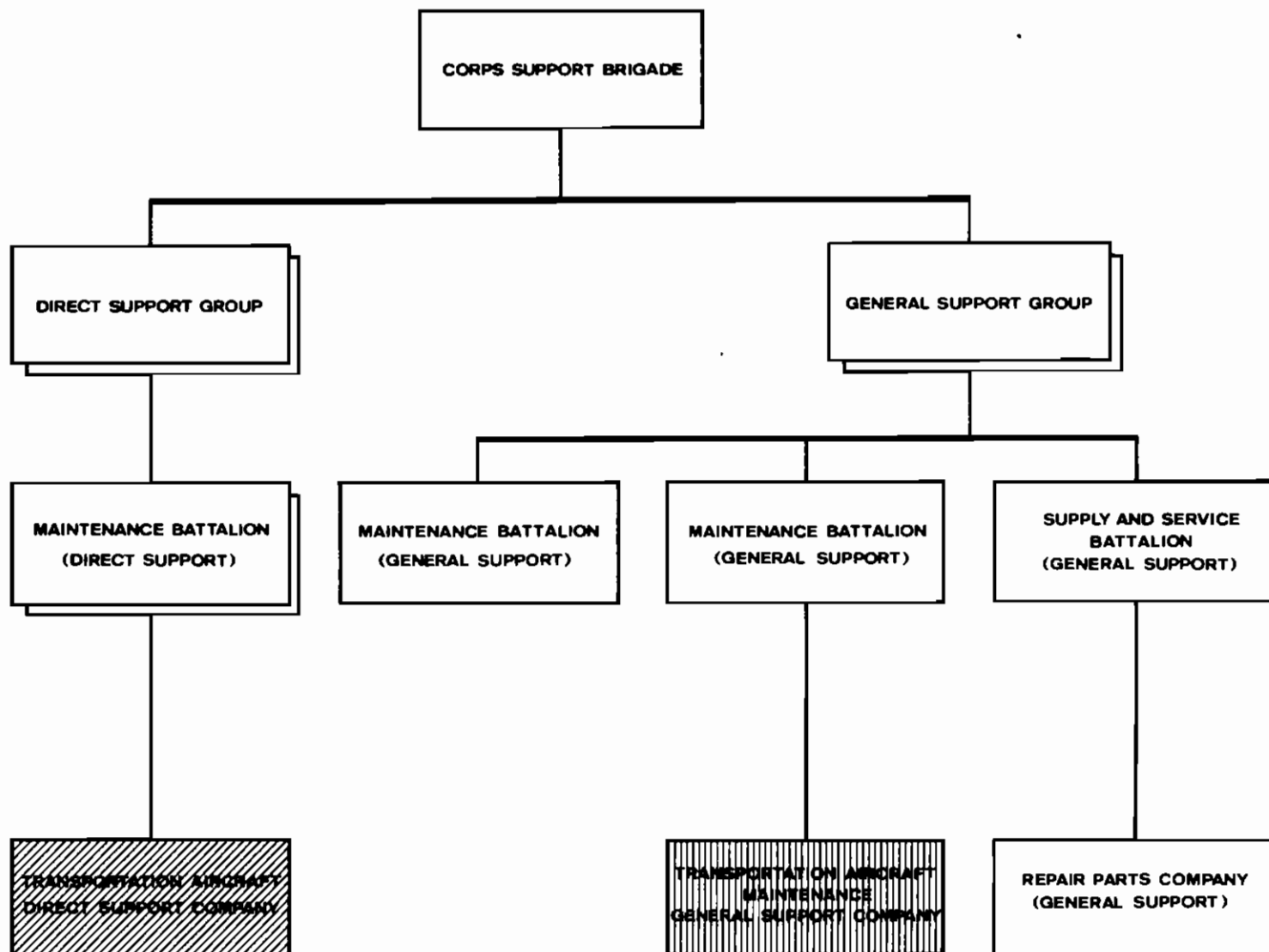


Figure 80. Corps support brigade.

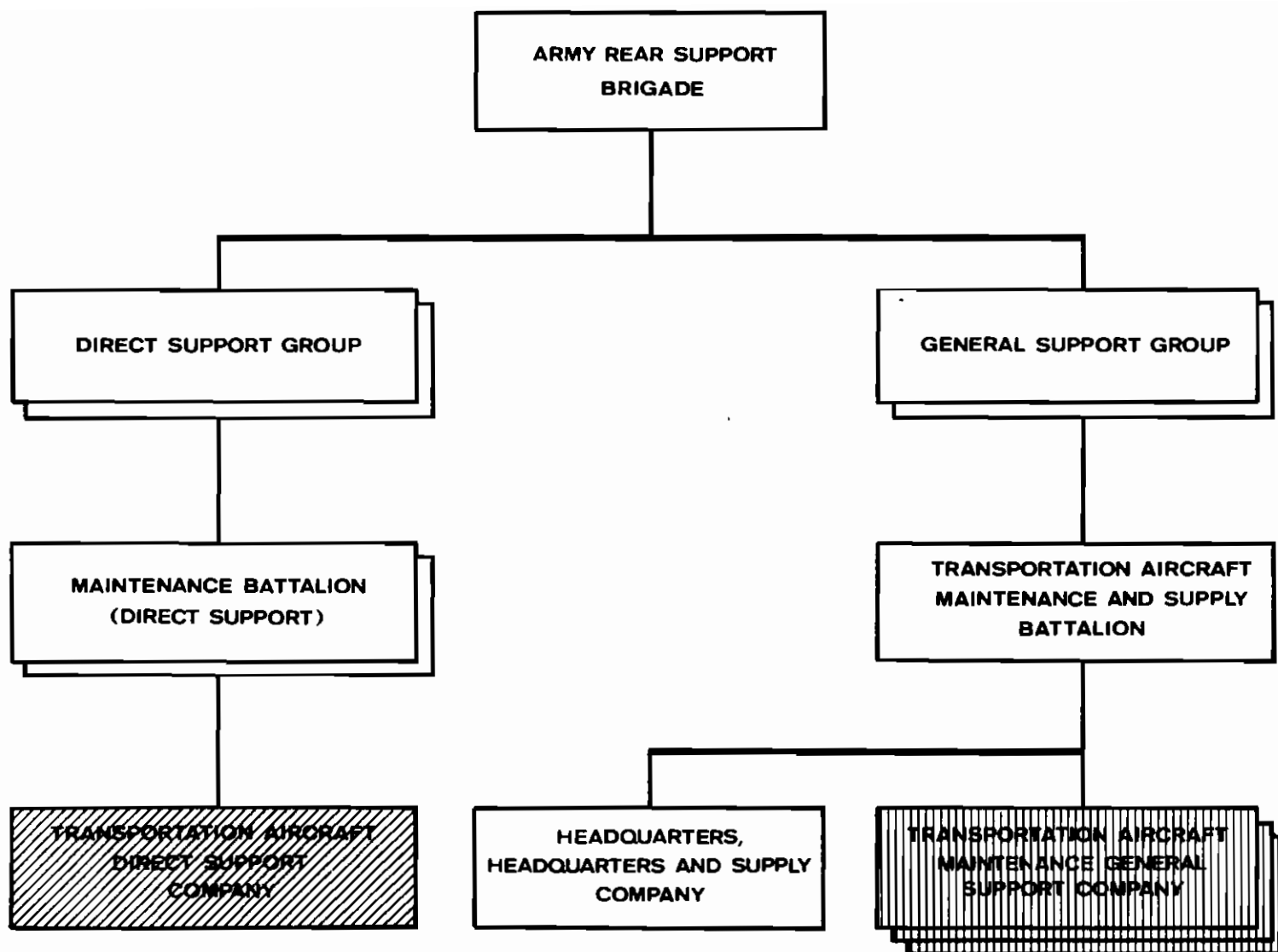


Figure 81. Army rear support brigade.

88. AIRCRAFT MAINTENANCE UNITS

a. Transportation Aircraft Maintenance and Supply Battalion.

- (1) Mission. The mission of the transportation aircraft maintenance and supply battalion is to provide general support maintenance, and supply and backup direct support maintenance for Army aircraft and aerial armament.
- (2) Organization. The transportation aircraft maintenance and supply battalion consists of a headquarters, headquarters and supply company, and a variable number of transportation aircraft maintenance general support companies. The type organization includes three aircraft general support companies (fig. 83).
- (3) Assignment. The transportation aircraft maintenance and supply battalion is assigned to the field army support command and attached to a general support group of the army rear support brigade for command, control, and supervision.
- (4) Employment. The transportation aircraft maintenance and supply battalion is employed in the army service area as a major subordinate element of the general support group. The battalion manages and controls general support maintenance and supply for Army aircraft and aerial armament.

b. Headquarters, Headquarters and Supply Company, Transportation Aircraft Maintenance and Supply Battalion.

- (1) Composition. For composition of the headquarters, headquarters and supply company, see figure 84.
- (2) Mission. The mission of the headquarters, headquarters and supply company of the transportation aircraft maintenance and supply battalion is to provide -
 - (a) Command, control, staff planning, and administrative and technical supervision of attached transportation aircraft maintenance general support companies.
 - (b) Repair parts general support for aircraft and aerial armament in the field army.
- (3) Organization. The headquarters, headquarters and supply company, consists of a battalion headquarters and a headquarters and supply company (fig. 84). The headquarters and supply company includes a company headquarters, an administration section, an operations section, a communications section, a battalion maintenance and supply section, a stock control section, and an aircraft supply platoon. The aircraft supply platoon contains a platoon headquarters, a requisition and stock records section, and a storage and issue section.

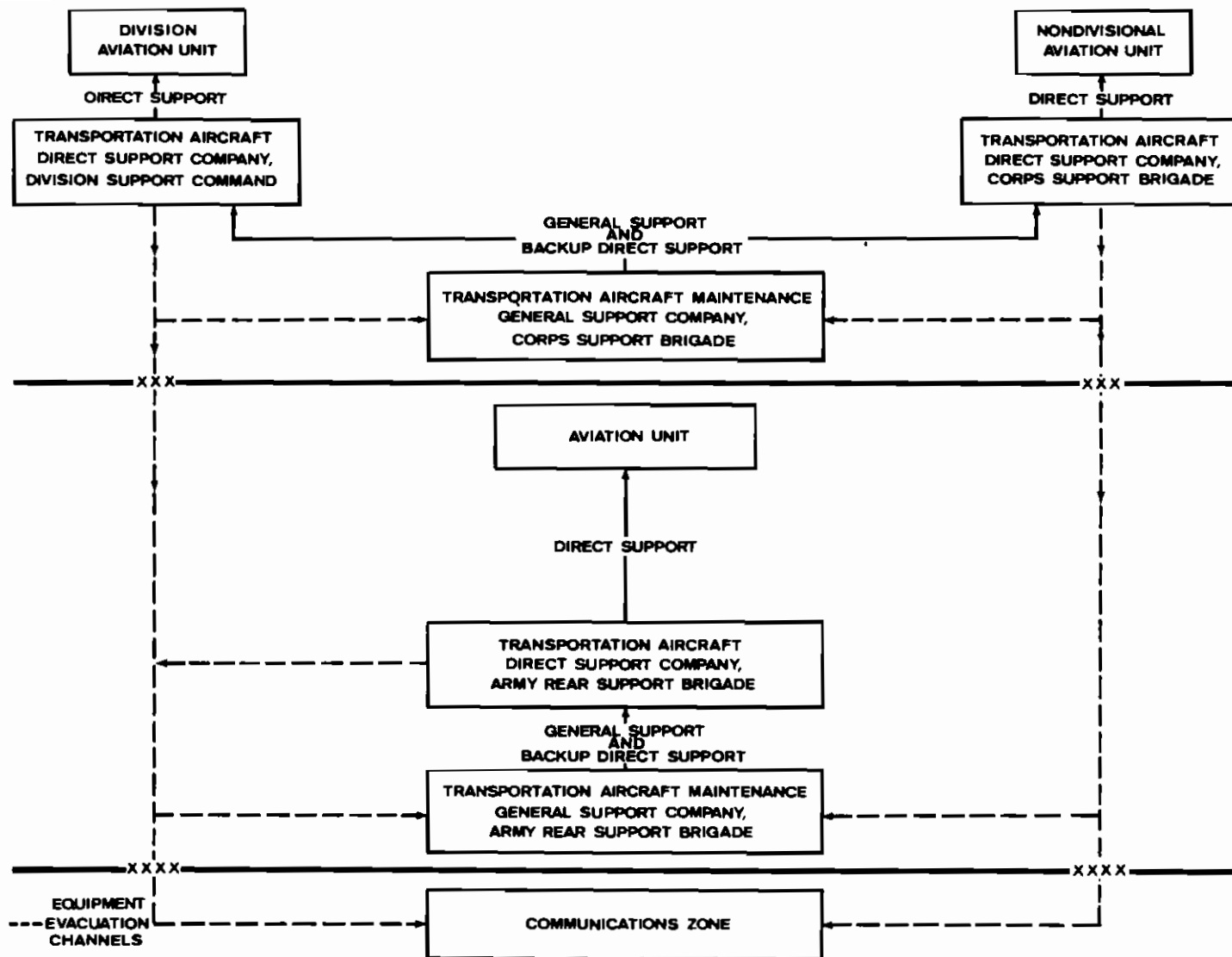


Figure 82. Channels of aircraft maintenance support within the field army.

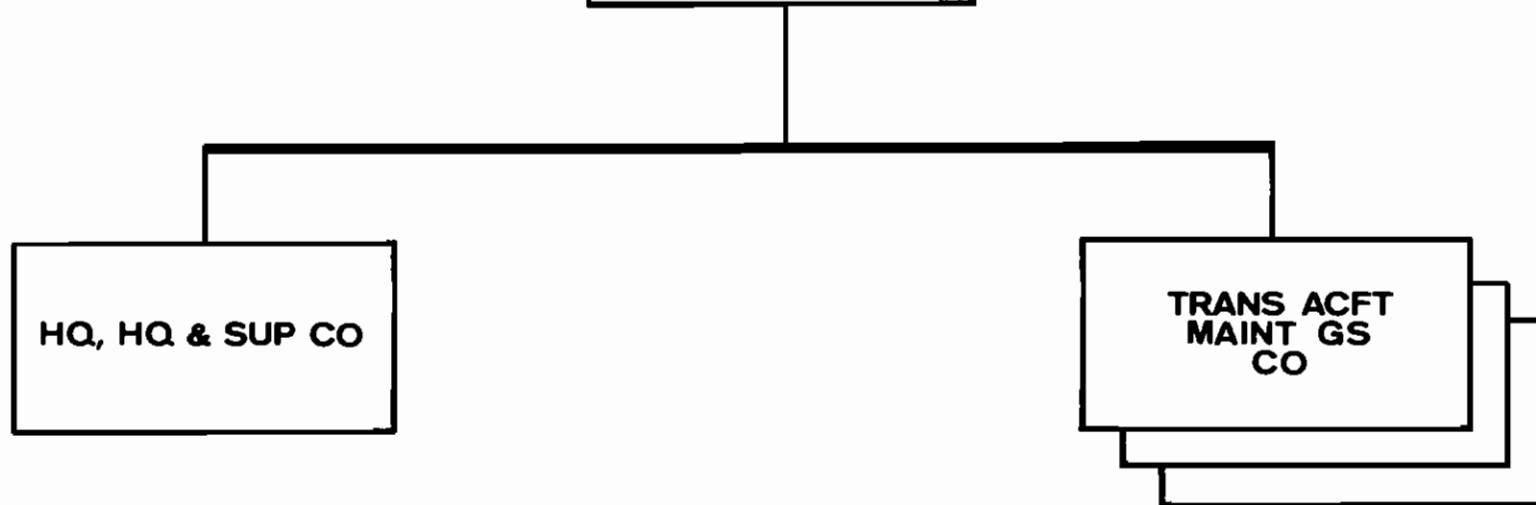


Figure 83. Transportation aircraft maintenance and supply battalion.

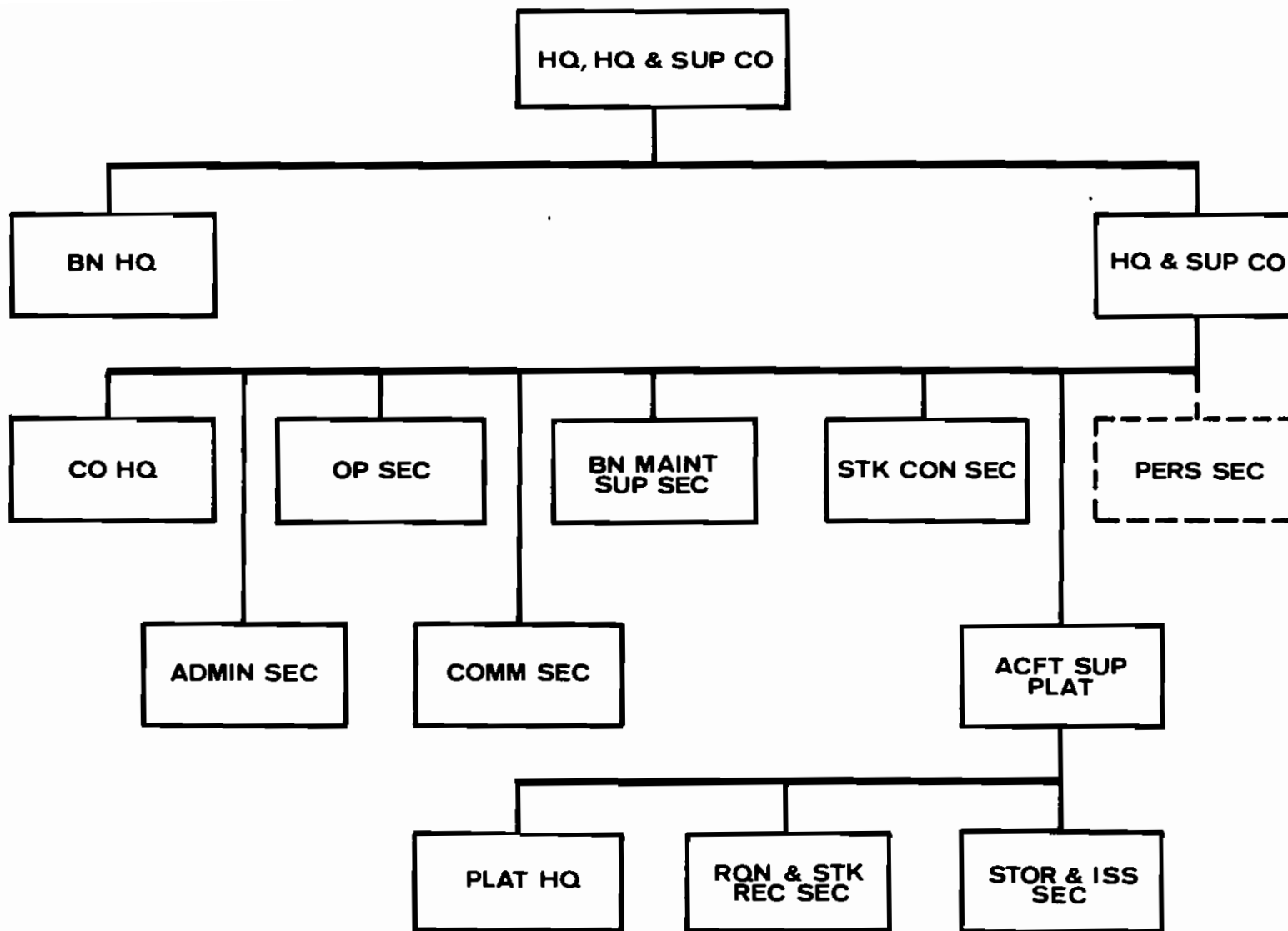


Figure 84. Headquarters, headquarters and supply company, transportation aircraft maintenance and supply battalion.

- (4) Assignment. The headquarters, headquarters and supply company is organic to the general support aircraft maintenance and supply battalion.
- (5) Capabilities. At full strength, the headquarters, headquarters and supply company is capable of -
- (a) Providing command, control, staff planning, and technical and administrative supervision for two to six aircraft general support companies.
 - (b) Providing wholesale repair parts support for aircraft and aerial armament systems.
 - (c) Receiving, storing, and issuing repair parts in support of an authorized stockage list of approximately 8,000 aircraft line items and 2,000 aerial armament line items.
 - (d) Providing stock control over repair parts for subordinate and supported units.
 - (e) Maintaining a portion of the field army reserve stocks of aerial armament repair parts.
 - (f) Establishing operating procedures for and supervising and assisting subordinate units in administration, supply, maintenance, communications, and training.
 - (g) Assigning and controlling the maintenance workloads of battalion operating elements.
 - (h) Engaging in effective, coordinated defense of the unit's area or installation.
- (6) Functions.
- (a) Battalion headquarters. Battalion headquarters provides command and staff supervision to insure timely and effective accomplishment of the technical mission of the battalion. It furnishes the structure and capacity to advise and assist the commander in all phases of command of the battalion. Staff members assist in administration, control, and direction of the technical effort. The battalion staff includes an executive officer (who also serves as the information officer), a battalion supply officer (S4), an adjutant (S1), and an operations officer (S3). The battalion commander, executive officer, and operations officer are qualified aircraft maintenance officers.
 - (b) Headquarters, headquarters and supply company.
 - 1. Company headquarters. The company headquarters provides the command and headquarters support for the headquarters, headquarters and supply company. This includes unit administration, mess, security, training, and discipline.

2. Administration section. The administration section performs normal administrative functions for the battalion, other than personnel records keeping. It initiates personnel actions, orders, morning reports, and other correspondence as required. The personnel staff noncommissioned officer serves as the essential liaison link between unit clerks of attached companies and the personnel services company of the support brigade. (The personnel services company processes personnel administrative actions, including classification, personal affairs, maintenance of personnel records, pay actions, and personnel accounting.)
3. Operations section. The operations section plans for and provides overall guidance, supervision, and control of battalion tactical and technical operations. This section also plans, directs, and supervises intelligence, training, and inspection activities within the battalion.
4. Communications section. The communications section provides the communications center for the battalion and establishes, maintains, operates, and controls the battalion radio net and switchboard. Sufficient personnel are authorized within the section to operate the communications system around the clock.
5. Battalion maintenance and supply section. The battalion maintenance and supply section serves as a coordinating agency between battalion units and provides staff planning and guidance for battalion organizational maintenance and supply activities.
6. Stock control section. The stock control section provides a centralized facility for controlling repair parts stockage of subordinate and supported units. In addition to maintaining normal stock records, the section maintains a record of unserviceable repairable items undergoing maintenance by attached aircraft maintenance companies and advises the materiel management section of the general support group concerning the status of these repairables. Disposition of repaired items is in accordance with policies and procedures established by higher headquarters. The stock control section also conducts lateral search for repair parts and directs lateral shipment of parts between subordinate units as required to accomplish the maintenance mission. In addition, the stock control section receives and processes requests from the aircraft supply platoon for parts not in stock. These requests are forwarded to the field army support command inventory control center, where a record is maintained of all supply assets and their locations within the field army. The inventory control center then directs shipment from available resources or places a request upon the theater army logistical command as appropriate.

7. Aircraft supply platoon. The aircraft supply platoon consists of a platoon headquarters, a requisition and stock records section, and a storage and issue section. The platoon headquarters provides command, control, and supervision of platoon activities. The requisition and stock records section processes requests from supported direct support aircraft maintenance units from general support repair parts companies (when backup wholesale repair parts support is required), and from the operating elements of the aircraft maintenance and supply battalion. The section issues shipping instructions and prepares documentation for items to be shipped. When an item is not in stock, the section places a request upon the stock control section. The storage and issue section receives, inspects, stores, maintains in storage, and issues all repair parts handled by the platoon.
- (7) Limitations. The headquarters, headquarters and supply company is dependent upon one of the attached aircraft maintenance companies for vehicle and aircraft organizational maintenance, and upon the personnel services company (support brigade) for processing personnel administrative actions.
- (8) Command and staff responsibilities.
- (a) Battalion commander. In addition to responsibilities normal to unit command and administration, the battalion commander is responsible for technical supervision and direction of battalion operating elements. Specific responsibilities of the battalion commander in this respect include -
1. Informing and advising the general support group commander and staff concerning all significant aspects of the battalion maintenance and supply support mission.
 2. Within established group policies of -
 - (a) Preparing necessary plans and directives to assure accomplishment of the battalion tactical and technical mission.
 - (b) Assigning support missions to and transferring workloads between battalion operating elements and recommending to the group commander the transfer, realignment, and reinforcement of aircraft support units.
 - (c) Assuring that subordinate units are kept informed of all elements of the situation that affect their operations.
 - (d) Assuring adequate liaison and coordination between the maintenance and supply battalion headquarters, subordinate units, and higher headquarters.

- (e) Reviewing and forwarding maintenance data generated from reporting and management procedures prescribed in TM 38-750.
- (b) Battalion operations officer. The battalion operations officer exercises staff supervision over planning and directs and controls battalion training and operations. His primary staff responsibilities include -
1. Keeping the battalion commander informed concerning all aspects of the battalion maintenance and supply support mission.
 2. Recommending plans and policies for accomplishment of the maintenance mission.
 3. Recommending the assignment of support missions and workloads within the battalion.
 4. Scheduling and conducting battalion level aircraft maintenance planning conferences.
 5. Assuring submission by operating units of data and reports as prescribed in TM 38-750.
 6. Coordinating with the battalion supply officer in determining disposition of repaired items.
- (c) Battalion supply officer. In addition to general supply responsibilities, the battalion supply officer provides staff planning, supervision, and control of supply support activities of the battalion. Because of the close interrelationship between repair parts support and maintenance, he occupies a key position within the aircraft support system and must maintain continuing liaison with the battalion operations officer and the battalion maintenance officer in order to assure adequate and timely repair parts support of the battalion maintenance mission. In addition, the supply officer represents the maintenance battalion commander in coordinating with higher headquarters to assure rapid and effective disposition of repaired items and in maintaining liaison with supported direct support units to assure that they receive adequate wholesale repair parts support.
- (d) Battalion aircraft maintenance officer. The battalion aircraft maintenance officer assists the operations officer by supervising, monitoring, and coordinating the repair activities of attached aircraft maintenance companies. Primary supervisory responsibilities of the maintenance officer include -
1. Making recommendations concerning and planning for the scheduling of maintenance into the operating units and for meeting established maintenance priorities.

2. Advising the battalion commander concerning the status of maintenance and its predicted impact upon the assignment of support missions, realignment of units, and transfer of workloads.
3. Informing the operations officer concerning anticipated work stoppages due to parts shortages.
4. Maintaining a consolidated record of the status of components and assemblies in maintenance shops for repair, and promptly reporting repaired items to the operations officer for disposition instructions.
5. Compiling maintenance data and maintaining records and charts as required for maintenance planning and control.
6. Supervising the preparation and submission of reports required by TM 38-750 and other applicable publications or directives.

c. Transportation Aircraft Maintenance General Support Company.

- (1) Composition. The composition of the transportation aircraft maintenance general support company is shown in figure 85.
- (2) Mission. The mission of the transportation aircraft maintenance general support company is to perform general support and backup direct support maintenance on Army aircraft and aircraft armament and backup direct support maintenance on avionics equipment.
- (3) Assignment. The company is assigned to the field army support command, in both the army rear support brigade and the corps support brigade.
- (4) Capabilities. The company is capable of -
 - (a) Providing 29,800 man-hours per month for general support (and backup direct support) aircraft maintenance, 4,800 man-hours per month for backup direct support repair of avionics equipment, and 2,400 man-hours per month for general support and backup direct support aircraft armament maintenance.
 - (b) Providing shop stocks of repair parts and related supply items for equipment repaired by the unit.
 - (c) Both DS and GS maintenance on SLAR equipment for OV-1 airplanes.

Note. This unit is dependent upon the servicing personnel activity for personnel administration and upon teams from TOE 29-500 for operation of a unit airfield.

(5) Functions.

- (a) Company headquarters. Company headquarters provides normal command and technical control and supervision for the company. The company headquarters also provides unit overhead personnel for administration, food service, and unit supply. The company is dependent upon the personnel services company for administration of personnel records.
- (b) Shop supply section. The shop supply section requests, receives, stores, and controls repair parts for support of the company maintenance mission and issues the parts to the operating sections of the company.
 - 1. The section is capable of supporting an authorized stockage list of approximately 4,000 aircraft line items and 1,000 aerial armament and avionics line items.
 - 2. When the transportation aircraft maintenance general support company is employed in the corps area, repair parts resupply is requested from the general support supply and service battalion and issue is made by the repair parts company. When the transportation aircraft maintenance general support company is employed in the army service area, repair parts resupply is requested from the headquarters and supply company of the aircraft maintenance and supply battalion. Issue of parts to the maintenance company is then made by the aircraft supply platoon of the headquarters and supply company.
- (c) Shop platoon. The shop platoon contains the allied shops, which repair airframes, engines, components, and systems. In addition, the platoon provides repairmen to make up teams to provide on-site technical assistance to supported aircraft maintenance units.
 - 1. Platoon headquarters. The shop platoon headquarters provides direct technical supervision of the repair activities of its subordinate sections. Responsibilities include maintenance of records and reports, coordination of repair parts support, and production control for subordinate sections.
 - 2. Airframe and engine section. The airframe and engine section repairs airframes, engines, and engine components of Army aircraft.
 - 3. Aircraft component section. The aircraft component section repairs rotors, propellers, power trains, electrical systems, instruments, and hydraulic systems. This section also has a limited capability for fabrication of repair parts and certain special tools.

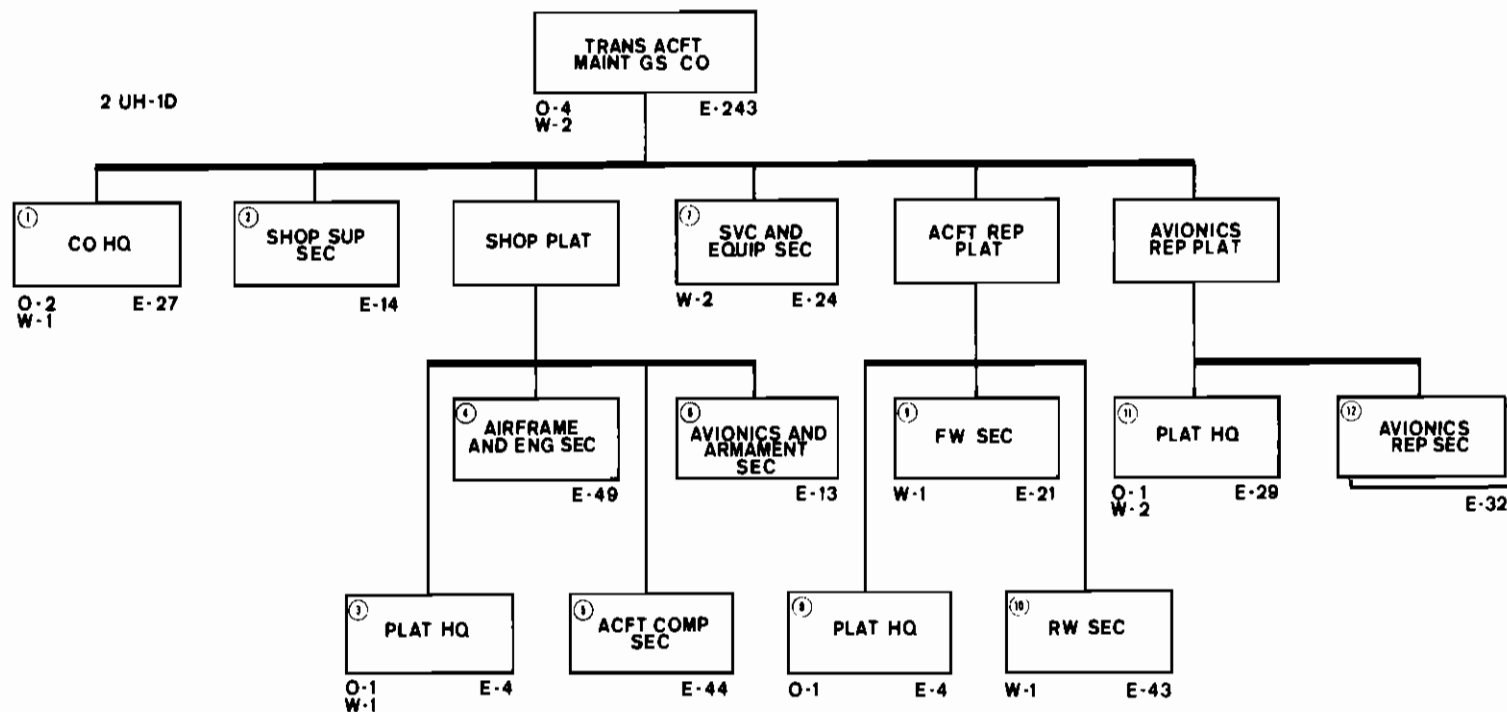


Figure 85. Transportation aircraft maintenance general support company (TOE 55-458G).

1 COMPANY HEADQUARTERS

1 MAJ Co Comd 64823 13
 1 CPT XO 4823 49
 1 WO QC Tech 671C0 13, 51
 1 E-8 First Sgt 67Z50
 1 E-7 Prod-QC Fman 67Z40
 1 E-6 Mess Steward 94B40
 1 E-6 Sup Sgt 76K40
 1 E-6 Airframe Insp 68G40
 1 E-6 Acft Eng Insp 68B40
 2 E-6 Airplane Tech Insp 67F2F 46
 2 E-6 Hel Tech Insp 67W2F 40, 46
 4 E-5 First Cook 94B20
 1 E-4 Armorer 76K30 12
 1 E-4 Co Clerk 71H20 12
 4 E-4 Cook 94B20
 2 E-4 Equip Rept Clerk 71T20
 1 E-4 Swbd Op 36K20 48
 1 E-4 Unit Sup SP 76K20 04
 1 E-3 Cook's Helper 94A10 01
 1 E-3 Lt Veh Dvr 70A10
 1 E-3 Sup Clerk 76A10 01

Mg 7.62mm..... 4
 Radiacmeter IM-93/UD..... 2
 Radiacmeter IM-174/PD..... 1
 Rdo set AN/GRR-5 mtd in
 trk 1/4-ton..... 1
 Rdo set AN/GRC-47 mtd in
 trk 1/4-ton..... 1
 Rdo set con gp AN/GRA-39..... 1
 Swbd tel SB-22/PT..... 2
 Tel set TA-312/PT..... 4
 Tlr cgo 1/4-ton..... 2
 Tlr cgo 1 1/2-ton..... 1

Tlr tk water 400-gal..... 1
 Trk cgo 2 1/2-ton..... 2
 Trk util 1/4-ton..... 2

2 SHOP SUPPLY SECTION

1 E-5 Acft Sup Supv 76H40
 1 E-5 Sr Trans Sup SP 76H20
 1 E-4 Ord Parts SP 76D20
 1 E-4 Ord Sup SP 76D20
 1 E-4 Sig Sup SP 76G20
 2 E-4 Tran Parts SP 76H20 47
 2 E-4 Tran Parts SP 76H20 47
 1 E-3 Forklift Op 56B20
 4 E-3 Sup Clerk 76A10 40

Radiacmeter IM-93/UD..... 2
 Stlr stake 12-ton 4 wheel..... 2
 Stlr van 12-ton 4 wheel..... 2
 Tel set TA-312/PT..... 2
 Tlr cgo 1 1/2-ton..... 1
 Trk cgo 2 1/2-ton..... 1
 Trk forklift 10,000-lb rough..... 1
 Trk trac 5-ton..... 2

3 SHOP PLATOON HEADQUARTERS

1 CPT Plat Ldr 04823 51
 1 WO Acft Rep Tech 671B0 11
 1 E-7 Plat Sgt 67Z40
 2 E-4 Equip Rep Clerk 71T20 49
 1 E-3 Toolroom Keeper 68A10 01

Radiacmeter IM-93/UD..... 2
 Shop set acft maint stlr C-1
 tool crib..... 1
 Tel set TA-312/PT..... 1
 Tlr cgo 1/4-ton..... 1

Trk trac 5-ton..... 1
 Trk util 1/4-ton..... 1

4 AIRFRAME AND ENGINE SECTION

1 E-6 Airframe Rep Supv 67Z40
 1 E-6 Eng Rep Supv 67Z40
 8 E-5 Sr Acft Eng Rpmn 68B20
 7 E-5 Sr Airframe Rpmn 68G20 43
 8 E-4 Acft Eng Rpmn 68B20 42
 14 E-4 Airframe Rpmn 68G20 41
 4 E-3 Acft Eng Rep Helper 68A10 40
 6 E-3 Airframe Rep Helper 68A10

Shop set stlr and tlr mtd C-4
 sheet metal..... 1
 Shop set stlr mtd C-5 welding.... 1
 Shop set stlr mtd C-7 eng and hyd. 1
 Shop set tlr mtd C-10 point..... 1
 Tel set TA-312/PT..... 1
 Tlr cgo 1 1/2-ton..... 2
 Trk cgo 2 1/2-ton..... 2
 Trk trac 5-ton..... 2

5 AIRCRAFT COMPONENT SECTION

1 E-6 Comp Rep Supv 67Z40
 1 E-6 Sr Toolmaker 44E30
 4 E-5 Sr Acft Inst Rpmn 68F30
 4 E-5 Sr Acft Electrician 68F20

*For remarks, see page 348.

DATA FOR FIGURE 85* - (continued)

4 E-5 Sr Acft Hyd Rpmn 68H20
1 E-5 Mach 44E20
4 E-5 Sr Powertrain Rpmn 68D20 43
4 E-5 Sr Rotor Prop Rpmn 68E20
1 E-5 Toolmaker 44E20 02
4 E-4 Acft Electrician 68F20
4 E-4 Acft Hyd Rpmn 68H20 42
4 E-4 Powertrain Rpmn 68D20 40
4 E-4 Rotor Prop Rpmn 68E20 40
4 E-3 Co Rep Helper 68A10

Shop set stlr and tlr mtd
C-2 elec shop..... 1
Shop set stlr and tlr mtd
C-3 flaw detector..... 1
Shop set stlr mtd C-6
mach shop..... 1
Shop set stlr and tlr mtd
C-8 inst shop..... 1
Shop set stlr mtd C-9 prop
and rotor set..... 1
Shop set stlr mtd C-11
powertrain..... 1
Tel set TA-312/PT..... 1
Tlr cgo 1 1/2-ton..... 2
Trk cgo 2 1/2-ton..... 2
Trk trac 5-ton..... 3

6 ARMAMENT SECTION

1 E-6 Acft Armt Rep Supv 45J40
1 E-6 Acft Armt Rep Insp 45J20

1 E-5 Sr Acft Armt Rpmn 45J20 43
5 E-4 Acft Armt Rpmn 45J20
1 E-3 Acft Armt Rpmn Helper 45A10 01
Lchr gren 40mm..... 2
Light set gen illum 25 outlet..... 1
Tel set TA-312/PT..... 1
Tlr cgo 1 1/2-ton..... 1
Trk cgo 2 1/2-ton..... 1

7 SERVICE EQUIPMENT SECTION

2 WO Hel Pilot 062B0 13
1 E-6 Mtr Sgt 63C40
2 E-5 Crew Chief 67N2F 13
1 E-5 Sr Wheel Veh Mech 63C30
2 E-4 Acft Fuel Hdlg SP 56C20 01
2 E-4 Equip Rep Clerk 71T20
1 E-4 Rep Parts SP 76D20 01
3 E-4 Powerman 52B20
5 E-4 Wheel Veh Mech 63B20
2 E-4 Wrecker Op 63F20
3 E-3 Powerman Helper 52A10 40
2 E-3 Wheel Veh Mech Helper 63A10 40

Extinguisher, fire CO₂ 15-lb hand .. 2
Extinguisher fire CO₂ 50-lb
wheeled..... 1
Hel UH-1D..... 2
Light set 1 1/2-kw heliport..... 1
Stlr wrecker 12-ton 4 wheel 40..... 1
Tk liq dispen tlr mtd..... 1
Tel set TA-312/PT..... 1
Tlr cgo 3/4-ton..... 1
Tlr cgo 2 1/2-ton..... 3

Trk cgo 3/4-ton..... 1
Trk cgo 2 1/2-ton..... 1
Trk cgo 2 1/2-ton WWN..... 1
Trk tk fuel serv 2 1/2-ton WWN..... 2
Trk trac wkr 5-ton WWN..... 2
Yoke towing and lifting 500-gal
drum..... 1

8 AIRCRAFT REPAIR PLATOON HEADQUARTERS

1 CPT Plat Ldr 64823 13,51
1 E-7 Plat Sgt 67Z40
2 E-4 Equip Rept Clerk 71T20 47
1 E-3 Toolroom Keeper 67A10 01

Radiacmeter IM-98/UD..... 2
Shop set fixed base gnd hldg
and svc set C..... 1
Shop set stlr mtd C-1
tool crih..... 1
Tel set TA-312/PT..... 1
Tlr cgo 1/4-ton..... 1
Trk trac 5-ton..... 1
Trk util 1/4-ton..... 1

9 FIXED WING SECTION

1 WO Acft Maint Tech 671C0 13, 51
1 E-6 Acft Rep Supv 67Z40
8 E-5 Sr Airplane Rpmn 67K20 44
8 E-4 Airplane Rpmn 67K20 40,44
4 E-3 Airplane Rpmn Helper 67A10

*For remarks, see page 348.

DATA FOR FIGURE 85 - (continued)

FIXED WING SECTION

Tel set TA-312/PT..... 1
Tlr cgo 1 1/2-ton 1
Trk cgo 1 1/2-ton WWN..... 1

10 ROTARY WING SECTION

1 WO Acft Maint Tech 671C0 13, 51
1 E-6 Acft Rep Supv 67Z40
17 E-5 Sr Hel Rpmn 67N20 45
17 E-4 Hel Rpmn 67N20 40, 45
8 E-3 Hel Rpmn
Helper 67A10

Tel set TA-312/PT..... 1
Tlr cgo 1 1/2-ton 2
Trk cgo 1 1/2-ton WWN..... 2

11 AVIONICS REPAIR PLATOON
HEADQUARTERS

1 CPT Plat Ldr 4825 11
2 WO Avionics Maint
Tech 286A0 11
1 E-7 Plat Sgt 35P40
1 E-3 Lt Veh Dvr 64A10

Radiacmeter IM-93/UD 2
Tel set TA-312/PT..... 1
Tlr cgo 1/4-ton 1
Trk util 1/4-ton..... 1

12 AVIONICS REPAIR SECTION (2)

2 E-7 Sec Sgt 35P40
2 E-6 Avionics Rep
Tm Chief 35P40

2 E-5 Abn Rdr Rpmn 26M20
4 E-5 Abn Ir Rpmn 26N20
8 E-5 Avionics Comm
Equip Rpmn 35L20
2 E-5 Avionics Nav
Equip Rpmn 35M20
2 E-5 Avionics Flt Con
Rpmn 35N20
2 E-5 GCA Equip Rpmn 26D20
2 E-5 Photo-Surv Rpmn 41G20
2 E-4 Equip Rept Clerk 71T20 02
2 E-4 Precise Power
Genr SP 52B30
2 E-4 Sig Sup Parts SP 76G20 01

Electronic shop stlr mtd:
AN/ASM-189..... 4
Electronic shop stlr mtd:
AN/ASM-190..... 4
Tel set TA-312/PT..... 4
Tlr cgo 3/4-ton 2
Tlr cgo 3/4-ton 2
Trk trac 5-ton 2
(Maintenance equipment and test sets
necessary to perform maintenance
of equipment supported.)

REMARKS:

01 Also light vehicle driver.
02 Also heavy vehicle driver.
04 Also switchboard operator.
11 Armed with pistol automatic
cal .45.
12 Armed with 40mm grenade
launcher. Remark 11
applies.
13 Armed with revolver cal .38.
40 Remark 01 applies to one EM.
41 Remark 01 applies to two EM.
42 Remark 02 applies to two EM.
43 Remark 12 applies to two EM.
44 Any combination of MOS 67K20,
67D20 may be used in ac-
cordance with AR 611-201
depending upon type aircraft
supported.
45 Any combination of MOS 67N20,
67S30, 67T30, 67U30 may be
used in accordance with
AR 611-201 depending upon
type aircraft supported.
46 MOS 67F2F or 67W2F may be
assigned as required based
on aircraft supported in ac-
cordance with AR 611-201.
47 Remark 02 applies to one EM.
48 Also wireman.
49 Also production control officer.
51 Must be qualified as test pilot.

4. Armament section. The armament section performs general support maintenance on the aerial weapons of supported units.
- (d) Service equipment section. The service equipment section maintains the trailer- and semitrailer-mounted shop sets, materials-handling equipment, generators, and wheeled vehicles organic to the company. The section operates and maintains its two organic utility helicopters and provides aerial transport of repair personnel and parts. It operates and maintains the fuel-dispensing tank trucks and petroleum storage facilities. Aviators of this section operate the organic helicopters in aerial evacuation of nonflyable aircraft.
- (e) Aircraft repair platoon. The aircraft repair platoon removes, inspects, reinstalls or replaces, and adjusts parts, accessories, and components of aircraft. Using its repairmen, it can make up technical repair teams to assist supported maintenance units.
 1. Platoon headquarters. The platoon headquarters supervises the functions of subordinate sections to include realignment of personnel and tools to meet changing workloads. Responsibilities include maintenance of records and reports, coordination of repair parts support, and production control.
 2. Fixed wing section. The fixed wing section removes and replaces components of airplanes. These components are routed to the shop platoon for repair and, if not subsequently reinstalled on the airplanes, are reported for disposition instructions. This section may receive serviceable replacement components from either the shop platoon or the shop supply section.
 3. Rotary wing section. The rotary wing section performs the functions in 2 above for helicopters.
- (f) Avionics repair platoon. The avionics repair platoon performs inspections and general support maintenance on avionics equipment.
 1. Avionics platoon headquarters. The avionics platoon headquarters provides direct technical supervision of the repair activities of its subordinate sections and is responsible for production control of the two avionics repair sections.
 2. Avionics repair section (2). Each avionics repair section performs inspections of and general support maintenance on the following equipment: radar, infrared, avionics communication, navigational aids, GCA, and photo/surveillance.
- (6) Limitations.
 - (a) Aerial evacuation of disabled aircraft by the transportation aircraft maintenance general support company is restricted to the

lift capability of the company's organic aircraft. When lift requirements exceed this capability, assistance is requested from the supported unit or from a heavy lift helicopter company. Assistance by the supported unit is normally arranged by direct contact between the units concerned. Assistance by heavy lift helicopter is requested through command channels.

- (b) Size and weight of mobile maintenance shops and supply vans limit unit off-road trafficability.
- (c) Inadequacy of blackout facilities may limit the type of maintenance that can be performed during darkness, generally restricting repairs to those that can be completed inside the mobile shop vans.

d. Transportation Aircraft Direct Support Company.

- (1) Composition. The composition of the transportation aircraft direct support company is shown in figure 86.
- (2) Mission. The mission of this company is to perform direct support maintenance on Army aircraft, aircraft armament, and avionics equipment, and related supply and recovery support for nondivisional aviation units.
- (3) Assignment. The transportation aircraft direct support company is assigned to the field army, corps, or logistical command.
- (4) Capabilities. The company is capable of providing -
 - (a) 21,600 maintenance man-hours per month per direct support maintenance of aircraft. (The number of aircraft that can be supported depends on the man-hours per month required for each type of aircraft.)
 - (b) 3,600 man-hours per month for direct support maintenance on avionics equipment.
 - (c) 800 man-hours per month for direct support maintenance on aircraft armament systems.
 - (d) Repair parts and related supply items for equipment repaired by the unit, and repair parts only to supported units.
- (5) Functions.
 - (a) Company headquarters. The company headquarters provides command and administration of the unit. Production and quality control personnel furnish technical supervision of repair operations to assure mission accomplishment. The company headquarters also contains personnel to perform organizational maintenance on unit signal items and small arms. The personnel service company of the support brigade performs personnel administration for the aircraft direct support company.

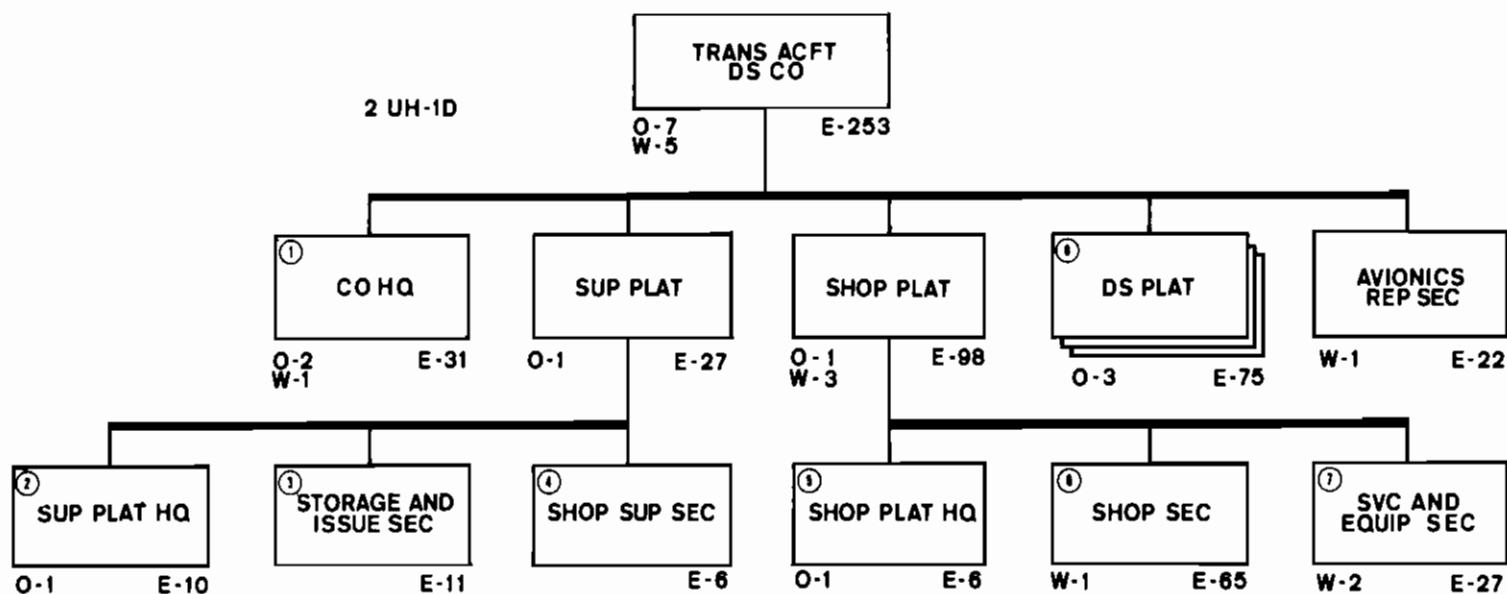


Figure 86. Transportation aircraft direct support company (TOE 55-457G).

1 COMPANY HEADQUARTERS

1 MAJ	Co Comd	64823	13
1 CPT	XO	4823	11, 42
1 WO	QC Tech	671C0	13
1 E-8	First Sgt	67Z50	
1 E-7	Prn Con Supv	67Z40	
1 E-6	Mess Steward	94B40	
1 E-6	Sup Sgt	76K40	
1 E-5	Tm Chief	05C40	
2 E-6	Airplane Tech		
	Insp	67F20	40
4 E-6	Hel Tech Insp	67W20	40
4 E-5	First Cook	94B20	
1 E-4	Armorer	76K30	
1 E-4	Co Clerk	71H20	12
4 E-4	Cook	94B20	
1 E-4	Fld Rdo Mech	31B20	
1 E-4	Gen Sup SP	76K20	12
2 E-4	RATEL Op	05C20	43
1 E-4	Equip Rept Clerk	71T20	
1 E-4	Swbd Op	36A10	
1 E-3	Acft Equip		
	Rept Clerk	70A10	
1 E-3	Cook's Helper	94A10	01
1 E-3	Lt Trk Dvr	70A10	
1 E-3	Sup Clerk	76A10	01

Generator 3 kw	1
Mg 7.62mm lt	4
Lchr gren 40mm	2
Tlr 1/4-ton	1
Tlr 3/4-ton	1
Tlr 1 1/2-ton	1
Tlr water 400-gal 1 1/2-ton	1
Trk cgo 3/4-ton	1
Trk cgo 2 1/2-ton	1
Trk cgo 2 1/2-ton WWN	1

Trk util 1/4-ton	1
Tel set TA-312/PT	4
Swbd tel SB-22/PT	2
Rdo AN/GRR-5 mtd in trk 3/4-ton	1
Rdo AN/VRC-46 mtd in trk 1/4-ton	1
Rdo AN/VRC-47 mtd in trk 3/4-ton	1
Rdo AN/GRA-39	1
RATT AN/GRC-46	1

2 SUPPLY PLATOON HEADQUARTERS

1 CPT	Plat Ldr	4474
1 E-6	Plat Sgt	76H40
1 E-5	Transportation	
	Sup Supv	76H40
1 E-4	Ord Parts SP	76D20
2 E-4	Repts Clerk	71B20
1 E-4	Sig Parts SP	76G20
2 E-4	Trans Parts SP	76H20
2 E-3	Sup Clerk	76A10 43

Tel set TA-312/PT	2
Tlr cgo 1/4-ton	1
Trk util 1/4-ton	1
Rdo AN/VRC-46 mtd in trk 1/4-ton	1

3 STORAGE AND ISSUE SECTION

1 E-5	Acft Parts Supv	76H40
1 E-4	Ord Parts SP	76D20
1 E-4	Sig Parts SP	76G20
1 E-4	Sr Pack-Crate SP	56B20 02
1 E-4	Trans Parts SP	76H20
2 E-3	Forklift Op	56B20
1 E-3	Ord Sup Clerk	76A10 01
1 E-3	Pack-Crate SP	56B20
1 E-3	Sig Sup Clerk	76A10 01
1 E-3	Trans Sup Clerk	76A10 01

Stlr stake 12-ton	2
Stlr van 6-ton	6
Trk trac 2 1/2-ton SWB	3
Trk trac 5-ton	1
Tent GP large	2
Trk forklift 6,000 lbs	1
Trk forklift 10,000 lbs rough terrain	1

4 SHOP SUPPLY SECTION

1 E-5	Sr Trans	
	Parts SP	76H20
1 E-4	Ord Parts SP	76D20
1 E-4	Sig Parts SP	76G20
2 E-4	Trans Parts	
	SP	76H20
1 E-3	Sup Clerk	76A10

Tel set TA-312/PT	1

5 SHOP PLATOON HEADQUARTERS

1 CPT	Plat Ldr	64823	13, 41
1 E-7	Shop Fman	67Z40	
2 E-6	Comp Rep		
	Insp	67W20	46
1 E-6	Comp Rep		
	Insp	67F20	46
2 E-4	Shop Clerk	71B20	43

Tel set TA-312/PT	2
Tlr cgo 1/4-ton	1
Trk util 1/4-ton	1
Rdo AN/VRC-46 mtd in trk 1/4-ton	1

*For remarks, see page 354.

DATA FOR FIGURE 86* - (continued)

6 SHOP SECTION

1 WO Acft Rep Tech 671C0 13, 41
 1 E-6 Acft Armt Rpmn 45J40
 1 E-6 Maint Supv 67Z40
 2 E-5 Mach 44E20
 3 E-5 Sr Acft Armt Rpmn 45J20
 2 E-5 Sr Acft Elec Rpmn 68F20
 4 E-5 Sr Acft Eng Rpmn 68B20
 1 E-5 Sr Acft Hyd Rpmn 68H20
 2 E-5 Sr Acft Inst Rpmn 68J20
 3 E-5 Sr Acft Rpmn 67T30 45
 4 E-5 Sr Airframe Rpmn 68G20
 1 E-5 Sr Powertrain Rpmn 68D20
 1 E-5 Sr Prop-Rotor Rpmn 68E20
 4 E-4 Acft Armt Rpmn 45J20 12
 2 E-4 Acft Elec Rpmn 68F20
 4 E-4 Acft Eng Rpmn 68B20
 2 E-4 Acft Hyd Rpmn 68H20 44
 4 E-4 Acft Rpmn 67T30 45
 8 E-4 Airframe Rpmn 68G20
 1 E-4 Powertrain Rpmn 68D20 02
 1 E-4 Prop-Rotor Rpmn 68E20
 1 E-3 Acft Armt Rpmn Helper 45A10 02
 10 E-3 Acft Comp Rpmn Helper 68A10 48

1 E-3 Hel Rpmn Helper 67A10
 2 E-3 Toolroom Keeper 68A10

Lchr gren 40mm 4
 Tlr cgo 1 1/2-ton 4
 Trk cgo 2 1/2-ton 4
 Trk trac 5-ton 3
 Shop set B-1 tool crib flaw detection . 1
 Shop set tlr mtd B-2 elec and hyd. 1
 Shop set B-3 sheet metal and welding. 1
 Shop set B-4 mach and eng. 1
 Shop set B-5 prop and rotor 1
 Shop set gnd hdlg and svc set B. 1
 Shop set stlr mtd B-6 paint shop. 1
 (Maintenance equipment and test set necessary to perform maintenance on supported equipment.)

7 SERVICE AND EQUIPMENT SECTION

2 WO Hel Pilot 062B0 13
 1 E-6 Mtr Sgt 63C40
 2 E-5 Crew Chief 67N2F 13
 1 E-5 MHE Rpmn 63K30
 2 E-5 Sr Wheel Veh Mech 63C20
 2 E-4 Acft Fueling SP 56C20 01
 1 E-4 Ord Parts SP 76D20 01
 3 E-4 Powerman 52B20
 4 E-4 Wheel Veh Mech 63B20 43
 2 E-4 Wkr Op 63B20
 1 E-4 Equip Rep Clerk 71T20
 1 E-3 Avn Equip Rept Clerk 70A10
 2 E-3 Powerman Helper 52A10 43
 4 E-3 Wheel Veh Mech Helper 63A10 43

Hel UH-1D 2
 Fuel separator 50 gpm. 3
 Generator 5 kw 3
 Generator 3 kw 2
 Generator 1.5 kw. 2
 Light set emerg airport. 1
 Stlr lowbed 12-ton wkr. 1
 Trk cgo 2 1/2-ton 2
 Tel set TA-312/PT. 1
 Trk 2 1/2-ton WWN 1
 Trk tk fuel 2 1/2-ton WWN 2
 Trk wkr 5-ton WWN. 2

8 DIRECT SUPPORT PLATOON (3)

3 LT Acft Maint Off 64823 13, 41
 3 E-7 Acft Maint Supv 67Z40
 3 E-6 Acft Tech Insp 67W20
 3 E-5 Sr Acft Eng Rpmn 68B20
 18 E-5 Sr Hel Rpmn 67T30 45
 3 E-4 Acft Eng Rpmn 68B20 12
 6 E-4 Airframe Rpmn 68G20 49
 18 E-4 Hel Rpmn 67T30 45
 3 E-4 Hv Trk Dvr 64B20
 3 E-4 Shop Clerk 71B20 02
 9 E-3 Hel Rpmn Helper 67A10 52
 3 E-3 Lt Trk Dvr 64A10
 3 E-3 Toolroom Keeper 67A10 01

Floodlight set 6 floods 3
 Genr 5 kw 3
 Lchr gren 40mm 6

*For remarks, see page 354.

DATA FOR FIGURE 86 - (continued)

DIRECT SUPPORT PLATOON (3)

Stlr stake 12-ton..... 3
 Stlr van 12-ton..... 6
 Tel set TA-312/PT..... 3
 Trk 3/4-ton..... 3
 Trk cgo 2 1/2-ton WWN..... 3
 Trk trac 5-ton..... 9
 Trk util 1/4-ton..... 3
 Rdo set AN/VRC-46 mtd in
 trk 1/4-ton..... 3
 Shop set tool crib A-1 flaw set.... 3
 Shop set A-2 sheet metal welding.. 3
 Shop set gnd hdlg and svc set A.... 3

9 AVIONICS REPAIR SECTION

1 WO Sec Chief 286A0 11
 1 E-7 Sec Sgt 35P40
 2 E-6 Avionics Rep Tm
 Chief 35P40
 8 E-5 Avionics Comm
 Equip Rpmn 35L20 51
 2 E-5 Avionics Flt Con
 Rpmn 35N20
 2 E-5 Avionics Nav
 Equip Rpmn 35M20
 2 E-5 GCA Equip Rpmn 26D20
 2 E-5 Abn Rdr Rpmn 26M20 02
 1 E-4 Equip Rec Clerk 71T20
 1 E-4 Precision Power
 Genr SP 52B20 01
 1 E-4 Sig Sup Parts SP 76G20 01
 Electronic shop stlr mtd
 AN/ASM-189..... 3
 Electronic shop stlr mtd
 AN/ASM-190..... 2

Tel set TA-312/PT..... 2
 Trac acft towing power svc..... 2
 Tlr cgo 3/4-ton..... 2
 Trk cgo 3/4-ton..... 2
 Trk trac 5-ton..... 2
 (Maintenance equipment and test sets
 necessary to perform maintenance
 on supported equipment.)

REMARKS:

01 Also light truck driver.
 02 Also heavy truck driver.
 11 Armed with pistol automatic cal .45.
 12 Armed with launcher grenade 40mm and
 pistol automatic cal .45.
 13 Armed with revolver cal .38.
 40 MOS 67F2F and 67N2F may be apportioned
 to fit type aircraft supported.
 41 Must be qualified as test pilot in rotary wing
 and/or fixed wing aircraft based upon type
 aircraft supported.
 42 Also production control officer.
 43 Remark 01 applies to one EM.
 44 Remark 02 applies to one EM.
 45 Any combination of MOS 67K20, 67D20,
 67N20, 67T20, and 67Q20 may be used.
 46 Any combination of MOS 68B20 through 68J20
 may be used.
 48 Remark 01 applies to four EM.
 49 Remarks 02 and 12 apply to three EM.
 51 Two EM drive ground servicing wheeled
 tractor.
 52 Remark 01 applies to three EM.

- (b) Supply platoon. The supply platoon performs all administrative and supervisory functions of the maintenance supply support portion of the company mission.
1. Supply platoon headquarters. The supply platoon headquarters maintains stock records on the status, location, and quantities of repair parts stocked by the company. It receives and processes supply requests submitted by supported aircraft units and directs shipment of requested items. When the aircraft direct support company is employed in the corps area, the supply platoon obtains its stock replenishment from the aircraft repair parts company of the general support supply and service battalion. In the army service area, it obtains stock replenishment from the headquarters, headquarters and supply company of the general support aircraft maintenance and supply battalion.
 2. Storage and issue section. The storage and issue section receives, stores, and issues to supported activities, mission-related expendable supplies and repair parts for aircraft, avionics, and aerial weapons systems.
 3. Shop supply section. The shop supply section serves as an expediting agency by drawing supplies from the storage and issue section for use by the shop platoon and the direct support platoons.
- (c) Shop platoon. The shop platoon is normally situated at the maintenance company base of operations on or adjacent to an airfield where aircraft requiring repair may be accommodated. In addition to the shop platoon, the maintenance base also contains the administrative and the aircraft supply activities required to support both the on-site maintenance operations and the more complex repairs required of the shop platoon. With these facilities and with the specialized vehicle-mounted shop vans, the shop platoon can make repairs whose complexity or whose requirements for equipment disassembly or for parts, tools, and/or specialized equipment do not permit accomplishment in the more forward areas.
1. Platoon headquarters. Personnel of the platoon headquarters plan the internal operations, assign work to shop personnel, maintain a record of status of repair jobs, maintain forms and records (TM 38-750), and otherwise provide planning, management, and supervision for the shop operations. Supervisory personnel include aircraft avionics, and aerial weapons repair technicians. Component repair inspectors assure that repairs meet established standards.
 2. Shop section. The shop section repairs aircraft, aircraft components, and aerial weapons equipment. It also provides backup to the direct support platoons operating on site.

3. Service and equipment section. The service and equipment section maintains organic shop sets, wheeled vehicles, generators, and materials handling equipment, and operates and maintains the fuel-servicing tank trucks and petroleum storage facilities. It requisitions, receives, stores, and issues parts for organizational repair of the equipment. Personnel of the service and equipment section operate and maintain the two utility helicopters used for transport of contact teams from the shop platoon and for emergency aerial delivery of repair parts. Under supervision of the aircraft maintenance officer or his representative, section aviators operate the organic helicopter in aerial evacuation of nonflyable aircraft.
- (d) Direct support platoons. The transportation aircraft direct support company contains three direct support platoons. Each platoon can provide on-site maintenance and technical assistance to an aviation unit of 12 to 25 aircraft. The extent of repairs permitted is limited by the equipment authorized the platoon and by the degree of disassembly permitted by the tactical situation or other limiting factors. Since the direct support platoon does not contain avionics or aerial weapons repairmen, assistance is obtained from the shop section or the avionics repair section as required.
- (e) Augmentation. When the workload or the situation requires, the transportation aircraft direct support company may be authorized augmentation as follows:
 1. Shop section. One shop section augmentation provides the company with approximately 2,000 additional maintenance man-hours per month.
 2. Direct support platoon. Augmentation by one direct support platoon provides on-site maintenance for an additional aviation unit of 12 to 25 aircraft. Authorization of this platoon normally requires augmentation of one to two shop sections also.
- (6) Limitations.
 - (a) The maintenance capability of the direct support company is reduced when the company is working under blackout conditions. Although the mobile shop vans can be blacked out, these vans do not accommodate repairs other than those that can be completed in a relatively restricted area.
 - (b) The size and weight of certain essential equipment, such as the mobile shop vans, significantly limit the off-road trafficability of the direct support company.
 - (c) In accomplishing aerial evacuation of nonflyable aircraft, the transportation aircraft direct support company is subject to the

same limitations that affect the transportation aircraft maintenance general support company. As with the general support company, assistance may be obtained from the supported unit or from the heavy lift helicopter company.

- (d) The transportation direct support company does not have the capability of direct support maintenance for OV-1 airplanes.

89. AIRCRAFT, AERIAL WEAPONS, AND AVIONICS SUPPLY

a. General.

- (1) Basically, aircraft supply support in the field army is a staged system wherein supplies are initially received by a depot in the theater army logistical command and then shipped to general support supply activities for issue to operating elements of the aircraft maintenance support system. Throughput of aircraft repair parts is limited to the movement of emergency supplies and heavy or bulky items such as aircraft engines, transmissions, and similar types of items which can be readily identified and controlled.
- (2) The direct support unit is customer oriented, providing the supported aviation unit with retail supply support for expendable supplies and for repair parts that are normally fast moving and have a predictable consumption rate. The general support supply activity is commodity oriented, providing wholesale supply of all items that are stocked by the direct support elements. In addition, the general support supply unit stocks bulky or heavy-tonnage items, repair parts that normally have a low usage factor, and items that are controlled or in critically short supply. In the army service area, the general support supply unit also holds a portion of the field army reserve stocks.

b. Interrelationship of Supply and Maintenance. Effective repair support for aircraft in the field army is directly and particularly dependent upon adequate and responsive aircraft supply support. The parts required for a repair operation must be immediately available, especially at the direct support level where equipment must be repaired for return to user with the least possible delay. Components, assemblies, and parts repaired by the general support activity for return to stock constitute a major source of supply in support of the maintenance mission. At the same time, repair of items for return to stock is contingent upon the rapid return of unserviceables to the general support activity. Thus, the interdependence of maintenance and supply is readily apparent; the requirement for control, coordination, and management of the two activities is also apparent.

c. Supply Management and Control.

- (1) The organization of the field army support command includes an inventory control center which exercises inventory control over all field army stocks, including aircraft and aircraft supplies. Responsibilities of the inventory control center include computation of requirements, direction of procurement, commodity management and distribution, and direction of disposal. Assigned personnel include commodity specialists. These specialists advise and assist the inventory control center commander in all aspects of the activity operations. The center uses

electronic equipment to process and transmit supply and stock control information and to maintain a record of all supply assets and their locations within the field army. If the center is destroyed or becomes inoperable because of equipment failure, duplicate records are maintained at an alternate location. Detailed coverage of the inventory control center is contained in FM 29-10.

- (2) The headquarters of the support brigade and of the support group are not in the routine repair parts supply channels; however, they exercise supply management of regulated and controlled items and approve the issue of maintenance float aircraft in accordance with policies established by the army commander as implemented by the commander of the field army support command. Operating battalions within the group exercise stock control for items that constitute field army stocks. These items include supplies carried by units of direct support groups and items in maintenance floats of direct support units. Except for controlled items, aviation supplies carried by direct support units are considered issued in the same sense as are supplies delivered to division support commands.
 - (a) In the direct support group, supply personnel in the transportation aircraft direct support company keep stock records on the status, location, and quantities of repair parts stocked by the company. The commander of the direct support maintenance battalion provides command supervision over the supply activities of the transportation aircraft direct support company and takes the measures necessary to assure that the operation conforms to prescribed procedures.
 - (b) In the general support group of the corps support brigade, the repair parts company of the supply and service battalion provides repair parts support for aircraft, aerial armament, and avionics equipment. Consequently, stock control of these items is accomplished by the supply control section of the supply and service battalion. Detailed coverage of the supply and service battalion is contained in FM 29-45.
 - (c) In the general support group of the army rear support brigade, the headquarters, headquarters and supply company of the transportation aircraft maintenance and supply battalion provides repair parts general support for aircraft and aerial armament. Therefore, the stock control section of this company provides the control over these items. As in the corps support brigade, repair parts in support of avionics equipment are stocked and controlled by the repair parts company of the supply and service battalion.
- (3) Within the general support group, the materiel management section (operating under the staff supervision of the group logistics officer) coordinates with the general support supply activity to facilitate maintenance and supply working relationships to include -

- (a) In accordance with policies established by higher command, developing and implementing procedures for scheduling and assigning the repair of unserviceable items reported by the supply activity.
- (b) Within prescribed policies and procedures, securing maintenance priorities and advising the supply activity of them.
- (c) Maintaining appropriate records and submitting required reports to the field army support command inventory control center on the status of unserviceable economically repairable end items, components, and assemblies that are a portion of the field army stocks. Reports include the quantities of items on hand for repair, scheduled completion dates, items awaiting disposition instructions, and items repaired since the last report (including their disposition).

d. Supply Support Structure (figs. 87 and 88).

- (1) The aviation unit receives aircraft supply support from its supporting aircraft direct support company.
- (2) In the corps support brigade, the transportation aircraft direct support company receives supply support from the functionalized repair parts company of the supporting general support supply and service battalion.
- (3) In the army rear support brigade, the transportation aircraft direct support company receives supply support for aircraft and aerial armament from the headquarters, headquarters and supply company of the transportation aircraft maintenance and supply battalion. (This battalion also provides backup supply support to the repair parts company of the corps support brigade.) Supply support for avionics equipment in the army rear support brigade is provided by the repair parts company of the supporting general support supply and service battalion.

e. Stockage. Stockage is influenced by aircraft densities in the area of employment, by mobility requirements, and by the support mission. Authorized stockage lists are originally based upon allowances prescribed by appropriate supply and -P technical manuals, then adjusted according to recorded demand data.

- (1) The transportation aircraft direct support company stocks repair parts to support its maintenance mission and to provide supply support for aircraft, avionics, and aerial armament in supported units. The company maintains a stockage list to support its operations, plus the required safety level and order and shipping time.
- (2) The headquarters, headquarters and supply company of the general support aircraft maintenance and supply battalion (1) stocks repair parts for aircraft and aerial armament and provides wholesale support for the aircraft direct support company in the army rear support brigade, (2) provides backup wholesale support for the general support repair parts company in the corps support brigade, and (3) provides supply support for the maintenance mission of attached transportation aircraft

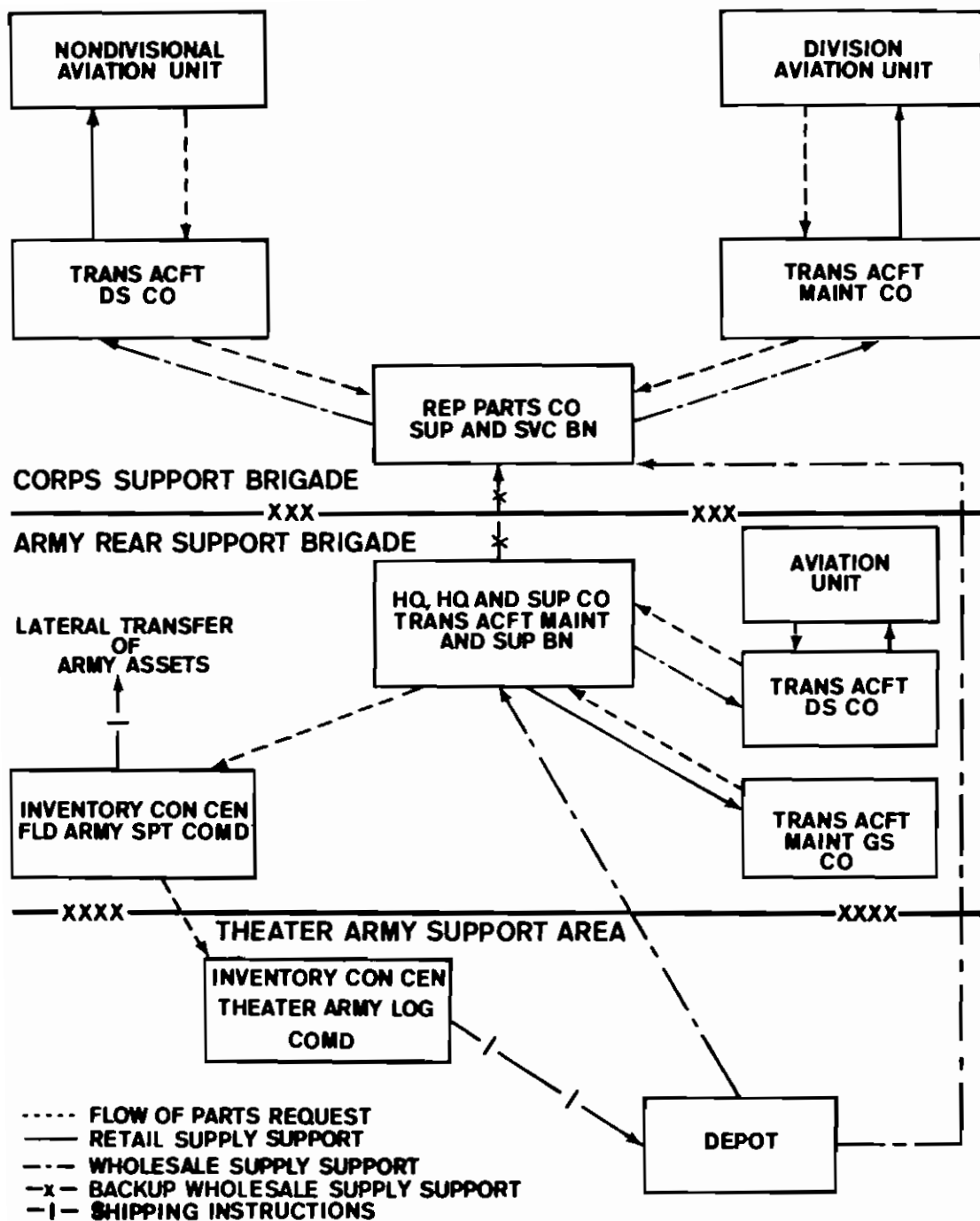


Figure 87. Aircraft and aerial armament repair parts supply channels.

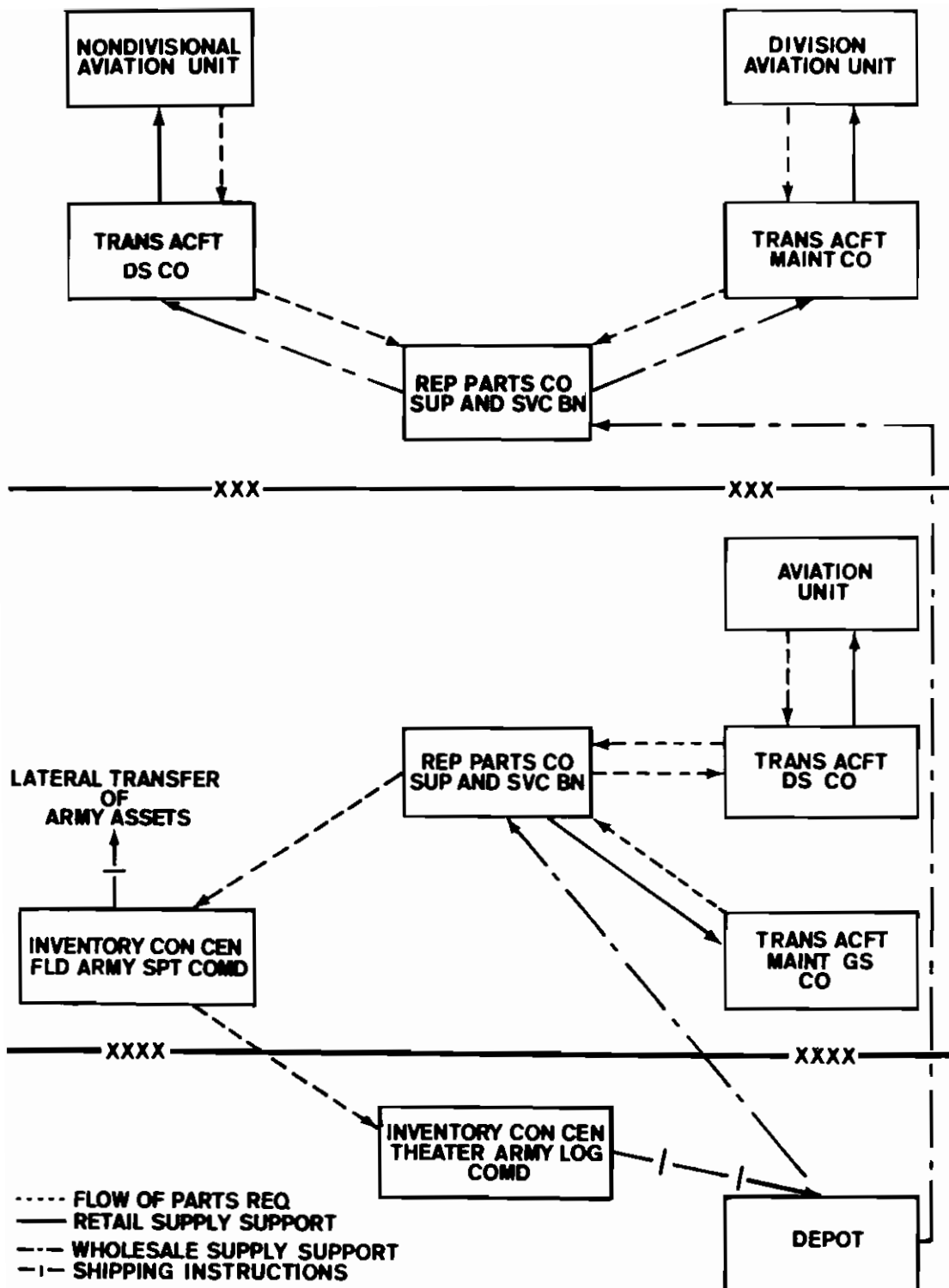


Figure 88. Avionics repair parts supply channels.

maintenance general support companies. The company maintains a stockage list to support its mission, plus the required safety level to include order and shipping time. It is staffed to support an authorized stockage list of approximately 8,000 aircraft line items and 2,000 aerial armament items.

- (3) The general support repair parts company stocks repair parts for aircraft, aerial armament, and avionics equipment in support of the aircraft direct support company in the corps support brigade. In the army rear support brigade, the repair parts company provides the transportation aircraft direct support company with wholesale repair parts support for avionics equipment. Detailed coverage of the repair parts company is contained in FM 29-45.
- (4) The transportation aircraft general support company maintains only a shop stock sufficient to support its own maintenance mission.

f. Repair Parts Requests.

- (1) Channels for requesting and shipping aircraft and aerial armament repair parts are shown in figure 87. Requesting channels and repair parts flow for avionics parts are shown in figure 88. Since the support brigade and the group manage controlled and critical items of supply, they maintain a record of all transactions involving these types of items. To permit centralized management of Armywide assets, battalion stock control sections forward a record of all transactions to the field army support command inventory control center.
- (2) Procedures for requesting repair parts are prescribed in AR's 711-16 and 735-35. Normal supply management data are written on and/or punched into the requesting document, DA Form 2765, and sent by transceiver to the next higher supply source. When the aircraft maintenance company does not possess keypunch equipment, the battalion stock control section provides the company with prepunched and preprinted DA Forms 2765 for each item on the authorized stockage list. Transceiver service is provided by attached signal service teams. When transceiver equipment is not available, the request is carried by messenger or aircraft.
- (3) Replenishment requests are submitted in accordance with a schedule established by the headquarters of the next higher supply source. Requests for parts whose lack results in deadlined equipment (EDP) may be submitted at any time. However, if submitted at other than scheduled transceiver time, EDP requests are transmitted by wire or telephone.
- (4) When an EDP request cannot be filled by the battalion supply activity, the battalion stock control section forwards the request to the next higher headquarters having automatic data processing equipment (ADPE). Until automatic data processing equipment becomes available at support brigade or group level, unfilled EDP requests are forwarded to the field army support command inventory control center. The inventory control center then directs issue from other assets within the support command

supply activities or, if the item is not available within army assets, forwards the request to the theater army logistical command inventory control center.

g. Direct Exchange. Direct exchange is an accelerated supply transaction in which serviceable repair parts are provided to supported units in exchange for similar unserviceable parts. Direct exchange is made on an item-for-item basis and is designed to expedite the supply of fast-moving repair parts. (See AR 711-16 for procedures.) Repair parts authorized for direct exchange are designated by the field army support command commander. Unserviceable economically repairable items received by the supporting unit are inspected, repaired, and returned to the supply system with minimum delay.

h. Supply Priorities. Supply priorities are based on two factors (AR 725-50) to include -

(1) Force Activity Designators (FAD).

- (a) FAD I, US Forces in Combat, forces designated by the Joint Chiefs of Staff.
- (b) FAD II, US Forces positioned and maintained in a state of readiness.
- (c) FAD III, US Forces maintained in a state of readiness for deployment.
- (d) FAD IV, US Active and Reserve Forces designated by the Joint Chiefs of Staff and planned for employment in approved war plans.
- (e) FAD V - All other US Forces.

Note. Military Assistance Program (MAP) Forces can be given any FAD by JCS.

(2) Urgency-of-Need Designators (UND). These designators indicate mission requirements which are -

- (a) UND A - items required to perform the mission.
- (b) UND B - items the lack of which will seriously impair the mission capability.
- (c) UND C - items needed more urgently than routinely (not to be used for routine).
- (d) UND D - routine replenishment.

(3) Issue priority designator. These two factors are combined to determine an issue priority designator as shown in table 2 (extract of table 2-1, AR 725-50).

Table 2. Issue Priority Designator Table (by Urgency-of-Need and Force/Activity Designator).

Urgency-of-need designator		Force/activity designator		Issue priority designator
A	Primary weapons or equipment. Key items essential to mission's accomplishment.	I	Combat -----	1
		II	Readiness for combat ---	2
		III	Readiness to deploy -----	3
		IV	Planned for employment in support of joint war plans and essential support activities for such forces -----	7
		V	All others -----	8
B	Auxiliary equipment (equipment which supplements or takes the place of primary equipment should it become inoperative). Key item lack of which impairs performance of mission.	I	Combat -----	4
		II	Readiness for combat ---	5
		III	Readiness to deploy -----	6
		IV	Planned for employment in support of joint war plans and essential support activities for such forces -----	9
		V	All others -----	10
C	Required for emergency repairs to administrative support equipment not essential to operational effectiveness.	I	Combat -----	11
		II	Readiness for combat ---	12
		III	Readiness to deploy -----	13
		IV	Planned for employment in support of joint war plans and essential support activities for such forces -----	14
		V	All others -----	15
D	Supply action for routine stock replenishment, depot redistribution, etc.	I	Combat -----	16
		II	Readiness for combat ---	17
		III	Readiness to deploy -----	18
		IV	Planned for employment in support of joint war plans and essential support activities for such forces -----	19
		V	All others -----	20

i. Priority Designators. Priority designators 1 through 8 will be evaluated prior to submission, authenticated by the unit commander or his representative, and designated in writing within 24 hours. These are subject to review by an inspector general. Priority designators are placed in issue groups as shown here with programed delivery dates.

Issue Group	Priority Designator	CONUS Date Rqn To Rec	OS Date Rqn to Date Rec
1	1-3	120 hours	168 hours
2	4-8	8 days	15 days
3	9-15	20 days	45-55 days
4	16-20	30 days	60-75 days

j. Exchange of Parts Between Major Items of Equipment (Cannibalization).

- (1) This supply item will be a last resort.
- (2) It will be in strict accord with AR 750-1500-8.
- (3) The following conditions must be met:
 - (a) The item of equipment losing the part must be deadlined for an extensive period of time.
 - (b) All supply action, including the exploration of lateral supply action, must have been taken.
 - (c) The part must be on requisition.
 - (d) The part, or a very limited number of parts, must make the training equipment completely operable.
 - (e) The transfer operation must not involve an extensive amount of maintenance time.

PART FOUR

ARMAMENT SUBSYSTEMS

90. GENERAL

a. The need for arming Army aircraft has long been recognized by the Department of the Army and the concept has been enthusiastically received throughout the Army.

b. The development program for armed helicopters began in 1956 when the Commanding General, U.S. Continental Army Command, became concerned with the likelihood of having to fight "brush-fire" wars. These wars would require forces which could be quickly deployed to the trouble area and be tailored to fit a particular task. As a direct result of his direction to major headquarters to consider the creation of mobile task forces to perform this function, the Army Aviation School activated a unit called the Sky Cavalry Platoon in March of 1957. This was a reconnaissance-type force completely mounted in armed helicopters. Through the experiments of this unit (later redesignated the 8305th Aerial Combat Reconnaissance Company) and through subsequent troop tests, the concept of arming Army helicopters with automatic weapons, rockets, and guided missiles has been proven. Development of weapons kits for present Army helicopters is continuing and standard weapons systems are being adopted. Aircraft within the field army which are to be used primarily or habitually in a fire support role will have integrated, or "built-in," weapons subsystems which will be more or less permanent installations. These would not be detachable except for the end item, the weapon itself. By use of a common mounting method, it is possible to dismount one weapon (a machinegun subsystem) and attach another (an aerial rocket subsystem). Eventually, an integrated weapons subsystem will be developed that will include the weapons and all of its fire control equipment as an integral part of the aircraft.

c. With the many changes now taking place in the field of armament subsystems, the following is a list of weapons systems designations and weapons used in armament subsystems, that may be mounted in the field based on TOE's now being released to units authorized aircraft armament subsystems.

(1) Weapons subsystem designation.

XM1	Armament Subsystem, Helicopter, Caliber .30 Machinegun; Twin Gun OH-13, OH-23.
M2	Armament Subsystem, Helicopter, 7.62mm M60C Machinegun; Twin Gun OH-13, OH-23.
XM3	Armament Subsystem, Helicopter, 2.75-Inch Rocket Launcher, 48-Tube on UH-1B/C. Will not be standardized.
M5	Armament Subsystem, Helicopter, 40mm M75 Grenade Launcher Nose-Mounted on UH-1B/C.
M6	Armament Subsystem, Helicopter, Quad 7.62mm M60C Machinegun on UH-1B/C.
XM8	Armament Subsystem, Helicopter, 40mm M75 Grenade Launcher on OH-6.
XM9	SUU-7 Bomblet Dispenser on UH-1.

XM12	Armament Pod Aircraft 20mm Automatic Gun, M61 Turbine Driven.
XM14	Armament Pod, Caliber .50 Machinegun; M3 (LP).
XM16	Armament Subsystem, Helicopter, Quad 7.62mm M60C Machinegun; 2.75-Inch, 7-Tube Launcher.
XM18	Armament Pod, Aircraft, 7.62mm High Rate GAU 2B /A Machinegun (LP).
XM21	Armament Subsystem, Helicopter, 7.62mm High Rate XM134 Machinegun; 2.75-Inch Rocket Launcher XM158.
M22	Armament Subsystem for UH-1B/C Using AGM-22B Missile.
M23	Armament Subsystem, Helicopter, 7.62mm M60D Machinegun; Door Pintle-Mounted on UH-1D.
M24	Armament Subsystem, Helicopter, 7.62mm M60D Machinegun; Pintle-Mounted on CH-47 (STD-A).
XM25	Armament Pod, Aircraft, 20mm Automatic Gun, Gas-Driven.
XM26	Armament Subsystem, Helicopter, TOW Missile, for UH-1B/C and AH-56A.
XM27	Armament Subsystem Helicopter, 7.62mm Machinegun High Rate, One GAU 2B /A Machinegun Side-Mounted on OH-6 (LP).
XM27E-1	Lightweight Version of XM27.
XM28	Armament Subsystem, Helicopter, Two 7.62mm GAU 2B /A Machinegun; Two 40mm M75 Grenade Launchers; or One GAU 2B /A and One M75, Turret-Mounted on the Nose of AH-1G.
XM30	Armament Subsystem, Helicopter, 30mm Automatic Gun XM140 on UH-1B /C and AH-56A.
XM31	Armament Subsystem, Helicopter, 20mm Automatic Gun; One Pod Mounted M24A1, Per Side on UH-1B /C.
XM33	Armament Subsystem, Helicopter, Caliber .50 M2 or 7.62mm M60D Mounted in Rear of CH-47.
XM34	Armament Subsystem, Helicopter, Dual 20mm M24A1 Guns Mounted One on Each Side of the CH-47.
XM35	Dual 20mm Subsystem for the AH-1G.
XM36	Mine Dispenser for Helicopter.
XM47	Dispenser, Antipersonnel Mine Weapons Used in Armament Subsystems.
XM51	40mm Nose Turret for AH-56A.
XM52	Belly Turret 30mm for AH-56A.
XM53	7.62mm Nose Turret for AH-56A.

(2) Weapons used in armament subsystems.

GAU 2B /A	Gun, 7.62mm, High Cyclic Rate Machinegun w/Electric Drive.
M24A1	Gun, 20mm, Automatic.
M60C	Machinegun, 7.62mm, Electrically Fired.
M60D	Machinegun, 7.62mm, Spade Grip With Thumb Triggers.
M75	Launcher, Grenade, 40mm (STD-A).
XM129	Launcher, Grenade, 40mm (Redesign of M75).
XM130	Gun, 20mm, Automatic.
XM133	Gun, 7.62mm, High Cyclic Rate Machinegun w/Gas Drive.

XM140	Gun, 30mm, Automatic.
XM141	Launcher, 2.75-Inch Rocket, 7-Tube Reloadable, Reusable.
XM157	Launcher, 2.75-Inch LSFFAR, 7-Tube Reloadable, Reusable, Not Repairable (LP).
XM158	Launcher, 2.75-Inch Rocket, 7-Tube Reloadable, Reusable, Repairable (LP).
XM159	Launcher, 2.75-Inch LSFFAR, 19-Tube Reloadable, Reusable, Not Repairable (LP).

d. The figures which follow show the present and proposed weapons subsystems. For information relative to numbers and types of aircraft to be armed in various organizations, refer to applicable TOE's.

91. M2 DUAL MACHINEGUN SUBSYSTEM

a. The M2 weapons subsystem (fig. 89) is designed for use on observation helicopters. It consists of two M60C machineguns which are remotely controlled by the pilot. The guns are mounted upright on aluminum supporting structures located on each side of the helicopter. The combined cyclic rate of fire of the two machineguns is 1,100 rounds per minute with an effective range of 750 meters. Ammunition for this subsystem is carried in boxes which are mounted directly beneath the guns. Each box has a capacity of 470 rounds, in addition to the 80 rounds carried in the ammunition chutes, for a total of 550 rounds on each side.

b. The weapons are fired, elevated, charged, or made firesafe by the pilot without releasing the helicopter controls. A pneumatic charger assembly controls the charging and safetizing operation and a trigger switch is used to actuate both firing solenoids. The two M60C machineguns in this subsystem are capable of being adjusted vertically to +9°. This is accomplished electrically and controlled by the pilot from inside the helicopter. To adjust this system for deflection, the helicopter must be turned either left or right.

c. Both guns weigh 42 pounds, and their mounts weigh 44 1/2 pounds. A complete basic load of 1,100 rounds of linked ammunition weighs 66 pounds; wiring, switches, and the charger bottle weigh an additional 10 pounds, for a total subsystem weight of 162 1/2 pounds.

92. XM3 2.75-INCH AREA ROCKET WEAPONS SUBSYSTEM

a. This armament subsystem (fig. 90) has been adopted as the interim area rocket weapons subsystem. A launcher pod containing 24 rocket tubes is attached to the universal mount on each side of the UH-1B/C helicopter. These pods are jettisonable.

b. The 2.75-inch folding fin aircraft rocket (FFAR) is used in this subsystem. The XM3 subsystem is employed as a direct fire area weapon against troops, lightly armored vehicles, and other soft targets. The minimum range of the 2.75-inch rocket is 300 meters, and the maximum effective range is 2,500 meters. The dispersion error of the 2.75-inch FFAR is 12 to 15 mils.

c. The subsystem is capable of selective fire in the following modes: pairs (single rocket from each pod), or multiple pairs of 2, 3, 4, 6, or 24 pairs (48 rockets), with a rate of fire of 6 pairs per second.

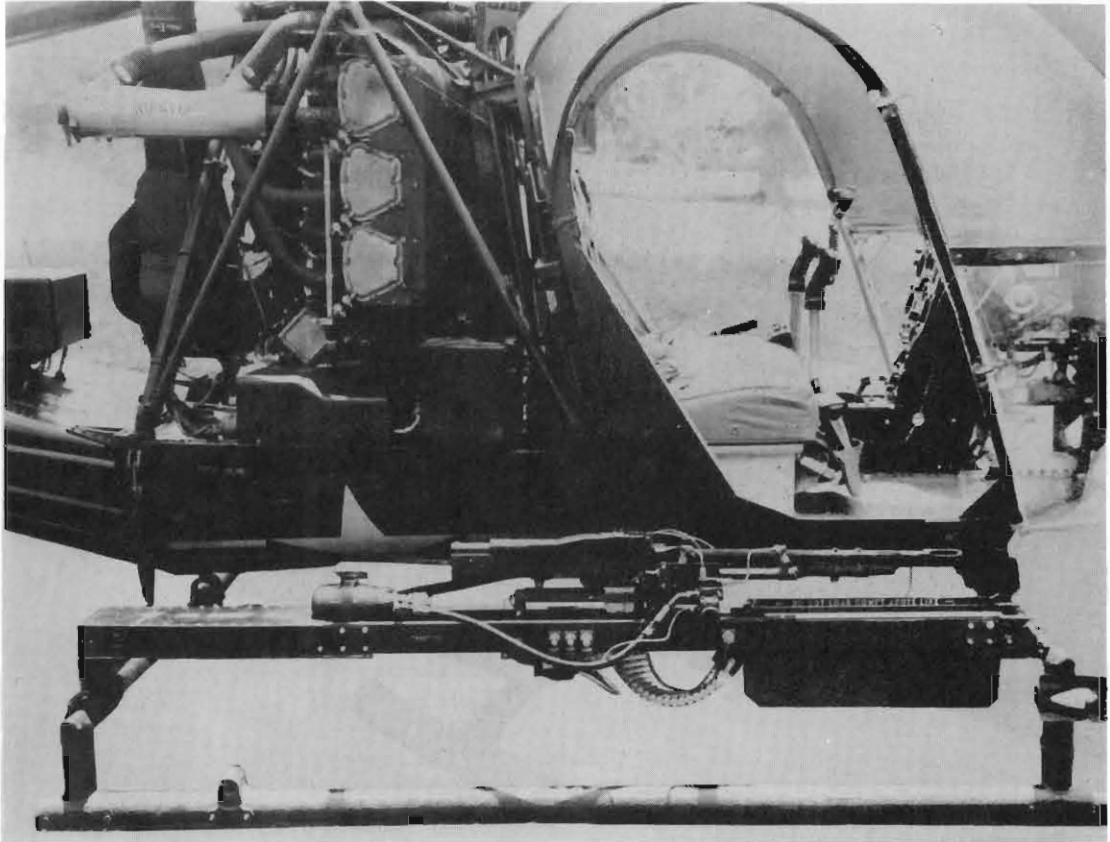


Figure 89. The M2 dual machinegun subsystem - right side.

d. Weight of a fully loaded system using 10-pound warheads is 1,439 pounds.

e. The pilot uses the XM60 reflex infinity sight to align the rocket tubes with the target and fires the subsystem with a trigger switch on the cyclic control.

93. M5 40MM GRENADE LAUNCHER

a. The M5 helicopter armament subsystem (fig. 91) is designed to fire 40mm grenade projectiles as a direct fire area weapon against troops, lightly armored vehicles, and other soft targets. This subsystem is capable of delivering its total ordnance load of 150 rounds at a rate of 220 rounds per minute to a maximum employable range of 1,750 meters.

b. The components of the subsystem include a nose-mounted, flexible turret; the M75 grenade launcher; ammunition booster; ammunition feed chuting; sighting station; servoamplifier and junction box; turret control panel; ammunition box; and associated electrical components. The total weight of the subsystem, fully loaded, is approximately 335 pounds.

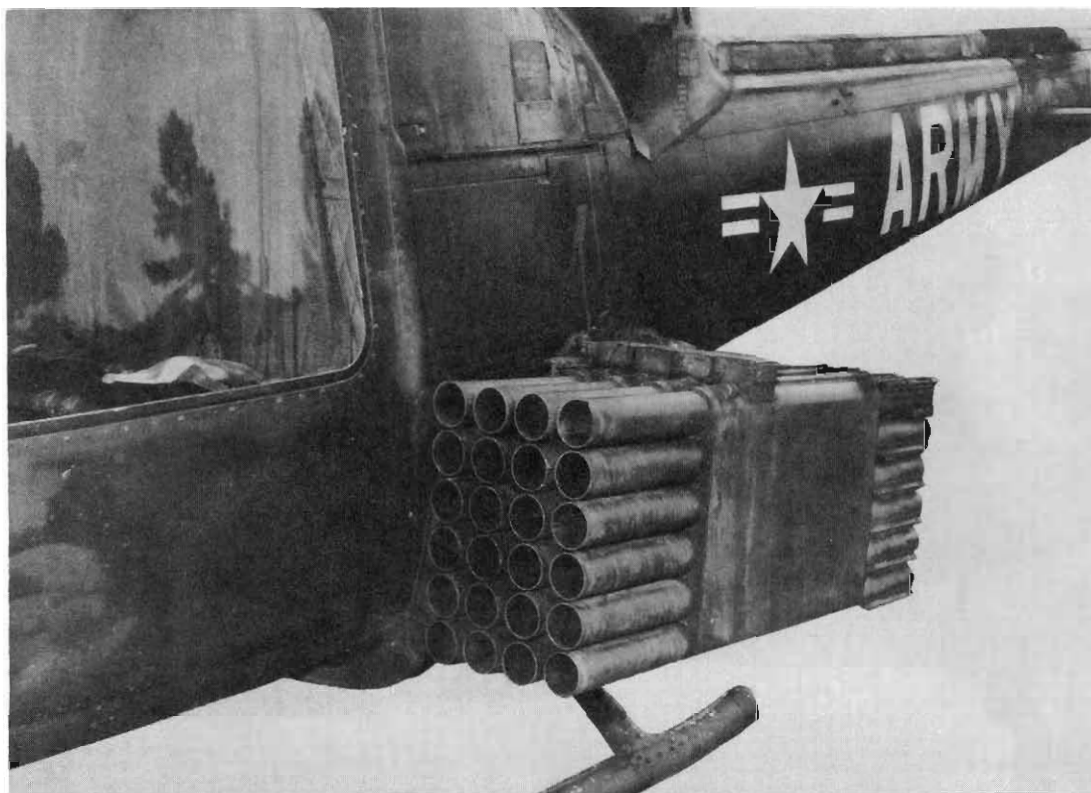


Figure 90. The XM3 2.75-inch area rocket weapons subsystem - left side.

c. Through the use of the flexible sight, the copilot-gunner directs the subsystem through its flexible limits - 15° elevation, 35° depression, 60° right or left of the nose. This weapon can also be fired in a fixed forward mode by either the pilot or copilot-gunner. In this position, elevation can be controlled throughout the elevation limits by adjustment of a wheel on the turret control panel.

94. M6 QUAD MACHINEGUN SUBSYSTEM

a. The M6 quad machinegun subsystem (fig. 92) is designed to provide helicopters with a counterfire capability to suppress enemy ground-to-air small arms fire. The subsystem provides two flexible gun mounts, one for each side of the helicopter. The guns may be stowed in a predetermined position, and fired as a fixed installation by either the copilot-gunner or pilot.

b. Each mount supports two M60C (7.62mm) machineguns with a combined rate of fire of 2,200 rounds per minute for a maximum effective range of 750 meters. Ammunition is carried in boxes located under the troop seats in the aircraft cargo compartment.

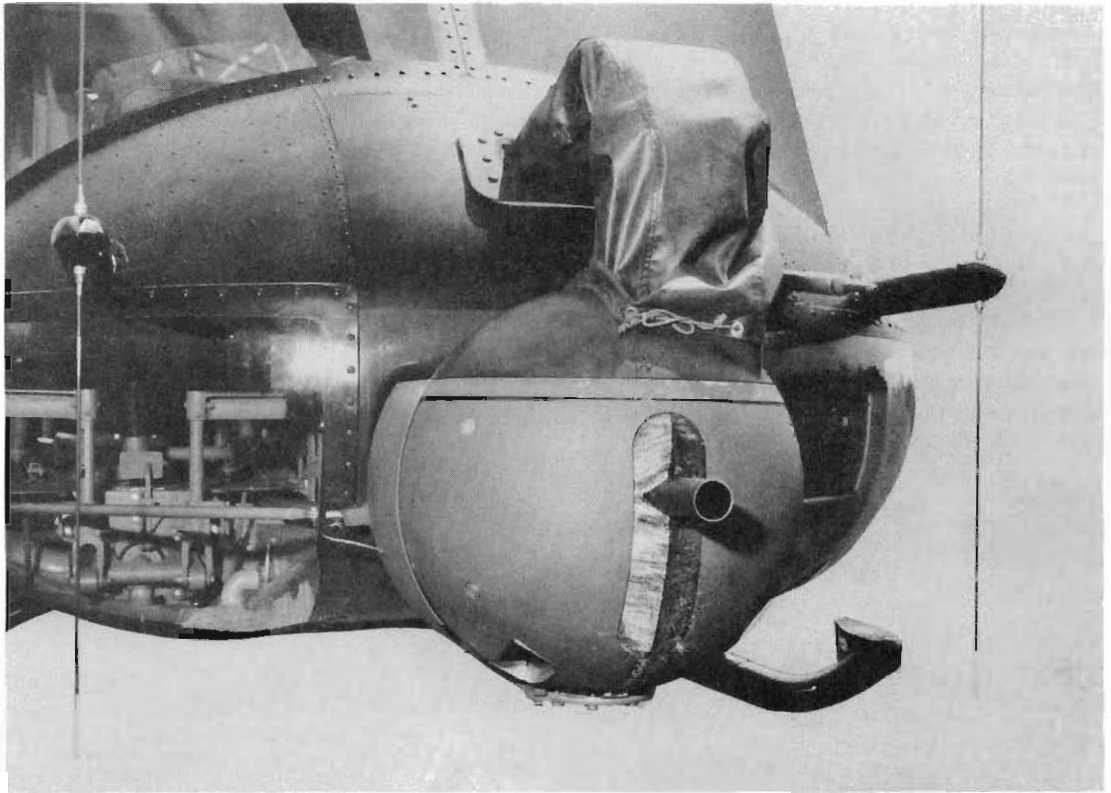


Figure 91. M5 40mm grenade launcher.

With the subsystem fully loaded, a total of 6,700 rounds is available. Fully loaded, the total weight is 830 pounds.

c. The guns are mounted on their sides, one above the other. Each gun is attached to the gun mount by a quick-release latch. They are fed from above and the spent cases and links are ejected downward, away from the aircraft.

d. The gunner may direct the fire of the guns independently of the helicopter attitude through the use of a sight control unit. This sighting unit remotely controls the guns, which can be elevated 15° , depressed 60° , and deflected 12° inboard and 70° outboard.

95. M22 ANTITANK GUIDED MISSILE SUBSYSTEM

a. The M22 antitank guided missile subsystem (fig. 93) is a French developed, zero-launched, wire-guided subsystem capable of providing point fire support against small dimensional hard targets such as tanks, armored vehicles, pillboxes, and bridges.



Figure 92. M6 quad machinegun subsystem mounted on the UH-1B/C.

b. When this subsystem is mounted on the UH-1, it consists of six AGM-22B missiles. Each missile weighs approximately 64 pounds, accelerates to a speed of 600 feet per second (425 miles per hour), and is capable of neutralizing any known armor in existence today. The maximum range of this missile is 3,500 meters and it can be fired while the UH-1 is on the ground, hovering, or in forward flight. Fully loaded the total weight is 681.5 pounds.

c. Each missile can be selected, launched, and guided by a gunner sitting in the helicopter's copilot seat. The missile is guided by a small wobble stick mounted on a control box which is directly in front of the gunner. Guidance commands to the missile are transmitted by means of two wires trailing from the control mechanism to the aft end of the missile during flight. The minimum range for effective control is dependent on the proficiency of the gunner but is normally 500 to 800 meters.

d. For most direct fire weapons, the probability of obtaining a hit increases as the range decreases. The hit probability of the missile increases with an increase in



Figure 93. M22 antitank guided missile subsystem mounted on the UH-1 - left side.

range. This subsystem can be fired most effectively at ranges greater than 1,000 meters. This standoff distance keeps the aircraft out of range of most small arms fires and allows the gunner time to locate the missile in the optical sight and to stabilize it on the target.

e. The M22 is relatively simple to maintain under field conditions and has an extremely high reliability factor.

96. XM16 DUAL ARMAMENT SUBSYSTEM

a. The XM16 armament subsystem (fig. 94) provides the helicopter with a dual weapons capability and is the first such system adopted by the Army for use on the UH-1 helicopter. The XM16 is designed to provide area suppressive fires in support of all conventional armed helicopter missions.

b. The XM16 subsystem is composed of the standard M6 armament subsystem and the 2.75-inch folding fin aircraft rocket. Two 7-tube rocket pods are attached to

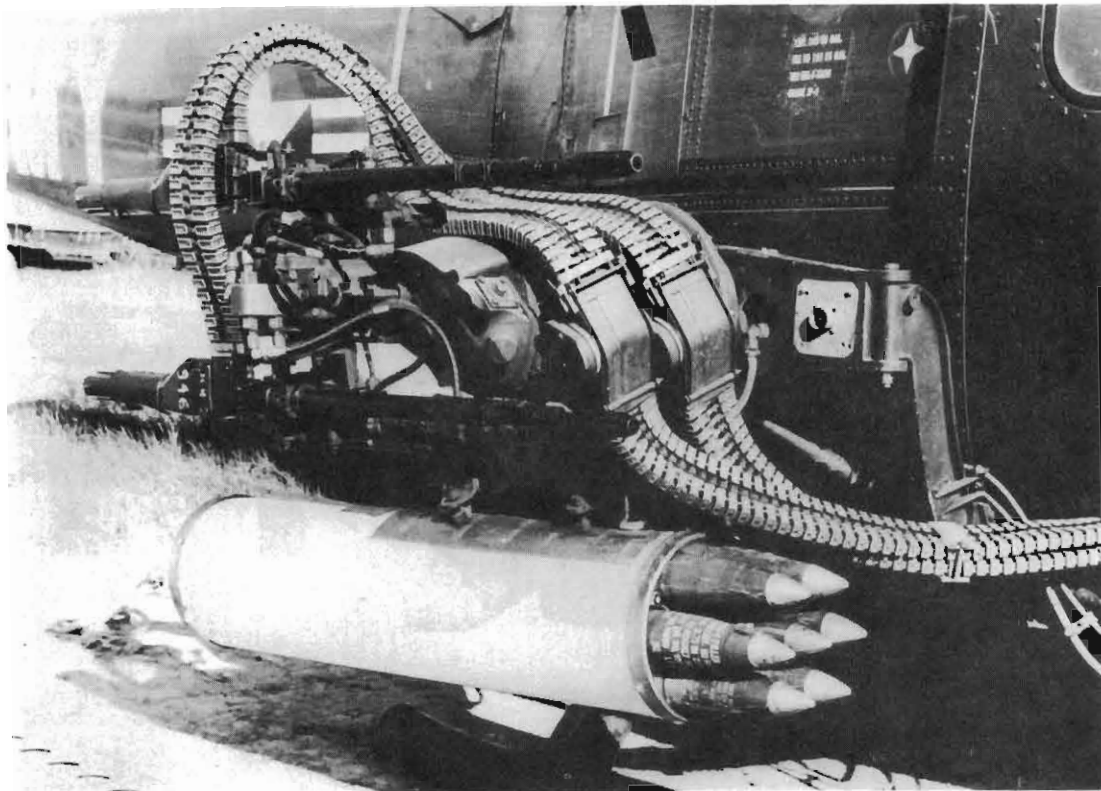


Figure 94. XM16 dual armament subsystem - left side.

bomb shackles located under each gun mount assembly. A rocket armament panel is installed on the aircraft pedestal and allows the pilot to select the number of pairs of rockets to be fired (one to seven pairs). An electrical and manual jettison is provided to allow jettisoning of the rocket pods in an emergency. The XM60 reflex infinity sight is installed on the pilot's side of the helicopter. The sighting techniques for rocket firing are the same as those used with the XM3 armament subsystem.

c. The XM16 subsystem weighs 1,294 pounds. This includes all the components, hardware, 6,700 rounds of 7.62mm ammunition, and fourteen 2.75-inch rockets. The combined rate of fire of the M60C machineguns is 2,200 rounds per minute; the maximum effective range is 750 meters. The 2.75-inch rocket system will fire six pairs per second to a maximum effective range of 2,500 meters.

d. The XM16 armament subsystem allows the gunner to fire the M6 subsystem in its flexible mode and the pilot to aim and fire the 2.75-inch rocket. Machinegun fire is automatically interrupted when the rockets are being fired.

97. XM21 ARMAMENT SUBSYSTEM

a. The latest addition to the helicopter inventory is the XM21 armament subsystem (fig. 95). The XM21 evolved from and is destined to replace the XM16 subsystem, which has been the primary helicopter armament to date. It inherited all of the advantages and capabilities of the XM16; however, in most areas, the capabilities have been improved.

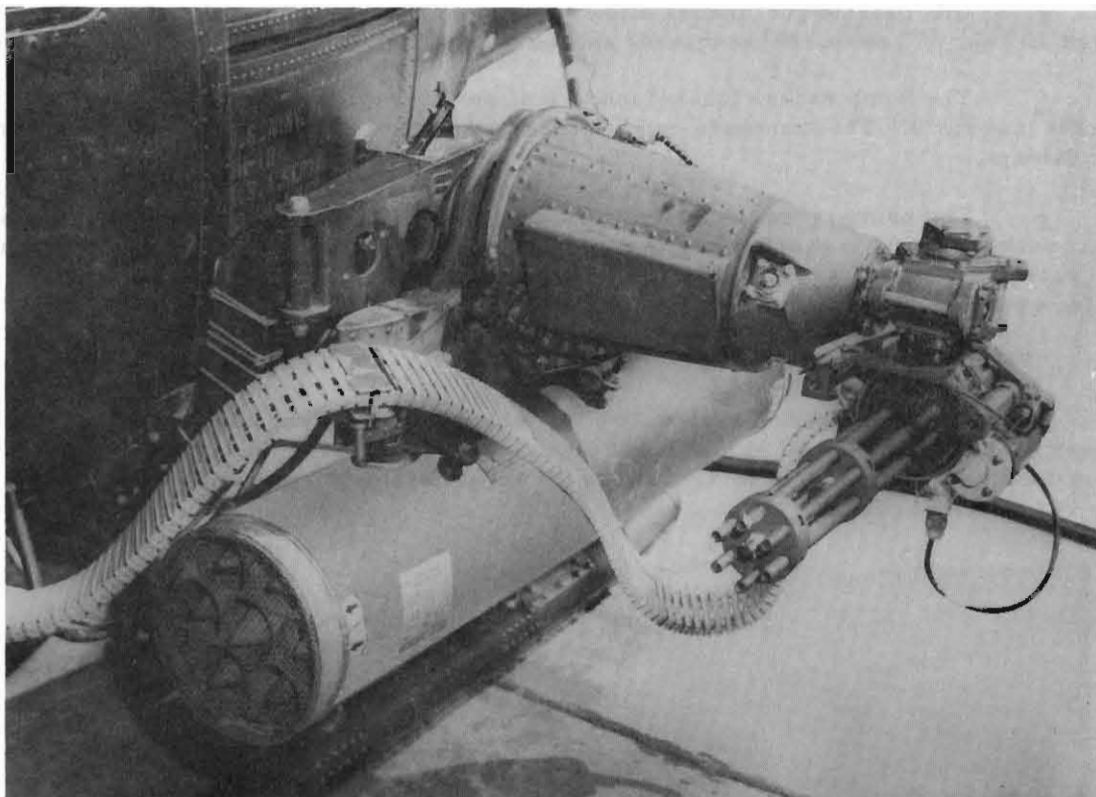


Figure 95. XM21 armament subsystem.

b. The primary difference between the XM16 and XM21 is the machineguns. The four M60C machineguns, which were basically infantry weapons modified to be used on the XM16, have been replaced by two 7.62mm high-rate-of-fire automatic guns. The substitution of the automatic guns for the M60 machineguns has increased the system firepower 100 percent. The XM21 has a maximum cyclic rate of fire of 4,800 rounds per minute, 2,400 rounds per minute per gun. The maximum rate of fire decreases to 4,000 rounds per minute. If either gun reaches a 12° inboard limit, it will cease to fire; however, the opposite gun will then accelerate from 2,400 to 4,000 rounds per minute. The gunner has the capability to select a single gun to obtain a minimum rate of fire of 2,400 rounds per minute. A 3-second burst limiter prevents him from firing bursts longer than 3 seconds; this prolongs the life of the gun and prevents unnecessary expenditure of ammunition.

c. The gun is an electrically driven, air-cooled, six-barreled high-rate-of-fire automatic gun. The electric drive motor rotates the gun in its housing by means of gears. Attached to the right side of the gun is the delinking feeder which accepts linked ammunition, strips the rounds from the links, ejects the links, and feeds the rounds into the chambers. An important safety feature is that the guns are completely cleared after each firing burst. Any time a weapon ceases to fire, a minimum of six live rounds are dumped overboard.

d. The ammunition storage boxes are basically the same as those used in the XM16. The capacity of the boxes is 6,000 rounds and the flexible chuting contains an additional 350 rounds. An electrically driven crossover cartridge drive has been attached to the boxes and allows the ammunition to be pulled from the primary row initially; then, from the secondary row by means of a clutch mechanism.

e. The flexible gun mounts allow the guns to be positioned within the flexible limits of 10° up, 85° down, 70° outboard, and 12° inboard.

f. The bomb racks, located inboard of the gun mount assemblies, support the rocket launchers. The launchers can be jettisoned in case of inflight emergency or combat damage.

g. The primary means of firing the gun is with the gunner's flexible sighting station, which is a space parallelogram allowing the gunner to sight around obstacles within the cockpit. A secondary means of firing the system is in the stowed position, using the firing switch on the cyclic control stick.

98. "FIREFLY"

a. This illuminating system is a fine example of field expediency and imagination. It was originally developed in Vietnam. Since its development, "Firefly" (fig. 96) has been used very successfully in Vietnam to illuminate boats or sampans discovered operating in authorized areas at night.

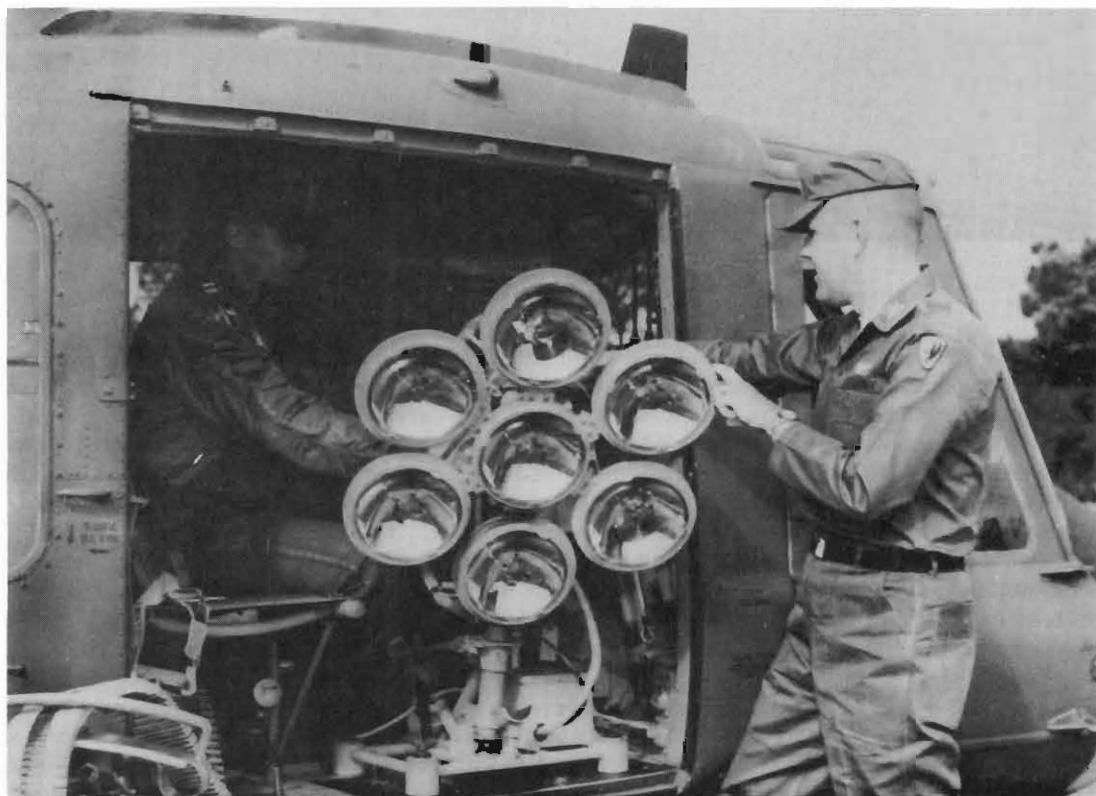


Figure 96. Firefly.

b. The system is normally employed with two additional armed helicopters which will destroy those targets which are being illuminated. This concept has been used to sink hundreds of enemy boats and to kill untold numbers of Viet Cong on the large rivers and canals in Vietnam. Because of "Firefly" the enemy no longer enjoys the cover of darkness to hide his movements.

c. The system has an intensity of 1.5 million candlepower and operates off the aircraft 28-volt DC power supply. At an altitude of 1,200 feet, the system can be used as a spotlight to illuminate an area 400 meters in diameter. At an altitude of 2,000 feet, the system used as a floodlight can illuminate an area approximately 1,000 meters in diameter. The operator can elevate, depress, and traverse the system using the handlebar controls. By turning a crank which changes the attitude of each light, he can adjust them to be used either as a spotlight or a floodlight.

d. Although the "Firefly" system is normally mounted on the UH-1D helicopter, it is important to note that it can be mounted on any UH-1 helicopter in approximately 3 minutes.

e. In using a device of this kind, the common question arises concerning exposure to enemy ground fire. Since its conception, none of the aircraft employing "Firefly" have been shot down. Due to the single light source and its intensity, range estimation and target lead are very difficult; in addition, the simultaneous attack by the "killer team" assist in suppressing any ground fire.

f. The weight of the system is 46 pounds.

99. XM27 AUTOMATIC GUN SUBSYSTEM

a. The XM27 automatic gun subsystem (fig. 97) is used on the OH-6A light observation helicopter. The subsystem, using the same GAU-2B/A automatic gun as the XM21 subsystem, is capable of providing fire support in a defensive role on such missions as reconnaissance and security.



Figure 97. XM27 automatic gun subsystem.

b. Fully loaded with 2,000 rounds of 7.62mm ammunition, the system weighs 276 pounds. The gun is fired by the two-position trigger switch on the cyclic and delivers 2,000 or 4,000 rounds per minute (2,000 in the first indent position and 4,000 in the second position). The variable rate of fire is controlled through the gun drive motor by varying the voltage to the motor.

c. The mount assembly for the XM27 is attached to the cargo compartment floor and pivots to allow the gun to elevate and depress from $+10^{\circ}$ to -24° (controlled by the elevation-depression switch on the cyclic). The gun is attached to the mount assembly by the use of recoil adapters which also absorb recoil. With the mount assembly and ammunition trays installed, the carrying of passengers in the cargo compartment is eliminated.

d. The ammunition tray lid contains the "ammo-lo" switch which causes the "ammo-lo" light to come on when there is 200 rounds remaining in the tray. Additionally, the flexible chuting which connects the right side of the trays to the delinking-feeder contains another 200 rounds.

e. The mode selector control, located on the instrument panel, allows the pilot to select either "fire-to-clear" which requires the gun to empty all chambers, or "fire-normal" which leaves the gun loaded after each burst. A 3-second burst limiter prevents overheating or wasting of ammunition.

f. The subsystem is normally fired by the pilot using the XM70 sight. The sight, which is connected mechanically to the gun, moves through the elevation-depression range and, in conjunction with the high cyclic rate of fire and the slightly increased muzzle velocity, increases the maximum effective range of the system to 1,000 meters.

g. The XM27E-1 subsystem, designed to replace the XM27, is basically the same, but uses a single ammo can holding 2,000 rounds, has no recoil adapters, and uses a different drive motor.

100. EMPLOYMENT OF ARMED HELICOPTERS

a. General. The armed helicopter can perform three basic missions - escort, reconnaissance, and direct fire support. The concept of using armed helicopters in a fire support role visualizes the broadest assignment of these aircraft to supplement and extend the fire support capability available to the general commander, but is not intended to substitute for ground-based fire or close air support. Using appropriate tactics, the armed helicopter contributes greatly to mission accomplishment through its inherent ability to operate under the same environmental conditions as the general force. For detailed information on armed helicopter employment, see FM 1-110.

b. Types of Armed Helicopter Fire. The types of fires used in the conduct of operational missions are point and area.

- (1) Point fires. Point fires have a high first-round hit probability to neutralize or destroy hostile point targets of relatively small dimensions. Point targets may be classified as -

- (a) Hard targets. Typical hard targets are heavily armored vehicles and fortified or prepared positions.

- (b) Soft targets. Soft targets include lightly armored or unarmored vehicles, exposed or lightly fortified crew-served weapon emplacements, and personnel.

- (2) Area fires. Helicopters with an area fire capability are employed independently or in conjunction with other conventional means to destroy or neutralize targets deployed over a wide area such as troop concentrations, assembled vehicles, command posts, and supply installations.

c. Low-Visibility Operations. Operations of armed helicopters are hindered by low visibility during bad weather or darkness. However, this does not prohibit operation of helicopters during such periods. Operations may be even more restricted at night.

- (1) Disadvantages. Disadvantages of flying under low visibility during daylight hours are -

- (a) Navigation over unfamiliar terrain becomes more difficult.
- (b) The speed of the helicopter may have to be reduced to avoid obstacles.
- (c) Observation of enemy activity becomes restricted.
- (d) Operations require more detailed planning, with particular emphasis on flight routes, altitudes, and formations.
- (e) Control is more difficult because of limited visibility between helicopters; thus, it is most important that each aviator and observer thoroughly understand every aspect of the mission.

- (2) Advantages. Advantages of flying under low visibility during daylight hours are -

- (a) The troops are provided with excellent concealment.
- (b) The helicopters are concealed from enemy observation by the weather.
- (c) Active enemy countermeasures are reduced.

d. Night Operations.

- (1) Armed helicopters are more effective during daylight operations since enemy targets, suspected enemy locations, and individual targets are more easily located and engaged. During night operations, area fire techniques are normally used to attack selected targets.
- (2) All flight difficulties encountered during low-visibility daylight operations apply to night operations as well, and planning must be complete and in detail. Terminal guidance performed by pathfinder-trained personnel of the aviation unit may be required. To enhance the effectiveness of armed helicopters at night, visual aids including infrared devices, starlight scopes, flares, illuminating rounds from indirect

fire weapons, and searchlights may be used. Of these, artillery 105mm illumination and ground mounted searchlights have been most effective. The use of pyrotechnics must be coordinated with other units participating in the operation. Indiscriminate use of pyrotechnics can cause loss of surprise and premature exposure of the units participating in the operation.

- (3) The key to a successful night operation is the aviator's ability to develop and maintain good night vision. In order that objects may be defined at night, effective use must be made of night vision techniques. Regardless of the intensity of the light encountered, it will produce varying effects on the aviator's night vision. Precautions must be taken to avoid a total loss of night vision or the aviator's reacting to erroneous impulses created by the effects of night illumination.
- (4) Even though night operations are normally flown at a higher altitude than are daylight operations, the aviator must constantly be aware of his position in relation to terrain and obstacles and control his helicopter accordingly.

101. ESCORT OF AIRMOBILE FORCES

a. Sufficient armed helicopters are organic within the ROAD division to provide escort for small airmobile operations (lift of a rifle company or less). Larger airmobile operations may be protected by armed helicopters which are organic to the unit conducting the airmobile operation or by aircraft organized into separate units and attached to, or placed in support of, the airmobile force. Escort helicopters may consist of observation, utility, or transport-type helicopters armed with machineguns, aerial rockets, guided missiles, or other weapons. The number may vary, but a ratio of one escort helicopter to three airlift helicopters has been found to be suitable. The type armament employed is dependent on the nature of the known and suspected types of enemy targets to be attacked. Generally, escort elements are equipped with machineguns, aerial rockets, grenade launchers, and guided missiles to insure a capability of engaging a variety of targets.

b. The type of aircraft selected for the escort role must be compatible in speed and range with the airlift helicopters to be escorted. It is highly desirable that a speed and range differential exist between the escort and escorted aircraft, with the escort aircraft having the advantage. When the same type aircraft are used for both the airlift and escort missions, an artificial speed differential may be created by limiting the airlift formation to a slower-than-maximum or normal cruise speed. This action will permit escort aircraft to cruise at formation speed, leave the formation as required to accomplish fire support missions, and still be able to return to the formation. Such a tactic also has the advantages of increasing to a limited extent the endurance of the aircraft, permitting better control of the formation, and providing the airlift aircraft a "cushion" of unused but available speed on which they can rely in an emergency.

c. Escort helicopter forces assist in providing security for the airlifted forces during the loading phase. Once the airlift force is airborne en route to the objective area, escort aircraft are responsible for destroying or neutralizing enemy forces which threaten the flight.

d. Other escort aircraft are deployed to the flanks, to the rear, and within the airlift aircraft formation. When the airmobile force is threatened or attacked, sufficient

fires are immediately placed on the enemy and continued until the airlift force has passed out of range or until the enemy is destroyed. Those escort aircraft which have been diverted from the force in order to accomplish missions then rejoin the formation. Rear guard aircraft prevent enemy forces which have been overflown or bypassed from attacking the force from the rear.

e. Mechanical failure or enemy action may force airlift aircraft to land prior to reaching the objective area. When possible, escort aircraft provide reconnaissance, security, and fire support for crews and troops of the downed aircraft until they can be picked up. Under some circumstances, escort aircraft may have to make the pickup.

f. As the airmobile forces approach the objective area, leading escort elements join in providing suppressive fires. If possible, this support is continued during the landing phase. After debarkation of airlifted troops, all or part of the escort aircraft may remain to support the ground elements by performing fire support and armed reconnaissance missions, or they may be used to protect the airlift aircraft on their return flight.

g. Centralized control of the entire airmobile force (troops, and airlift and escort aircraft) is essential during the flight to, and landing at, the objective area. This overall control is normally vested in the commander of the airlifted force, and escort aircraft are responsive to his desires. (The control, safety, and action of individual aircraft in flight remain the responsibility of the aviator-in-command of the aircraft.)

102. RECONNAISSANCE AND SECURITY

a. The threat of attack on friendly units can be greatly reduced through the employment of armed helicopters in the reconnaissance and security role. Ground units operating in counterinsurgency operations will require habitual security; in conventional war, ground convoys will require reconnaissance and security in the combat or communication zone only when the need for added security is apparent.

b. The size of the armed helicopter force will vary depending on the size of the ground unit involved and the importance placed on security for a particular operation. A minimum of two helicopters (one fire team) may be employed as the security force; however, it is recommended that more than one fire team be employed so the aerial force can provide continuous support and a continuing reconnaissance in the operational area.

- (1) Continuous support. If the ground unit is to move a considerable distance, it may be necessary for the armed aircraft to relieve on station. Another fire team should be available to replace the aircraft on station during this time. If sufficient resistance is encountered to necessitate ammunition reloading, the aircraft should be replaced so that effective continuous support is assured. Aircraft forced to land because of mechanical failure or enemy action must also be replaced.
- (2) Continuing reconnaissance. More than one fire team of armed helicopters should be employed so that one fire team can provide continuous reconnaissance for the unit while the balance of the armed helicopter force is positioned over or near the unit. Reconnaissance can be conducted at low level at least 1,500 meters on each side of the ground unit or as terrain dictates. The reconnaissance element relays to the commander information on conditions found, obstacles, critical terrain, and known or suspected enemy positions. Negative reports should also be included at frequent intervals.

c. The direct fire support elements provide cover directly over or adjacent to the unit and provide the commander with immediately responsive fire support. This strike force may use various formations but the most commonly used are 360° orbits near or around the unit. This force must be prepared to support the reconnaissance element as well as the ground unit.

d. To insure success in this mission, detailed planning must be accomplished by the commander. This planning should include, but not be limited to, the following:

- (1) A thorough map reconnaissance of the operational area, alternate routes, and adjacent terrain.
- (2) Establishment of control measures which may include checkpoints, phase lines, and holding areas.
- (3) A route reconnaissance if time and security permit.
- (4) Extensive and detailed coordination for specific refueling and rearming requirements, to include support.
- (5) Detailed coordination with the commander concerning radio frequencies, routes, times, control measures, preplanned action if unit is attacked, location of friendly forces in the area, and other means of fire support to be employed.

103. ROTARY WING ARMAMENT CHARACTERISTICS

- a. For armament subsystem weights, see table 3.
- b. For range data, see table 4.
- c. For performance data, see table 5.
- d. For angular coverage, see table 6.
- e. For aircraft armament subsystem range fan, see figure 98.

Table 3. Armament Subsystem Weights.

Item	Subsystem							
	M2	M6	XM3		M22	M5	XM16	XM21
	Type of ammunition							
	7.62mm	7.62mm	2.75-inch rocket		AGM-22B	40mm	7.62mm and 2.75-inch rocket	7.62mm and 2.75-inch rocket
			w/6.45-lb whd	w/10-lb whd				
Weight (lb)								
<u>Subsystem</u>								
Unloaded	86.5	430	391	391	266	223.5	600	629
Fully loaded	162.5	830	1,324	1,439	681.5	335.3	1,268 ¹ 1,317.7 ²	1,346
<u>Ammunition (per round or rocket)</u>	.088	.088	19.15	22.70	64	.75	19.15 ¹ 22.70 ² .088	19.15 ¹ 22.70 ² .088
<u>Jettisonable wt (fully loaded)</u>	NA	NA	1,174	1,344	432	NA	328 (w/6.45-lb whd) 378 (w/10-lb whd)	328 378

¹2.75-inch rocket w/6.45-lb whd.²2.75-inch rocket w/10-lb whd.

Table 4. Range Data.

	Subsystem (range in meters)										
	M2	M6	XM3		M22	M5	XM16			XM21	
	Type of ammunition										
	7. 62mm	7. 62mm	2. 75-inch rocket		AGM-22B	40mm	7. 62mm	2. 75-inch rocket			
			6-1b whd	10-1b whd				6-1b whd	10-1b whd	6-1b whd	10-1b whd
Maximum range	3, 200	3, 200	9, 300	7, 700	3, 500	1, 750	3, 200	9, 300	7, 700	9, 300	7, 700
Maximum effective range	750	750	2, 500	2, 500	3, 500	1, 200	750	2, 500	2, 500	2, 500	2, 500
Minimum employment range	NA	NA	300	300	500	300	NA	300	300	300	300

Table 5. Performance Data.

	Subsystem						
	M2	M6	XM3	M22	M5	XM16	XM21
Fuze arming distance (meters)	---	---	187	300	18-37	187	187
Flight time (seconds)	---	---	1.69 ¹	22	---	1.69 ¹	1.69
Penetration (inches of armor)	---	---	---	23	---	---	---
Bursting radius (meters)	---	---	---	---	10	---	---
2.75-inch rocket w/6.45-lb whd	---	---	6	---	---	6	6
2.75-inch rocket w/10-lb whd	---	---	8	---	---	10	10
Maximum rate of fire	550 rds/min each gun	550 rds/min each gun	6 pairs of rockets/sec	1 per 23 sec	220 rds/min	550 rds/min each gun and 6 pairs of rockets/sec	4,800 rds (both guns); 4,000 rds (single gun) 6 pairs of rockets/sec
Maximum acceleration (ft/sec)	---	---	2,300	600	---	2,300	2,300
Muzzle velocity (ft/sec)	2,750	2,750	---	---	790 (M384)	---	---
Ammunition capacity	1,100 rds	6,700 rds	48 rockets	6 missiles	150 rds	6,700 rds (7.62mm) and 14 2.75-inch rockets	6,400 rds (7.62mm) and 14 2.75-inch rockets

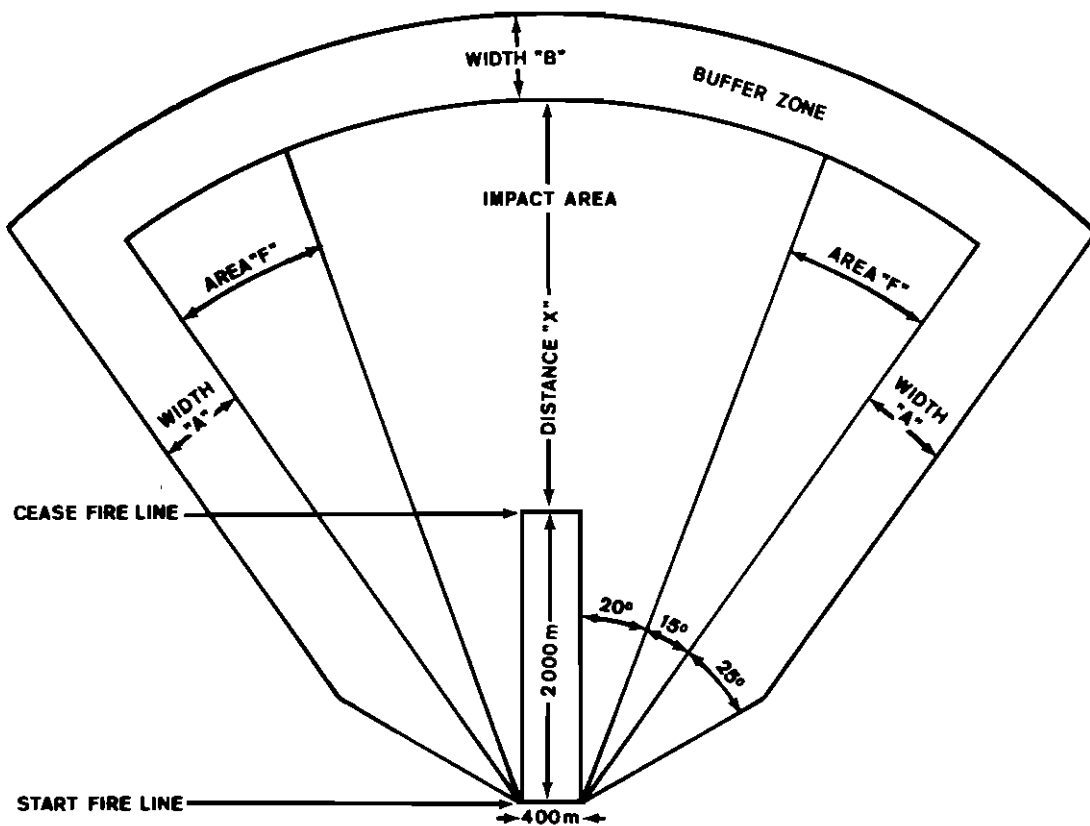
¹ Rocket motor burnout time.

Table 6. Angular Coverage.¹

	Angular limits (degrees)			
	M5	M6/XM16	M2	XM21
Outboard (right and left)	60	70	None	70
Inboard	NA	12	None	12
Elevation	15	15	9	10
Depression	35	60	None	85

¹ The XM3 subsystem fires from fixed positions; the XM16 subsystem combines fixed firing of 2.75-inch rockets with flexible firing of the M6; and the M22 subsystem is wire-guided.

WEAPON	WIDTH AREA "A" METERS	WIDTH AREA "B" METERS	DISTANCE "X" METERS
7.62mm	500	500	4000
2.75 ROCKET	500	500	* 9700
40 mm	200	200	2400
M 22	1000	1000	4900



* 10 LB WARHEAD

Figure 98. Aircraft armament subsystem range fan.

PART FIVE

SURVIVAL AND EVASION AND ESCAPE

Section I. SURVIVAL

104. GENERAL

Army aviation combat operations as conducted today increase the requirement for survival training. The actions taken in the first few minutes of a survival situation are the most crucial and have a great bearing on the ability to survive. A general knowledge of survival techniques in all types of weather or in extreme environments is a prerequisite if personnel are to be adequately trained to respond to all survival situations and conditions.

105. ARCTIC SURVIVAL

a. Major Requirements for Survival. When personnel recognize the environmental characteristics of the Arctic, the major requirements for survival become evident. The basic survival problem in the Arctic is keeping warm. Temperatures range from cool to frigid; therefore, warm clothing and shelter are essential and food is needed to compensate for the accelerated heat loss.

b. Immediate Actions.

- (1) In winter, protection from cold is the most immediate and constant problem. Personnel should keep dry, avoid snow blindness, and periodically check for frostbite.
- (2) When traveling on foot in a glacier area, downed crewmembers of an aircraft should be roped together (preferably three men to a rope). During movement, the snow should be probed to detect crevasses.
- (3) In summer, it is important to keep dry and provide protection against insects.

c. First Aid. Frostbite and snow blindness are two definite hazards to arctic survival.

- (1) Frostbite. The first sensation of frostbite is a feeling of numbness rather than pain. The appearance of a grayish or yellow-white spot on the skin can be observed before the victim feels a sensation. The affected area should never be massaged since frozen tissue can be torn and cause further damage.
- (2) Snow blindness. Symptoms of snow blindness are burning, watering, or inflamed eyes; headaches; and poor vision. Snow blindness should be treated by staying in a dark shelter or by wearing a lightproof bandage to protect the eyes from light for a 24-hour period. Pain can

be relieved by placing a cold compress on the eyes and by taking aspirin.

d. Signaling. Aircraft should be kept free of snow and frost so that they can be easily seen. A parachute can also be seen in the forest or on the tundra in summer, especially at night. Signals should be tramped out in the snow and then filled with boughs, sod, or moss to provide contrast for easy detection.

e. Shelters. Since the aircraft is conductive to cold temperatures, a suitable insulated shelter should be improvised outdoors. The campsite should be established in a wooded area, if possible, near a source of fuel. Campsites should not be selected at the bases of slopes or cliffs where snow may drift or create avalanches. It is important to keep the front opening of the shelter crosswind.

f. Clothing. Insulation, combined with body heat, provides the maximum warmth. Clothing should be worn loosely because a tight fit will cut off circulation and increase danger of freezing. The ears should be covered at all times with a scarf. Clothing that has been exposed to water should be rolled in dry snow to blot out moisture, and then the snow should be brushed off. Rolling should be continued until all water is absorbed. Shoes should never be removed until inside the shelter.

g. Water. Whenever possible, ice instead of snow should be melted to obtain water. For drinking water, old sea ice should be used. It is bluish, has rounded corners when broken, and is free of salt; new sea ice is gray, milky, hard, and salty.

h. Food. In the Arctic, native animals and plants are not reliable as a source of food. The best chance of survival is along the coastlines of Asia, Alaska, and Greenland, because seafood is more common there and provides a dependable supply of food. Tundra animals include rabbits, hemming mice, ground squirrels, and fox. They may be trapped or shot, winter or summer, anywhere on the tundra (open, treeless plains). The large game, such as the caribou and moose, are migratory and are normally found on the tundra during the winter months. Since all arctic game (large or small) may transmit trichinosis, all meat should be cooked thoroughly. Liver of polar bear and the bearded seal has a high concentration of vitamin A that is toxic to man and should never be eaten.

i. Travel. Travel in the Arctic is extremely difficult and hazardous. The decision to travel should be made only after careful consideration of the following requirements:

- (1) Exact knowledge of present location and of the objective of the journey.
- (2) Knowledge of orientation methods.
- (3) Physical stamina.
- (4) Suitable clothing.
- (5) Adequate food, fuel, and shelter, or the equipment for obtaining them.

106. DESERT SURVIVAL

a. Immediate Actions. When downed in the desert, water and heat present the biggest problem. It is important to get into the shade as soon as possible and keep the head and the back of the neck covered.

b. First Aid. Exposure to the desert sun can cause three types of heat collapse: heat cramps, heat exhaustion, and heat stroke.

- (1) Heat cramps. The first warning of heat cramps usually appears in the leg or stomach muscles. The patient should be allowed to rest; he should be given salt dissolved in water, but only if there is plenty of water to drink.
- (2) Heat exhaustion. An individual suffering from heat exhaustion appears flushed, pale, and perspires heavily. Heat exhaustion will cause the skin to become moist and cool, and delirium or unconsciousness may occur. The victim should be placed in the shade, flat on his back, and given two salt tablets dissolved in a canteen of water.
- (3) Heat stroke. A heat stroke may occur suddenly. The face will turn red, the skin will become hot and dry, all sweating will stop, the pulse will be fast and strong, and the victim will have a severe headache. Unconsciousness may occur. To treat the victim, loosen his clothing and lay him flat, but off the ground, in the shade. Cool by wetting clothes with water and by fanning. Do not give stimulants.

c. Water. The minimum requirement of water is 1 gallon per person per day. Clothing helps ration perspiration by reducing evaporation and minimizing requirements. In all deserts, wells provide the main source of water. Desert natives often know the location of lingering surface pools in dry streambeds or other low places. In semiarid brush country, pools are usually located under brush heaps or in sheltered rocks. In true desert areas, flocks of birds will circle over waterholes, providing the survivor with a means of locating water sources.

d. Food. In most desert areas, animals are scarce. Their presence depends upon water and vegetation; true deserts offer little of either. Animals are usually located at waterholes; in grassy canyons, low-lying areas, or dry riverbeds where there is a greater chance for moisture, or under rocks and in bushes. Animals are most commonly seen at dusk or in early morning.

e. Signaling. A good improvised flare can be made from a tin can filled with sand soaked with gasoline. Oil and pieces of rubber should be added to make dense smoke for daytime signaling. Gasoline or other fuels should be burned at night to create a bright flame. In the desert, the mirror makes an excellent signal since it can be observed from great distances.

f. Shelter. Immediate shelter of some type is needed for protection from the direct rays of the sun, and from the extreme heat during the day. Natural shelter is limited to the shade of cliffs or the lee side of hills. If available, a parachute makes an excellent shelter. The layers of cloth are separated by an airspace of several inches and will make a much cooler shelter than a single thickness. To reduce heat, the

parachute can also be placed across a trench dug in the sand; the temperature 1 foot above the ground and 1 foot below the ground will be reduced 30° to 45° over actual surface temperature.

g. Clothing. In hot deserts, clothing is required for protection against sunburn, heat, sand, and insects. Personnel should avoid discarding any clothing and should keep the head and body covered during the day.

h. Travel. Desert trails resemble interlacing cowpaths, all leading in the same general direction. Usually these networks of paths are only a few yards wide, and are as clear and distinct as cowpaths in a pasture. Personnel last much longer without water if they stay near the aircraft in the shade, rather than taking the chance of becoming exhausted by trying to walk out. Travel should be attempted only if water is adequate, or if there is reasonable doubt of being rescued.

107. TROPICAL SURVIVAL

a. General. The Tropics are often viewed as enormous and forbidding jungles through which every step taken must be backed out, and where every inch of the way is crawling with danger. Actually, much of the Tropics is not jungles. Tropical areas may be jungles; mangrove or other swamps; open, grassy plains; or semiarid brushland. They may contain deserts or cold, mountainous areas. The jungles must be traveled with some labor and difficulty, but with little danger from anything larger or more terrifying than malaria-carrying mosquitoes.

b. Immediate Actions. Immediate shelter is needed for protection from tropical rain, sun, and insects. Malaria-carrying mosquitoes and other insect pests are the immediate dangers. Before leaving the crash area, the route should be carefully blazed or marked. The compass should be used and the direction of travel well known.

c. First Aid. In the Tropics, even the smallest scratch can quickly become dangerously infected. Any wound should be promptly disinfected.

d. Water. In tropical survival, an adequate supply of water normally is available. Water from tropical streams, pools, springs, and swamps is safe to drink only after it has been purified. Turbid water may be partially cleaned by filtering through an improvised filter, such as parachute cloth.

e. Food. Food is usually abundant in tropical areas. Animals are usually found along paths and roads. The ground should be checked for hedgehogs, porcupines, ant-eaters, mice, wild hogs, deer, and wild cattle. Fruits and berries are usually plentiful.

f. Shelter. A campsite should be selected on a knoll or high spot, in an open place well removed from swamps. In this type of terrain, the presence of mosquitoes is minimized, the ground will be drier, and there will be more chance of a breeze. In the wet jungle forest, shelter is required as a protection from dampness. The easiest improvised shelter is made by draping a parachute or tarpaulin over a rope or vine stretched between two trees. A good rain shelter can be made by covering an A-type framework with a good thickness of palm or other broad leaves, pieces of bark, or mats of grass. The thatch should be laid shingle-fashion, starting from bottom and working up with the tips of the leaves pointed downward. Sleeping directly on the ground should be avoided. Constructing a hammock from the parachute will discourage ants, spiders, leeches,

scorpions, and other pests. Camps should never be on game trails or near a stream or pond, especially during the rainy season.

g. Fire-Making. Wood is usually plentiful in the Tropics. During the rainy season, the fire problem may be more complicated because of the difficulty of finding dry fuel; however, many of the larger trees, whether dead or alive, have hollow trunks. Strips of the dry inner lining can be cut for kindling. Dry wood may be found hanging in the network of vines or lying on bushes. Bamboo should not be used for fuel because it burns too quickly, emits dangerous fumes, and may explode.

h. Clothing. The body should be covered to prevent malaria-carrying mosquitoes and other pests from lighting on exposed skin, and to guard against infections caused by scratches from thorns or sharp grass. The head and neck can be protected by wearing a mosquito headnet or by tying an undershirt or T-shirt around the head. Loose clothing should be worn to provide better ventilation.

i. Travel. If forced down in dense jungle where the aircraft and signals cannot be seen from the air, personnel should -

- (1) Attempt to travel to open country. Travel should be conducted during daylight hours, avoiding obstacles such as thickets and swamps. In some dense jungles, travel must be conducted on ridges where less vegetation makes cross-country travel possible.
- (2) Travel downhill until a stream is found, then follow the stream. In some dense jungles, travel must be conducted on ridges where less vegetation makes cross-country travel possible.

108. SEA SURVIVAL

a. General. The basic rules for ground survival also apply to sea survival. In general, shelter should be provided from the elements; personnel should keep as dry as possible, seek food, signal for help, observe strict water discipline, and not despair.

b. Immediate Actions. Survivors should stay upwind and clear of the aircraft, but remain near the aircraft until it sinks. Rafts should be checked for leaks and points of possible chafing. Excess water should be bailed out. Food and water should be rationed and fishing started immediately.

c. Signaling. Radios, mirrors, smoke, and sea markers provide excellent means for signaling.

d. Water. The water supply will come from catching rainwater, or by using either the desalting kit or the Solar Stills. These items of equipment should be put into operation as water is needed or according to forecast needs.

e. Food. The food supply will come from two sources - seafood or water fowl.

- (1) Shining a light on the water at night will attract fish. All fish should be cleaned and cut immediately and eaten before they spoil. Leftovers should be preserved by cutting them in thin strips and drying them in the sun.

- (2) All birds are potential food. They can be caught on baited hooks, triangular pieces of shiny metal, with a noose, or a baited toggle of metal or wood attached. Many birds will be attracted to the raft as a possible perching place. They may settle on the raft or even on your head or shoulder. They should be grabbed as soon as they have folded their wings.

f. Travel. The course a raft will take is the result of both wind and ocean currents, modified by the use of oars or paddles, tiller, sea anchor, and sails. In the open ocean, currents seldom move more than 6 to 8 miles a day. Rafts are not equipped with keels; this prevents sailing into the wind.

- (1) When ocean currents are moving toward an established destination, but the winds are unfavorable, a sea anchor should be put out and persons on the raft should huddle low to offer as little wind resistance as possible.
- (2) When the wind is blowing directly toward the destination of the raft, the raft should be fully inflated, the sea anchor raised, a sail rigged, and persons on the raft should sit high. An oar should be used as a rudder.

109. SURVIVAL KITS

a. Standard Kits.

- (1) Army survival kits contain items considered necessary for an individual downed in an extreme climate. The three standard individual kits are classified as Hot Climate, Cold Climate, and Overwater, each with the items peculiar to such regions of operation. In addition, the Army has procured the PSK-2 Personal Kit and the SEEK Survival Kit, which provide first-aid items.
- (2) Supply channels are published in Supply Letter 57-63, 2 July 1963, U.S. Army Aviation Materiel Command, St. Louis, Mo.
- (3) Funded requisitions are addressed to: Headquarters, U.S. Army Support Center, 2800 South 20th Street, Philadelphia, Pa. 19101. Units interested in the PSK-2 and the SEEK Kits should forward requisitions to the Defense Medical Supply Center, Brooklyn, New York. Federal stock numbers for the kits are -

Standard Kits

Hot Climate	8465-973-1861
Cold Climate	8465-973-1862
Overwater	8465-973-1863

OV-1 Kits

Hot Climate	8465-965-4701
Cold Climate	8465-782-3003
Overwater	8465-965-4702
Army Lightweight Individual	8465-101-0741
Combination of Hot Climate and Overwater	8465-516-3496
SEEK Kit	4240-631-9909
PSK-2	6545-611-0978

b. Personal Kits.

- (1) Each aircrew member should have an individual personal kit as part of his regular flying equipment. It is possible that the standard issue kit may be lost or abandoned, or not even carried in the aircraft; therefore, this personal kit must be equipped to replace, rather than supplement, the standard kit. This kit must be compact and lightweight (fig. 99). It must be adapted to the space and weight limitations, gear worn during flight, terrain flown over, climatic conditions, and individual preferences.

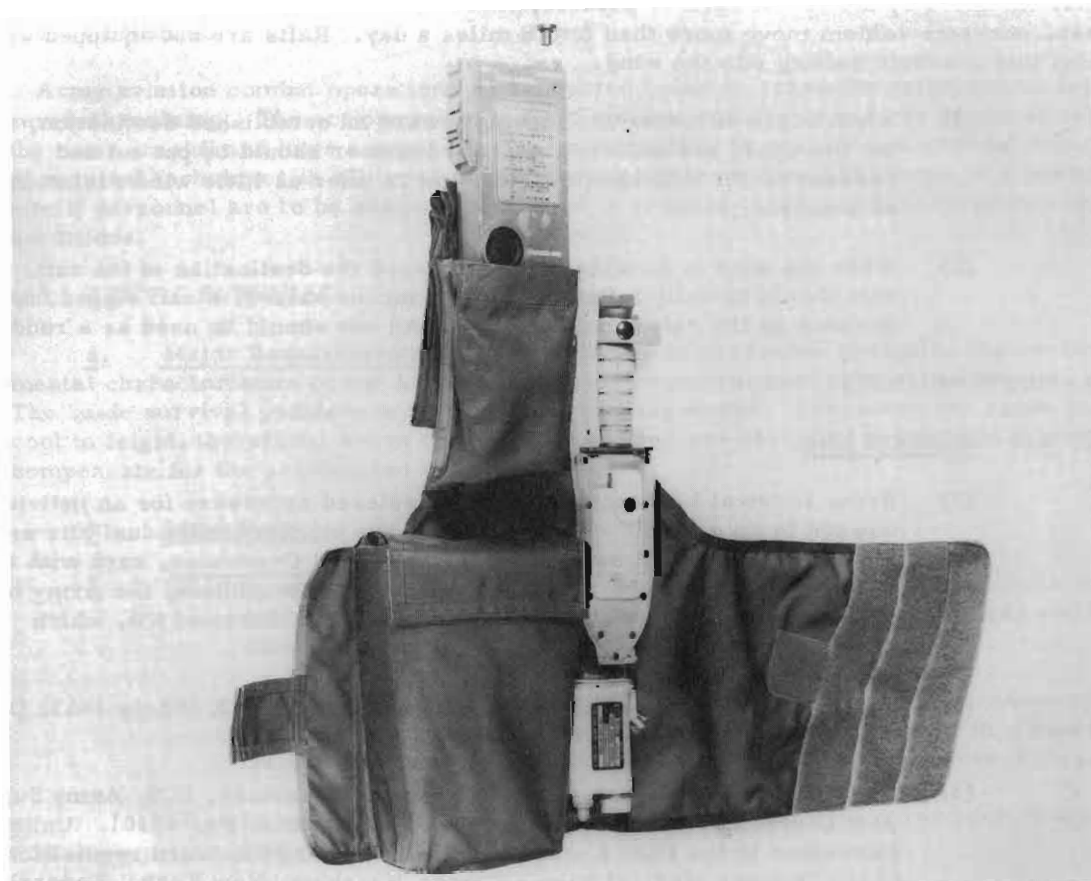


Figure 99. Personal survival kit (leg holster kit).

- (2) The following list will serve as a guide to assist in selecting items for inclusion in the personal kit:

(a) Foods.

Dehydrated soup mix.
Sugar cubes - high energy food.
Candy - source of quick energy.
Salt - seasoning and as replacement of body salt.
Bouillon cubes - morale factor.
Soluble coffee or tea - morale factor.

(b) Useful items.

Cutting edge - knife, razor blades.
Snare wire - game procurement.
Gill net - fish and bird procurement.
Pen light w/batteries - signal and night navigation.
Aluminum foil - cook, signal, waterproof.
Fire starter - matches, flint, magnifying glass.
Soap - hygiene, wound disinfectant.
Water purification tablets.
Prophylactics - water storage, waterproofing.
Tape - medical use, equipment repair.
Lipstick, antichap.
Aspirin - minor pain killer.
Compass.
Fishhooks and flies - assorted sizes.
Needles and pins - assorted sizes.
Band-aids.
Candles - source of heat.
Fishline.
Sewing kit.

110. SURVIVAL RADIOS

a. General. Emergency survival ground-to-air radios are authorized on the basis of one per aircraft in the division. Although two of the five accepted survival radios have a wide frequency range, they are normally pretuned to emergency frequencies 243.0 mc UHF or 121.5 mc VHF, as applicable. Search and rescue aircraft have the necessary equipment to "home" on the transmitted signal and assist in returning the operator to safety.

b. Operation and Limitations. Complete operating instructions for transmitting, receiving, and homing signals are on the data plates attached to the equipment. Maximum range performance of each is limited by the power output of each radio, total life of power source, and the "line-of-site" characteristics of VHF and UHF transmitters and receivers. To combat the "line-of-site" characteristic, the radio operator should choose an operating site as high and as unobstructed as possible. All survival radios produce a cone of silence directly above the antenna when transmissions are made. The operator should avoid pointing the antenna at the rescue aircraft to insure uninterrupted voice/tone transmissions. Best performance is obtained when the operator faces the rescue aircraft and keeps the radio antenna vertical.

c. Hours of Operation. To insure maximum battery life, the period and duration of radio operation must be curtailed. Initial broadcast will depend on air traffic within the area and/or the search air rescue reaction time. Broadcast is recommended as follows:

- (1) After a reasonable length of time, dependent upon the search rescue reaction time, begin periodic transmissions at radio operator's discretion (15 and 45 minutes after the hour).
- (2) At any time a rescue aircraft or any aircraft is observed operating in the immediate area.

- (3) In a combat zone, such as Vietnam, the normal air traffic density is such that immediate transmissions would likely receive response.



Figure 100. ACR RT-10 radio.

DATA FOR ACR RT-10 RADIO (fig. 100).

Frequency range: UHF - 240-260 mc normally preset 243.0 mc.

No. of channels: One preset.

Battery life: 24 hours.

Approximate range: 30 nautical miles.

Note. This radio is replacing the AN/URC-10. Battery in the ACR RT-10 is self-contained, whereas the AN/URC-10 has an external battery.

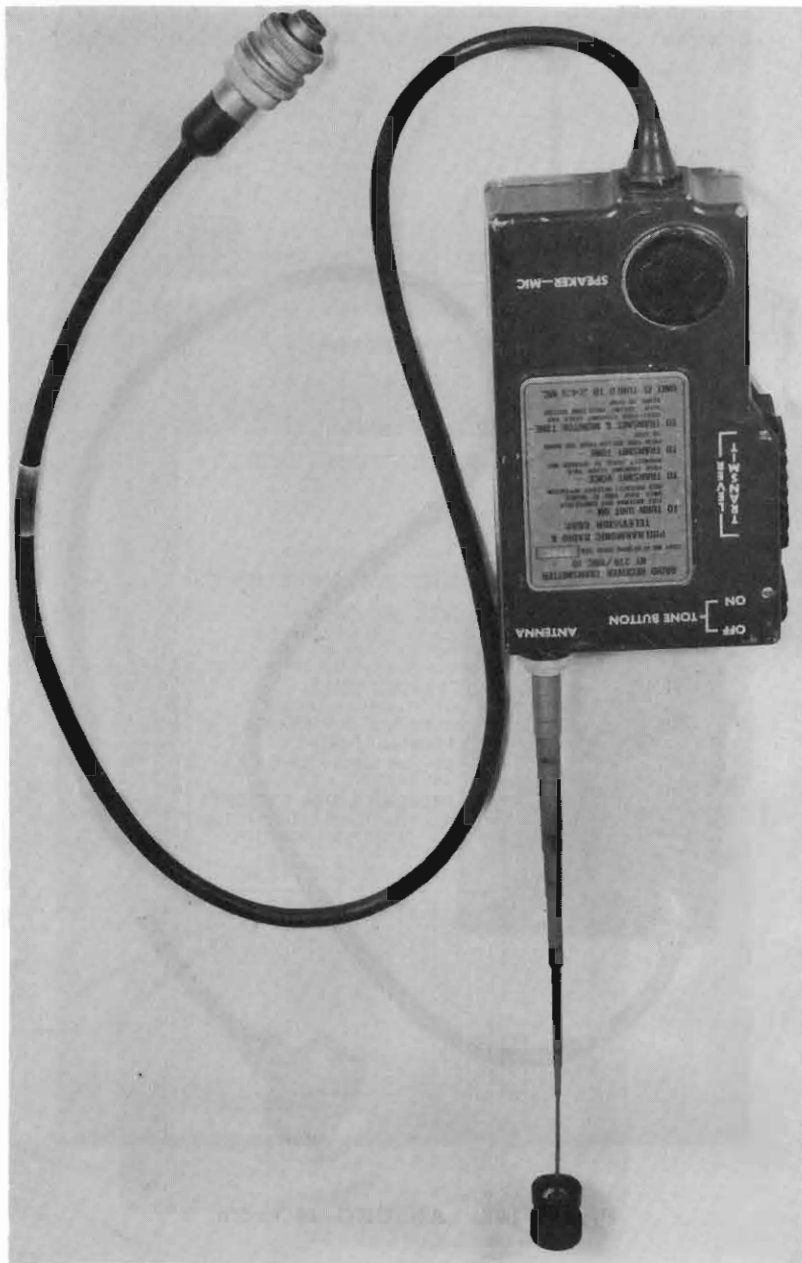


Figure 101. AN/URC-10 radio.

DATA FOR AN/URC-10 RADIO (fig. 101).

Frequency range: UHF - 240-260 mc normally preset 243.0 mc.

No. of channels: One preset.

Battery life: 120 hours.

Approximate range: 30 nautical miles.



Figure 102. AN/URC-11 radio.

DATA FOR AN/URC-11 RADIO (fig. 102).

Frequency range: UHF - 243.0 mc.

No. of channels: One.

Battery life: 24 hours.

Approximate range: 10-15 nautical miles.

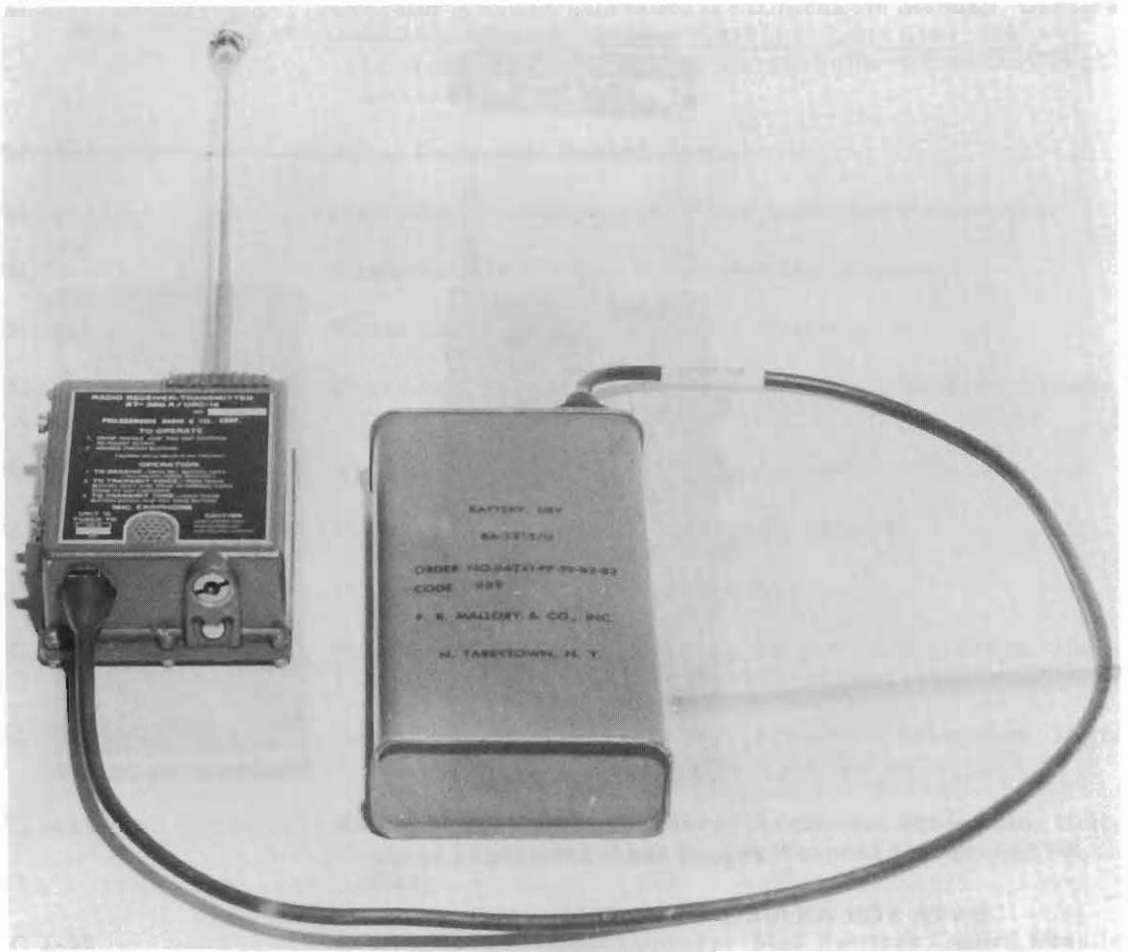


Figure 103. AN/URC-14 radio.

DATA FOR AN/URC-14 RADIO (fig. 103).

Frequency range: VHF - 121.5 mc.

No. of channels: One.

Battery life: 24 hours (approx).

Approximate range: 10-15 nautical miles.

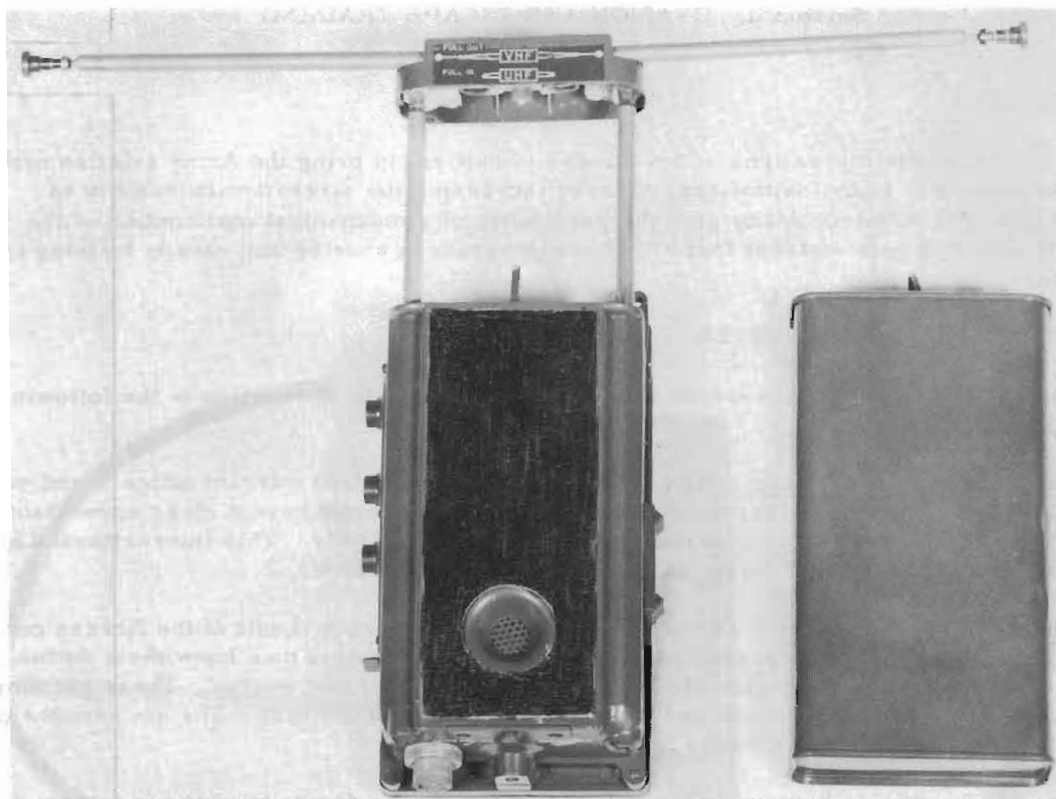


Figure 104. AN/URC-4 radio.

DATA FOR AN/URC-4 RADIO (fig. 104).

Frequency range: VHF - 120-130 mc normally preset 121.5 mc.

UHF - 240-260 mc normally preset 243.0 mc.

No. of channels: One preset (receiver and transmitter on same frequency).

Battery life: 24 hours.

Approximate range: 10 nautical miles.

Section II. EVASION AND ESCAPE TRAINING

111. GENERAL

The combat aerial operations of the airmobile battlefield bring the Army aviation units in close proximity to the battlelines, thereby increasing the aircraft vulnerability to ground fire. This vulnerability plus the possibility of a mechanical malfunction of the aircraft makes it quite evident that a training program in evasion and escape training is necessary.

112. TRAINING PREREQUISITES

A course of instruction in evasion and escape must include instruction in the following areas:

a. Geneva Convention. Since aviators are officers and warrant officers and potentially the senior ranking personnel in a PW camp, they must have a clear understanding of the 1949 Convention as it pertains to the handling of PW's. This International Law defines the legal rights and duties of the PW while being detained.

b. Code of Conduct. The code of conduct was a direct result of the Korean conflict. Prior to this, it was presumed that the American fighting men knew their duties and responsibilities in respect to their conduct against an armed enemy. These presumptions proved false in some cases and resulted in the code of conduct. The six articles of the code clearly define these duties and responsibilities.

c. The Will to Survive. The will to survive or the desire to continue to resist is the primary psychological motivation for a successful evasion and escape attempt. The factors affecting this will include - training, planning, and self-control; endurance - both mental and physical; mutual support; a religious conviction; and strong family or home ties. The absence of one or more of these factors seriously affects this mental attitude.

d. Planning for Infiltration. Such a plan requires cognizance of the short range evasion techniques as outlined in FM 21-77, Evasion and Escape. A planned course of action requires -

- (1) Knowledge of your location.
- (2) A known area to infiltrate toward.
- (3) Maximum use of cover and concealment during movement.
- (4) Bypass provisions for obstacles and enemy positions.
- (5) Consideration of weather and visibility.
- (6) Travel commensurate with the physical capability of the individual.

113. EVASION AND ESCAPE FIELD EXERCISES

The field exercise is an excellent training opportunity for the student to practice what he has learned during classroom instruction.

a. Lessons Learned. The lessons learned will depend on the duration of the problem, but will include -

- (1) Night navigation.
- (2) Day navigation.
- (3) Land survival.
- (4) Contacting partisans.
- (5) Infiltration.
- (6) Escape techniques.
- (7) Capture.
- (8) Enemy interrogation.
- (9) Enemy indoctrination.

b. Minimum Requirements. The duration of the problem depends initially on the availability of time for training. Other variable factors include -

- (1) Terrain. The terrain available will dictate the size and extent of the exercise. The exercise comparison handout shows the recommended real estate requirements for the three exercises. (See a 5-hour, 14-hour, and 24-hour problem.)
- (2) Equipment. Equipment for running the exercise is not a major problem. It depends on the geographic location of the training area and the time of year the training is conducted.
- (3) Aggressor personnel. A recommended Aggressor-Student ratio of 2 to 1 is considered an adequate enemy representation on the ground. The terrain to be covered and the number of students participating in the exercise will determine the size of the Aggressor force.
- (4) Control personnel. The number of control personnel will be established by the terrain to be covered and the number of students participating in the exercise.
- (5) PW compound. The PW compound should be large enough to accommodate 50 percent of the students participating in the problems. It should be divided into two sections - an administrative section for in-processing, interrogating, and out-processing; and a confinement section.
- (6) Compound personnel. For effective compound operation, one officer is used as compound commandant, one NCO (E-7) as assistant commandant, and four EM from the Aggressor unit as compound guards. All of these personnel are dressed in Aggressor uniforms.

5-HOUR PROBLEM

Training Area Required

4,000-6,000 meters long.
2,000-4,000 meters wide.

Field exercise would include only one course leg.

Scope of Subjects to Be Covered

Lecture-conference instruction will include -

Same as 72-hour exercise.

Field exercise will include -

Items from 72-hour exercise:

3, 6, 7, 8, 12.

Number of Tactics (Control) Personnel

1 - Officer - PI	- Principal Instructor.
2 - Officers - Control	- To control four areas of infiltration.
8 - NCO's - Control	- Assist in controlling four areas of infiltration and perform administrative duties (i.e., grading, etc.).

Number of STR (Aggressor) Personnel

4 - Medical Aidmen	- Render medical aid if necessary.
5 - Vehicle Drivers	- 1/4-ton qualified. Drive vehicles for control personnel.
1 - Rifle Platoon (44 EM and 1 Officer)	- Act as Aggressor.
4 - Vehicle Drivers	- 1/4-ton qualified.
4 - Vehicle Drivers	- 2 1/2-ton qualified. Drive vehicles for Aggressor troops.

Equipment Required

2 - 1/4-ton ambulances	- To evacuate injured personnel if necessary.
5 - 1/4-ton trucks w/VRC-10 mounted	- Used by control personnel.
4 - 2 1/2-ton trucks	- To transport Aggressor troops.
4 - 1/4-ton trucks w/VRC-10 mounted	- To control Aggressor troops.

ADVANTAGES.

1. Problem can be worked into present POI.
2. Support for this problem is within expected capabilities.

DISADVANTAGES.

1. Insufficient time for student to apply what he has learned in conference to an actual situation.
2. Lack of time could result in a loss of motivation or possibly cause the student to disregard certain evasion principles.
3. Would not give student a working knowledge of evasion and escape.
4. Does not include training on PW camp.

NOTES:

1. The times referred to in the exercises are POI hours and not consecutive hours of training.
2. Aggressor-student ratio used at the Infantry School is 2 to 1.
3. Evasion and escape problem will follow the land survival instruction.

14-HOUR PROBLEM

Training Area Required

12,000-15,000 meters long.
3,000-5,000 meters wide.

Field exercise would include two course legs.

Scope of Subjects to Be Covered

Lecture-conference instruction will include -

Same as 72-hour exercise.

Field exercise will include -

Items from 72-hour exercise:

1, 2, 3, 5, 6, 7, 8, 12.

Number of Tactics (Control) Personnel

1 - Officer - PI	- Principal Instructor.
6 - Officers - Control	- For control of eight areas used in exercise.
14 - NCO's - Control	- Assist in control of eight areas used in exercise and perform administrative duties (i.e., grading, etc.).

Number of STR (Aggressor) Personnel

4 - Medical Aidmen	- Render medical aid if necessary.
5 - Vehicle Drivers	- 1/4-ton qualified. Drive vehicles for control personnel.
1 - Rifle Platoon (44 EM and 1 Officer)	- Act as Aggressor troops.
4 - Vehicle Drivers	- 1/4-ton qualified.
4 - Vehicle Drivers	- 2 1/2-ton qualified. Drive vehicles for Aggressor troops.
4 - Utility or Cargo Helicopter Pilots	- Fly utility or cargo helicopters.

Equipment Required

2 - 1/4-ton ambulances	- To evacuate injured if necessary.
5 - 1/4-ton trucks w/VRC-10 mounted	- Used by control personnel.
4 - 2 1/2-ton trucks	- To transport Aggressor troops.
4 - 1/4-ton trucks w/VRC-10 mounted	- To control Aggressor troops.

Equipment Required (continued)

2 - Observation helicopters	- To assist in control of exercise.
4 - Utility or cargo helicopters	- To pick up students at helicopter pickup points and add realism to the problem.

ADVANTAGES.

1. More time is available for student to apply what he has learned to an actual situation on the ground.
2. Adequate terrain is available to run the problem.
3. Adequate support is available to support the problem.
4. Gives the student a knowledge of evasion and escape.
5. Motivates the student to increase his proficiency in evasion and escape on his own.

DISADVANTAGE.

Insufficient time to include training on PW camp.

24-HOUR PROBLEM

Training Area Required

40,000-45,000 meters long.
4,000-6,000 meters wide.

Field exercise would include five course legs.

Scope of Subjects to Be Covered

Lecture-conference instruction will include -

1. The Geneva Convention.
2. Code of Conduct.
3. Long Range Evasion.
4. Contacting Friendly and Neutral Elements.
5. Capture.

Scope of Subjects to Be Covered (continued)

6. Prisoner of War Camp.
7. Enemy Interrogation.
8. Enemy Indoctrination.
9. Escape From PW Camp.

Field exercise will include -

1. Long Range Evasion.
2. Day Land Navigation.
3. Night Land Navigation.
4. Land Survival.
5. Contacting Neutral Elements.
6. Infiltration of Enemy Lines.
7. Capture.
8. Escape.
9. Conduct of PW Camp.
10. Enemy Interrogation.
11. Enemy Indoctrination.
12. Living by Code of Conduct.
13. Escape From PW Camp.

Number of Tactics (Control) Personnel

1 - Officer - PI	- Principal Instructor.
10 - Officers - Control	- For control of eight exercise areas, plus PW compound.
24 - NCO's - Control	- To assist in controlling eight exercise areas, plus PW compound. Also, perform administrative duties (i.e., grading, etc.).

Number STR (Aggressor) Personnel

4 - Medical Aidmen	- Render medical aid if necessary.
8 - Vehicle Drivers	- 1/4-ton qualified. Used to drive vehicles for control personnel.
1 - Rifle Company (three platoons) (135 EM and 4 Officers)	- Act as Aggressor.
4 - Vehicle Drivers	- 1/4-ton qualified.
12 - Vehicle Drivers	- 2 1/2-ton qualified. Drive vehicles to transport Aggressor troops.

Equipment Required

2 - 1/4-ton ambulances	- To evacuate injured personnel if necessary.
8 - 1/4-ton trucks w/VRC-10 mounted	- Used by control personnel.
4 - 1/4-ton trucks w/VRC-10 mounted	- To control Aggressor troops.
12 - 2 1/2-ton trucks	- To transport Aggressor troops.
2 - Observation helicopters	- To assist in controlling exercise.
1 - Utility or cargo helicopter	- For evacuation of seriously injured personnel.

ADVANTAGES.

1. Sufficient time allowed to include all requirements for an evasion and escape problem.
2. Problem includes training on PW camp.
3. Gives the student a working knowledge of evasion and escape.
4. Provides the best training for the student.

DISADVANTAGE.

Troop support is beyond capabilities of support sources.

APPENDIX A

REFERENCES

AR 10-11	Organization and Functions - United States Army Materiel Command.
AR 10-12	Organization and Functions - United States Army Combat Developments Command.
AR 11-14	Materiel Readiness.
AR 40-501	Standards of Medical Fitness.
AR 40-535	Worldwide Aeromedical Evacuation.
AR 95-series	(Army Aviation.)
AR 190-11	Physical Security Standards for Protection of Weapons and Ammunition.
AR 310-1	Military Publications - General Policies.
AR 310-3	Military Publications - Preparation, Coordination, and Approval.
AR 320-5	Dictionary of United States Army Terms (Short Title AD).
AR 320-50	Authorized Abbreviations and Brevity Codes.
AR 345-210	Records Management - Files Systems and Standards.
AR 350-1	Army Training.
AR 350-5	Military Education and Schools.
AR 385-10	Army Safety Program.
AR 385-40	Accident Reporting and Records.
AR 420-90	Fire Prevention and Protection.
AR 600-107	Medical Restriction From Flight Duty, Suspensions, Flying Evaluation Boards, and Flight Status Review System.
AR 711-16	DSU /Installation Stock Control and Supply Procedures (Army Field Stock Control System).
AR 711-25	Stockage of supplies and Maintenance of Authorized Stockage Lists.

AR 715-580-3	Single Department Procurement of Lighting Equipment, Air- port (Air Force).
AR 725-50	Issue of Supplies and Equipment; Requisitioning, Receipt, and Issue System.
AR 735-35	Supply Procedures for TOE and TDA Units or Activities.
AR 746-5	Color and Marking of Army Materiel.
AR 750-1	Maintenance Concepts.
AR 750-5	Organization, Policies, and Responsibilities for Maintenance Operation.
AR 750-8	Command Maintenance Management Inspections (CMMI).
AR 750-1500-2	Technical Publications for Aircraft Files.
AR 750-1500-8	Use of Serviceable Parts From Unserviceable Aircraft or Air- craft Components.
DA Pam 310-series	(Military Publications Indexes.)
FM 1-5	Aviation Company.
FM 1-10	Army Aviation Organizational Aircraft Maintenance.
FM 1-15	Divisional Aviation Battalion and Group.
FM 1-60	Army Aviation Air Traffic Operations - Tactical.
FM 1-80	Aerial Observer Training.
FM 1-100	Army Aviation Utilization.
FM 1-105	Army Aviation Techniques and Procedures.
FM 1-110	Armed Helicopter Employment.
FM 3-10	Employment of Chemicals and Biological Agents (under revision).
FM 3-12	Operational Aspects of Radiological Defense.
FM 5-1	Engineer Troop Organizations and Operations.
FM 5-20	Camouflage, Basic Principles and Field Camouflage.
FM 7-11	Rifle Company, Infantry, Airborne, and Mechanized.
FM 8-15	Division Medical Service, Infantry, Airborne, Mechanized, and Armored Divisions.

FM 8-16	Medical Service, Field Army.
FM 9-30	Maintenance Battalion, Division Support Command.
FM 10-8	Air Delivery of Supplies and Equipment in the Field Army.
FM 11-50	Signal Battalion, Armored, Infantry, and Infantry (Mechanized) Divisions.
FM 11-86	Combat Area Signal Battalion, Army.
FM 17-36	Divisional Armored and Air Cavalry Units.
FM 19-25	Military Police Traffic Control.
FM 21-5	Military Training Management.
FM 21-6	Techniques of Military Instruction.
FM 21-30	Military Symbols.
FM 21-40	Chemical, Biological, and Nuclear Defense.
FM 21-41	Soldier's Handbook for Defense Against Chemical and Biological Operations and Nuclear Warfare.
FM 21-76	Survival.
FM 21-77	Evasion and Escape.
FM 24-1	Tactical Communications Doctrine.
FM 29-3	Direct Support Supply and Service in the Field Army.
FM 29-10	Supply Management in the Field Army.
FM 29-22	Maintenance Operations in the Field Army.
FM 29-45	General Support Supply and Service in the Field Army.
FM 31-21	Special Forces Operations.
FM 31-25	Desert Operations.
FM 31-30	Jungle Training and Operations.
FM 31-71	Northern Operations.
FM 31-72	Mountain Operations.
FM 41-10	Civil Affairs Operations.
FM 54-2	The Division Support Command.

FM 54-3	The Field Army Support Command.
FM 54-4	The Support Brigade.
FM 55-9	Transportation Services and the Transportation Brigade in the Field Army.
FM 55-45	Aircraft Maintenance Services and Units in the Field Army.
FM 57-35	Airmobile Operations.
FM 61-100	The Division.
FM 101-10-2	Staff Officers' Field Manual - Organizational, Technical, and Logistical Data - Extracts of Tables of Organization and Equipment.
FM 105-5	Maneuver Control.
ATP 20-5	Army Training Program for Field Exercises and Maneuvers.
TM 1-300	Meteorology for Army Aviation.
TM 3-210	Fallout Prediction.
TM 3-220	Chemical, Biological, and Radiological (CBR) Decontamination.
TM 5-315	Firefighting (Structures, Aircraft, Petroleum, and Nuclear Material) and Rescue Operations in Theaters of Operations.
TM 5-330	Planning, Site Selection, and Design of Roads, Airfields, and Heliports in the Theater of Operations.
TM 9-1900	Ammunition, General.
TM 10-1101	Petroleum-Handling Equipment and Operations.
TM 10-1105	Inspecting and Testing Petroleum Products.
TM 10-1113	Petroleum Tank; Vehicle Operation.
TM 11-2557-26	Terminal Instrument Procedures (TERPs).
(C) TM 11-5850-202-15	Organizational, DS, GS, and Depot Maintenance Manual; Surveillance System, Infrared AN/USA-4(U).
(C) TM 11-5895-284-12	Organizational Maintenance Manual: Radar Surveillance Sets AN/APS-94, AN/APS-94A, AN/APS-94B, and AN/APS-94C(U).
TM 11-6720-207-10	Operator's Manual: Camera, Still Picture, KA-39A.

TM 11-6720-208-12	Operator's and Organizational Maintenance Manual: Cameras, Still Picture KA-30A and KA-30A2; Lens Cone Group LA-136A; and Lens Cones, Aerial Camera LA-132A and LA-133A.
TM 38-750	Army Equipment Record Procedures.
TM 38-750-1	Maintenance Management: Field Command Procedures.
TM 55-403	Fundamentals of Army Helicopter Maintenance.
TM 55-404	Fundamentals of Army Airplane Maintenance.
TM 55-8465-206-13	Organizational and DS Maintenance Manual for Survival Kits - Army Aircraft.
TM 57-210	Air Movement of Troops and Equipment.
TA 60-26	U.S. Army Airfields and Heliports, CONUS.
AFR 95-series	(Runway and Taxiway Markings.)
TC 1-22	Rotary Wing Aircraft Gunnery: Armament Subsystem, Helicopter, 7.62mm Machinegun (M6-series) Quad Gun.
TC 1-24	Rotary Wing Aircraft Gunnery: Armament Subsystem, Helicopter, 7.62mm Machinegun, Twin Gun (M2).
TC 1-25	Rotary Wing Aircraft Gunnery: Armament Subsystem, Helicopter, 2.75-inch Area Rocket Weapons System (ARWS, XM3).
TC 1-30	Rotary Wing Aircraft Gunnery: M22 Antitank Guided Missile System on UH-1 Helicopters.
TC 1-32	Transition Training in the CH-54 Helicopter.
TC 1-33	Rotary Wing Aircraft Gunnery: Armament Subsystem, Helicopter, 7.62mm Automatic Gun 2.75-inch Rocket Launcher, XM21.
TC 1-34	Transition Training in Army Aircraft.
TC 6-1	Field Artillery Observation.
USAAVNS Handbook	Communications Reference Handbook for Army Aviators (available upon request to Commandant, U.S. Army Aviation School, ATTN: AASTT, Fort Rucker, Alabama 36360).

(THIS PAGE INTENTIONALLY LEFT BLANK.)

ARMY AVIATION SUPPORT PLAN ANNEX

(SAMPLE FORMAT)

Classification is centered at the top and bottom of each page of the annex. In the case of training documents classification is so indicated (Example, SECRET for training purposes only).

(Classification)

Copy Nr 2
21st Inf Div
BAD HOMBACH (RM 1934) GERMANY
022200 Feb 19 ____
LX9

Copy number assigned by the issuing headquarters.
Official designation of unit issuing the annex.
Physical location of the command post of the headquarters issuing the annex, coordinates, state or country.
Date-time group is the time the order which the annex supports was signed and became effective, unless specified otherwise in paragraph 3, coordinating instructions.
Message reference number is assigned by the G3 of the issuing headquarters for the purpose of acknowledging the annex in the clear.
The operation order that the annex supports and all other annexes, appendixes, tabs or inclosures to the basic order will bear the same message reference number.

The annex letter designation, followed by the words (Army Aviation) indicating the activity or branch represented, and the operation order it supports, is shown as follows.

ANNEX D (Army Aviation) to OPORD 6
References: Maps, GERMANY, AMS Series M406 UTM, 1:50,000, Sheets 2 thru 6.

Paragraph 1, "SITUATION" will always contain subparagraphs a, b and c, referring to Enemy Forces, Friendly Forces, and Attachments and Detachments.

1. SITUATION

Subparagraph 1a, "Enemy Forces" contains factual information of the enemy. Often a reference to a published intelligence document (ISUM), overlay, or annex will be sufficient for this paragraph. However, any information of particular interest to Army Aviation should be included.

a. Enemy forces.

- (1) Annex A (Intelligence) to OPORD 6.
- (2) Guerrillas intensifying attacks on low flying aircraft.

Subparagraph 1b, "Friendly Forces" refers to higher, adjacent, supporting, or reinforcing units of particular interest to Army Aviation but should be limited to that information which the subordinate aviation unit commander needs to know in order to accomplish his assigned mission. When Army Aviation is not affected by this subparagraph, reference to the operation order may be made.

b. Friendly forces.

- (1) OPORD 6.
- (2) 112th Trans Bn (Trans Acft) (Army) provides ALOC for airmbl assault on request Div Comdr.
- (3) 5th TAF provides one fighter-bomber sq on ground alert to spt airmbl assault on request of airmbl force comdr.

Subparagraph 1c, "Attachments and Detachments" lists the units attached to or detached from the headquarters issuing the annex, together with the effective date and time if other than the effective date and time of the annex. If these units are either indicated in the task organization for the operation or there has been no change from a published troop list, an appropriate reference is made. When a unit has been attached for some period of time the unit will be listed and the term "remains attached" used.

c. Attachments and detachments.

- (1) 135th Airmbl Bn (Corps) attached (effective 031200 Feb 19 ____).
- (2) No change from Jan troop list.
- (3) Annex A, Task Organization.

2. MISSION

Army Aviation provides general support to divisional units and supports seizure of obj 19 and 20 by airmobile assault on order.

Paragraph 2, "MISSION" contains a clear concise statement of the role Army Aviation, in the command, will play in support of the operation. There are no subparagraphs in paragraph 2.

Paragraph 3, "EXECUTION" illustrates "HOW" the mission will be accomplished by delegating specific tasks and missions to subordinate units (organic, attached or under operational control) so that each subordinate commander knows what he is expected to do in order to carry out the commander's desires.

3. EXECUTION

Subparagraph 3a contains the commander's amplification of the tasks involved in the execution of the mission. When the concept of operation as specified in the operation order does not call for the use of Army Aviation as part of major maneuver element or striking force, then a reference to the operation order will suffice. If Army Aviation is to play a decisive role in an operation, par 3a, should clarify the purpose of the operation in detail to insure appropriate action by subordinates in the absence of additional specific instructions. However, this is contingent upon the existence of a definite plan of attack indicating, a task organization, how the operation will be phased and the sequence of actions to take place. This subparagraph may also include priorities of aviation support (if applicable).

a. Concept of operation, OPORD 6.

b. 21st Avn Bn (-) GS.

- (1) Airmbl Co, attached to 1st Bde. Attachment ceases 0700 D+4. Revert to Bn control. Prep to spt RAS force comdr on order.
- (2) Provide Div Surgeon 2 UH-1's for aeromed evac thru D+7.
- (3) Provide 2 UH-1's to spt comd comdr on call.
- (4) Provide 2 OH's to Div PM daily.

c. 135th Airmobile Bn (Corps) GS.

- (1) 185th Airmbl Co (Lt Hel) spt RAS force comdr. Spt ceases 1200 D+4. Revert to Div GS.
- (2) 187th Airmbl Co (Lt Hel) provide suppressive fire spt to airmbl force comdr on order.

Tasks to be accomplished by subordinates should be stated in general terms whenever possible, to allow the subordinate commander the prerogative of deciding in what manner the task can best be accomplished and who will accomplish it. Instructions, however, should be specific and be designed for the subordinate to comprehend without question rather than interpret. Abbreviations are authorized provided they do not require the use of additional reference material in order to understand the abbreviation.
In issuing instructions to subordinates, brevity should not be substituted for clarity. The use of unnecessary verbiage should be avoided. For example, the word prepare should be used only when some form of preparation is necessary to carry out a task, such as moving an entire unit from one location to another. Restating normal missions of a unit is also unnecessary. For example, "AS&TA plt provide division with airborne surveillance capability." This is a normal mission of the Aerial Surveillance and Target Acquisition Platoon and need not be reflected in the annex.

Major subordinate units are listed in numerical sequence (organic units first) with a specific task or command/control relationship for each, except for units totally in reserve in which case the unit(s) will be shown in the next to last subparagraph of paragraph 3. The command/control relationship specified for a major subordinate unit will apply as well to subordinate elements of the unit. For example, when an aviation battalion is placed in general support (GS) its subordinate units are also in GS unless otherwise indicated. A (-) is shown adjacent to a unit when a unit loses command of a subordinate element, as would be the case of a unit or element detached from its parent organization and attached to another. When a unit is attached to another organization, to be effective at a time other than the effective

Units attached to the command or under the operational control of the commander should be given a mission, task or command/control relationship the same as an assigned unit. When there is a need for a specific type unit for a specific mission the commander initiating the annex may specify, by unit designation, which unit of a subordinate command will accomplish the mission.

Major subordinate units are listed in numerical sequence (organic units first) with a specific task or command/control relationship for each, except for units totally in reserve in which case the unit(s) will be shown in the next to last subparagraph of paragraph 3. The command/control relationship specified for a major subordinate unit will apply as well to subordinate elements of the unit. For example, when an aviation battalion is placed in general support (GS) its subordinate units are also in GS unless otherwise indicated. A (-) is shown adjacent to a unit when a unit loses command of a subordinate element, as would be the case of a unit or element detached from its parent organization and attached to another. When a unit is attached to another organization, to be effective at a time other than the effective time of the annex, the effective time of the attachment will be shown. An annex is effective for the same duration as the operation order it supports. Therefore, missions or task to subordinates that apply to only one segment or phase of an operation should reflect this limitation; indicating also what the unit mission or task will be thereafter.

Paragraph 4, "ADMINISTRATION AND LOGISTICS" contains a statement of the administrative support provided for the operation. If an administrative order is in effect, or is being issued separately, it is normal only to make reference to the AdminO; however, any administrative information that is of particular interest to or affects Army Aviation should be included. Paragraph 4 contains such subparagraphs as are required, and follows the sequence of the administrative order. This sequence includes supply items Classes I thru V and miscellaneous supplies, transportation, service, labor, medical evacuation and hospitalization, civil affairs, and miscellaneous.

Acknowledgment instructions are a part of the ending and must be included. Normally the single word "acknowledge" is sufficient. This indicates that the receiver will, by use of the message reference number in the heading, acknowledge that he has received and understands the order.

Appendixes are listed by number and title. The general or special staff officer preparing the annex assigns the number to the appendix. If a particular appendix is not to be issued with the basic annex, a phrase such as, "To be issued" or "Issued later" will be included. For school purposes "omitted" indicates that the appendix was not issued with the problem.

The authentication by the general staff officer preparing the operation order appears on the second and all subsequent copies of the order and related annexes.

(3) Provide 2 OH-1s to spt comd comdr on call.

(4) Provide 2 OH's to Div PM daily.

c. 135th Airmobile Bn (Corps) GS.

(1) 185th Airmbl Co (Lt Hel) spt RAS force comdr. Spt ceases 1200 D+4. Revert to Div GS.

(2) 187th Airmbl Co (Lt Hel) provide suppressive fire spt to airmbl force comdr on order.

(3) 189th Airmbl Co (Med Hel) prep to lift assault elements of 1 Inf Co to obj 19 and 1 Inf Co to obj 20 in single lift, on 6-hour notice.

d. Coordinating instructions.

(1) Downed aviator pickup points, Coord NB565195, NA650325, pickup times SOP.

(2) Nuclear air warning system - SOP.

(3) No acft operate in 5-mile radius of Coord NB541183 prior to H hour unless cleared by FCC.

4. ADMINISTRATION AND LOGISTICS

a. AdminO 9.

b. All units report initial Class IIIA requirements.

5. COMMAND AND SIGNAL

a. Signal.

(1) SOI Index 1-7 in effect.

(2) Annex E, Signal.

b. Command. Unit locations Overlay 1a.

Acknowledge.

Appendix 1 - Air Loading Table (to be issued)

Distr: B

2 - 135th Airmobile Bn (Corps)
2 - 112th Trans Bn (Trans Acft) (Army)
2 - 5th TAF

Off:
/s/Long
LONG
G3

pl provide division with airborne surveillance capability." This is a normal mission of the Aerial Surveillance and Target Acquisition Platoon and need not be reflected in the annex.

Units attached to the command or under the operational control of the commander should be given a mission, task or command/control relationship the same as an assigned unit. When there is a need for a specific type unit for a specific mission the commander initiating the annex may specify, by unit designation, which unit of a subordinate command will accomplish the mission.

The last subparagraph is entitled, "Coordinating Instructions" and contains details of coordination and control applicable to two or more elements of the command, such as, troop safety considerations and other EEI which the commander wishes to emphasize. When there are no coordinating instructions the word "none" will be placed after the heading.

The final paragraph contains instructions relative to command and the operation of signal communications. It may have as many subparagraphs as are required. Signal instructions may refer to an annex, but as a minimum should list the index of the signal operations instructions (SOI) which is in effect and any special instructions relating to the use of pyrotechnics or restrictions on the use of any means of communications. Command refers to the command post location of subordinate, own, and higher units or instructions to select and report locations of command posts, and when desired, the location of the CP of the next higher headquarters but very often refers to an operation overlay (when applicable). Designation of an alternate command post may be entered in this subparagraph.

The name and grade of the commander appears on the second and all subsequent copies of the order and related annexes. The original copy (Nr 1) must be signed by the commander or chief of staff. This is the historical copy which remains in the files of the headquarters.

Distribution usually refers to a standard distribution list, adding any units that are required. SOP distribution in this case includes higher headquarters, organic and attached units, staff, and file. Adjacent, supporting, and reinforcing units have been added.

FITZHUGHFITZ
Maj Gen

(Classification)

415-416

APPENDIX C

ARMY AIRCRAFT DESIGNATION (AR 700-26)

1. The complete designation of a typical Army aircraft is as follows:

Y	UH	I	D	BF	63	5100
<u>CLASSIFICATION</u>	<u>BASIC MISSION AND TYPE SYMBOLS</u>	<u>MODEL</u>	<u>SERIES</u>	<u>MANUFACTURER</u>	<u>FISCAL YEAR PROCUREMENT WAS AUTHORIZED</u>	<u>SERIAL NO.</u>

2. Classification Code:

<u>Letter</u>	<u>Title</u>	<u>Description</u>
G	Permanently Grounded	An aircraft permanently grounded and used for ground instruction and training.
J	Special Test, Temporary	Aircraft on special test programs by authorized organizations or on bailment contract having a special test configuration or whose installed property has been temporarily removed to accommodate the test. At completion of the test, the vehicle will be returned either to its original configuration or to standard operational configuration.
N	Special Test, Permanent	Aircraft on special test programs by authorized activities or on bailment contract, whose configuration is so drastically changed that return of aircraft to its original configuration or conversion to standard operational configuration is beyond practicable or economical limits.
X	Experimental	Aircraft in a developmental, experimental stage where basic mission and design number have been designated but not established as a standard vehicle for service use.

<u>Letter</u>	<u>Title</u>	<u>Description</u>
Y	Prototype	Aircraft procured in limited quantities to develop the potentialities of the design.
Z	Planning	Designations used for identification purpose during the planning or predevelopment stage.

3. Basic Mission and Type Symbols.

<u>Letter</u>	<u>Title</u>	<u>Description</u>
A	Attack	Aircraft designed to search out, attack, and destroy enemy land or sea targets, using conventional or special weapons. Also used for interdiction and close air support missions.
B	Bomber	Aircraft designed for bombing enemy targets.
C	Cargo	Aircraft used primarily for carrying cargo, troops, and equipment.
E	Special Electronic Installation	Aircraft possessing ECM capability or having electronic devices to permit employment as an early warning radar station; also used for aircraft equipped with tactical data communications link for all autonomous modes of flight.
F	Fighter	Aircraft designed to intercept and destroy other aircraft and/or missiles (includes multipurpose aircraft also designed for ground support missions; for example, interdiction and close air support).
*H	Helicopter	An aircraft designed with the capability of flight in any plane, e.g., horizontal, vertical, or diagonal.
K	Tanker	Aircraft designed for in-flight refueling of other aircraft.
O	Observation	Aircraft designed to observe (through visual or other means) and report tactical information concerning composition and disposition of enemy forces, troops, and supplies in an active combat area.
P	Patrol	Long-range, all-weather, multiengine aircraft operating from land and/or water bases, designed for independent accomplishment of the following functions: Antisubmarine warfare, maritime reconnaissance, and mining.
S	Antisubmarine	Aircraft designed to search out, detect, identify, attack, and destroy enemy submarines.

*Type Symbols.

<u>Letter</u>	<u>Title</u>	<u>Description</u>
T	Trainer	Aircraft designed for training personnel in the operation of aircraft and/or related equipment, and having provisions for instructor personnel.
U	Utility	Aircraft used for miscellaneous missions such as carrying cargo and/or passengers, towing targets, etc. These aircraft include those having a small payload.
*V	VTOL and STOL	Aircraft designed for vertical takeoff or landing with no takeoff or landing roll, or aircraft capable of takeoff and landing in a minimum prescribed distance.
X	Research	Aircraft designed for testing configurations of a radical nature. These aircraft are not normally intended for use as tactical aircraft.
*Z	Airship	A self-propelled lighter-than-air aircraft.

*Type symbols.

APPENDIX D

PLANNING GUIDANCE FACTORS FOR EMPLOYMENT OF ARMY AIRCRAFT AVAILABILITY

<u>Acft Designation</u>	<u>Type Acft</u>	<u>Availability of Asg Acft *(percentage)</u>
O-1	Observation	75
OV-1	Observation	75
U-6	Utility	75
U-1	Lt Trans	75
U-8	Command/Utility Trans	75
CV-2A	Trans	75
OH-13, OH-23	Observation	67
UH-19	Utility	67
UH-1	Utility/Tactical Transport	67
CH-21	Lt Trans	67
CH-34	Lt Trans	67
CH-37	Med Trans	67
CH-47A	Med Trans	67
CH-54	Hvy Trans	67

*First lift availability, based on normal maintenance considerations only. May be increased to approximately 90 percent by grounding all aircraft for 36 hours, or 100 percent by grounding all aircraft for 58 hours, preceding A-hour. (A-hour is the time the lead aircraft of the lead serial touches down in the objective area.) For operations into enemy territory, operational losses of 5-15 percent of the preceding lift must be assessed because of the effects of weather, darkness, and/or enemy action.

APPENDIX E

METHODS FOR DETERMINING AIRCRAFT REQUIREMENTS

1. GENERAL

a. When planning for a movement by air, commanders and staff officers must be familiar with the type and characteristics of aircraft available for the move. To determine the number of aircraft required for any given mission, the following must be considered:

- (1) Dimensions and location of the cargo door and the dimensions of the cargo compartment.
- (2) Allowable cargo load of the type aircraft for the mission. (Provided by the aircraft unit commander based on technical considerations.)
- (3) The number of personnel, amount of equipment, and the amount of supplies to be airlifted.

b. When those factors listed above have been considered and nontransportable items have been eliminated or replaced with transportable items, three methods may be used to determine aircraft requirements:

- (1) The weight method.
- (2) The type load method.
- (3) The space method.

c. For airmobile operations and tactical airlifts, the standard weights for individuals as shown below are used. These weights take into consideration the weight of the man plus his combat equipment and proportionate share of hand-carried supplies and TOE equipment.

- (1) Aircraft crewman - 200 pounds.
- (2) Combat-equipped soldier - 240 pounds.
- (3) Litter patient - 250 pounds.
- (4) Parachutist - 260 pounds.
- (5) During the strategic deployment of units, the weight of the individual soldier is much harder to determine since the hand-carried equipment and supplies will vary with the type of deployment, climate, and purpose of the mission. Under such circumstances, a standardized weight should be computed and agreed upon by both the Army and the Air Force.

d. For more detailed information, see TM 57-210.

2. WEIGHT METHOD

a. The weight method is normally used at division or higher level of command to estimate aircraft requirements rapidly. This method is based on the consideration that total weights to be moved will be the determining factor. It is not accurate enough to compute requirements for units in which major items of equipment are to be transported and tactical integrity is to be maintained.

b. Example: Weight to be transported = 73,800 lbs.

Allowable cargo load, each aircraft = 6,000 lbs.

$$\frac{73,800}{6,000} = 12.3, \text{ or } 13 \text{ aircraft required.}$$

3. TYPE LOAD METHOD

a. This method is the typical arrangement of personnel and cargo within load limits of aircraft for safe flight. It is particularly valuable for determining requirements for small units which are to be loaded on Army aircraft.

b. Due to the reduced number of types of major items of equipment that can be carried by current Army aircraft, this method is not as applicable in determining Army aviation requirements as when determining requirements for Air Force troop carrier aircraft with greater load-carrying capacity. Changes in the allowable cargo load of aircraft (affected by weather, altitude, and other technical factors) may require that type loads, where computed in advance, be recomputed for each mission to insure safe flight.

c. Examples of Type Loads:

(1) Utility helicopter (allowable cargo load - 2,500 lbs).

Type I

10 men

Type II

1 106mm rifle
6 rounds 106mm rifle ammunition
7 men

Type III

1 4.2 mortar
12 rounds 4.2 mortar
ammunition
5 men

Type IV

3 men
1,800 lbs cargo

(2) Medium cargo helicopter (allowable cargo load - 12,000 lbs).

Type I

2 1/4-ton trucks
3 men
6,000 lbs (external)

Type II

1 1/4-ton truck
1 106mm rifle
12 rounds 106mm rifle ammunition
15 men
4,800 lbs (external)

Type III

1 1/4-ton truck
 2 1/4-ton trailers
 (loader)
 4 men
 6,000 lbs (external)

Type IV

1 1/4-ton truck
 1 1/4-ton trailer (loaded)
 15 men
 4,500 lbs (external)

4. SPACE METHOD

a. This method is a simplification of the weight and type load methods and is used to determine Army aircraft requirements. The weight of a combat equipped soldier is used as a denominator to convert weights into spaces. A combat equipped soldier (considered to be 240 pounds - including weight of individual and his proportionate share of hand-carried supplies and equipment, to include crew-served weapons up to, but not including, the 106mm rifle and 4.2-inch mortar) is considered one space.

b. To convert major items of equipment into spaces, the weight (in pounds) of the individual item is divided by 240. If two or more items of the same type are to be transported, the number of spaces required for a single item is multiplied by the number of items. Example:

<u>Item</u>	<u>Weight Ea</u>	<u>Spaces Ea</u>	<u>No. Items</u>	<u>Total Spaces</u>
1/4-ton truck	2,665	$\frac{2,665}{240} = 11.1 \text{ or } 11.5^*$	2	$2 \times 11.5 = 23$

c. To convert additional assault supplies (not carried by the individual soldier) into spaces, the total weight of those supplies (in pounds) is divided by 240. Example:

$$\frac{3,048 \text{ (total weight)}}{240 \text{ (space)}} = 12.7 \text{ or } 13^*$$

d. To convert the allowable cargo load of an aircraft into spaces, the allowable cargo is divided by 240. Example:

$$\frac{2,553 \text{ (allowable cargo load, single aircraft)}}{240} = 10.6, \text{ or } 10.5^{**} \text{ spaces ea aircraft}$$

e. To determine the number of aircraft required to airlift a force, the total number of spaces required is divided by the allowable cargo load of a single aircraft expressed in spaces. Example:

$$\frac{251 \text{ (spaces required)}}{10.5 \text{ (spaces available ea acft)}} = 23.8, \text{ or } 24 \text{ aircraft required.}$$

*In converting transported weight to spaces, consider only whole or half-spaces. Carry fractions to next higher half-space (10.1 = 10.5, 11.6 = 12).

**In converting allowable cargo loads to spaces, consider only whole or half-spaces. Fractions will be reduced to the next lower half-space, i. e. (22.8 = 22.5, 24.3 = 24).

f. A typical loading plan for moving one dismounted infantry rifle company in UH-1D helicopters would be computed in the following manner:

- (1) A rifle company, infantry battalion has six officers and 174 EM. Five personnel are normally considered nonessential and are not taken initially into the objective area. One senior aidman is normally attached to the company. This makes the company personnel strength 176. These are as follows:

Co Hq	Co Comd Comm Chief 2 RATEL Op 2 Wiremen Sr Aidman <u>Rdo Mech</u> 8 (Total)	Rifle Platoons (3), Hq	Plat Ldr Plat Sgt <u>RATEL Op</u> 3 (Total 9)
		Rifle Sqd (9)	Sqd Ldr (9) Tm Ldr (18) Auto Riflemen (18) Grenadier (18) <u>Riflemen (27)</u> 10 (Total 90)
Wpns Sqds (3)	Sqd Ldr (3) Mg Gnr (6) Gnr 90mm (6) Ammo Bearer (6) Asst Mg Gnr (6) <u>Asst Gnr 90mm Rifle (6)</u> 11 (Total 33)	81mm Mort Sqds (3)	Sqd Ldr (3) Gnr (3) Ammo Bearer (6) <u>Asst Gnr (3)</u> 5 (Total 15)
Wpns Plat Hq	Plat Ldr Plat Sgt <u>RATEL Op</u> 3 (Total)	Antitank Sqds (2)	Sec Ldr (1) Sqd Ldr (2) Gnr (2) Ammo Bearer (2) <u>Asst Gnr (2)</u> 5 (Total 9)
81mm Mort Sec Hq	Sec Ldr Fwd Obsr (3) FD Cmpt (2) <u>RATEL Op (3)</u> 9 (Total)	Initial Airlift Nonessential Personnel	
		XO 1Sgt Sup Sgt Armorer <u>Co Clerk</u> 5	

- (2) A rifle company would normally carry into the objective area 48 rounds of 81mm ammunition per tube (3 x 48 = 144 rounds; 15 pounds per round) and 12 rounds of 106mm recoilless rifle ammunition per 106mm recoilless rifle (2 x 12 = 24; 37 pounds per round), in addition to the basic load.

PLANNING WORKSHEET

1	2	3	4	5	6	7	8	9	10
Unit	Pers	Additional Supplies		Major Items of Equipment	Wt (ea)	Spaces (ea)	No. Items	Total Spaces	Total Column Remarks 2, 4, & 9
		Wt (lbs)	No. Spaces						
Co	176	3,048	13	Trk, 1/4-ton w/AN/VRC-47	2,408	10.5	1	10.5	199.5
				Trk, 1/4-ton w/1/4-ton tlr	2,838	12	1	12	12.0
				Trk, 1/4-ton w/AN/GRC-125 mtd and 1/4-ton tlr	2,922	12.5	1	12.5	12.5
				Trk, 1/4-ton M38 106mm recoilless rifle	2,665 460	11.5 2	2 2	23 4	23.0 4.0

TOTAL SPACES: 251

TOTAL AIRCRAFT REQUIRED: 24

(3) Air loading table.

Chalk #1	Plat Ldr, 1st Plat	240 lbs
	1st Sqd, 1st Plat (9)	<u>2,160 lbs</u>
		2,400 lbs
Chalk #2	Plat Sgt, 1st Plat	240 lbs
	2d Sqd, 1st Plat (9)	<u>2,160 lbs</u>
		2,400 lbs
Chalk #3	3d Sqd, 1st Plat (10)	2,400 lbs
Chalk #4	Wpns Sqd, 1st Plat (10)	2,400 lbs
Chalk #5	1st Sqd, 1st Plat (1)	240 lbs
	2d Sqd, 1st Plat (1)	240 lbs
	Wpns Sqd, 1st Plat (1)	240 lbs
	RATEL Op, 1st Plat (1)	240 lbs
	72 Rds 81mm Ammo	1,080 lbs
	Additional Supplies	<u>135 lbs</u>
		2,175 lbs
Chalk #6	Co Comd	240 lbs
	1st Mort Sqd, Wpns Plat (5)	1,200 lbs
	Comm Chief	240 lbs
	RATEL Op (Co Hq)	240 lbs
	Fwd Obsr (81st Mort Sec)	240 lbs
	Plat Sgt, Wpns Plat	<u>240 lbs</u>
		2,400 lbs
Chalk #7	Plat Ldr, Wpns Plat	240 lbs
	RATEL Op (Hq, Wpns Plat)	240 lbs
	2d Mort Sqd, Wpns Plat (5)	1,200 lbs
	Fire Direction Cmpt (81mm Mort Sec)	240 lbs
	Wireman (Co Hq)	240 lbs
	RATEL Op (Co Hq)	<u>240 lbs</u>
		2,400 lbs
Chalk #8	3d Mort Sqd, Wpns Plat	1,200 lbs
	Sec Ldr, 81mm Mort Sec	240 lbs
	RATEL Op (81mm Mort Sec) (3)	720 lbs
	Fire Direction Cmpt (81mm Mort Sec)	<u>240 lbs</u>
		2,400 lbs
Chalk #9	Sec Ldr, AT Sec	240 lbs
	Sr Aidman	240 lbs
	Fwd Obsr (81mm Mort Sec) (2)	480 lbs
	Wireman (Co Hq)	240 lbs
	Rdo Mech (Co Hq)	240 lbs
	24 Rds 81mm Mort Ammo	360 lbs
	Additional Supplies	<u>753 lbs</u>
		2,553 lbs

Chalk #10	1st AT Sqd, Wpns Plat (4)	960 lbs
	106mm Recoilless Rifle	460 lbs
	26 Rds 106mm Recoilless Rifle Ammo	960 lbs
	10 Rds 81mm Mort Ammo	150 lbs
		<u>2,530 lbs</u>
Chalk #11	Trk, 1/4-ton M38 - A/C	2,665 lbs
Chalk #12	2d AT Sqd, Wpns Plat (4)	960 lbs
	106mm Recoilless Rifle	460 lbs
	26 Rds 106mm Recoilless Rifle Ammo	960 lbs
	10 Rds 81mm Mort Ammo	150 lbs
		<u>2,530 lbs</u>
Chalk #13	Trk, 1/4-ton M38 - A/C	2,665 lbs
Chalk #14	Trk, 1/4-ton with AN/VRC-47	2,408 lbs
Chalk #15	Trk, 1/4-ton with 1/4-ton tlr	2,838 lbs
Chalk #16	Trk, 1/4-ton with AN/GRC-125 and 1/4-ton tlr	<u>2,922 lbs</u>
Chalk #17	Plat Ldr, 2d Plat	240 lbs
	1st Sqd, 2d Plat (9)	<u>2,160 lbs</u>
		2,400 lbs
Chalk #18	Plat Sqd, 2d Plat	240 lbs
	2d Sqd, 2d Plat (9)	<u>2,160 lbs</u>
		2,400 lbs
Chalk #19	RATEL Op, 2d Plat	240 lbs
	3d Sqd, 2d Plat (9)	<u>2,160 lbs</u>
		2,400 lbs
Chalk #20	Wpns Sqd, 1st Plat (10)	2,400 lbs
Chalk #21	Plat Ldr, 3d Plat	240 lbs
	1st Sqd, 3d Plat (9)	<u>2,160 lbs</u>
		2,400 lbs
Chalk #22	Plat Sgt, 3d Plat	240 lbs
	2d Sqd, 3d Plat (9)	<u>2,160 lbs</u>
		2,400 lbs
Chalk #23	RATEL Op, 3d Plat	240 lbs
	3d Sqd, 3d Plat (9)	<u>2,160 lbs</u>
		2,400 lbs
Chalk #24	Wpns Sqd, 3d Plat (10)	2,400 lbs

(4) This air loading table represents a solution.

- (5) In preparing a unit's air loading table, consideration must be given to -
- (a) Insure integrity to the extent possible.
 - (b) Disperse key personnel and critical material.
 - (c) Personnel available in aircraft for handling equipment carried internally or externally by each aircraft.
 - (d) Intended landing area of the aircraft in the objective area, and the mission of the airlifted element.
- (6) The senior ground occupant of each aircraft is responsible for insuring that personnel and equipment are loaded on the aircraft in accordance with the air loading table.
- (7) The total unused airlift capability in this air loading table is 2,779 pounds. Subtracting this from the available cargo load of each aircraft (2,553 pounds), the difference is 226 pounds. This means that if all aircraft were loaded to maximum allowable cargo load, this rifle company would need 22 aircraft. However, it must be realized that tactical loads of a rifle company inbound into an airmobile objective area do not always lend themselves to precise load distribution. Aircraft carrying major items of equipment must operate in the caution loading zone, since these weights exceed maximum allowable load for this day. This must be approved by the aviation commander. Another solution is to request cargo helicopters.
- (8) The preparation of the air loading table for a unit, such as a rifle company, is normally the responsibility of that unit commander. He consults with the appropriate staff officers as necessary. At brigade level, the aviation section commander, who is also the special staff officer on Army aviation matters, normally will be called upon to assist in the preparation of an air loading table. He usually assists in the area of technical characteristics and capabilities of Army aircraft.

APPENDIX F

AERIAL ARTILLERY ADJUSTMENT

1. GENERAL

There are two types of artillery fire missions that can be adjusted from the air - precision and area. Both types require the use of a Call for Fire and Subsequent Corrections.

a. There are 6 elements of the Call for Fire and 10 elements of the Subsequent Corrections. The elements of the Call for Fire are -

- *(1) Identification of observer. This element consists of the call sign or code assigned to identify the observer.
- *(2) Warning order. The warning FIRE MISSION is sent by the observer to achieve communication priority and to alert FDC personnel. The observer may also denote the volume of fire for effect he desires, such as FIRE MISSION, REQUEST BATTALION, OVER.
- *(3) Location of target. The three methods used to locate a target are grid coordinates, prearranged code, and known point shift (c below).
- *(4) Description of target. This element is a brief, informative description of the target.
- (5) Method of engagement. The following elements are included in the method of engagement:
 - (a) Classification of fire. If the target is in proximity (600 meters) to friendly elements, the observer should state DANGER CLOSE.
 - (b) Type of adjustment. In adjustment with two types of fire employed - area or precision - if omitted in the Call for Fire, area fire is assumed.
 - (c) Trajectory. Two choices of trajectory are available - low angle or high angle. If omitted, low angle is assumed. If high-angle fire is being used and the observer wishes to change to low-angle fire, he will transmit CANCEL HIGH-ANGLE.
 - (d) Ammunition. This is announced in the order of projectile and fuze. If no choice is indicated, shell HE and fuze quick will be assumed.
 - (e) Distribution of fire. If other than normal sheaf is desired, the observer may so request.

*The starred element is mandatory.

*** (6) Method of fire and control.**

(a) Method of fire. If the observer desires salvo fire, he may request it by announcing PLATOON (BATTERY) RIGHT (LEFT).

(b) Method of control.

1. Adjust fire. ADJUST FIRE indicates that an adjustment is necessary, that the observer can see and adjust, and that the unit may begin firing when ready.
2. Fire for effect. FIRE FOR EFFECT indicates that the observer is ready to observe and that the unit may fire for effect when ready.
3. At my command. AT MY COMMAND indicates that the observer desires to control the time of delivery of fire, and it must be used in conjunction with FIRE FOR EFFECT or ADJUST FIRE.
4. Cannot observe. CANNOT OBSERVE indicates that the observer will be unable to adjust the fire; however, he has reason to believe that a target exists at the given location.

b. The elements of the Subsequent Corrections are -

- (1) Spotting line.
- (2) Trajectory.
- (3) Method of fire.
- (4) Distribution.
- (5) Shell.
- (6) Fuze.
- (7) Deviation.
- (8) Range.
- (9) Height of burst.
- (10) Control.

Note. None of the elements in b above are mandatory. In the event of lost rounds, the observer must state "Lost, shell WP repeat, over."

c. The three ways that an air observer can locate a target are by -

- (1) Grid coordinates. The observer can locate the target on his map and transmit the grid coordinates of the target location; e. g., GRID 671-413.

- (2) Prearranged code. When the location of a target has been established, a code name or target number may be given it. Only that code name or number is necessary to transmit.
- (3) Known point shift. The observer may indicate the location of a target by giving a shift in meters from a known point, using a spotting line. A spotting line is an imaginary line on the ground which enables the observer and the FDC to be oriented in a common direction. It serves the same purpose as the DIRECTION used by a ground observer. A spotting line is used in conjunction with a known point shift and is also used as a basis for making spottings and correcting subsequent rounds. Omission of reference to a spotting line designates the Gun-Target (G-T) line. To use a line of known direction or a convenient reference line, it must be so stated. Shifts are announced in the order of lateral, range, and vertical corrections; e. g., FROM TARGET AB 104, RIGHT 200, ADD 400, UP 20. If there is no change, that element is omitted. The three different spotting lines which an air observer can use are -
 - (a) Gun-Target line. An imaginary line extending from the gun location through the target.
 - (b) Line of known direction. A line of determined direction formed by any object or series of objects, selected and coordinated prior to flight.
 - (c) Convenient reference line. Same as a line of known direction, except that it is selected and coordinated during flight.

2. PRECISION FIRE

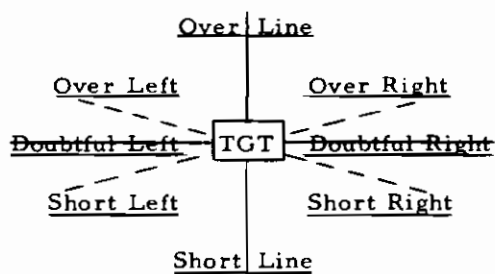
There are two types of precision fire missions - registration and destruction. A registration mission is fired to obtain corrected firing data. A destruction mission is fired to destroy a point-type immobile target.

a. Adjustment Procedures.

- (1) General.
 - (a) In the Call for Fire, the method of control will always be ADJUST FIRE.
 - (b) In a destruction mission, the adjusting point is the target; in a registration mission, it is the registration point.
 - (c) Only one piece will fire during the adjustment phase.
- (2) Adjustment of deviation. Corrections are made to the nearest 10 meters to bring the next burst to the spotting line being used.
- (3) Adjustment of range. A bracket is established in a multiple of 100 meters that, when successively split, will result in a 100-meter range bracket. The minimum range change that can be made by the observer is 50 meters.

b. Fire for Effect.

- (1) Fire for effect is entered when -
 - (a) Splitting the 100-meter range bracket.
 - (b) Hitting the target.
 - (c) Receiving a range correct burst within one burst width.
- (2) Only one piece will fire for effect and the observer will send spottings to the FDC. Spottings are a determination of where a round landed in relation to the target and spotting line being used. The twelve possible spottings are -



Lost: Impact not observed.

Air: Round exploded before impact.

Graze: Round exploded on impact.

- (3) During a registration mission, a "time registration" will be conducted. The observer will spot each round as either AIR or GRAZE. The FDC terminates a registration mission. The observer terminates a destruction mission.

3. AREA FIRE

Area fire procedures are used for attacking large, dispersed, and possibly mobile targets. Speed, accuracy, and volume of fire are needed to obtain the desired results.

a. Adjustment procedures are used when the target location data is not accurate enough to insure effect on the target with the first rounds.

- (1) The observer selects an adjusting point near the center of the target area.
- (2) Two pieces are fired during the adjustment phase with light and medium artillery. The center point between the two bursts is used to make the adjustment.
- (3) The adjustment of range and deviation is the same as for precision fire.

b. Fire for effect is entered when -

- (1) Splitting the appropriate range bracket.
- (2) Obtaining a range correct spotting. A range correct spotting is obtained when you have -
 - (a) Bracketing rounds in range.
 - (b) Bracketing rounds in deviation.
 - (c) Bracketing rounds in range slightly off in deviation.
 - (d) One round hitting the adjusting point.
 - (e) One round hitting within one burst width of the adjusting point.

c. Fire for effect may be entered without adjustment when -

- (1) The target location is surveyed.
- (2) The target has been recently fired upon.
- (3) Only a small, accurate shift is required from a surveyed or known point.
- (4) A prominent terrain feature is located in the target area.
- (5) The target area is large.

d. The fire direction officer will decide how many pieces will fire for effect. After the pieces have fired, the observer must observe what effect the rounds had on the target. The three possibilities are -

- (1) Fire has been accurate and sufficient, in which case the observer would end the mission.
- (2) Fire has been accurate but not sufficient, in which case the observer would repeat fire for effect.
- (3) Fire was not centered on the target, in which case the observer would send a correction to center the fire and repeat fire for effect.

4. AERIAL ARTILLERY IN SPECIAL SITUATIONS

Special situations may best be countered by utilizing techniques and procedures which vary from the normal artillery procedures previously discussed. The techniques which can be utilized in special situations are listed below.

a. Call for Fire Techniques.

- (1) Mark center of sector. This technique is used when the aerial observer has neither map coverage of the target area or known points from which to shift fires. The observer will give the general location of the target, i. e. , two miles north of Trai Bi, followed by the words "mark center

of sector. " After the rounds have been spotted, the observer adjusts using the known point shift technique. Subsequent adjustment will follow the normal artillery procedures.

- (2) Ranging rounds. Ranging rounds are used when the aerial observer does not know the supporting gun locations. Two rounds are fired at the same deflection, 400 meters apart in range. This establishes a gun-target line and a 400-meter "yardstick" on the ground for the observer. After these rounds have been spotted, using the known point shift technique, the observer adjusts from the round nearest the target. Subsequent adjustments will conform to normal artillery procedures.

b. Target Attack.

- (1) Creeping method. The creeping method of target attack is used when friendly elements are in proximity to the target instead of using the normal target bracketing procedure. Range corrections are made progressively, in small increments, until a target hit is effected.
- (2) Moving targets. Adjustment procedures for moving targets go directly into fire for effect. Depending on the speed of the target, the fire for effect will be adjusted or auxiliary adjusting points will be utilized.

5. SAMPLE FIRE MISSION

The following is a typical fire mission:

ELEMENT	EXAMPLE
<u>CALL FOR FIRE</u>	
Observer identification.	Big Boy 20 this is Big Boy 81.
Warning order.	Fire mission.
Location of target.	Grid BS823591.
Description of Target.	Stalled gas truck.
*Method of engagement.	
Type of adjustment.	Destruction.
Trajectory.	High angle.
Ammunition.	
Distribution of fire.	
Method of fire and control.	Adjust fire.

*Nonmandatory: If omitted, you get area fire, low angle, shell HE, fuze quick, and a normal sheaf.

ELEMENT	EXAMPLE
<u>SUBSEQUENT CORRECTIONS**</u>	
Spotting line.	Reference line ALPHA.
Trajectory.	High angle.
Method of fire.	Battery right.
Distribution.	Converge.
Shell.	Shell HE and WP.
Fuze.	VT.
Deviation.	Right 80.
Range.	Add 50.
Height of burst.	Up 20.
Control.	At my command, fire for effect.

** Elements not pertinent to subsequent corrections may be omitted.

APPENDIX G

ARMY AVIATION MOS STRUCTURE

1. ENLISTED MILITARY OCCUPATION SPECIALTIES

a. Army Aircraft Maintenance Specialties.

<u>MOS</u>	<u>Title</u>
67A10	Aircraft maintenance crewman. This is the basic entry MOS for the Army aircraft maintenance career field. Qualification in this MOS is a prerequisite.
67B20	Single-engine observation-utility airplane mechanic.
67C20	Single-engine light cargo airplane mechanic.
67D20	Single-engine airplane repairman.
67E40	Single-engine airplane maintenance chief.
67F20	Airplane technical inspector.
67G20	U-8 /U-21 command airplane mechanic.
67H20	Multi-engine observation airplane mechanic.
67K20	Multi-engine airplane mechanic.
67L40	Multi-engine airplane maintenance chief.
67M20	Single-engine, single-rotor observation helicopter mechanic.
67N20	UH-1 /AH-1G helicopter repairman.
67P20	Single-engine, single-rotor utility light transport helicopter mechanic.
67Q20	Single-engine, single-rotor helicopter repairman.
67R40	Single-engine, single-rotor helicopter maintenance chief.
67S20	Single-engine tandem-rotor helicopter mechanic.
67T20	Multi-engine, single-rotor helicopter mechanic.
67U20	Multi-engine, tandem-rotor helicopter mechanic.
67V20	OH-6 helicopter repairman.
67W20	Helicopter technical inspector.

<u>MOS</u>	<u>Title</u>
67Z40	Aircraft repair chief.
68A10	Aircraft components repair apprentice.
68B20	Aircraft engine repairman.
68D20	Aircraft powertrain repairman.
68E20	Rotor and propeller repairman.
68F20	Aircraft electrician.
68G20	Airframe repairman.
68H20	Aircraft hydraulic repairman.

Note. Incentive pay is authorized aircraft maintenance personnel as nonflying and flying crewmembers when assigned as an aircraft crew chief or maintenance supervisor.

b. Other Army Aviation Enlisted Military Occupational Specialties.

<u>MOS</u>	<u>Title</u>
17B10	Field Artillery radar crewman.
17J10	Drone aircraft crewman.
26C20	Ground surveillance radar mechanic.
26E20	Airborne sensor specialist.
31R20	Drone aircraft control systems mechanic.
35K20	Avionics repairman.
35L20	Avionics communications equipment repairman.
35M20	Avionics navigation equipment repairman.
35N20	Avionics flight control equipment repairman.
35P40	Avionics equipment maintenance supervisor.
41G20	Surveillance photographic equipment repairman.
41H40	Photographic repair chief.
43E20	Parachute rigger.
45J20	Aircraft armament repairman.

<u>MOS</u>	<u>Title</u>
45Z40	Armament maintenance foreman.
51M20	Fire fighter.
55B20	Ammunition storage specialist.
56C20	Petroleum storage specialist.
93B20	Air traffic controller.
93D20	Flight simulator specialist.
71P20	Flight operations coordinator.

c. Special Qualifications Identifiers.

F - Flying status.

O - No special qualifications.

Y - Pathfinder.

2. OFFICER MILITARY OCCUPATIONAL SPECIALTIES

<u>MOS</u>	<u>Title</u>
1980	Fixed wing aviator.
1981	Rotary wing aviator.
1982	Airfield operations officer.
1983	Aviation unit commander.
1984	Fixed wing instrument flight examiner.
1985	Rotary wing instrument flight examiner.
2518	Aviation staff officer.

3. WARRANT OFFICER MILITARY OCCUPATIONAL SPECIALTIES

<u>MOS</u>	<u>Title</u>
671-B	Aircraft repair technician, nonrated.
671-C	Aircraft repair technician, rated.
061-B	Airplane pilot, single-engine.
061-C	Airplane pilot, multiengine.

<u>MOS</u>	<u>Title</u>
062-B	Helicopter pilot, utility and light cargo single rotor.
062-C	Helicopter pilot, utility and light cargo tandem rotor.
062-D	Helicopter pilot, medium transport.

Note. The prefix of (6) before any military occupational specialty indicates a requirement for an Army aviation qualified officer. As an example, the MOS of 6 1203 would indicate an Army aviation qualified armor unit commander.

(THIS PAGE INTENTIONALLY LEFT BLANK.)

APPENDIX H

ARMY AIRCRAFT CHARACTERISTICS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
A. AIRCRAFT	UNIT	O-1A, E OBSERVATION	OV-1A OBSERVATION	OV-1B OBSERVATION	OV-1C OBSERVATION	U-1A UTILITY	U-6A UTILITY	U-8D UTILITY	U-8F UTILITY	CV-2B CARGO	OH-6A OBSERVATION	OH-13H OBSERVATION	OH-23D OBSERVATION	UH-1A UTILITY	UH-1B ³ UTILITY	UH-1D ³ UTILITY	UH-19D UTILITY	CH-21C CARGO	CH-34C CARGO	CH-37B CARGO	CH-47A CARGO	CH-54 CARGO	
B. NAME		BIRD DOG	MOHAWK	MOHAWK	MOHAWK	OTTER	BEAVER	SEMINOLE	SEMINOLE	CARIBOU		STOCK	RAVEN	IROQUOIS	IROQUOIS	IROQUOIS	CHICKASAW	SHAMWEE	CHOCTAW	MOJAVE	CHINOOK	SKY CRANE	
C. CREW (200 Lbs Ea)	Ea	1	2	2	2	1	1	1	1	3	1	1	1	1	1	1	1	2	2	3	3	2	
D. DIMENSIONS:																							
(1) Length - Fuselage	Ft & In	25'9½"	41'1"	43'8"	44'1"	41'10"	30'5"	31'6"	33'4"	72'7"	23'6"	30'5"	28'5"	36'6"	39'6"	41'11"	42'3"	52'7"	46'9"	64'11"	51'0"	70'3"	
(2) Length - Blades Unfolded	Ft & In	NA	NA	NA	NA	NA	NA	NA	NA	NA	30'2½"	41'5"	40'8"	32'10"	52'11"	57'1"	62'3"	86'4"	65'10"	88'0"	98'3.25"	88'5"	
(3) Length - Blades Folded	Ft & In	NA	NA	NA	NA	NA	NA	NA	NA	NA	23'6"	NA	NA	NA	NA	NA	42'3"	52'7"	37'0"	55'8"	51'0"	70'3"	
(4) Width - Blades Folded	Ft & In	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11'7"	14'0"	13'0"	27'4"	12'5"	21'10"	
(5) Width - Tread	Ft & In	7'7"	9'2"	9'2"	9'2"	11'2"	10'2"	12'9"	12'9"	23'2"	6'3"	7'6"	7'6"	8'6"	8'4"	9'7"	11'0"	13'4"	12'0"	19'9"	11'11"	19'9"	
(6) Height Extreme	Ft & In	7'6"	13'	13'	13'	12'5"	10'5"	11'4"	14'2"	31'9"	8'4½"	9'6"	10'1½"	11'5"	13'2½"	13'1"	15'3"	15'9"	15'11"	22'0"	17'11"	24'10"	
(7) Diameter Main Rotor	Ft & In	NA	NA	NA	NA	NA	NA	NA	NA	NA	26'4"	35'2"	35'5"	43'9"	44'0"	48'3"	53'0"	44'0"	56'0"	72'0"	59'1.25"	72'	
(8) Diameter Tail Rotor	Ft & In	NA	NA	NA	NA	NA	NA	NA	NA	NA	4'3"	5'8"	5'6"	8'5"	8'6"	8'6"	8'9"	NA	9'6"	15'0"	NA	16'0"	
(9) Wing Span	Ft & In	36'0"	42'0"	48'0"	42'0"	58'0"	48'0"	45'3"	45'10½"	95'7½"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
E. CARGO DOOR																							
(1) Dimensions - Width/Height	In	45" x 7'11"	NA	NA	NA	46" x 45" Left	40" x 40"	35"x36.5"	50½"x26½"	73½"x74"	2'2½"x3'4½"	2'10½"x3'4½"	NA	NA	48" x 48"	48" x 48"	92" x 49"	48" x 48"	Cargo-Left 45" x 59"	53" x 48"	Nose 87x72 Hatch 72x48	90" x 78"	NA
(2) Location - Side of Fuselage	In	Right	NA	NA	NA	30" x 42" Right	Left & Right	Right	Left	Rear	Left & Right	Left & Right	NA	NA	Left & Right	Left & Right	Left & Right	Right	Rescue-Right 37" x 59"	Right	Right	Rear	NA
F. CARGO COMPARTMENT																							
(1) Height of Floor Above Ground	In	NA	NA	NA	NA	46"	46"	NA	48"	45.6"	25.25"	NA	NA	26"	27"	32"	30"	38"	34"	36"	30"	NA	
(2) Length Usable	In	NA	NA	NA	NA	156"	92"	50.5"	110.6"	345"	46"	NA	NA	48"	60"	92"	120"	240"	163.5"	364"	366"	NA	
(3) Width Floor	In	NA	NA	NA	NA	60"	48"	53.6"	55.0"	81"	50.5"	NA	NA	80.5"	80.5"	96"	66"	46"	60"	87"	90"	NA	
(4) Height (Clear of Obstructions)	In	NA	NA	NA	NA	52"	51"	46.7"	55.0"	75"	48.5"	NA	NA	56"	56"	52"	60"	66"	70"	69"	78"	112"	
(5) Cargo Space Optimum	Cu Ft	NA	NA	NA	NA	293'	125'	136'	168.8'	1,150'	38'	NA	NA	140'	140'	220'	300'	422'	363'	1,252'	1,487'	NA	
G. EXTERNAL CARGO ²																							
(1) Maximum recommended external load	Lbs	500	4,000	4,000	4,000	NA	1,000	NA	NA	NA	NA	NA	NA	3,000	4,000	4,000	2,000	5,000	5,000	10,000	16,000	20,760	
(2) Rescue Hoist Capacity	Lbs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 or 600 ⁴	400	600	600	600	NA	
(3) Cargo Loading Winch Capacity	Lbs	NA	NA	NA	NA	NA	NA	NA	NA	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,000	3,000	NA	
H. PASSENGER CAPACITY																							
(1) Troop Seats (240 Lbs Per Man)	Ea	1	0	0	0	10	5	5	5	32	3	1	2	6	8	12	6	12	12 or 18	23	33	NA	
(2) Litters and Ambulances	Ea	0 + 1	NA	NA	NA	6 + 3	2 + 2	0 + 5	0 + 5	14 + 8 20 + 2 ⁵	0 + 3	2 + 0	2 + 1	2 + 1	3 + 1	6 + 1	6 + 0	12 + 0	8 + 0	24 + 0	24 + 3	NA	
I. OPERATIONAL CHARACTERISTICS ^{1,2}																							
(1) Maximum Allowable Gross Wt	Lbs	2,100(0-1A) 2,165(0-1B)	12,500	13,318	12,676	8,000	5,100	7,300	7,700	28,500	2,700	2,450	2,700	7,200	8,500	9,600	7,900	13,500	13,600	31,000	33,000	42,000	
(2) Basic Weight	Lbs	1,502(0-1A) 1,614(0-1B)	9,673	10,650	10,004	4,900	3,100	5,000	5,490	18,576	1,080	1,715	1,821	4,020 ³	4,600 ³	4,900 ³	5,650	8,900	7,800	21,500	17,200	19,300	
(3) Useful Load	Lbs	598 (0-1A) 551 (0-1B)	2,827	2,668	2,672	3,100	2,000	2,300	2,210	9,924	1,620	735	879	3,180	3,900	4,700	2,250	4,600	5,800	9,500	15,800	22,700	
(4) Internal Fuel Capacity	Lbs/ Gal	252/42	1,930/297	1,930/297	1,930/297	1,281/ 213.5	828/138	1,380/ 230	1,380/ 230	4,968/828	382/59	258/43	276/46	812/125	1,072/165	1,430/220	1,050/175	1,800/300	1,572/262	2,388/398	4,095/630	8,700/1,350	
(5) Normal Cruising Speed ⁶	Kts	87	185	185	185	104	105	155	160	150	100	70	70	80	90	100	70	80	85	90	110	100	
(6) Endurance at Cruising Speed ⁶	Hrs & Min	4 + 00	1 + 25	1 + 25	1 + 25	6 + 30	6 + 00	6 + 00	6 + 00	6 + 30	2 + 25	1 + 45	1 + 50	1 + 25	1 + 45	2 + 15	2 + 25	3 + 15	2 + 50	1 + 25	2 + 40	1 + 45	
(7) Grade of Fuel	Oct	80/87 ⁸	JP-4	JP-4	JP-4	80/87 ⁸	80/87 ⁸	115/145	115/145	115/145	JP-4	80/87 ⁸	80/87 ⁸	JP-4	JP-4	JP-4	115/145	115/145	115/145	115/145	JP-4	JP-4	
(8) Fuel Consumption Per Hour ⁷	Lbs/ Gal	54/9	1,105/170	1,105/170	1,105/170	180/30	132/22	204/34	204/34	660/110	130/20	120/20	120/20	422/65	487/75	487/75	360/60	480/80	456/76	1,200/200	1,300/200	3,460/532	

DEFINITIONS:

MAXIMUM ALLOWABLE GROSS WEIGHT: The maximum allowed total weight of the aircraft prior to takeoff; the "BASIC WEIGHT" of the aircraft plus the crew, personnel equipment, special devices, passengers/cargo, and usable fuel and oil. This is limited by structure, power available, or landing load.

BASIC WEIGHT: The empty weight of an aircraft in its basic configuration, to include all appointments, integral equipment, instrumentation, and trapped fuel and oil, but excludes passengers, cargo, crew, and fuel and oil.

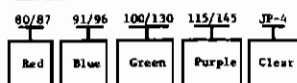
USEFUL LOAD: The load-carrying capability of an aircraft. It includes the payload, crew, and usable fuel and oil required for the mission. Here it is the difference between "MAXIMUM ALLOWABLE GROSS WEIGHT" and the "BASIC WEIGHT" as defined above. Thus, it is evident that a reduction of the fuel load will reduce the ENDURANCE and increase the PAYLOAD. Full oil is required for all missions.

PAYLOAD: The useful load less the crew, full oil, and the required fuel for the mission.

NORMAL CRUISING SPEED: The true airspeed which an aircraft can normally be expected to maintain at some standard power setting below rated military power. This speed will vary with altitude.

ENDURANCE AT CRUISING SPEED: The time that an aircraft can remain airborne at normal cruising speed with fuel aboard without using the required fuel reserve. The data listed under "OPERATIONAL CHARACTERISTICS" is computed utilizing full fuel minus a 30-minute reserve, except turboprop which requires 20 minutes reserve.

US ARMY AIRCRAFT FUEL IDENTIFICATION



FOOTNOTES:

¹ All data computed at standard conditions at sea level.

² Detail weight computations and characteristics taken from current technical manuals on each aircraft.

³ Basic weight for standard aircraft. (Weapons systems and components not included.)

⁴ UH-19D: Helicopters prior to serial no. 56-1519 are equipped with provisions for a 400 lb. capacity rescue hoist; subsequent helicopters are equipped with provisions for a 600 lb. capacity rescue hoist.

⁵ "RATO" type litter arrangement (aircraft no. 61-2599 and subsequent).

⁶ Airspeeds and fuel consumptions will vary with gross weight, altitude, power settings, and aircraft. See appropriate operator's manual for correct airspeed and fuel consumption.

⁷ Computed at maximum gross weight and at sea level.

⁸ During mobilization, fuels will be 115/145 and JP-4.

APPENDIX I

AIRBORNE SURVEILLANCE EQUIPMENT

The Army presently has three means of surveying the battlefield: Photography, radar, and infrared equipment.

1. PHOTOGRAPHY EQUIPMENT

a. KS-53 Camera System.

- (1) General description. The KS-53A still picture camera system is a lightweight aerial camera designed for the purpose of recording reconnaissance-type tactical aerial photographs. The KS-53A is used in the surveillance drone. The KS-53A camera system consists of a KA-39A camera, a control box, a photoflash detector, two flare ejectors, two ejector covers, two ejector test sets, three cable assemblies, two carrying cases, and a set of spare parts.
- (2) Capabilities and limitations. The KS-53A camera system is capable of taking both day and night photographs. The camera in this set has seven image-motion compensation (IMC) altitude settings for the 200-mile per hour speed range, and nine IMC altitude settings for the 100-mile per hour speed range, plus a day mode and a night mode.
- (3) Technical characteristics.

Film:	Roll film: 9 1/2 inches wide by 75 feet long.
Format:	9x9 inches.
Power requirements:	Electrical - 24 to 28 volts DC at 7 amps.
Lens data:	6 inch f/6.3, Metrogon, wide angle. Diaphragm stops f/8 for day operation, and f/4 for night operation.
Shutter speeds:	1/150 and 1/300 second when used in the day mode. The camera must be set on 1/150 second for night operation.
IMC altitude settings:	1,000, 1,500, 2,000, 2,500, 3,000, 4,000, and 5,000 feet for the 200-mile per hour speed range; 5,000, 5,500, 6,000, 6,500, 7,000, 7,500, 8,000, 9,000, and 10,000 feet for the 100-mile per hour speed range.
Filters:	Yellow for light haze; red for medium to heavy haze; clear for night photography. Always use a filter with the KA-39A.

Note. For additional information, see TM 11-6720-207-10.

b. KS-61 Camera System.

- (1) General description. The KA-30A still picture camera is a compact aerial reconnaissance camera capable of taking exposures over a wide range of altitudes and groundspeeds during day or night missions. This camera can be used with all OV-1 (Mohawk) airplanes.
- (2) Capabilities and limitations. This camera has four modes of operation: AUTO CYCLE, which produces a straight 60 percent overlap; PULSE, where the overlap may be varied from 10 percent to 80 percent, but does not have IMC; PULSE IMC, which is used at low level with variable overlap, 10 percent to 60 percent; and the NIGHT MODE. Image motion compensation is available with all modes of operation, by using the OPERATE or AUTO OPERATE switches in the aircraft. IMC is the movement of the film through the camera at a speed proportional to the groundspeed of the airplane and its altitude.

(3) Technical characteristics.

Film:	Roll film - 5 inches wide by 100 feet long. The three films available with this camera are PLUS X, with an ASA rating of 80 DAY ONLY; DOUBLE X, with an ASA rating of 100 DAY ONLY; and TRI-X, with an ASA rating of 200 NIGHT and DAY.
Power requirements:	Electrical - 28 VDC, 115 VAC, 400 cps. Vacuum - 1 to 8 inches of mercury at 5 cfm. (Supplied by internal means in the aircraft.)
Lens data:	3 inches focused at infinity, with an aperture range of f/4.5 to f/11. 6 inches focused at infinity, with an aperture range of f/2.8 to f/16.
Shutter speeds:	3 inches - continuously variable between 1/50 and 1/800 second. 6 inches - continuously variable between 1/50 and 1/400 second.
IMC altitude settings:	Automatic once the altitude and speed are inserted into the system.
Filters:	Yellow for light haze; red for medium or heavy haze.

Note. For additional information, see TM 11-6720-208-12.

2. RADAR EQUIPMENT

a. General Description. The AN/UPD-2 airborne radar reconnaissance system is composed of four subsystems: the AN/APS-94 radar reconnaissance set, the AN/ASN-64 Canadian-Marconi Doppler Navigator, and the AN/AKT-16 radar data transmitting

set, which are mounted in the OV-1B (Mohawk) airplane; and the AN/TKQ-1 radar data receiving set which is mounted in an S-144G shelter. The system can be put into operation within minutes. The AN/APS-94 antenna is mounted on the underside of the airplane fuselage.

b. Capabilities and Limitations. Classified CONFIDENTIAL.

c. Technical Characteristics. Classified CONFIDENTIAL.

Note. For additional information, see (C) TM 11-5895-284-12.

3. INFRARED EQUIPMENT

a. General Description. The AN/UAS-4 infrared surveillance system is an airborne infrared system with data link facilities. The airborne components are - the AN/AAS-14 infrared detecting set, and the AN/ART-41 radio transmitting set. These components are mounted in the OV-1C (Mohawk) reconnaissance airplane. The ground components are - the AN/TRR-14 radio receiving set, and the AN/TAQ-1 surveillance information center. These components are installed in a modified S-144G shelter. The complete system can be put into operation within minutes after takeoff.

b. Capabilities and Limitations. Classified CONFIDENTIAL.

c. Technical Characteristics. Classified CONFIDENTIAL.

Note. For additional information, see Systems Manual (C) TM 11-5850-202-15.

(THIS PAGE INTENTIONALLY LEFT BLANK.)

INDEX

	<u>Paragraph</u>	<u>Page</u>
Aerial medical evacuation requests -----	79g, <u>h</u>	318
Aerial weapons supply -----	<u>89</u>	357
Airborne division aviation battalion -----	42	184
Airborne division organizational chart -----	(fig. 6)	7
Airborne operations -----	<u>12a</u>	21
Aircraft:		
Availability -----	(app. D)	420
Characteristics -----	(app. H)	441
Designations -----	(app. C)	417
Maintenance units -----	88	335
Supply -----	89	357
Airfields -----	<u>20a</u>	26
Airmobile division aviation -----	31-36	43
Alternate landing areas -----	<u>22g</u>	27
Amphibious operations -----	<u>12b</u>	21
Arctic survival -----	<u>105</u>	388
Armanent characteristics -----	103	382
Armament subsystems -----	90-103	366
Armed helicopter:		
Employment -----	100	378
Fire -----	<u>100b</u>	378
Armored division organizational chart -----	(fig. 8)	9
Army aviation:		
History of -----	3	13
Mission of -----	1	12
Organizational concepts -----	4, 5	15
Uses -----	2	12
Artillery adjustment, aerial -----	(app. F)	429
Aviation staff duties -----	16	23
Avionics supply -----	89	357
Characteristics of Army aircraft -----	(app. H)	441
Column control -----	<u>14c</u>	23
Command and control -----	<u>2a</u>	12
Command relationships -----	7	17
Communications -----	26, 27	38
Counter guerrilla operations -----	<u>12d</u>	22
Defensive operations -----	10	20
Deliberate landing area -----	<u>21c</u>	26
Desert survival -----	<u>106</u>	390
Direct support -----	<u>7c</u>	18
Displacement from one landing area to another -----	<u>24c</u>	30
Employment:		
Factors affecting -----	13	22
Principles of -----	6	17
Employment of armed helicopters -----	100	378
Escape -----	111-113	401
Escort of airmobile forces -----	101	380
Escort of ground convoys -----	102	381

	Paragraph	Page
Evasion-----	111-113	401
Factors for planning aircraft availability-----	(app. D)	420
Field army aircraft, recapitulation-----	(fig. 9)	10
Field army support command (FASCOM)-----	73	300
Organizational chart-----	(fig. 2)	3
Field exercises, evasion and escape-----	113	401
Firefly-----	98	376
General support-----	7d	19
Geneva convention-----	112a	401
Guerrilla operations-----	12c	22
Guidance factors for aircraft availability-----	(app. D)	420
Hasty landing area-----	21b	26
Heliports-----	20b	26
History of Army aviation-----	3	13
Infantry division aviation battalion-----	37	128
Infantry division organizational chart-----	(fig. 5)	6
Intelligence-----	2b	12
Kits, survival-----	109	393
Landing areas:		
Alternate-----	22g	27
Classes of-----	21	26
Displacement from and to-----	24c	30
Lighting of (airplane)-----	25b	31
Lighting of (helicopter)-----	25d	36
Marking of (airplane)-----	25a	30
Marking of (helicopter)-----	25c	36
Occupation of-----	24b	30
Satellite-----	22f	27
Selection of-----	23	27
Type of-----	20	26
Landing point-----	22d	27
Landing site-----	22c	27
Landing strip-----	22b	27
Landing zone-----	22a	26
Logistics-----	2e	12
Low-visibility operations-----	100c	379
Maintenance units, aircraft-----	88	335
Maneuver-----	2c	12
Mechanized division organizational chart-----	(fig. 7)	8
Methods for determining aircraft requirements-----	(app. E)	421
Mission of Army aviation-----	1	12
MOS structure, Army aviation-----	(app. G)	436
Nap-of-the-earth flight-----	29c	42
Night operations-----	100d	379
Occupation of landing areas-----	24b	30
Offensive operations-----	9	19
Operational control-----	7b	18
Organizational concepts of Army aviation-----	4, 5	15
Organizations:		
Divisional:		
Airborne division aviation-----	42-46	184

	<u>Paragraph</u>	<u>Page</u>
Airmobile division aviation	31-36	43
Infantry division aviation	37-41	128
Mechanized and armored division aviation	47-54	209
Nondivisional:		
Armored cavalry aviation units	67-69	273
Aviation air traffic control company	83-86	321
Aviation company (Army)	81, 82	321
Aviation company, separate brigade	64-66	268
Aviation group	55-63	223
Aviation units (FASCOM)	73-78	300
Corps artillery aviation battery	70-72	290
Transportation aircraft maintenance and supply activities	87-89	331
Pioneer landing area	21a	26
Planning guidance for aircraft availability	(app. D)	420
Principles of employment	6	17
Radio, survival	110	395
Recapitulation - Army aircraft in the type field army	(fig. 9)	10
Reconnaissance for landing areas	23b	28
References	(app. A)	409
Retrograde operations	11	21
Satellite landing area	22f	27
Search and rescue	14b	23
Sea survival	108	392
Special operations	12	21
Staff coordination	18	25
Staff duties, aviation	16	23
Staff estimates and recommendations	17	24
Supply, aircraft, aerial weapons, and avionics	89	357
Support plan annex	(app. B)	415
Surveillance equipment	(app. I)	443
Survey operations	14a	23
Survival	104-110	388
Kits	109	393
Radios	110	395
Tables:		
Angular coverage (Table 6)	103	386
Armament subsystem weights (Table 3)	103	383
Issue priority designator table (Table 2)	89	364
Maintenance to flying hour ratio (Table 1)	87	332
Performance data (Table 5)	103	385
Range data (Table 4)	103	384
Training, evasion and escape	111-113	401
Transportation aircraft maintenance and supply activities	87-89	331
Tropical survival	107	391
Type corps organizational chart	(fig. 3)	4
Type field army organizational chart	(fig. 1)	2
Uses of Army aviation	2	12