FM 57-100

DEPARTMENT OF THE ARMY FIELD MANUAL

THE AIRBORNE DIVISION

HEADQUARTERS, DEPARTMENT OF THE ARMY
SEPTEMBER 1959

UNITED STATES ARMY
THE CHIEF OF STAFF

FOREWORD

The employment of airborne forces in World War II introduced revolutionary doctrinal changes regarding mobility, maneuver, and surprise in the conduct of war. Since World War II, the possession of nuclear weapons in quantity, potential improvements in target acquisition, missiles of vastly increased range, and greatly improved vehicles for tactical and strategic mobility require the development of even more radical concepts for the employment of these forces in conjunction with other major elements of the Army. To develop decisive future combat superiority, we must integrate lessons learned in the past with our best estimates of the battlefield of tomorrow, imaginative tactics which rapidly exploit new developments, and sound judgment in designing new organizational structures.

In this era, the threats to the security of the United States are numerous and may appear in a variety of forms. To counter most of these threats effectively will require the application of measured military force, to include the use of airborne units of maximum organizational flexibility and combat power. The tactical and strategic mobility possessed by the airborne division, coupled with its inherent capability to strike with measured force at the time and place most likely to obtain decisive results, makes it particularly well adapted for application as an instrument of national policy.

The concepts of organization and employment presented in this manual represent current doctrine for the conduct of airborne operations and establish goals for future training of airborne units. The characteristics of airborne forces -- boldness, speed, surprise, and the capability for far-ranging action -- blend in one unit the tactical virtues sought by all military organizations. In this sense the airborne division may well point the way and provide guidance for all future combat organizations. However, the same pathfinder spirit which resulted in the initial concept and development of airborne forces must be applied if we are to exploit the full potential of our new organizations, materiel, and concepts.

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General, United States Army
Chief of Staff

FIELD MANUAL
No. 57–100

HEADQUARTERS,
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WASHINGTON 25, D. C., *9 September 1959*

THE AIRBORNE DIVISION

***This manual, together with FM 57–30, 31 July 1959, supersedes FM 57–20, 23 January 1952.**

CHAPTER 1

GENERAL

Section I. INTRODUCTION

1. Purpose

This manual sets forth tactical and administrative support doctrine and guidance for the employment of the elements of the airborne division. It is designed for the use of commanders and staffs of the airborne division in preparation for, and execution of, operations in the field. The text also will serve as reference material for higher commanders and staffs that might be required to command or supervise the employment of an airborne division.

2. Scope

a. The material presented herein is applicable to active nuclear warfare. Where applicable, appropriate modifying guidance for conditions of nonactive nuclear warfare is integrated throughout the text.

b. The manual is primarily concerned with information concerning those aspects of the airborne division organization and method of employment that are peculiar to the airborne division and that differ from those of other Army tactical units.

c. Where reference is made to functions and responsibilities of the theater army logistical command (TA Log Comd), it should be understood that similar functions are performed by any administrative support agency in which an airborne operation is mounted.

d. Some subject matter concerns the details of operations of subordinate units of the airborne division, particularly the support group. This information is included to insure clarity of new concepts of organization, tactical operations, and administrative support.

e. Additional information concerning the planning for and conduct of airborne operations is contained in FM 57–30.

3. Operational Environment

a. General. The inherent mobility of the airborne division and the rapidly changing world events suggest that an airborne division might be employed in a wide range of military situations. The division should be trained and prepared to participate in situations short of war as well as limited and general wars. See FM 100–5.

b. Geographical Locale. The designed characteristics and capabili-

ties of the airborne division provide it with the capability of employment in a wide range of areas and locales that are not normally accessible to other ground forces. Airborne units must be prepared to operate under varying conditions which may involve difficult and varied types of terrain, extremes of climate, and widely disparate characteristics of population, degree of development, and political-social-economic structure.

4. Situations Short of War

a. Situations short of war may occur in various areas of the world. Many of the likely areas where situations short of war might occur are located in areas where U. S. forces are not presently stationed.

b. Administrative support requirements for situations short of war will normally be characterized by a maximum use of air lines of communication, austere support force structure and base complexes, and utilization of strategic prestocked land or floating bases.

c. Military forces may be committed in a situation short of war to stabilize a restless area or help maintain or restore order. Planning and training by the airborne division in preparation for participation in situations short of war should emphasize such operations as anti-guerilla warfare and riot control.

d. The airborne division with its current equipment and flexible organization is capable of rapid deployment, by air or other means, to any area of the world. The high ratio of rifle strength in the airborne division and its strategic mobility make the airborne division well suited for employment in situations short of war.

5. Airborne and Air-Mobile Operations

a. The airborne division is organized and equipped to engage in frequent joint airborne assault operations using medium and assault transport aircraft as a means of transportation. The same characteristics of organization, training, and equipment that give the airborne division the capability of participating in joint airborne operations ideally suit it for participation in air-mobile operatons. The procedures for planning and conducting air-mobile operations are very similar to those employed in joint airborne operations. In each case the airborne division must prepare for the operation, be transported to the objective area, and be landed in the objective area. The major differences in the two types of airborne operations are highlighted in the following areas:

(1) Command and control of the transport means.
(2) Characteristics of the aircraft.
(3) Size and scope of the operation.

b. Although this manual deals primarily with joint airborne opera-

tions, it is emphasized that the airborne division is well suited to plan and conduct air-mobile operations.

c. Details concerning air-mobile operations are contained in FM 57–35.

Section II. BASIC CONSIDERATIONS

6. Types of Airborne Operations

a. Airborne combat operations are classified by type as short duration and long duration.

(1) Short duration operations normally will be conducted by a division or elements thereof with minimum nondivisional reinforcing units. Combat is conducted utilizing accompanying supplies and minimum followup supply. There is no routine supply phase. Minimum service support is provided in the objective area and the operation terminates with the early relief, withdrawal, or relift of the airborne force for subsequent operations.

(2) Long duration operations normally require that airborne units be reinforced by nondivisional combat, combat support, and service support units. The forces employed are usually committed to sustained ground combat. This type of operation involves a substantial buildup of troops, supplies, and equipment primarily utilizing air lines of communications.

b. The mission assigned the airborne force will determine the type of operation to be conducted. An airborne raid normally will be of the short duration type while a large-scale operation conducted deep in the enemy's rear will usually be of the long duration type and require substantial buildup by air lines of communications. There is no clear line of delineation between the two types and either may be of a tactical or strategic nature.

7. Missions

The airborne division may be assigned missions of strategic as well as tactical significance. The division, unless substantially reinforced, usually engages in short duration operations and participates in long duration operations normally as a part of a larger force. The airborne division is assigned those missions that capitalize on its designed ability to perform frequent airborne assault operations. Some typical missions for an airborne division are to—

a. Conduct airborne raids.
b. Seize critical objectives such as bridges or defiles.
c. Participate in show of force operations.
d. Reinforce threatened areas.
e. Conduct blocking and screening operations.

f. Conduct harassing and interdiction missions on a large scale over an extensive area behind the enemy lines.

g. Conduct a reconnaissance in force.

h. Control areas and the civilian population therein.

8. Strategic Army Force

In order to deploy forces rapidly to meet local aggression in any part of the world, as well as to reinforce units currently deployed in oversea areas, a requirement exists to maintain an operational ready strategic army force within the United States. This force must be ready at all times for prompt deployment by air, or a combination of air and sea lift, to any part of the world where Armed Forces of the United States might be required. The airborne division is designed, organized, and equipped for rapid deployment by air. The division will frequently be required to prepare and maintain plans for deployment to various areas of the world. These plans will require deployment and with little warning and utilizing rapidly established lines of communications which rely primarily on air transport means. The division will necessarily deploy with priority given to the requirement for combat elements, and with administrative support provided on an austere basis during the early phase of the operation. Administrative support requirements may be reduced by supplies available in prestocked forward bases or by use of indigenous forces or equipment in the forward staging or objective area. The mobility and capabilities of the airborne division are evidence of the instant readiness of strategic army forces to move without delay to threatened areas. Such evidence is essential to the deterrent value of such forces.

CHAPTER 2

ORGANIZATION

Section I. AIRBORNE DIVISION

9. Mission

The mission of the airborne division is to move by air to close with the enemy and destroy or capture him; to seize and hold important objectives until linkup, reinforcement, or redeployment; to execute small scale airborne commando type operations to perform selected missions; and to move by air on short notice to any oversea land reas as a deterrent or resistance force in any threatened area.

10. Organization

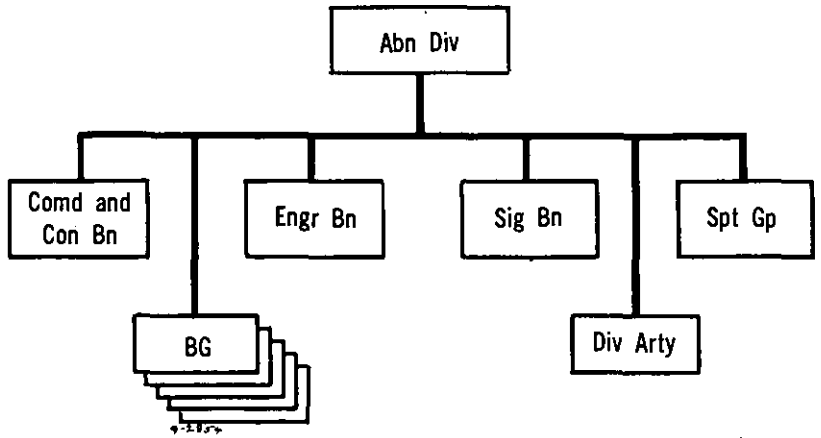


Figure 1. Airborne division.

11. Capabilities

At full strength, this unit has the following capabilities:

a. Executes airborne assault by means of parachute drop or air-landing.

b. Closes with the enemy and destroys or captures him, utilizing fire, maneuver, and close combat.

c. Conducts all types of ground operations when augmented by appropriate combat and administrative support units.

d. Coordinates reinforcing or supporting units.

e. Acts alone or as part of a larger force.

f. The entire division can be delivered into an objective area by parachute.

12. Employment

a. The airborne division is the basic large airborne tactical unit of the Army. The division has a high ratio of infantry strength and is designed primarily for airborne assault operations. The division is capable of independent operations and is well suited for any type of operation that requires a high ratio of infantry strength.

b. The division can perform in a sustained combat role, but requires augmentation primarily in the fields of mobility means, engineer, artillery, armor, and administrative support.

Section II. INFANTRY AND RECONNAISSANCE UNITS

13. Airborne Battle Group, Infantry

a. Mission. The basic combat mission of the airborne battle group is to close with the enemy by means of airborne assault and ground combat to capture or destroy him.

b. Organization.

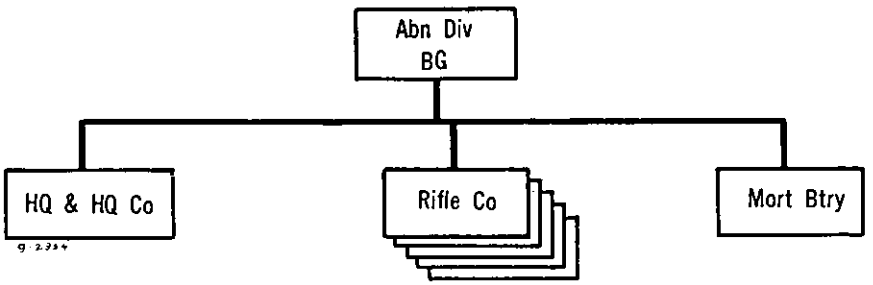


Figure 2. Airborne battle group.

(1) *Headquarters and headquarters company.* This company provides command, staff planning, administration, reconnaissance, communications, supply, transportation, radar control for tactical operations of Army aircraft, medical service, and antitank and assault gun functions for the airborne battle group. The signal platoon contains an electronic devices section with 2 medium radar teams, each with AN/TPS 21 radar set, and 5 light radar teams. The light radar teams are each equipped with an AN/PPS–4 radar set. These normally will be employed with the rifle companies. Administrative functions of all units of the battle group are centralized in this company. The group headquarters, in addition to a normal staff, has a deputy group commander.

(2) *Mortar battery.* The mortar battery provides close fire sup-

port for the battle group. Normally, platoons of the battery will operate in direct support of elements of the battle group and may be attached to rifle companies or task forces for the airborne assault. The battery has an organic air control team. The battery controls the fires of reinforcing artillery units and the commander is the fire support coordinator for the battle group.

(3) *Rifle company.* The rifle company normally fights as part of the battle group. It may operate under the direct control of the battle group commander or as part of a task force under the deputy commander or other designated individual. The company is capable of semi-independent action. Its weapons platoon has two 106-mm recoilless rifles and three 81-mm mortars.

c. Capabilities. At full strength, this unit has the following capabilities:

(1) Closes with the enemy and destroys or captures him, utilizing airborne assault, fire, maneuver, and close combat.
(2) Repels enemy assaults by fire and close combat.
(3) Seizes and holds terrain; seizes, destroys, or defends vital objectives.
(4) Maneuvers in all types of terrain and climatic conditions.
(5) Conducts frequent airborne assault by parachute or assault aircraft with minimum marshalling and planning procedures.
(6) Conducts airborne withdrawal.
(7) Conducts independent operations for short periods of time.
(8) Functions as a standard infantry unit when adequately augmented.

d. Employment.

(1) The battle group is the basic tactical unit of the airborne division. It is capable of operating independently or as part of the division. It is trained and equipped to make assault landings by parachute and assault aircraft.
(2) The battle group, reinforced with combat and service support units, is the airborne combat team and is the basic tactical unit for the airborne assault.
(3) The battle group can directly control all of its companies or can form subordinate task forces of two or more companies as the situation and mission require. The rifle companies, reinforced, are capable of semi-independent action.

14. Cavalry Troop

a. Mission. The mission of the cavalry troop is to—

(1) Perform reconnaissance for the division through the use of a combination of ground and supporting air reconnaissance elements over wide fronts and extended distances.

(2) Provide security by surveillance of critical areas and by air transport of groups of personnel to critical areas.

b. Organization.

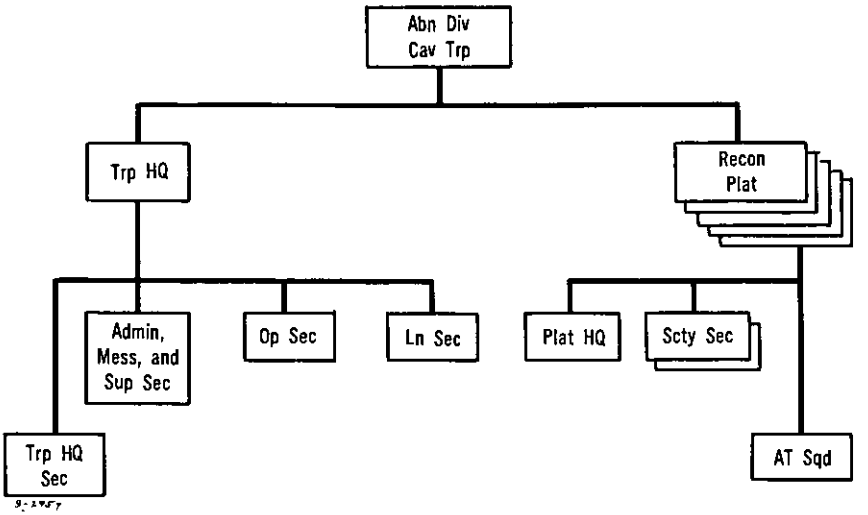


Figure 3. Cavalry troop.
(Organic to command and control battalion.)

(1) *Troop headquarters.* The headquarters section provides necessary personnel and equipment for command, control, operations, and performance of the administrative functions of the troop. The operations section has operations, intelligence, air observer, and communications personnel. The liaison section provides liaison between the cavalry troop and division or other headquarters.

(2) *Reconnaissance platoon.* The reconnaissance platoon operates most effectively as a unit, but may operate by sections and under some circumstances by squads. It performs route, zone, and area reconnaissance in conjunction with other elements of the cavalry troop. It is normally employed beyond the security forces of the battle groups or in areas between battle groups.

c. Capabilities. At full strength, the unit—

(1) Performs reconnaissance and area surveillance over wide fronts and extended distances through the use of a combination of organic troops, ground vehicles and attached aircraft, photographic equipment, airborne/ground radar, and intrusion detection devices.

(2) Operates independently under division control forward of battle group security elements.

(3) Redeploys rapidly by vehicles and aircraft organic to the division.

(4) Reconnoiters targets for nuclear weapons employment and damage assessment of nuclear strikes.
(5) Conducts pathfinder activities to include providing limited terminal guidance for Army aircraft; reconnoiters for suitable drop or landing zones; marks drop or landing zones.
(6) Fights as infantry when required.

d. Employment. The primary mission of the cavalry troop is the collection of military information by operations beyond the reconnaissance and security forces.

Section III. FIRE SUPPORT AND COMBAT SUPPORT UNITS

15. Airborne Division Artillery

a. Mission. The division artillery mission is to provide general artillery support for the airborne division. It also provides the division artillery component of the intelligence, observation, liaison, communication, and survey systems.

b. Organization.

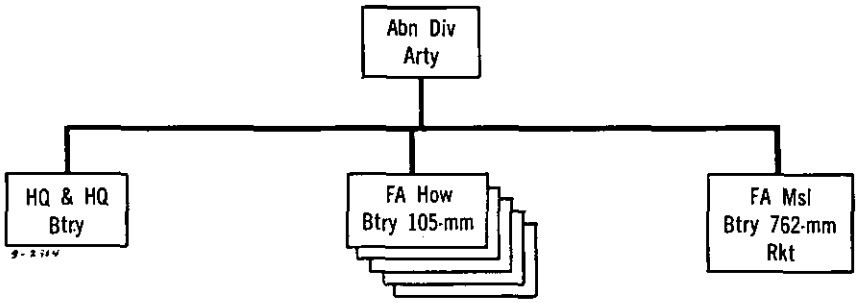


Figure 4. Division artillery.

(1) *Headquarters and headquarters battery.* This battery directs and coordinates the operations of the division artillery and attached units. It provides facilities for control of those units, to include division artillery headquarters components of intelligence, observation, survey, meteorological, and communication systems. It maintains supply and personnel records for the division artillery and effects unit distribution of supplies as required, using transportation from the support group. Medical service is provided to include emergency treatment, operation of aid stations, evacuation of casualties, and supervision of sanitation.
(2) *Field artillery battery, 105-mm howitzer.* This battery provides general artillery support including its component of observation, communication, and survey system. It reinforces fires of other artillery units of the division.

(3) *Field artillery missile battery.* This battery provides long-range general artillery support and/or reinforcing fires to units of the airborne division. It provides its portion of division artillery communication and survey systems. The missile battery employs supply point distribution of rocket ammunition, using its organic vehicles.

c. Capabilities. At full strength, the unit has the following capabilities:

(1) The division artillery is organized as a tactical and administrative unit and is self-sustaining.
(2) Artillery personnel can fight as infantry when required.
(3) The missile battery can deliver nuclear fires.
(4) Direct support fire for each of the airborne battle groups can be provided.
(5) All elements are transportable in medium transport aircraft and can be parachuted.

d. Employment.

(1) Principles governing the employment of the airborne division artillery are essentially the same as those governing the infantry and armored division artillery. They are modified in application by considerations unique to the specialized nature of airborne operations, organization, and methods of employment.
(2) The principle of massed fire retains its importance. Massing of division artillery howitzer fire and the heavy mortar fire of the battle groups on the same target is desirable.
(3) The principles of maneuver, surprise, and economy of force as applied to artillery assume increased importance because of the limited number of weapons available to the airborne division artillery commander, the presence of a nuclear delivery capability, and the greater frontages on which the artillery must be capable of providing support.
(4) Airborne artillery howitzer positions are selected from which an all-around fire capability can be achieved. Firing positions for rocket launchers are selected and surveyed to permit rapid occupation from concealed locations and subsequent evacuation.
(5) The missile battery is the artillery unit most capable of exerting a decisive influence on the supported course of action. It is normally retained under division artillery control and is used for specific missions in a general support role.

16. Engineer Battalion

a. Mission. The mission of the airborne division engineer battalion is to increase the combat effectiveness of the division by combat support and general engineer work and, in particular, concurrently con-

structing air-landing facilities capable of accommodating assault aircraft and Army helicopters and fixed-wing aircraft.

b. Organization.

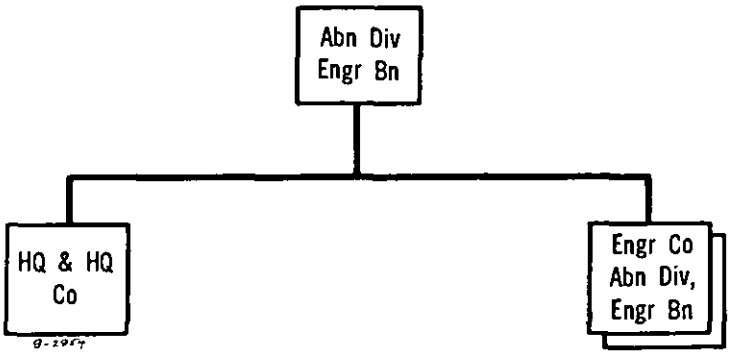


Figure 5. Engineer battalion.

c. Capabilities. At full strength, the unit has the following capabilities:

(1) Delivery by parachute of its major equipment designed primarily for the hasty construction of low criteria air-landing facilities for assault type aircraft and Army aircraft.
(2) Construction, repair, and maintenance of roads, bridges, fords, culverts, and assisting in the construction and repair of command posts, shelters, and defensive installations.
(3) Limited support on hasty stream-crossing operations with assault boats and short spans of bridging.
(4) Assistance in the removal and emplacement of obstacles, including mines and boobytraps.
(5) Preparation and execution of demolitions, including employment of prepositioned nuclear weapons. Special demolition missions which are beyond the organic capability of the engineer battalion to execute will require the attachment of nondivisional technical teams on a mission basis.
(6) Engineer reconnaissance and intelligence, and in particular, site selection for air-landing facilities.
(7) Providing initially a maximum of four air-landing facilities suitable for assault aircraft and, in addition, provision of direct engineer support to four combat groups.
(8) Assistance to supported units in staff planning by furnishing technical advice on engineering matters, including recommendations for the employment of engineer troops, and control and supervision of all attached engineer troops.
(9) Employment in combat in an infantry role.
(10) Assistance in assault of fortified positions.
(11) Technical assistance in special camouflage.

(12) Engineer supply activities, which are limited to water supply and map procurement, storage, and supply.

d. Employment. The engineer companies normally are attached by platoons to battle groups for the assault. They are placed under centralized control as early as possible to insure maximum flexibility and economy of effort. Major items of construction equipment are organic to the headquarters and headquarters company and are attached as required to the engineer companies. The battalion can provide three 38-foot spans of fixed bridging and 10 assault boats. Bridging and stream-crossing equipment is allocated as required by the mission.

17. Aviation Company

a. General. Although it is planned to equip the aviation company with a utility-type helicopter, the interim aircraft will be a light cargo helicopter. The employment of elements of the aviation company will be considered in terms of the light cargo helicopters.

b. Mission. The mission of the aviation company is to provide the division and its elements with aerial observation, surveillance, reconnaissance, movement of troops, equipment, supplies, medical evacuation, and other aerial support.

c. Organization. See figure 6.

(1) *Division aviation section.* This section coordinates the activities of the aviation company with the division staf, elements of the division, and supporting air elements as required. The division aviation officer advises the division commander and staff on the use of organic and attached Army aviation, and exercises staff supervision over all aviation matters.

(2) *Company headquarters section.* This section contains supervisory and other personnel who assist the company commander.

(3) *Operations platoon.* When operating under centralized control, the operations platoon receives and processes requests for aircraft based on established policies and procedures, and accomplishes necessary coordination with the flight operations center (FOC).

(4) *Communication section and air traffic control section.* The communications section establishes, operates, and maintains the communication nets of the aviation company. The air traffic control section is responsible for terminal control of aircraft organic to the division.

(5) *Flight operations center.* The FOC is located at either the main division airstrip or the fire support coordination center (FSCC). The FOC exercises air movement control over all Army aircraft in the division objective area and coordinates Army air traffic with whatever Air Force air movement control agency is operating in the objective area.

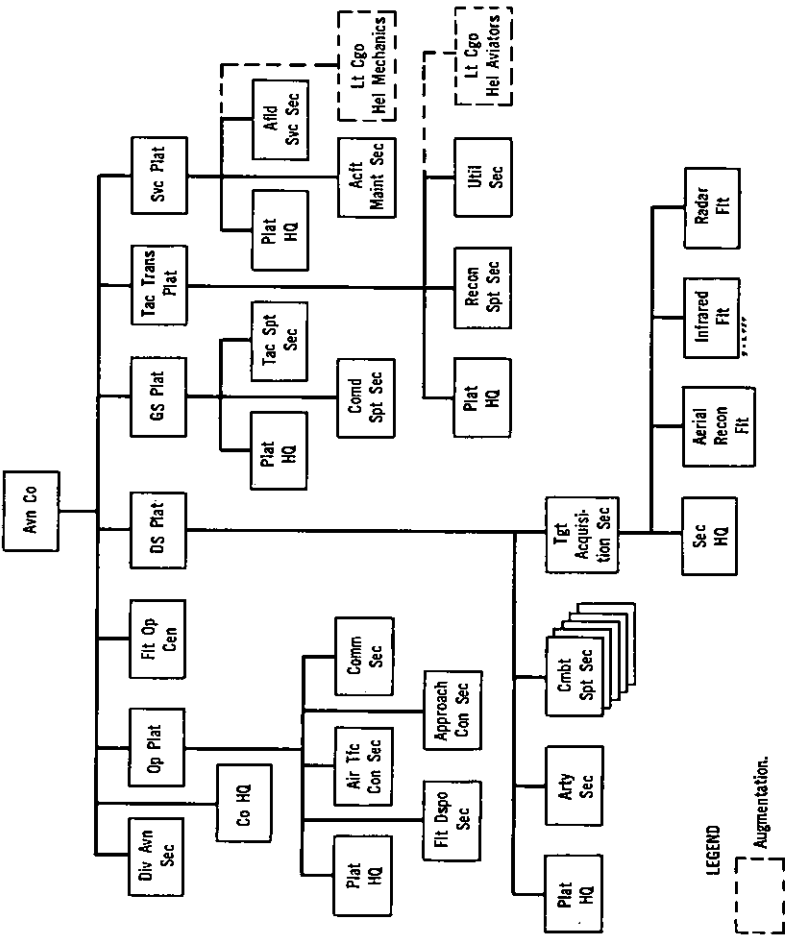


Figure 6. Aviation company.

(6) *Direct support platoon.* This platoon consists of a platoon headquarters, an artillery section, five combat support sections, and a target acquisition section.

(*a*) *Artillery section.* This section supports the division artillery by locating targets and by adjusting fire. The section commander acts as the aviation officer to the division artillery commander. It normally will operate as a unit but may be sectionalized when the division is operating in combat team formation. Its secondary mission is to collect information for intelligence purposes.

(*b*) *Combat support sections.* The combat support sections will habitually be attached to or placed in direct support of each battle group. The section commander acts as the aviation officer on the special staff of the supported battle group commander. Any other elements of the aviation company attached to or in support of the battle group come under his operational control. Additional aircraft and pilots will be provided from other sources available to the aviation officer to perform the mission of support of the battle group.

(*c*) *Target acquisition section.* This section habitually trains and operates with the cavalry troop. It is organized and equipped for close and distant reconnaissance and surveillance. It maintains area surveillance during both daylight hours and periods of limited visibility by use of visual and photographic reconnaissance, and other sensory devices.

(7) *General support platoon.* This platoon consists of a platoon headquarters, a command support section, and a tactical support section. It provides rotary and fixed-wing aircraft for command and staff transport and reconnaissance. Additionally, it provides a pool of reconnaissance helicopters for the support of battle groups and other divisional elements. Aircraft not required for battle groups provide aeromedical evacuation, command transportation, reconnaissance, courier service, and similar support for other division elements.

(8) *Tactical transport platoon.* This platoon consists of a platoon headquarters, a reconnaissance support section, and a utility section.

(*a*) *Reconnaissance support section.* This section habitually trains and operates with the cavalry troop in transporting the reconnaissance platoons. When not employed with the cavalry troop, it is used to augment the support provided by the utility section.

(*b*) *Utility section.* This section provides the organic airlift for personnel, equipment, and supplies of the division.

Normally it operates as a unit but is capable of decentralization for support of the battle groups. In addition to the transport role, the aircraft may be employed for aeromedical evacuation and other special missions.

(9) *Service platoon.* The service platoon is responsible for inspection of aircraft, organizational maintenance, petroleum, oils and lubricants (POL) servicing of aircraft, and aviation supply (limited).

d. Capabilities. At full strength, the unit has the following capabilities:

(1) Performs aerial observation, reconnaissance, and surveillance of the line of contact area and enemy areas within the division zone of action for the purpose of locating, verifying, and evaluating targets, adjusting artillery and mortar fire, and for terrain reconnaissance.

(2) Provides aircraft equipped with aerial surveillance devices which may operate with the cavalry troop or directly under the division staff in accomplishing reconnaissance and surveillance over extended distances and wide frontages.

(3) Provides supplemental aerial photography to include daylight vertical and oblique photography, and limited night photography.

(4) Provides air movement of troops, supplies, and equipment by Army cargo aircraft.

(5) Provides battlefield illumination (limited).

(6) Provides command, reconnaissance, and liaison transportation.

(7) Provides aeromedical evacuation.

(8) Performs courier and messenger service.

(9) Performs wire laying, radio relay, and propaganda leaflet dissemination.

(10) Performs staff and command planning for employment of Army aviation within the division to include attachment of Army aviation units not organic to the division.

(11) Performs organizational maintenance on all organic aircraft.

(12) Individuals of this unit can fight as infantry when required.

e. Employment.

(1) The aviation company is employed under centralized control; however, certain elements of the company habitually operate with various units of the airborne division.

(2) Elements of the company are designed for attachment to the battle groups when the division operates in combat team formation.

Section IV. ADMINISTRATIVE SUPPORT UNITS

18. Administration Company

a. Mission. The mission of the administration company is to serve as a carrier unit for elements of the division rear echelon which provide personnel and administrative services and, when augmented, replacement support for divisional units. The company also can provide limited service support for the division rear echelon and the division administration center.

b. Organization.

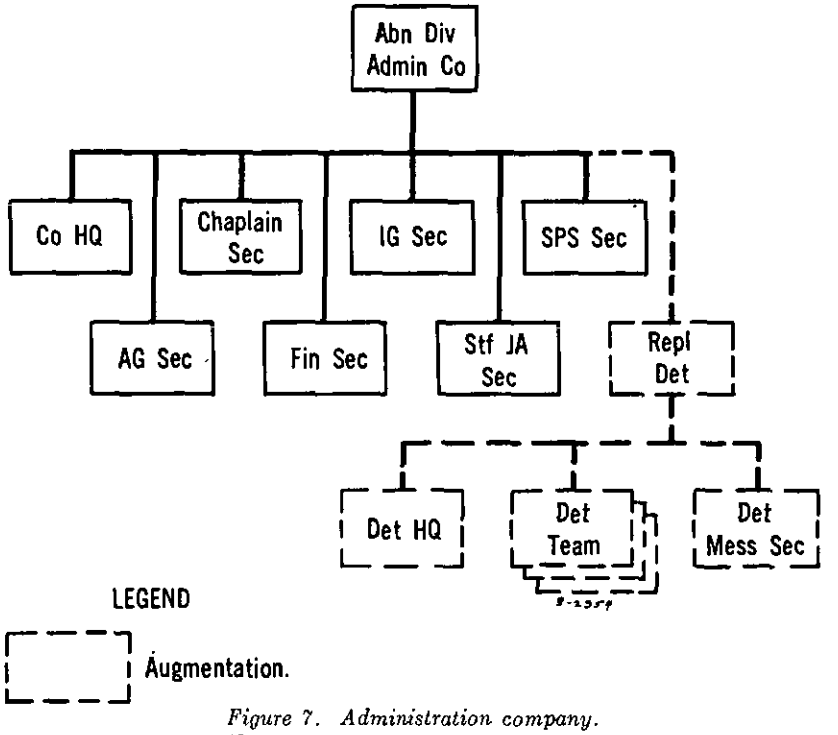


Figure 7. Administration company.
(Organic to command and control battalion.)

(1) *Company headquarters.* The company headquarters provides administrative support (except medical) to assigned and attached elements, mess facilities for the division administration center, and the organization for tactical control of the rear echelon.

(2) *Replacement detachment.* This detachment is placed on the tables of organization and equipment (TOE) on a wartime augmentation basis or when authorized by Department of the Army. The replacement detachment provides facilities for the reception, administrative processing, control, inspec-

tion, messing, and limited training of replacements and facilities for processing hospital and emergency returnees and rotational personnel. Each of the 3 detachment teams has a holding capacity of 100 replacements at any one time.

(3) *Division special staff sections.* The division special staff sections provide personnel and administrative services at division level.

c. Capabilities. At full strength, the unit has the capability to provide—

(1) Personnel and administrative support to units assigned and attached to the division.

(2) An organization through which the commanding officer, rear echelon, can exercise tactical control over the diverse elements assigned or attached thereto.

d. Employment.

(1) *General.* The administration company contains those special staff sections which normally remain with the division rear echelon. During airborne assault operations, the bulk of the company remains in the departure area. The commander of the rear echelon is designated by the commanding general from the special staff officers assigned to the company if the support group commander is not available.

(2) *Company headquarters.* The company headquarters performs the normal administrative functions of such a headquarters including mess and supply. The company commander is the headquarters commandant of the division rear echelon. He has no control over the operations of the division special staff sections or the replacement section.

(3) *Replacement detachment.* The replacement detachment, when authorized, operates in accordance with published doctrine and handles the reception, control, inspection, and limited training of individual replacements received by the division. It also processes hospital and emergency returnees and rotational personnel. The detachment normally will operate in the immediate vicinity of the division rear command post. The capacity of the section without augmentation is 300 replacements.

(4) *Division special staff sections.* The division special staff officers assigned to the company (adjutant general, finance officer, inspector general, staff judge advocate, chaplain and special services officer) operate in accordance with command and staff relationships and doctrine outlined in FM 101–5.

(5) *Chaplain section.* During tactical operations, the chaplain's section may be located in the objective area. Both the adjutant general's section (including the division Army post office

(APO) and the replacement detachment are capable of operating in echelon to provide advanced detachments, as required, in the objective area.

(6) *Division administration center.* Unit personnel sections of subordinate elements of the division join the administration company when the division is in combat. The administration company plus these sections form the division administration center. The unit personnel sections operate under the technical supervision of the division adjutant general.

19. Support Group

a. General. The organization and method of operation of the support group are unique and are found only in the airborne division. See chapter 7 for a detailed description of the organization and functions of the support group and subordinate units.

b. Mission. The support group mission is to provide command, staff planning, supervision, and execution of logistical operations at division level (except engineer construction and supply of maps and water).

c. Organization.

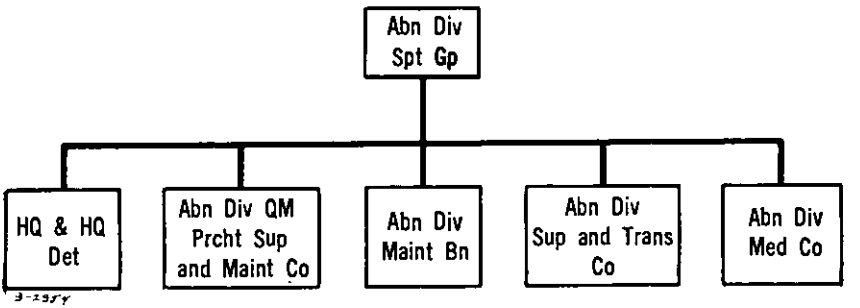


Figure 8. Support group.

d. Capabilities. At full strength, the unit provides—

(1) Division level logistical support to include intransit storage and disposition of all classes of supplies (except engineer maps and water supply) transportation of personnel, supplies, and resupply.

(2) Limited graves registration services.

(3) Second echelon maintenance support except aircraft and medical and third echelon maintenance support (except medical) for all equipment of the division.

(4) Third echelon medical service for the division.

(5) Quartermaster air-type equipment required for aerial delivery of personnel, supplies, and equipment.

e. Employment. The support group commander is the logistical operator of the division and through coordination with the division G4 and supervision of the functional-type units organic to the support group, implements the division logistical plan.

Section V. CONTROL UNITS

20. Signal Battalion

a. Mission. The mission of this battalion is to provide signal communications for the airborne division, division headquarters, and support group headquarters. Additionally, the battalion provides an area communications system, long lines communication service to battle group headquarters, support group headquarters and to other units operating directly under division headquarters.

b. Organization.

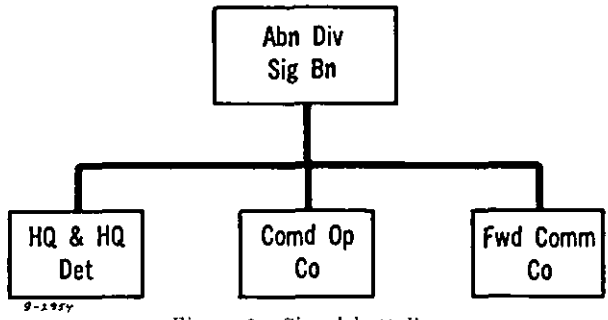


Figure 9. Signal battalion.

c. Capabilities. At full strength, the unit provides the following facilities:

(1) Installs, operates, and maintains wire and radio communications for an airborne division headquarters and an airborne division support group headquarters.

(2) Installs, operates, and maintains a division area communication system.

(3) Installs, operates, and maintains long lines communication service to battle group headquarters, support group headquarters, and to other units operating directly under division headquarters.

d. Employment.

(1) *General.* The division communication system is an area type system. It is so designed that if the division command post and communication control office are destroyed, any of the five area communication centers can assume control of the remainder of the system until the control office is reestablished. It provides long lines channels of communication between major units of the division over a network of alternate paths. Traffic routes can readily be rearranged to compensate for circuit interruption because of enemy action, equipment failure, or a change in communication traffic pattern. Radio relay is installed during the initial phases of an operation and, as the tactical situation permits, field wire is installed.

(2) *Command operations company.* The command operations company installs, operates, and maintains all communication facilities for the division command post and support group headquarters. It provides local telephone service for other units and terminal and switching facilities to all communication centers.

(3) *Forward communication company.* The forward communication company operates 5 area communication centers, 1 in support of each of the battle groups. An area communication center platoon normally is attached to each battle group for the assault and provides telephone, telephone switching, teletypewriter, cryptographic, radio/wire integration, and radio relay service between the battle group and division and adjacent battle groups.

21. Command and Control Battalion, Airborne Division

a. Mission. The mission of this battalion is to provide personnel and equipment for the command, control, staff planning, and supervision of operations of the division and attached units and to provide a carrier unit for the administration company, aviation company, and cavalry troop.

b. Organization.

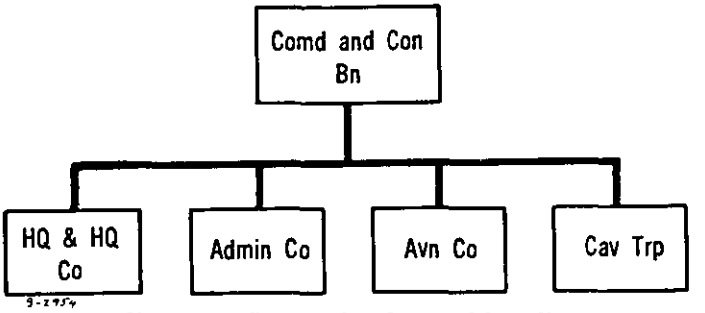


Figure 10. Command and control battalion.

c. Capabilities. At full strength, this unit—

(1) Provides administrative support and control of subordinate units.

(2) Performs headquarters commandant functions for the division headquarters.

(3) Provides personnel and other administrative support for the command and staff elements of the division headquarters.

(4) Provides local security forces for the division headquarters.

Note: See paragraphs 12, 15, and 16 for capabilities of cavalry troop, aviation company, and administration company.

d. Employment. The command and control battalion consists of the headquarters and headquarters company, the administration com-

pany, cavalry troop, and the aviation company. The grouping of these units within a battalion facilitates their administration and in administrative matters, limits the span of control required of the division commander. However, the primary operations of the administration company, cavalry troop, and aviation company remain under the direct supervision of the division commander.

22. Headquarters and Headquarters Company, Command and Control Battalion

a. Mission. The mission of this company is to provide the personnel and other administrative support for the command, control, staff planning, and supervision of administration and operations of the airborne division.

b. Organization. See figure 11.

c. Capabilities. This company provides—

(1) Command, staff planning, control and supervision of operations of the division and the command and control battalion.

(2) Personnel section and supply support for the command and control battalion.

(3) Administration, mess, supply, and motor transportation for the division and battalion headquarters.

(4) Medical service to include emergency treatment, operation of battalion aid station, and supervision of sanitation within the battalion.

(5) Security for the division command post and suitable music for military formations and ceremonies.

(6) Military police service to include enforcement of military law, traffic control, and handling prisoners of war (POW).

(7) Personnel to operate a radiological center.

d. Employment.

(1) *Division headquarters.* The division headquarters contains the command and staff sections which form the basis for the main command post of the division during tactical operations.

(*a*) The command section consists of the division commander, two assistant division commanders and their aides, and enlisted assistants. The two assistant division commanders are provided to assist the division commander in fulfilling such command functions as he deems necessary. They may command subordinate task forces within a single division objective area, command task forces when the division is committed in two or more separate airheads, or perform such other critical functions as the commander may desire.

(*b*) The chief of staff, in addition to an assistant, an administrative assistant, and clerical assistance, has three liaison officers in his section.

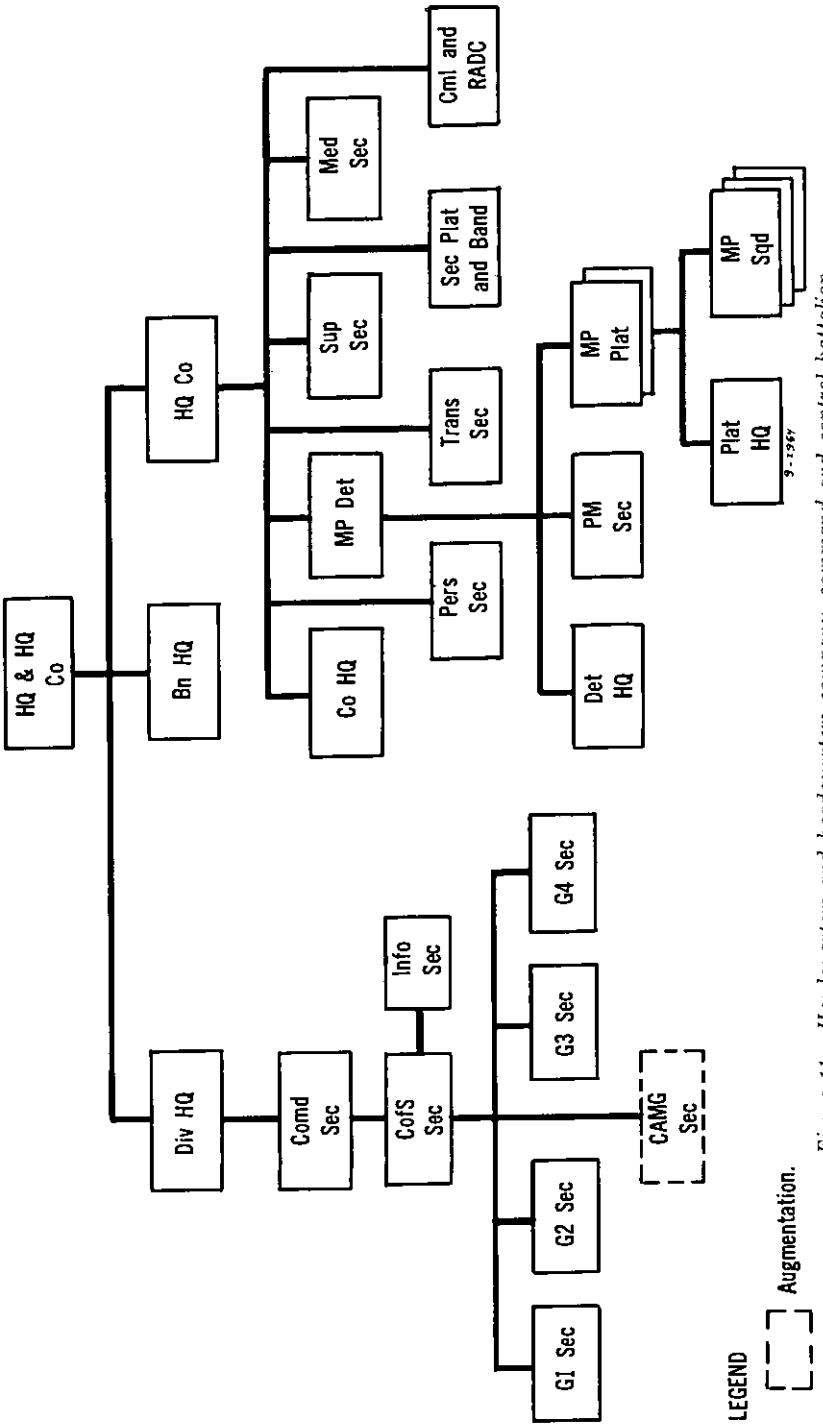


Figure 11. Headquarters and headquarters company, command and control battalion.

(*c*) The G1, G2, and G3 perform duties as outlined in FM 101–5. In addition, the G1 exercises general staff supervision over the operations of the administration company, the G2 exercises general staff supervision over the intelligence operations of the cavalry troop, and the G3 exercises general staff supervision over the operations of the aviation company and the cavalry troop when employed on missions other than intelligence. The G2 further has operational control of the attached military intelligence detachment. One officer in the G3 section is the division chemical officer. He performs the duties as outlined in FM 101–5, except those pertaining to supply, recovery, and evacuation of materiel. He advises on requirements for chemical supplies, munitions, and equipment.

(*d*) The division G4 is the staff planner for all logistical operations affecting the division. As such, he is responsible to the division commander for formulating detailed plans and policies which will insure adequate support of tactical operations. The nature of joint airborne operations is such that detailed plans must be prepared prior to the operation. The plans must include detail as to what support is required, who will provide the support, when it is required, where it is required, and how it will be provided. Necessary information will be provided by the logistical specialists of the division. For this purpose the G4 must have timely and accurate information regarding the various facets of the division's logistical requirements and capabilities. Therefore, the G4 must have direct access to the functional and technical specialists within the division in order to determine and establish requirements in such detail as the logistical plan requires. Since the support group commander is responsible for executing the logistical support plan, the G4 must insure that his plan is developed in close coordination with the support group commander. The support group commander is principally a logistics operator. However, he is available to G4 to assist in the preparation of the detailed logistical plan as required. The division transportation officer is assigned to G4 section and performs those duties outlined in FM 101–5 except as they pertain to supply, maintenance, and recovery of transportation items which are the responsibility of the division supply officer or maintenance officer.

(*e*) The division staff will be augmented by a civil affairs (CA) section in combat operations or when authorized by Department of the Army. The division G5 performs duties as out-

lined in FM 101–5. In addition, the G5 exercises general staff supervision over the operations of the attached CA section. The G5 is the staff planner for all CA operations affecting the division. As such, in airborne operations, the G5 must place special emphasis upon accurate detailed analysis of the economic, political, and sociological conditions within the objective area and the degree of assistance or interference they will present to the projected operation.

(*f*) In addition to the personnel listed above, the following special staff officers will normally be located at or represented in the division main command post:

Special staff officer	*Parent unit*
Artillery officer	Division artillery
Commander, support group	Support group
Engineer	Engineer battalion
Signal officer	Signal battalion
Aviation officer	Aviation company
Provost marshal	Headquarters and headquarters company, command and control battalion

(2) *Battalion headquarters.* The battalion headquarters consists of those personnel required to supervise the administrative support of the command and control battalion. The battalion commander is the headquarters commandant of the division. He has no control over the primary operations of the administration company, cavalry troop, or aviation company but supervises their administration and furnishes administrative support to these units as required.

(3) *Company headquarters.* The company headquarters performs the normal functions of such a headquarters including command and administration of the company. The company commander executes the directives and orders of the commanding officer, command and control battalion. The mess section operates the mess for the company to include the division headquarters. When separate messes are required, the mess section will provide the necessary personnel and equipment.

(4) *Personnel section.* The personnel section maintains the permanent personnel records of personnel assigned to the command and control battalion. During tactical operations, the section operates in the division administration center, which is established with the administration company in the departure area. Each of the companies of the command and control battalion will maintain only those minimum records required for daily operation, e.g., sick book, duty rosters, and current training records. The personnel section also prepares such

other documents as payrolls and court-martial charges, verifies machine records unit (MRU) rosters, and obtains and distributes mail for units of the battalion.

(5) *Transportation section.* The transportation section contains the drivers, radio operators, vehicles, and on-vehicle radios of division headquarters, battalion headquarters, and company headquarters. The section leader supervises the first echelon maintenance of assigned vehicles and operates the division headquarters motor pool.

(6) *Supply section.* The supply section procures supplies (less repair parts, medical, and aviation supplies to include aviation POL) from division distributing points and issues direct to personnel of the company when feasible. So far as practicable, the section makes unit distribution to the cavalry troop and aviation company, except class III, repair parts, medical, and aviation supply, and class V for the aviation company.

(7) *Medical section.* The medical section provides medical service to the units of the command and control battalion to include emergency medical treatment, operation of the battalion aid station, evacuation of patients, and supervision of sanitation. During tactical operations, the section will be located near the division main command post and will serve units in that vicinity as directed. The majority of the aidmen will habitually work with the cavalry troop and aviation company. Medical service for the division rear echelon in the departure area will be a responsibility of the division medical company of the support group.

(8) *Military intelligence detachment (attached).* An airborne qualified military intelligence detachment is habitually attached to the division and provides the division with specially trained personnel in the fields of order of battle, photointerpretation, interrogation of prisoners of war, language interpretation, field operations intelligence, communication reconnaissance, and counterintelligence. The detachment is under the operational control of the G2 and teams are attached to subordinate elements of the division as required. Linguists normally will join the division after the area of operations has been determined.

(9) *Security platoon and band.* In combat, the security platoon and band assists in providing security for the division command post. When required, personnel will also be used for supply handlers and litter bearers. The platoon can conduct limited ground combat subject to the limitations imposed by the numbers and types of weapons, and the lack of communication equipment.

(10) *Military police detachment.* The military police detachment is an agency of the division provost marshal and as such enforces laws, orders, and regulations, handles prisoners of war, provides traffic control, and conducts minor investigations as required. The detachment is assigned to the division headquarters and headquarters company for administrative support to include supply, personnel, and messing.

(11) *Civil affairs section (attached).* A CA section is normally attached to the division for tactical operations. The section may include a language team when such is required. The section operates under the general staff supervision of the G5 and as such is the operating element which assists in fulfilling the commander's CA responsibilities with respect to the civil population, government, and the economy of the area. It provides the G5 with information for preparation of estimates, plans, and reports on CA operations. Additionally, it serves as the implementing agency for the conduct of CA operations. CA units as required enter the objective area early in the operation. CA activities assume added importance in airborne operations because of a greater degree of dependence upon exploitation of local civilian resources.

CHAPTER 3

CHARACTERISTICS OF THE AIRBORNE DIVISION

Section I. GENERAL

23. Operations

The basic, large tactical, airborne unit is the division. It is designed as a specialized unit with emphasis upon its capability to perform airborne missions in an assault role with entry into combat by either air-landed or parachute means. It is capable of immediately and effectively engaging the enemy upon landing. The division's limited ground mobility and organic fire support means in an objective area are compensated for, in part, by intensified combat training, effective use of surprise, preponderance of force, and supporting artillery, air, and naval fire from outside the objective area. While the airborne division is specially tailored for short duration airborne operations, it can conduct sustained ground operations when properly augmented. The length of time the division can operate without reinforcement is contingent primarily upon the tactical and logistical support provided, the weather, the terrain, and the enemy situation.

24. Airhead Size

a. The enemy nuclear threat will be of paramount concern to the airborne commander and will influence the size of the airhead(s) to be seized. An analysis of the optimum size single division airhead indicates that an airhead approximately 10 to 15 miles in diameter provides for adequate dispersion to minimize the effects of a single, nominal yield nuclear weapon, contains sufficient space for maneuver, and is within the capabilities of the division to seize and defend in most situations. However, as is true in any discussion of tactics, a mathematical solution offers only a point of departure in formulating a plan and such factors as those listed below will determine the size of the airhead to be seized and defended. The size of an airhead or airheads to be seized and defended by an airborne division is primarily dependent upon the following factors:

(1) The mission assigned to the division.
(2) Enemy capabilities.
(3) Weather and terrain in the objective area.
(4) Capability of our own forces.
(5) Available drop and landing zones.

(6) Time of linkup, reinforcement, or redeployment.

b. A single large airhead affords the airborne force maximum flexibility in the conduct of tactical and administrative support operations. Factors which influence the selection of airheads when planning the tactical disposition of the airborne force are—

(1) *Mission and mutual support.* When the mission requires that specific objectives are seized, and the forces assigned these objectives can provide mutual support, then a single airhead may be preferable. If the objectives are widely separated, then multiple airheads may be desired. If the mission requires that plans provide for securing a large area or for fighting the battle in depth, then a single large airhead may be favored. Selection of multiple airheads must consider the possibility of an enemy, who may be weaker in total strength, concentrating and defeating each airhead force in turn. A single airhead permits our force to shift units and fires to threatened sectors.

(2) *Communication requirements.* If the enemy has a strong ECM capability, maximum use of all communication means is required. Disposition of the force in multiple airheads will probably prevent the use of wire communication between major units and place complete reliance on radio.

(3) *Internal security.* A single airhead is favored when the internal area of the airhead is relatively secure. However, if there is a large civilian population within the objective area, or a considerable guerilla threat exists, then smaller, multiple, airheads will facilitate the provision of internal security.

(4) *Mobility.* If the ground and air mobility of the enemy is equal to or greater than that of our own forces, a single airhead is desirable. This gives our forces the greatest capability to shift our combat power rapidly.

25. Operations in Difficult Terrain

The airborne division is particularly well suited for the conduct of ground combat operations in difficult terrain such as jungles and mountain. The successful conduct of military operations in difficult terrain places a high premium on lightweight equipment, foot mobility, helicopter support, and a high ratio of rifle strength. These characteristics are inherent to the airborne division and give it both the capability of moving by air and existing and fighting under difficult terrain conditions. The relatively large helicopter lift available in the division aviation company assumes increasing importance when considering operations of the division under these conditions. Some specialized training concerning the conditions to be encountered may be required

before the division can fully exploit the off-road capability inherent to its lightweight equipment.

26. Mounting Time

a. The time required to mount an airborne operation must be reduced to a minimum. Factors which will contribute to reduction are—

(1) Adequacy of training and equipment.
(2) Availability of advance information.
(3) Accuracy and detail with which advance plans are prepared.
(4) Availability and proficiency of the transport means.

b. Under normal circumstances, and in the absence of a previous alert or prepared plans, approximately 7 days are required to mount an airborne operation. This amount of time is necessary in order to accomplish such tasks as—

(1) Preparing tactical plans.
(2) Preparing administrative support plans.
(3) Receiving and preparing equipment necessary for the airborne assault.
(4) Coordinating with the Air Force.
(5) Briefing the commanders and troops.
(6) Marshalling.

c. When partially prepared, this period may be reduced. For example, if the division has already received the necessary supplies and equipment and is located in dispersed areas near departure airfields, the time required to complete the mounting would be reduced considerably.

27. Strategic Employment

The airborne division, when designated as part of a strategic force, prepares plans which will enable the division, with any required augmentation of combat and service support elements, to move from bases in the United States directly to the area of employment. Such plans make provision for employment of the airborne force in areas where U.S. forces are not deployed. However, the normal method of employment will be to fly the airborne units from the United States to forward friendly bases for redeployment in accordance with the plans of the oversea theater of operations commander or the Joint Chiefs of Staff.

28. Attachments

For an airborne operation, the division normally has attached to it other units and detachments. The exact number of these depends upon such factors as the mission, type operation, expected length of time before linkup or relief, enemy situation, civilian problems in the objective area, and the size of the airborne force involved. The fol-

lowing are the minimum attachments to the division for an airborne assault:

a. One air liaison party and necessary forward air controllers.

b. Necessary combat control teams.

c. Necessary additional military intelligence and counterintelligence units or teams.

d. One civil affairs section.

29. Sustained Operations

Although primarily designed to conduct frequent airborne assault operations, the division has the flexibility of organization needed to absorb and control the augmentation units required for the conduct of sustained ground operations. When properly augmented, it can operate in much the same manner as a standard infantry division. The augmentation required varies with the conditions under which the division operates and the assigned mission. There is no set or standardized group of units that must be attached to the division; however, additional support to varying degrees may be required in the following fields:

a. Armor.

b. Artillery.

c. Vehicular transportation.

d. Reconnaissance.

e. Maintenance personnel and equipment.

f. Medical.

g. Communications.

h. Engineer.

i. Civil affairs.

Section II. CONCEPT OF EMPLOYMENT

30. General

The employment of the airborne division envisions the use of aircraft to overcome distance and geographical barriers and to bypass enemy ground defenses. The division is organized and equipped to facilitate strategic as well as tactical deployment.

31. Coordination

Detailed coordination with troop carrier units of the Air Force is accomplished at division, battle group, and company levels to coordinate such matters as aircraft loading, joint briefings, and drop and landing zones. Coordination is also accomplished with other Army forces, Naval forces, and tactical air forces involved in the operation concerning general matters such as linkup coordination, communications, fire support, and recognition signals.

32. Fire Support

If the airborne division is delivered into areas where there are well-organized enemy forces, effective preparation by fire is normally made of the objective area. Enemy forces of significant size, especially mobile forces such as armored or mechanized units, located within quick reinforcing distance of the proposed airhead areas, are also targets of high priority. Recognizing that the division is most vulnerable to enemy counterattack during the period immediately after landing, every effort must be made to prevent the movement of strong enemy forces to the airhead area during this period. The availability of nuclear weapons deliverable by supporting units greatly improves the capability of neutralizing enemy forces.

33. Tactical Deployment

a. The airborne division may attack in 1 of 2 ways. The division may be deployed in one general area in which the battle groups are mutually supporting (fig. 16); in widely separately areas in which the battle groups are on independent or semi-independent missions (fig. 17); or any combination of these two general manners of deployment (fig. 18).

b. The selection of a single airhead facilitates control, coordination, and planning but complicates the ever-present problem of achieving dispersion. This method of employment makes it easier for the enemy to determine the location and size of the airborne force and to plan for the use and exploitation of nuclear weapons.

c. Multiple airheads complicate the planning and control, but have the advantage of providing more dispersion, confusing the enemy, and making his intelligence efforts more difficult. The possibility of defeat in detail becomes greater; however, in short duration operations, this may frequently become an acceptable risk.

34. Phases

a. Airborne division operations normally are initiated by an assault phase followed by one or more of the following: a defensive phase, an offensive phase, or a withdrawal phase.

b. The assault phase normally is executed, employing parachute and assault aircraft, for the purpose of seizing an initial airhead or multiple airheads in hostile territory. Direct assault landings against occupied objectives will not be deliberately attempted by STOL or VTOL aircraft unless action has been taken to reduce the enemy resistance in the objective area. An airborne assault frequently will involve a combination of parachute and assault aircraft landings.

c. Concurrently with the defensive phase, limited offensive operations may be conducted to seize additional objectives which facilitate the defense or favor future operations.

d. Relief or withdrawal is executed after the accomplishment of a specific mission, after linkup with friendly forces, or when required by the situation.

Section III. CAPABILITIES AND LIMITATIONS

35. Capabilities

a. The airborne division provides a means by which a higher commander may decisively influence operations. When provided with adequate air transport means, it possesses intertheater, as well as intratheater, mobility. This mobility extends the opportunities for rapid and decisive maneuver to gain tactical advantage or strategic surprise. Strategic surprise may be attained by the rapid movement of the airborne division over great distances.

b. The airborne force can cross major terrain barriers and conduct decisive military operations. The division is particularly well-suited for execution of turning movements, for employment in conjunction with armored or other mobile forces, and for exploitation of field artillery, air, or naval fire on relatively distant objectives.

c. The high quality of the individual airborne soldier, coupled with the high *esprit de corps* characteristic of airborne units, provides the airborne division an increased combat capability over other military organizations.

d. The airborne division will frequently be at full strength and will have had the advantage, when required, of special training and operational rehearsals when conducting an airborne operation.

e. A unique feature of airborne operations lies in the fact that the greatest moment of weakness for both the airborne force and the defender occurs at the same moment—during the assault landings. During this period, the airborne division is dispersed and control is difficult, but at the same time the defender has inadequate intelligence upon which to base a strong counterattack plan. The advantage will then lie with the airborne force which has chosen the area of the attack and retains the initiative.

f. The airborne division can enter combat by air-landed or parachute means or a combination thereof.

36. Limitations

a. Strong enemy armored attacks remain as a major threat to the airborne division; however, recent developments in the field of antitank weapons and the proper utilization of terrain will greatly assist the division in defending itself against armored attacks.

b. Weather conditions and aircraft availability can exert a considerable influence on the scope of operations of the airborne division.

c. Following a strategic move, the airborne division can maintain itself in a state of operational readiness for a limited period. Beyond

this period, nondivisional service support units are required to assist the division in performing administrative type functions.

d. Although the division possesses considerable capability in its own right, the execution of sustained combat operations normally will require augmentation by tactical and administrative elements.

e. Once on the ground, the vehicular mobility of the airborne division is limited by the numbers and types of vehicles that can be brought into the objective area.

f. Command of the air over the objective area is required for large scale operations. However, limited operations may be conducted without command of the air by using surprise techniques and tactics to deliver the airborne force or by conducting the operations during periods of limited visibility.

CHAPTER 4

COMMAND AND CONTROL

Section I. COMMAND

37. The Division Commander

The nature of airborne operations places a strong demand on the commander to make timely and forceful decisions and requires that he be familiar with all aspects of the division plan for the airborne operation.

38. The Assistant Division Commanders

There are two assistant division commanders in the airborne division. The assistant division commanders will perform duties as prescribed by the division commander. It is essential that both keep abreast of the division situation in order that either can assume command of the division, if the occasion demands, and continue operations without a break in the logical sequence of command guidance, planning, and decisions. Tasks that might be performed by the assistant division commanders are—

a. Command task forces composed of one or more elements of the division or attached units.

b. One assistant division commander could direct tactical operations and training to include G2 and G3 activities and the other assistant division commander could direct administrative support operations and training to include G1, G4, G5, and support group activities.

c. Advise the commander on current plans and operations.

d. Act as a "troubleshooter" to supervise any unusual situation that might arise.

e. Act as a command representative on joint matters.

39. Command Considerations

The following functions of command require emphasis to capitalize on the characteristics of the airborne division:

a. Leadership.

(1) The initial stage of an airborne operation usually is conducted with control of the division decentralized to task force or combat team levels. The division commander gives subordinate commanders ample opportunity to develop initiative and self-reliance in order that they will be able to accomplish

their mission when operating in a semi-independent status. Airborne operations are decentralized during the early phases, and this, coupled with the introduction of nuclear weapons into the tactical situation, makes it imperative that the division commander develop strong subordinate commanders who are able to meet the requirements of the nuclear battlefield.

(2) Information concerning the overall division situation during the early part of an airborne operation usually is limited. Considering this critical period of the operation, the division commander, through personal visits on the part of himself and the assistant division commanders, must keep abreast of the situation and provide on-the-spot guidance.

(3) The commander himself, by personal example, must display those elements of leadership, self-discipline, and mental and physical toughness that are so necessary in combat.

b. Training.

(1) In addition to the normal tactical training, the airborne division training program should emphasize the need for speed in seizing initial assault objectives. The training should develop judgment and initiative in all subordinate leaders. Independent actions by reinforced company-sized units should be stressed.

(2) Standing operating procedures must be developed and stressed which will minimize the effects of enemy nuclear weapons strikes and decrease the time necessary to mount an airborne operation of any type.

c. Operations.

(1) The division commander's concept of operations must be complete and thoroughly understood by all subordinate commanders. Contingency plans, either written or in the minds of the commanders, must be considered for all logical situations. Plans to react to the situations created by losses to enemy nuclear weapons, losses en route to the objective area, and misdelivery of units should receive special emphasis.

(2) Adequate provisions must be made to insure that the division commander or other designated personnel are always available to authorize the firing of nuclear weapons.

(3) Once the division is in the objective area, rapid or drastic changes in the situation will often occur. The division commander must be available, either personally or by communications means, to his staff and subordinate commanders to make decisions concerning the shifting of the division effort to meet the changing situation.

(4) Both enroute to and within the objective area, the commander must insure that the command, communications, and

staff elements of the division are so located as to preclude their loss to a single nuclear weapon of the yield most likely to be used by the enemy.

d. Communications.

(1) Communications must be established at the earliest possible time in the objective area to facilitate control of the division and the flow of information.

(2) Communications must also be established with higher headquarters and supporting elements located outside the objective area.

Section II. ORGANIZATION FOR COMBAT

40. General

a. The division commander organizes his force for combat to accomplish the specific mission assigned the division. The division is tailored to meet the specific situation, and combat power is allocated according to the needs of the major subordinate elements of the division.

b. The organization for combat is based on allocation of three basic types of units—combat; combat support; and service support units. The absolute minimum service support units are taken into the objective area initially and others are phased into the airhead on a "when needed" basis.

41. Organization for Combat

a. In organizing for combat, the battle groups are the basic units considered in the allocation of forces for the airborne assault. These units, when combined with units such as the aviation company, artillery, and engineers, form the basic combat units of the airborne division. Service support units will be provided on an austere basis.

b. The division organization provides for maximum flexibility in tailoring forces to accomplish designated missions. When organizing the division for an airborne operation, the division commander must visualize the assault objectives to be seized and allocate combat power and control means to fit the situation.

42. Task Forces

a. General. Where the situation indicates the use of a task force type organization, the division commander tailors the force to accomplish the particular mission. In general there are two broad types of control under which task forces are employed.

(1) The task force may operate under close division control with the task force headquarters operating in a manner similar to that of an airborne combat team.

(2) The task force may operate in a semi-independent or independent manner with a mission-type order. This type of organization would be most likely to occur when the division is establishing multiple airheads.

b. Organization.

(1) *General.* The task force may vary in size from a reinforced platoon to one or more reinforced battle groups.

(2) *Composition.* The task force should be a balanced force including combat, combat support, and service support units in the required strength to accomplish the assigned mission. Some of the considerations used in determining the tailoring of a particular task force are—

(*a*) Reconnaissance and security.
(*b*) Communications and control means.
(*c*) Fire support elements.
(*d*) Logistical support.
(*e*) Transportation means to include aircraft.
(*f*) Span of effective control of the commander.
(*g*) Terrain, mission, and friendly and enemy situation.
(*h*) The extent of anticipated CA operations.

(3) *Command.* When the battle group forms the nucleus of the task force, it usually is commanded by the battle group commander. A task force composed of more than one battle group usually will be commanded by one of the assistant division commanders. When a battle group is reinforced and used on an independent or semi-independent mission, it may be commanded by one of the assistant division commanders.

c. Operations. The task force operates in the same manner as any other combined arms force. Depending upon the method of employment, the task force may be assigned objectives such as terrain or enemy forces, or it may have a mission-type order.

d. Training. All appropriate type units of the division should receive training to enable them to participate in task-force operations. The training must prepare units to participate in task organizations with minimum warning time to prepare for the operations. Standing operating procedures (SOP) should be developed at appropriate levels to enable the task force to be formed quickly and effectively.

Section III. COMMAND POSTS

43. General

Command posts are the nerve center of the division and will exercise a considerable amount of influence on the tactical effectiveness of the division. In airborne division operations, the speedy and effective establishment of the division command post in the objective area is

imperative in order that the division commander can regain control of the division as early as possible during the assault phase.

44. Main Command Post

The division command post is established in the marshalling area in a location designed to facilitate control of the dispersed elements of the division. It is organized to permit continuity of command and control during the movement of the division to the objective area and until the command post opens in the objective area. The site for the tentative location of the division command post in the objective area is selected prior to the assault. The command post contains those elements of the division staff, attached unit representatives, and liaison officers that the commander requires for the conduct of tactical operations. During the early stage of the airborne assault, the division command post is necessarily manned by a small operating group. Emphasis is placed on those actions necessary to enable the division commander to gain centralized control over the major elements of the division.

45. Tactical Command Post

A tactical command post is established where required and is manned by a small, mobile group consisting of the division commander, selected staff officers, and communications and security personnel. In the assault phase of an airborne operation, the division commander usually will be in the same aircraft serial with the members of his tactical command post, and, immediately upon reaching the objective area, he will start operating, utilizing the tactical command post. Currently with this, one of the assistant division commanders or the chief of staff will be establishing the division main command post.

46. Alternate Command Posts

a. During combat operations the division habitually designates an alternate division command post to function in the event that the division main command post is destroyed or rendered inoperative.

b. The division artillery command post usually is designated as the first alternate command post, with the command post of the battle group in reserve designated as the second alternate installation.

c. To preclude the loss to a single nuclear weapon of all the operational personnel of the various staff section that perform their duties in the division command post, the following measures may be adopted:

(1) Insure that the division commander and assistant division commanders are not in the division command post at the same time.

(2) Establish a procedure to insure that the operating personnel of the various divisional staff sections sleep or rest in a loca-

tion (possibly the alternate command post area) separated from the main command post.

(3) Provide copies of orders and messages to the alternate command post in order that it can remain up to date concerning the division situation and function as the division command post should the need arise.

47. Division Rear Command Post

The division rear command post is initially located in the departure area and is operated by the senior officer remaining in the departure area or an officer designated by the division commander. The division rear command post is built around the division administration company and is the focal point for all matters concerning the division that cannot be handled by the main command post located in the objective area.

Section IV. STAFF AND COMMAND PROCEDURES FOR NUCLEAR WEAPONS EMPLOYMENT

48. General

The steps in nuclear weapons employment and the personnel or agencies involved are shown as follows:

Function	*Action agency*	*Personnel involved* *Preassault planning and employment during assault phase of the op*
Target development	G2 and FSCC	G2 and FSCC personnel who develop targets from information acquired by collecting agencies of higher and supporting units.
Guidance to include preliminary decision to employ.	Div comdr	Div, corps, or joint airborne TF comdr as appropriate.
General analysis of targets in relation to their possible effect upon the mission, the planned scheme of maneuver, priority of attack, assigned obj, and the tactics to be employed.	G3	G3
Detailed target analysis and coordination of fires.	FSCC[1]	FSCC personnel who perform target analysis or coordinate employment of delivery means controlled by higher headquarters or other services.[1]

[1] By division, corps, or joint abn TF headquarters as appropriate.

Function	*Action agency*	*Personnel involved* *Preassault planning and employment during assault phase of the op*
Decision to fire	Div comdr or designated representative.	Corps or joint airborne TF commander during the preassault phase.
Final integration of scheme of maneuver and nuclear fires.	G3	G3
Immediate post-strike damage assessment.	FSCC	Corps or joint airborne TF. The FSCC target analysis personnel and, where appropriate, JAAP[2] personnel, of these agencies are responsible for providing essential data.

[2] Joint airborne advance party (see glossary).

49. Procedures

The functions presented in the above table provide for the effective coordination of nuclear fires delivered from within the airhead by organic or attached means and those fires delivered by higher headquarters or supporting agencies from outside the airhead. To varying degrees, these functions are interdependent and require continuous cooperation. The table does not reflect compartmentalization of effort. The best effort will be produced when the personnel involved in the various steps closely coordinate their efforts.

50. Employment of Nuclear Weapons

In general, the employment of nuclear weapons in airborne operations follows normal procedures; however, the following factors deserve additional consideration because of the nature of airborne operations:

a. The supply of nuclear munitions and maintenance of delivery facilities within the objective area are more difficult than in normal ground operations.

b. Every precaution must be taken to avoid creating induced radiation and obstacles in areas to be landed on or occupied by the airborne force.

c. More surface or subsurface burst weapons may be employed to create obstacles along main enemy avenues of approach to the objective area.

Section V. SIGNAL COMMUNICATIONS

51. General

The airborne division employs a division area communication system. The signal battalion of the division is designed specifically to furnish communications during the assault and subsequent phases of an airborne operation. The equipment of the signal battalion has been chosen with emphasis on air-transportability and flexibility of employment.

52. Division Area Communication System

a. Operation. The airborne division communication system is an area system (fig. 12). It is so designed that if the division command post and communication center are destroyed, any of the five area communication centers can assume control of the remainder of the system until the division communication center is reestablished. The area system affords maximum flexibility of employment and minimum vulnerability to enemy nuclear weapons. It provides long line channels of communication between the major units of an airborne division over a network of alternate paths. Traffic routes can more readily be rearranged to compensate for circuit disruptions due to enemy action, equipment failure, or a change in the communication traffic pattern.

b. Components of System. The principal components of the area system are a division communication center and five area communication centers. The division communications center is connected to the five area communication centers by multichannel radio relay-carrier systems or field wire circuits. Radio relay-carrier systems are installed during the initial phases of an operation. Every effort is made to install field wire or cable circuits at the earliest possible time. The radio relay and carrier equipment will then be used as backup for the field wire circuits and to provide the area communication centers with means of displacing without interrupting existing communications. The use of field wire at the earliest possible moment is essential to communication security and the reduction of the vulnerability of communication channels to enemy electronic countermeasures. Lateral communications between area communication centers are furnished by multichannel radio relay-carrier systems which are supplemented by field wire circuits when possible.

53. Division Radio Nets

The nets provide flexible communications for the initial assault phase of an airborne operation, for rapid displacement of major command posts, and for periods during which personal voice communication between commanders is desired. All radio sets in these nets are vehicular mounted except radio sets AN/PRC–10 in the division assault net.

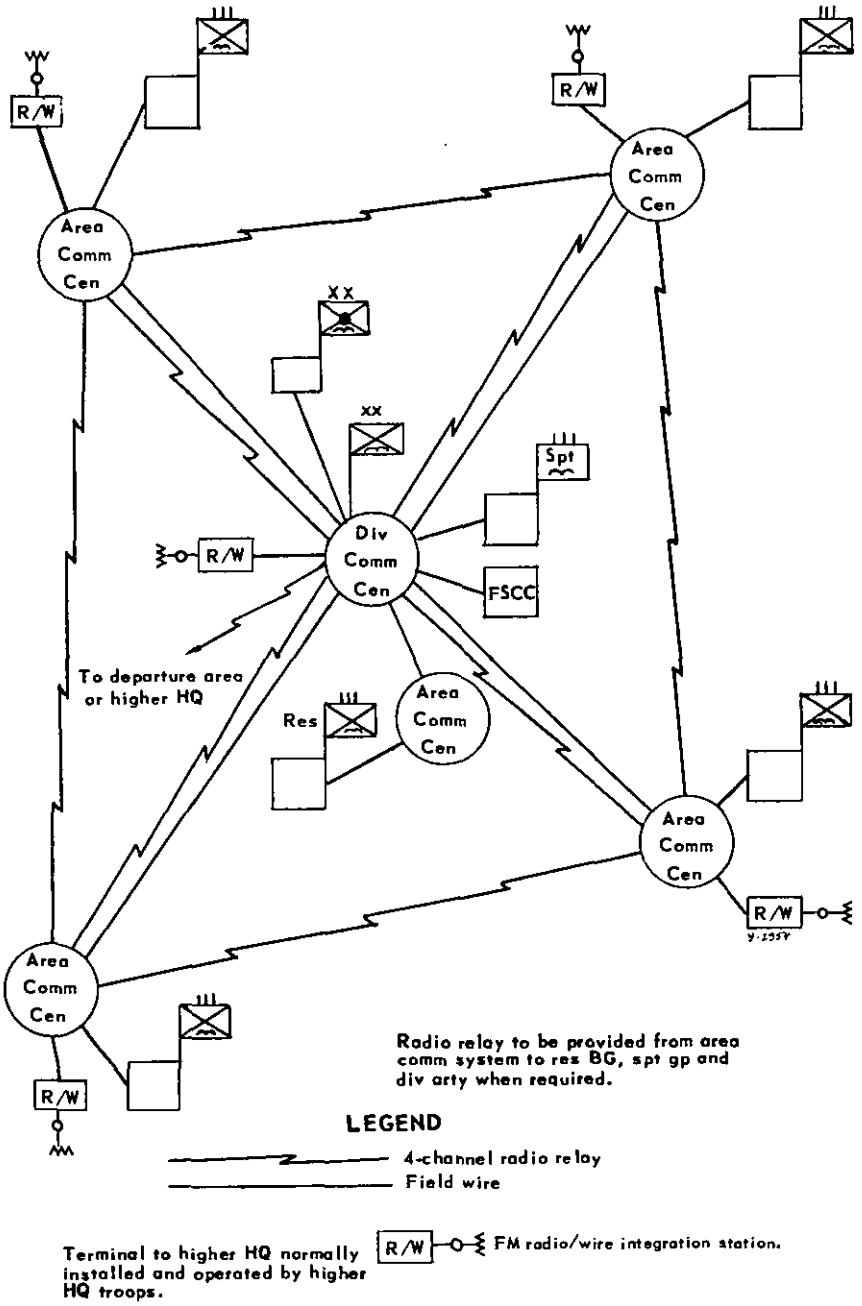


Figure 12. Airborne division area communication system.

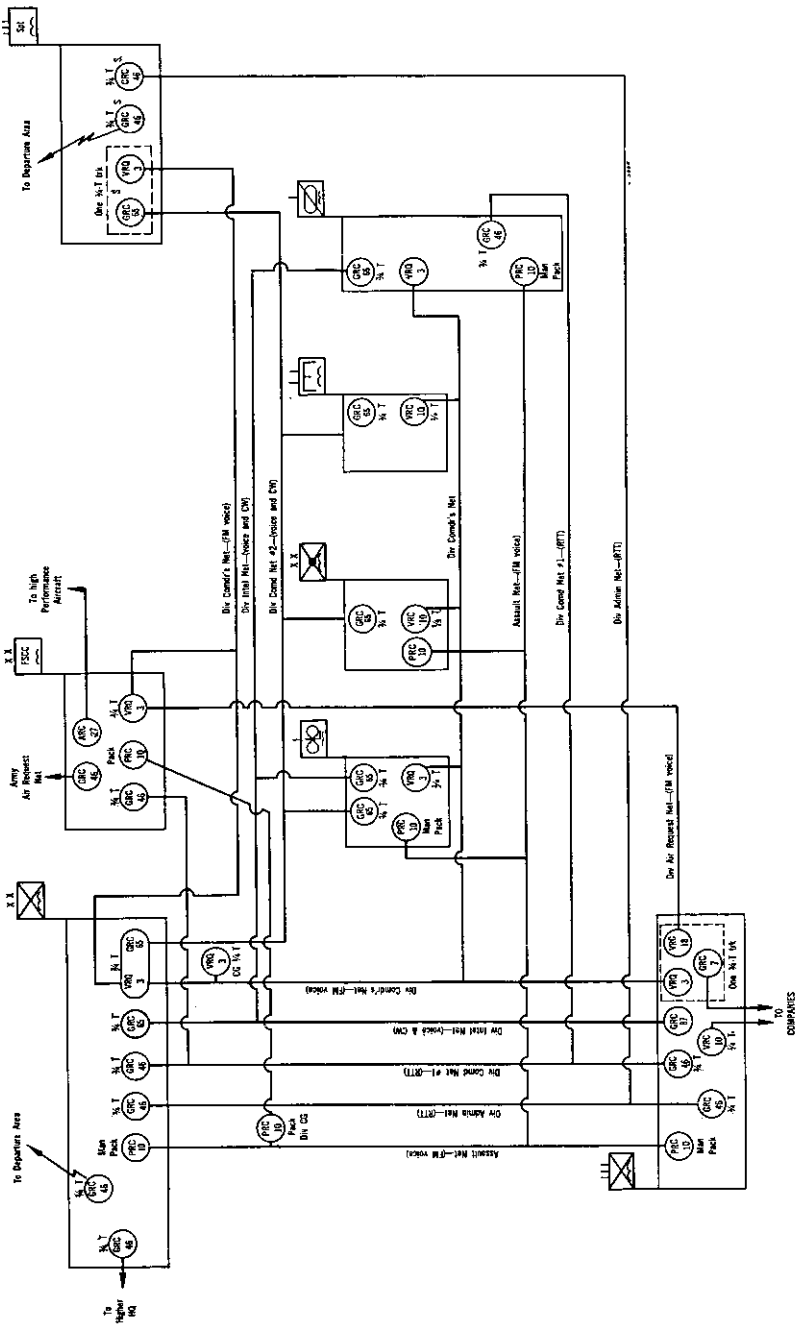


Figure 13. Radio net diagram—airborne division.

Figure 13 illustrates schematically major radio nets used in the airborne division. The division radio nets are listed separately below.

a. Division assault net (FM:voice).
b. Division command net 1 (radioteletype).
c. Division command net 2 (voice:CW).
d. Division commander's net (FM:voice).
e. Division administrative net (radioteletype).
f. Division intelligence net (voice:CW).
g. Division air request net (FM:voice).

Section VI. FIRE SUPPORT COORDINATION AND PLANNING

54. General

A major part of the division's combat power lies in its organic and supporting nuclear and nonnuclear fires, which requires that the division commander devote his personal attention to the planning, coordination, and employment of fires. He must be constantly aware of the capabilities of the various delivery means and support agencies available to the division. The fire support coordination center (FSCC) is the agency within the division charged with the responsibility of coordinating the various fire support functions and accomplishing the detailed fire support planning for the division commander.

55. The Fire Support Coordinator

a. The division artillery commander is the division fire support coordinator. He is assisted in discharging his duties by representatives from appropriate agencies of the division and other Army and Navy and Air Force units. Personnel and equipment for the operation of the FSCC are provided in the tables of organization and equipment (TOE) of the airborne division.

b. Based on the concepts and policies of the division commander, he determines fire support requirements, prepares the fire support plan, coordinates available fire support, and, through the FSCC, provides a focal point for target intelligence and analysis.

c. At the battle group level the fire support coordination function is performed by the mortar battery commander. During the assault phase of an airborne operation, the battle group usually has a 105-mm howitzer battery attached and the battery commander can assist in the fire support planning. When the battle group is operating as two task forces, the senior mortar battery officer with each force functions as the fire support coordinator. The mortar battery forward observer with each infantry company assists the company commander in performing the limited fire support coordination function required at that level. At each echelon, the fire support coordinator is responsible for the

details of coordination of fire support based on the force commander's decision, combat orders, policies, and priorities, and he is responsible for the preparation of the fire support plan.

56. Composition of the FSCC

a. The size and composition of the FSCC and its procedures are determined by the division commander, and must be varied to meet the needs of the situation. In the planning phase prior to an operation, the FSCC may be enlarged to expedite the preparation of the detailed plans required.

b. Normally, the FSCC will include the following:

(1) Commanding officer or the assistant executive officer, division artillery.
(2) G3 air.
(3) Air liaison officer.
(4) G2 air.
(5) Operations and intelligence representatives from division artillery.
(6) Division artillery nuclear weapons employment officer.

c. When required, the FSCC will include the following:

(1) Liaison officers from other fire support agencies.
(2) Chemical and biological (CB) warfare adviser.
(3) Division aviation representative.
(4) Air defense liaison officer.
(5) Any other assistants or advisers required.

57. Fire Support Planning

a. The division fire support coordinator reviews fire support plans of the battle groups to insure that they can be fulfilled by the fire delivery means allocated to the division and to insure that maximum effective use is made of organic and support weapons. The coordinated battle group fire plans are augmented by the addition of fires which may be available at the division level. The consolidated battle group fire plans and procedures for augmenting these plans are the basis for the division fire plan.

b. The allocation of indirect fire weapons within the current airborne division organization is such that the bulk of these weapons (81-mm and 4.2 inch mortars) are organic to the battle groups. The five 105-mm howitzer batteries and the missile battery are the only indirect fire weapons directly under division control. The number of indirect fire weapons organic to the airborne division is relatively small and thus requires optimum utilization of available weapons. The division fire support coordinator is the individual responsible for the coordination of the fires available to the division and for the integration of effort of the division howitzer batteries with the battle group mortar

batteries. The degree of coordinating authority delegated to the division fire support coordinator concerning this matter will be set forth in standing operating procedures or orders directed by the division commander.

58. Operations of the FSCC

The division FSCC—

a. Enters the objective area with the assault echelon of the airborne division. The size and composition of the FSCC that accompanies the assault echelon will depend primarily upon the availability of aircraft.

b. Is normally established in the immediate vicinity of the division command post. The division artillery fire direction center is normally designated as the alternate division FSCC.

c. Coordinates requests for battlefield illumination and extensive use of smoke with the appropriate division and nondivisional agencies.

d. Establishes the fire coordination line (FCL). Any changes to the FCL are disseminated through FSCC channels and all requests for fire beyond the FCL are approved by the FSCC.

e. Makes plans for suppression of enemy fires to include enemy air defense fires to support both tactical air and Army aircraft operations.

f. Processes all requests for fire support, and forwards approved requests that cannot be accomplished by fire support means available to the division.

g. Coordinates the various fire plans as described in paragraph 59.

h. Initiates action to insure immediate poststrike damage assessment.

59. Fire Support Plans

a. Normally, the following are published as appendixes to the division fire support plan and are coordinated by the division FSCC:

(1) *The artillery fire plan.* Battle group artillery fire plans are prepared by the mortar battery fire direction center (FDC). A copy of each battle group artillery fire plan is forwarded to the division artillery FDC. The division artillery FDC consolidates and coordinates these plans, adds targets desired by the division and division artillery commanders, and develops the division artillery fire plan. A copy of this plan is made available to the division FSCC.

(2) *Air fire plan.* The battle group assistant operations officer for air and the fire support coordinator together with the forward air controller (FAC) prepare the air fire plan. After approval by the battle group commander, the air fire plan is submitted to the division FSCC and is integrated into the division plan.

(3) *Nuclear weapons.*

(*a*) Detailed information concerning nuclear fires are found in appropriate portions of the artillery fire plan, air fire plan and naval fire plan.

(*b*) Fire missions preceding the assault are normally executed by nonorganic delivery agencies that are supporting the operation. These preplanned missions support the assault and will normally be controlled by higher headquarters.

(*c*) Fire missions after the assault may be executed by delivery means accompanying the division or by supporting agencies not located in the objective area. The delivery of nuclear fires from locations both within and outside the objective area permits greater flexibility in the use of nuclear fires.

(4) *Antitank fire plan.* This plan provides for the utilization of all available fire delivery means to cover by fire all major armored avenues of approach into the airhead area.

b. Air Defense Artillery Support. During short duration operations in which the necessary degree of control of the air has been achieved, the airborne division normally will operate without air defense artillery. The increased number of aircraft supporting an airborne operation dictates careful consideration of the quantitative requirements for air defense artillery support. Attached air defense artillery is employed under division artillery control. However, elements may be attached to subordinate units for the execution of specific air defense missions or for employment in a ground support role. When plans include air defense artillery, coordination and employment place emphasis on recognition, identification, and rules of engagement of aircraft.

c. *Selection of Bomb Lines.* The selection of bomb lines in an Army force responsibility. Agreement on the selected bomb line is, however, always obtained from the supporting air commander to insure ease of identification from the air. The two systems to be used for selection of bomb lines are—

(1) *System A.* Under this system, the selection of the bomb line is based upon recommendations submitted by subordinate headquarters. The recommendations of subordinate headquarters are considered, and a recommendation for a new bomb line is furnished to the next higher headquarters until it reaches Army headquarters or a similar joint operational organization. Upon approval by the Army force commander at this level, and acceptance by the supporting air commander, the bomb line is established.

(2) *System B.* Under this system, subordinate headquarters send position reports giving the locations of their leading troops and future movements, in code, over the Air request net direct to the joint operational headquarters at Army or similar headquarters. The bomb line is then established by the Army force commander, with the agreement of the supporting air commander.

CHAPTER 5

TACTICAL PLANNING

Section I. GENERAL

60. Preliminary Planning

a. Planning for airborne operations is usually initiated at theater or comparable level. The presence of an airborne division, organized to perform frequent airborne assault operations, encourages the planning of airborne operations. The nature of future combat and the flexible organization of the airborne division indicate the likelihood of employment of more frequent battle group size operations.

b. The division frequently plans for several operations simultaneously. Plans prepared by the airborne division, based on directives from higher headquarters, will be as detailed as time permits.

61. Liaison

a. Typical units or agencies with whom the division might exchange liaison officers are—

(1) Other Army units of the airborne force.
(2) Army missile units supporting the operation from outside the objective area.
(3) Troop carrier elements.
(4) Supporting theater administrative zone agencies.
(5) Juncture forces.
(6) Unconventional warfare elements.
(7) Supporting construction troops for airhead buildup.

b. Upon receipt of directives or orders to plan for or participate in an airborne operation, commanders of Army and Air Force units concerned immediately exchange qualified liaison officers to act as advisers and coordinators on all matters of common interest. Such exchange of liaison officers extends through all echelons as orders are issued. Typical duties of each liaison officer are—

(1) To represent his unit commander at the headquarters to which he is detailed.
(2) To act as adviser to the headquarters on matters pertaining to his own command.
(3) To coordinate matters involving dual responsibility such as joint briefings, parallel orders, joint reports, etc.
(4) To be familiar with the location and capacity of all installa-

tions at the airfield(s) and air-landing facilities with which his commander, staff, or troops will be concerned.

(5) To be familiar with plans and arrangements for reserve aircraft in the event of last minute failures and to be prepared to assist in the movement of troops from aborting aircraft to reserve aircraft.

(6) To represent his commander at the Air Force combat airlift support unit (CALSU).

(7) Be familiar with unconventional warfare plans in the area of operations.

62. Planning Techniques

Detailed planning is based on the current situation and is developed by backward planning from the objective area in the following sequence:

a. Ground Tactical Plan. This plan is based on the assigned mission and includes the determination of the strength and composition of the forces required and the development of an administrative plan to support the operation.

b. Landing Plan. This plan is developed in conjunction with the Air Force and includes the sequence, time, method of delivery, and place of arrival of troops and materiel.

c. Flight and Air Movement Plans. These plans are developed in conjunction with the Air Force and are based on the landing plan.

d. Marshalling Plan. This plan is developed in conjunction with the supporting theater administrative zone agency and with higher headquarters and is based on the air movement plan.

63. Directives

a. General. Warning directives may be oral and are frequently fragmentary in the early stages of the planning. A complete written directive may not be received until the later stages of the planning for the airborne operation.

b. Plans. The division, when directed to plan one or more airborne operations, begins planning immediately upon receipt of a directive and continues until the operation is either canceled or executed. The division plans tactical operations within the limits of availability of aircraft, logistical support, and intelligence of the objective area. The amount of detail in planning and the detail in which intelligence is sought vary with the echelon of command.

c. Simplicity. Simplicity is the guiding principle in the preparation of plans. To attain simplicity, the planner will—

(1) Not depend on a plan which is entirely contingent upon the arrival of any one air serial or tactical unit.

(2) Avoid complicated landing and assembly plans.

(3) Make allowance for operational delays in takeoff and landing.

(4) Maintain optimum tactical integrity of units in loading plans.

d. Standing Operating Procedures. Planning staffs of participating Air Force units and the airborne division plan concurrently to achieve maximum coordination. The necessity for continuous liaison, mutual interchange of information, and frequent coordinating conferences emphasizes the desirability of locating planning staffs in close proximity to one another. Where appropriate, standing operating procedures (SOP) are developed by the planning staffs for normal and recurring actions.

64. Planning Time Required

Under normal circumstances, and in the absence of a previous alert or prepared plans, approximately 7 days are required to plan and prepare for a joint airborne operation of division size. If the airborne division is in a state of operational and logistical readiness and located in proximity of departure sites, operations may be planned and launched in 48 hours or less after receipt of essential planning information. Operations of battle group size may be launched within 24 hours or less.

65. Assault Plan

a. Development. Upon receipt of a directive and assembly of necessary planning data and intelligence, detailed planning is begun. Planning follows the same principles as in other ground operations. The plan for the airborne assault and seizure of objectives is prepared with minimum delay. Much detailed planning, particularly concerning supply, communications, and air operations, is dependent on this plan. The final operation order is based on assault plans as modified by and integrated with troop carrier, tactical air, and supporting Army missile unit capabilities.

b. Organization for Combat. Combat elements of the airborne division are organized in accordance with the mission and operating conditions imposed. These may include parachute or air-landed units, depending upon the need. Troop and materiel-carrying capabilities and availability of aircraft, capacity of landing areas in the objective area, and other limitations impose restrictions on the organization and size of the assault echelon. Special planning is necessary to reduce aircraft requirements and insure the provision of necessary firepower and mobility in the assault elements. Sufficient aircraft of appropriate types must be available to transport the assault elements to the objective area in mass and at the desired time. If a shortage of aircraft exists, it first must be determined if sufficient aircraft are available to execute the tactical plan. Based upon the degree of aircraft shortage and tactical considerations, a specific plan may have to be revised or canceled. However, frequently it is feasible and desirable to continue

planning of a specific operation by properly phasing back selected elements of the airborne force from an early to a later echelon.

c. Alternate Plans. Alternate plans, to be implemented in the event of a malfunction or misdelivery of preassault weapons, misdelivery of units, losses en route, or a decided change in the enemy dispositions, must be provided for. Alternate plans are prepared for each serial scheduled for landing on a particular drop or landing zone.

Section II. INTELLIGENCE

66. General

Airborne division intelligence planning is conducted in accordance with the same basic principles that govern intelligence planning for other Army units of comparable size. Intelligence planning is initiated when the mission is received and is continuous throughout the operation. Intelligence is disseminated to all interested agencies as it is received in order that conurrent planning can be effected at all levels.

67. Weather

Weather has a considerable impact on airborne operations both because of flying conditions and the effect that wind has on parachute operations. Weather can be the decisive factor in determining whether an airborne operation commences on schedule or should be postponed or even canceled. A weather minimum, prescribing the worst possible weather allowing full scale participation of all forces, is prescribed for the operation. Provisions for providing up-to-date weather information must be made early in the planning phase.

68. Terrain

A detailed terrain analysis is made with special emphasis on the determination of likely landing zones and drop zones and to determine the engineer effort required to construct minimum criteria air-landing facilities. The G2 and the appropriate Air Force intelligence officer determine the areas within, or near, the objective area that are suitable for use as drop or landing zones. A study is also made of the enemy airfields in the objective area.

69. Collection of Information

a. Inaccessability of objective areas requires that heavy reliance be placed on strategic intelligence. This is supplemented by current reconnaissance, but the agencies available are sharply limited, since objectives are normally beyond the reach of routine ground reconnaissance. Since airborne operations normally strike at enemy rear areas, greater clandestine collection efforts are possible than in normal ground operations where forward areas usually are carefully screened.

b. Reconnaissance and observation missions are carefully planned before arrival in the objective area. Coordination must be effected between the battle group forces manning the reconnaissance and security positions (RSP) and the division cavalry troop. Essential elements of information are developed for both the planning and the operational phases. Information concerning the political, sociological, and economic factors in the proposed area of operations is included in the estimate for an airborne operation.

70. Enemy Forces

Special emphasis is placed on the location of enemy armored units that might influence the conduct of the operation and on reinforcing times for all enemy forces which have the capability to intervene before the airhead is consolidated. A detailed estimate of the enemy capabilities in the fields of air defense fires, nuclear weapons, and disposition of forces in the objective area must be made. Enemy forces disposition, capabilities, strengths, and weaknesses are usually quite different in rear areas than they are near the forward edge of the battle area.

71. Counterintelligence

The need for secrecy when mounting an airborne operation requires that detailed counterintelligence plans be prepared and rigidly enforced.

72. Briefings

Airborne combat troops are committed suddenly and decisively to action; there is little opportunity for progressive orientation of personnel or for basic modification of intelligence plans during the initial stages of an airborne assault. All details of coordination must be firm and personnel must be thoroughly oriented prior to enplaning. Maps, airphotos, and briefing aids are required in large quantities for effective orientation of all personnel of the division. Briefing of all personnel to include the individual soldier is required.

Section III. ECHELONMENT FOR AIRBORNE OPERATIONS

73. Assault Echelon

The assault echelon is composed of parachute and air-landed elements which seize the initial assault objectives and airhead(s). In an airborne division, the assault echelon consists of the combat teams, the division reserve, and division troops.

a. Combat Teams. The basic combat team organization for an airborne assault is a battle group, a 105-mm howitzer battery, a platoon of an engineer company, and such additional attachments as the situation requires. Combat team formations are terminated on order,

usually when communications within the airhead(s) permit exercise of centralized control.

b. Division Reserve. The division reserve in the assualt usually does not exceed one battle group. The reserve may have a limited combat mission upon landing, such as protecting the landing of division troops, as long as the mission does not interfere with readiness of the reserve for employment in its primary role.

c. Division Troops. Division troops consist of the command, control, and administrative elements necessary for centralized direction and support, and those combat units not included in combat teams or division reserve.

74. Followup Echelon

The followup echelon is that part of the airborne force (less rear echelon) which is not initially brought into the objective area. The followup echelon joins the assualt echelon as soon as practicable by air or surface movement or by a combination of these methods. The means of transportation used influences the composition of the follow-up echelon. It consists of additional vehicles and equipment of units of the assault echelon and combat, combat support, and service units not required in the assault echelon.

75. Rear Echelon

The rear echelon is that part of the force which is left in the departure area. The rear echelon consists of those administrative and service elements not needed in the objective area whose function can be performed more efficiently in the departure area. In long duration operations, the rear echelon may be brought into the airhead to support subsequent operations.

Section IV. OPERATIONS

76. General

a. Preliminary Planning. Preliminary planning is mandatory for efficient execution of a specific operation on short notice. The preparation of aircraft requirement tables is a major task which must be performed during preliminary planning. Rapid planning for specific operations is facilitated by preparing and maintaining current aircraft requirement tables. Such tables show the number of aircraft of various types required for optimum operating conditions as well as the requirements for minimum operating conditions. Because of a wide range in numbers of aircraft available, supplementary tables for conditions between optimum and minimum are prepared and expedite planning upon receipt of a mission. These tables serve as a basis for the allocation of aircraft for a particular operation.

b. Mission Analysis. A studied analysis of the mission assigned is the first step in tactical planning. This analysis discloses the task or tasks which must be accomplished and their priority, and determines the general locale of the objective area or areas.

77. Selection of Objectives and Airhead(s)

After the objective area(s) have been determined, specific objectives are selected, the early seizure of which assists the accomplishment of the mission. Simultaneously with the selection of the assault objectives, the extent of the airhead is considered. The area included within the airhead will be denied to the enemy and enemy attempts to penetrate this area will be repelled.

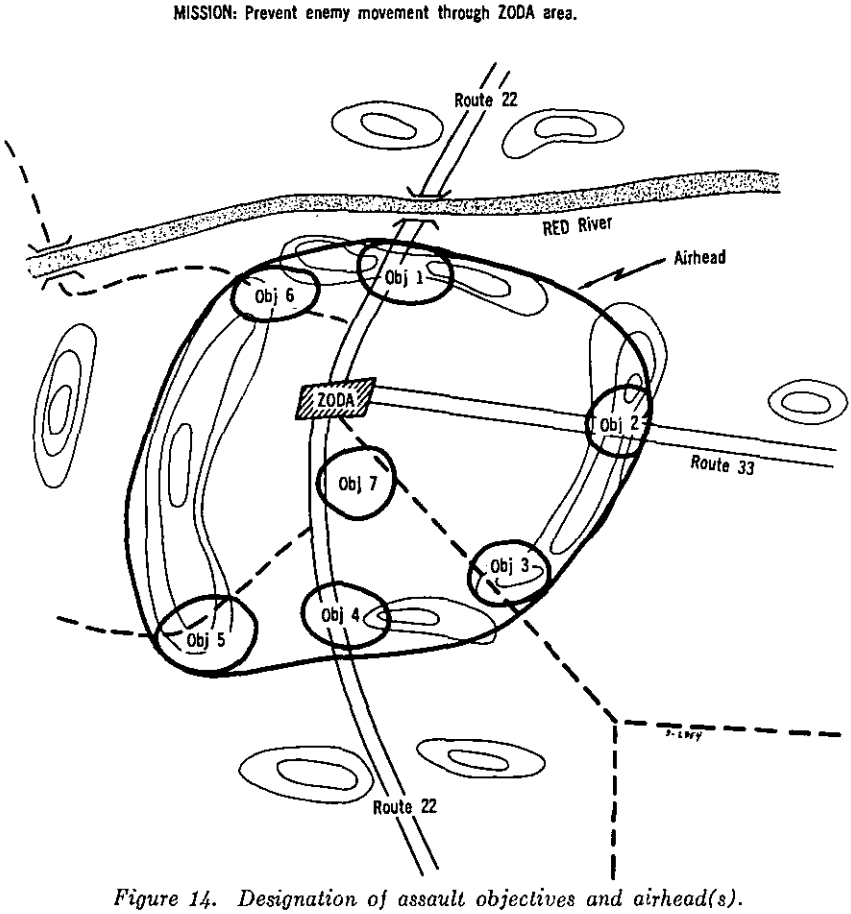


Figure 14. Designation of assault objectives and airhead(s).

a. The principal factors that determine the location, extent, and form of the airhead(s) are—

(1) Mission of the airborne force.

(2) Enemy capabilities.

(3) Offensive and defensive characteristics of the terrain.
(4) Capabilities of the airborne force.
(5) Expected time of relief, relift, or withdrawal.

b. The airhead(s) must contain sufficient space to—
(1) Permit maneuver.
(2) Provide for defense in depth.
(3) Allow sufficient space for dispersion to reduce the vulnerability to nuclear weapons.
(4) Permit the subsequent landing (if required) of additional troops, supplies, and equipment.

c. Critical terrain is occupied by company and reinforced company-sized units and the remaining areas are covered by barriers, patrols, outposts, aerial observation, and fires.

78. Distribution of Forces

Dependent upon the assigned mission, the division and elements thereof may be committed in a variety of ways. Three typical methods of employment are shown in figures 16 through 18.

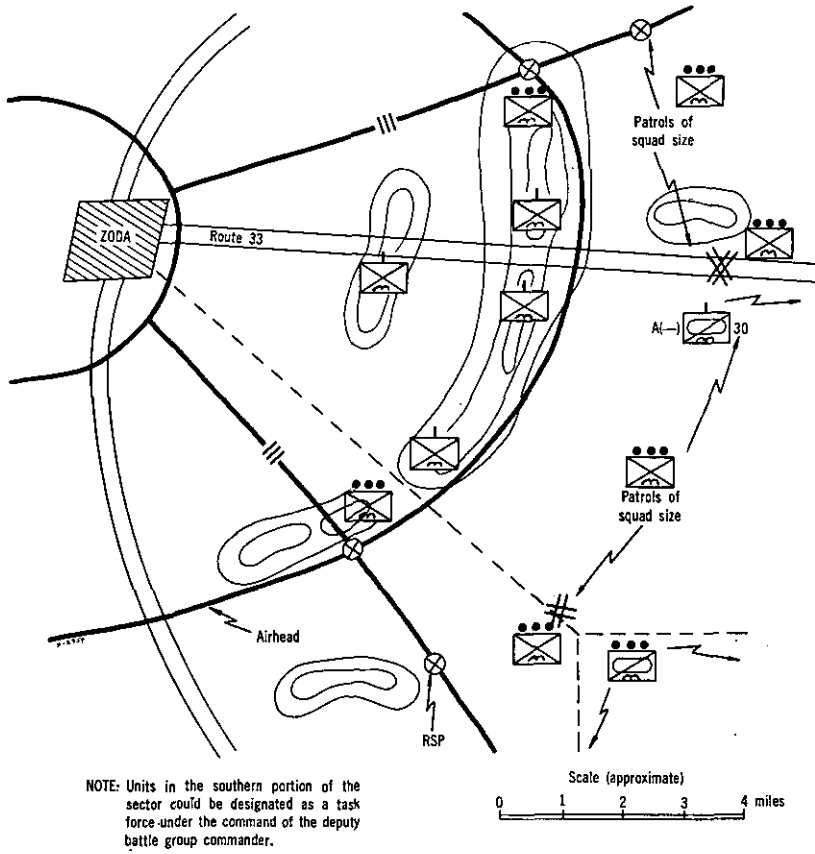


Figure 15. Typical distribution of units in battle group sector of an airhead.

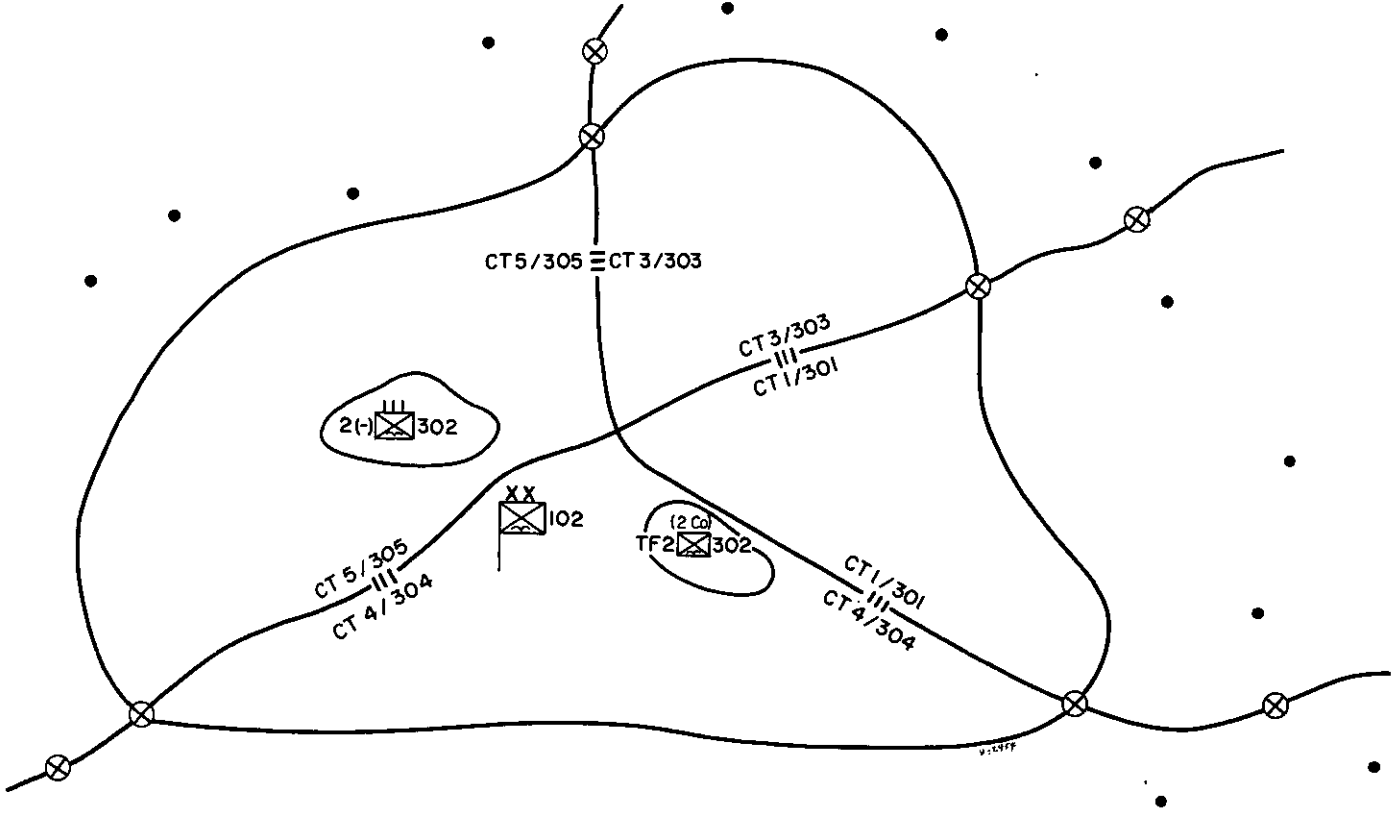
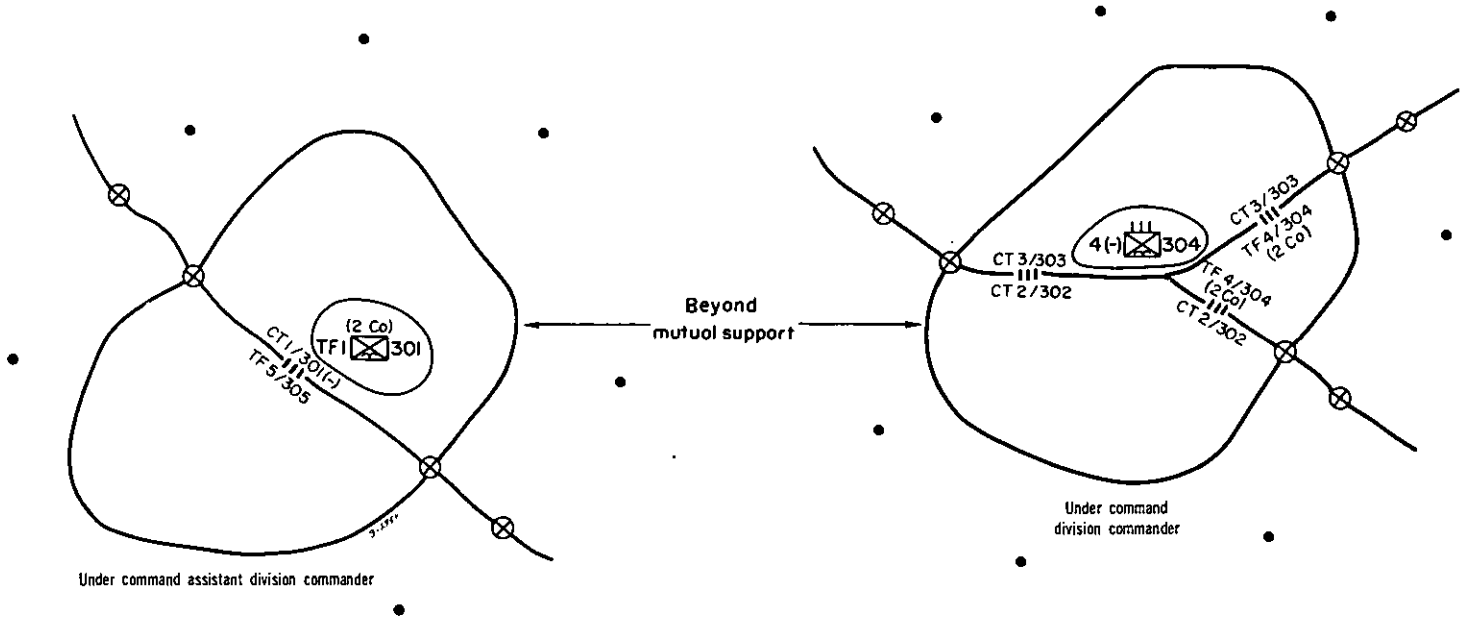


Figure 16. All elements in division-size airhead.



NOTE: Div res composed of 5/305(-) in departure area or one of airheads.

Figure 17. Division in two major task groupings.

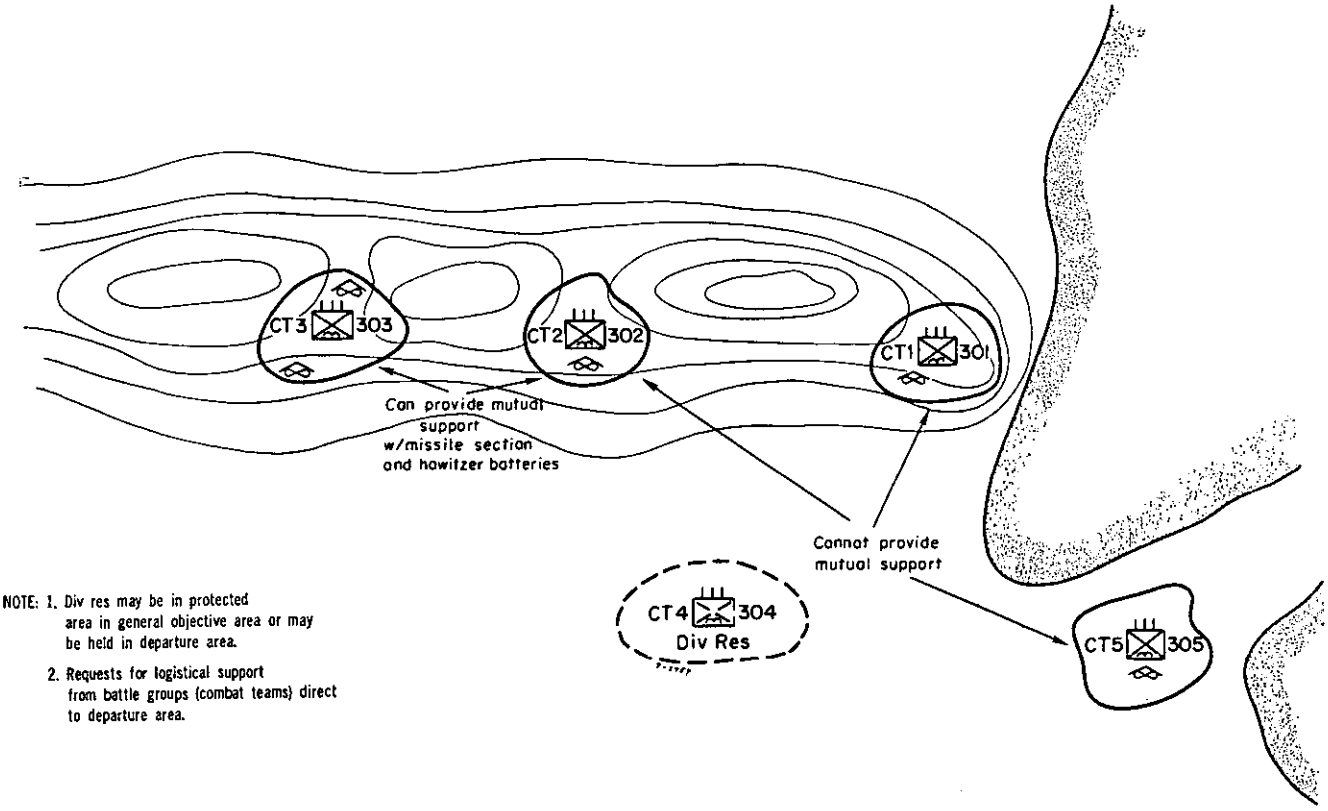


Figure 18. Battle groups committed independently.

79. Task Organization and Boundaries

a. The task organization of the airborne force is directly related to the sectors of responsibility and the nature and type of task assigned the major subordinate units. So far as practicable, the task assigned, including area responsibilities, is proportionate to the combat capability of the unit to which assigned. The task organization provides for a reserve, even though no immediate task or area responsibility may be assigned the reserve.

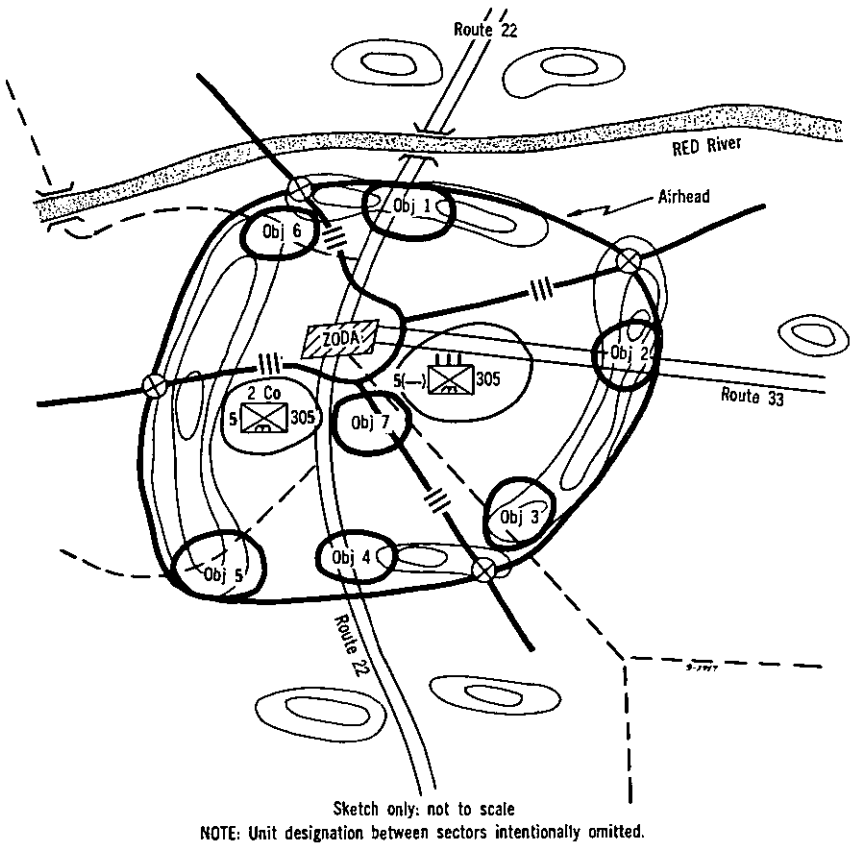


Figure 19. Task organization and boundaries added to airhead.

b. Sectors of responsibility are assigned to major subordinate combat elements by the placement of boundaries. A commander assigned a sector of responsibility seizes the objectives located therein, clears the area of enemy forces, and defends the sector. Boundaries are extended beyond the airhead to the extent necessary to coordinate fires and ground observation forward of the RSPs. In selecting and designating assault

boundaries for airborne operations, the same criteria are used as in other ground operations. Additional considerations are to—

(1) Provide adequate drop and landing zones and maneuver room for each subordinate unit within its sector.
(2) Minimize the adjustment of boundaries in the transition from the assault to the defensive phase.
(3) Minimize the necessity for a subordinate unit to fight in divergent directions.

80. Reserve

a. The reserve normally is brought into the objective area in the assault echelon. When initial tasks assigned other elements of the airborne force have been accomplished, additional forces may become available for reserves. The reserve is located within the airhead with consideration of—

(1) Proximity to areas of probable employment.
(2) Availability of routes for movement.
(3) Availability of cover and concealment.
(4) Capability of the enemy to interfere with movement.
(5) Provision of depth to defense in the most threatened sector.
(6) Vulnerability and passive protection from enemy nuclear attack.

b. When elements of the division are simultaneously committed in widely separated areas, the division may locate its reserve in readiness in the departure area prepared for air delivery in an assault role should the situation so require. The reserve may be located in the objective area rather than the departure area if terrain affords a well-protected assembly area. This location facilitates rapid commitment by use of Army transport aircraft.

c. When the division reserve is committed, the division commander makes provision for reconstituting a reserve. He usually exploits his advantage of interior lines of communications within the airhead and designates a new reserve from the unit(s) occupying those sections of the airhead that are least heavily engaged.

81. Reconnaissance and Security Positions and Forces

a. Reconnaissance and security (R&S) forces are habitually employed in airborne operations and perform such missions as warning of enemy approach, locating targets, preventing enemy ground reconnaissance and close observation into the airhead(s), emplacing and firing atomic demolition munitions (ADM), deceiving and delaying the enemy, providing intelligence information, and controlling fires. The latter two missions may be accomplished by designating some R&S forces and stay-behind elements to remain behind enemy lines as the enemy advances toward the airhead.

b. Within the objective area, the R&S forces consist of those forces located in designated locations along the RSP and those forces reconnoitering to the front of the RSP. The division commander normally prescribes the location of the RSP forward of the airhead by indicating a series of roadblocks, observation posts, and reconnaissance detachments. Division designates only those locations that are important to the division as a whole. Subordinate units designate additional locations as required. The provision of the necessary forces to occupy the designated locations along the RSP is normally a responsibility of the battle groups occupying the various sectors of the airhead. The battle group boundaries are extended through the trace of the RSP and a limiting point is placed at the intersection of the RSP and the battle group boundaries. The extension of the boundary and the placing of a limiting point fixes the responsibility of subordinate commanders and establishes a point for coordination between adjacent units.

c. The division cavalry troop or elements thereof are normally employed under division control to perform R&S missions forward of the RSP. The cavalry troop normally is not assigned a screening mission, but is committed, as appropriate, to cover high speed avenues of approach leading to or from the airhead area. The actions of the cavalry troop and those forces occupying the RSP are closely coordinated.

d. R&S forces are landed early in the assault echelon. They may be landed directly on their assigned positions, or they may be landed within the airhead and then move out from it to perform their designated mission. Army aviation will enable R&S forces to move rapidly, to extend the range of reconnaissance, to provide earlier warning, to assist in calling for fires of all types, and to emplace ADMs. Helicopter support from the division aviation company greatly facilitates both the movement of forces to positions along the RSP, patrolling between the RSP and the airhead, and the operations of the cavalry troop forward of the RSP. Because of the extended frontages over which the R&S forces operate, special emphasis is placed on communications.

e. Considerations influencing the location and composition of R&S forces are—

(1) R&S mission.
(2) Location of dominant terrain, obstacles, and observation forward of the airhead.
(3) Troops available and size of sector of responsibility.
(4) Enemy threats and likely avenues of approach.
(5) Communication facilities available.
(6) Capabilities of fire support means.

82. Scheme of Maneuver

The scheme of maneuver for seizing and defending an airhead is prescribed by assigning missions and objectives, designating the air-

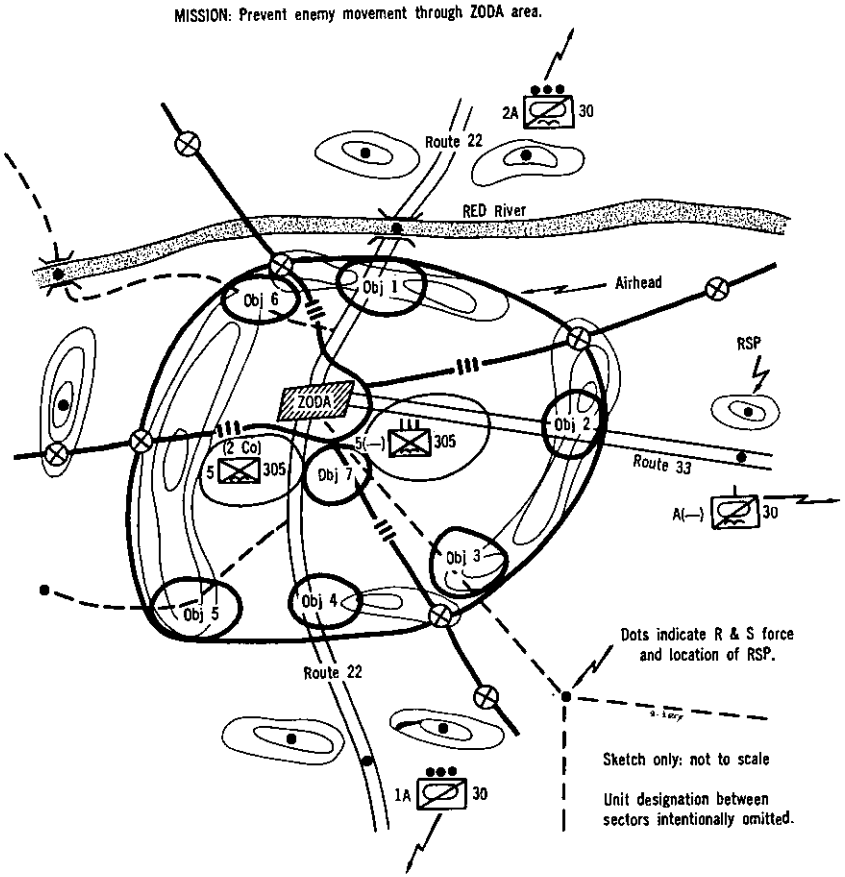


Figure 20. R&S positions and forces added to airhead.

head(s) and RSP, prescribing a task organization and boundaries, and providing for a reserve. After landing, the scheme of maneuver and tactical plan is based upon considerations governing the conduct of ground operations. Some modification is necessary, however, because of decentralization of initial command control. Special consideration must be given to the time and place at which the assault and reserve elements are landed and to assembly and reorganization of the assault forces.

83. Drop and Landing Zones

In formulating the landing plan and scheme of maneuver, the nature and location of drop and landing zones are important considerations. Selection of specific drop and landing zones is dependent primarily upon considerations of size, condition, number, and proximity to objectives. Drop and landing zones selected must provide for an initial disposition of troops which facilitates seizure of assigned objectives.

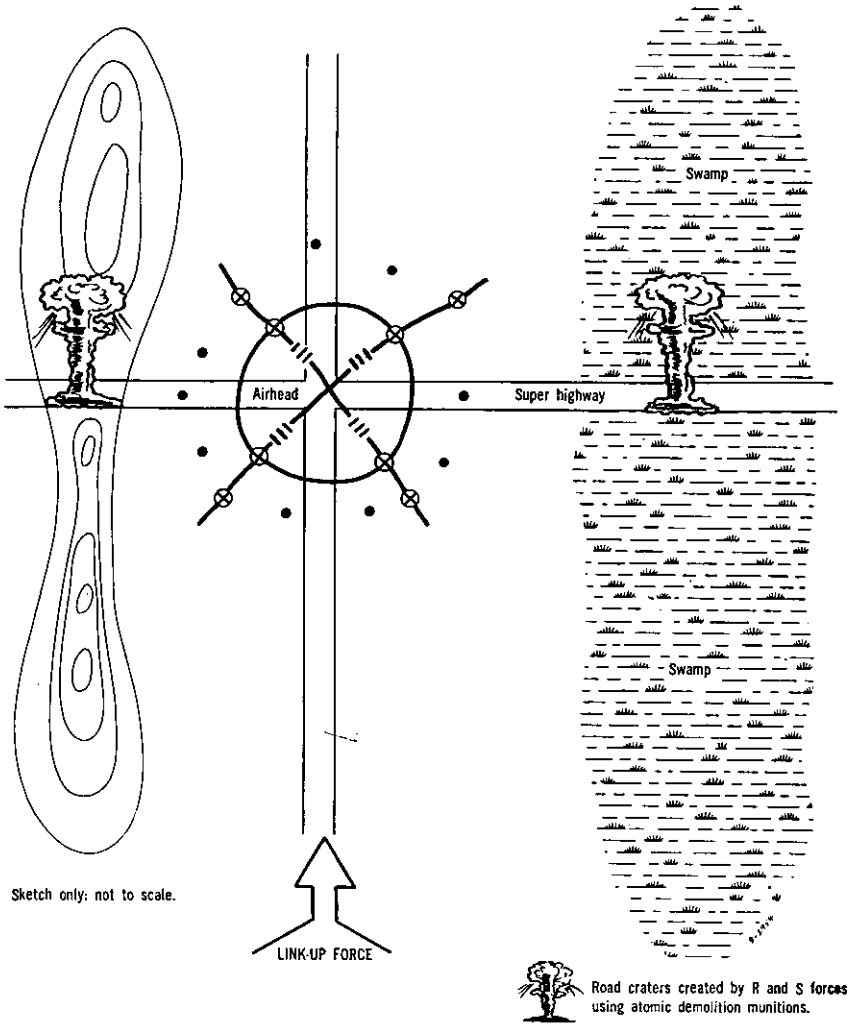


Figure 21. Use of atomic demolition munitions by R&S forces.

84. Air-Landing Facilities

a. Air-landing facilities are those minimum provisions for landing, handling, and takeoff of aircraft which can be constructed to meet minimum essential requirements. The criteria established are those which gave full consideration to the nature of the operation, construction capability, and minimum aircraft safety limits. Types of aircraft using these facilities will include assault aircraft and Army fixed-wing and rotary-wing aircraft. Because of the characteristics of these various aircraft, separate facilities may have to be provided.

b. Nuclear weapons make air-landing facilities increasingly vulnerable to destruction. For this reason, the use of numerous, widely dis-

persed low activity air-landing facilities should be stressed. It is desirable to have one operational assault air-landing facility for each committed battle group and one for the remainder of the division. Also one medium transport air-landing facility for use by the division as a whole is desirable.

c. The airborne engineer battalion has the capability of initially providing a maximum of four air-landing facilities suitable for assault aircraft and in addition provision of direct engineer support to four combat groups. This capability is dependent upon the utilization of existing roads, type of soil, cleared areas, and other factors affecting construction effort. Any requirements greater than this capability or unusual conditions will necessitate engineer augmentation. Such augmentation may include engineer equipment, operators, and specialists from supporting engineer light equipment companies or other appropriate units.

85. Assembly

Once landed, speed in obtaining equipment and reorganizing troops is of paramount importance. Units of platoon and company size having immediate specific missions normally proceed on those missions when the bulk of the unit is assembled without waiting for assembly of the entire task force or battle group.

86. Regaining of Command Control

Dispersion of troops during landing requires that the initial effort of all commanders and staff officers be devoted to regaining the command control necessary for effective direction of the assault force. Of particular importance is the immediate establishment of the assault radio net.

87. Cover and Deception

The division will be directly concerned with making recommendations to higher headquarters concerning the tactical cover and deception measures to be taken and will contribute to the implementation of the overall plan. The actual plans for the tactical employment of the division in the airborne operation must be closely coordinated with the cover and deception plans. Deception measures with which the division might be directly concerned are—

a. The provision of personnel and equipment to be dropped at selected locations to deceive the enemy as to the true location of the main effort. The airborne forces may be used to augment the deception created by the dropping of dummy and decoy devices at other locations in the same general area. These airborne forces, after accomplishing their mission, might be either withdrawn by air or directed to proceed to the objective area utilizing infiltration tactics.

b. Reinforcement and mobile employment of R&S forces to deceive the enemy as to the true location of the airhead.

c. Manipulation of radio traffic within the objective area to deceive the enemy as to the location and intent of the elements of the division.

d. The employment of nuclear fires to mislead the enemy concerning the location of the main effort.

Section V. LANDING PLAN

88. General

The landing plan is prepared to support the scheme of maneuver. The plan contains the sequence, time, and place of arrival of troops and materiel in the objective area.

89. Development of Plan

Concurrently with the development of the tactical plan, the troop carrier intelligence officer and division G2, with the assistance of the division engineer, select all usable drop and landing zones in or near the proposed airhead(s). Airborne unit and supporting troop carrier commanders study assigned landing areas to select specific drop and landing zones suitable to both. Based upon this information, and in coordination with subordinate units, the division G3 selects drop and landing zones to be used by each unit and he determines the order in which units will land. Units normally are landed in their assigned sectors. However, when insufficient or inadequate drop and landing zones exist, boundaries may be shifted or particular units may be permitted to land either in the sector assigned another unit or outside the airhead(s). The troop carrier commander is informed of the desired order of landing of units, time of landing, and the selection of drop and landing zones to be used.

Section VI. AIR MOVEMENT

90. Air Movement Plan

The air movement plan is prepared jointly by the division and troop carrier commander concerned. The air movement plan includes the flight route diagram (prepared by troop carrier), the air movement table (prepared jointly), the loading plan (prepared by the division elements), and similar documents (prepared unilaterally or jointly) having to do with the air movement phase.

91. Assignment to Serials

Airborne units, within a given combat team, are assigned to serials scheduled to depart from airfields and air-landing facilities located in the same general area, thus facilitating control during marshalling.

When not practicable because of landing priorities, because of disruption of troop carrier tactical integrity, or for other reasons, compromise is often necessary. The air movement table sets forth the assignment of airborne units to serials within the air columns. The placement of units in successive serials is in accordance with priorities established for landing and supports the scheme of maneuver. Tactical integrity of airborne units, as well as troop carrier units, is maintained so far as practicable. Serials normally do not exceed 20 aircraft. The need for dispersion in an active nuclear situation through use of even smaller serials may limit tactical integrity to units of company size. All elements in a given serial are landed in the same drop or landing zone in the objective area. See chapter 9 and appendix IX for additional details concerning air movement.

Section VII. COMMUNICATIONS

92. Mounting Phase

The mounting area commander (TA Log Comd agency) is responsible for providing the majority of the communications means during this phase. The division signal officer is primarily concerned with planning for the subsequent phases of the operation and bringing the signal battalion up to the peak of operational readiness. The signal officer also supervises any special training needed by any of the units of the division and the inspection of all signal equipment to insure that it is adequate for the operation.

93. Air Movement

During the period that the division is airborne and en route to the objective area, all communications between aircraft or from aircraft back to the departure area will be made utilizing Air Force communication means.

94. Planning

In addition to the planning for those phases of the airborne operation which take place prior to arrival in the objective area, the division signal officer must make plans for communications to be established in the objective area. The communications plans that the signal officer would be concerned with are as follows:

a. An assault net to operate during the early part of the operation in the objective area.

b. Transition from the assault net operations to the normal division communication nets.

c. Communications from the objective area to such outside agencies as—

(1) Troop carrier forces.

(2) Higher headquarters.
(3) Supporting tactical air elements.
(4) Departure area.
(5) Any other supporting elements such as Naval forces.

Section VIII. TRAINING FOR SPECIFIC OPERATIONS

95. General

The extent of the training actually required for any specific operation will vary with the state of training of the unit, time and facilities available, and complexity of the operation. The complete training procedure described below will seldom be required.

96. Preparatory Training

a. As soon as the airborne division receives a directive for an operation, all training is pointed at preparing for the specific mission assigned. Specific training is initiated without delay and covers only essential items since normally the time between receipt of a directive and execution of the operation is limited.

b. An analysis of the unit mission, the enemy situation, civil situation, and the terrain in the objective area will indicate the problems that will confront the unit after landing. A training program is developed emphasizing the specific training each unit will need to accomplish its mission. To add realism, training areas are selected that resemble the objective area. Time permitting, mockups are made of installations, obstacles, landmarks, and enemy defenses in the objective area. All units, particularly platoons and squads, receive specialized combat training for the type of fighting their mission requires. This training includes instruction on the use of special items of equipment and enemy vehicles and equipment.

c. As the detailed plan develops, specialized or refresher training is given in the methods or techniques to be used in the impending operation. This training includes—

(1) Packing equipment containers.
(2) Loading personnel and equipment into aircraft, particularly when the type aircraft has not been previously used.
(3) Rigging and loading with field expedients, such as an A-frame.
(4) Parachute drops and assault aircraft landings under the anticipated combat conditions.
(5) Use of assembly aids.

97. Rehearsals

a. Rehearsals are a desirable part of preparation for an airborne operation. However, considerations which may preclude rehearsals or limit their extent are—

(1) Lack of time and resources.
(2) Security.
(3) Vulnerability.

b. Rehearsals, when staged, should be conducted under conditions paralleling those to be encountered in actual operations, and early planning is initiated to insure that the following are available:

(1) Necessary aircraft.
(2) Suitable rehearsal areas.
(3) Replacements for damaged or lost equipment.
(4) Replacements for losses sustained during rehearsals.
(5) Sufficient time following rehearsals to permit reconditioning and repacking of aerial delivery equipment.

c. Consideration should be given to inclusion of the following in rehearsals:

(1) Marshalling, to include loading of aircraft.
(2) Unloading of aircraft after landing.
(3) Communication procedures.
(4) Assembly and control procedures after landing.
(5) Execution of the tactical plan.
(6) Supply, evacuation, and transportation procedures.
(7) Juncture procedures.
(8) When planned, conduct of air withdrawal.

Section IX. MISCELLANEOUS

98. Plans for Juncture With Advancing Friendly Forces

In operations involving a juncture, detailed coordination between the airborne force and friendly forces designated to effect the linkup is essential. Direct contact between these forces normally is authorized beginning with the initial planning phase. This contact is established by command and staff liaison and is continued throughout the execution phase to linkup. The actual linkup should be effected as rapidly as possible and in such a manner as to minimize the possibility of casualties to either the airborne force or linkup force from friendly fires. The principal measure for fire coordination is the establishment of a mutually agreed upon fire coordination line (FCL). The function of the FCL is to regulate the flat trajectory and high angle fires as well as friendly air strikes. The following are of particular significance to the planning and execution of a juncture with friendly forces:

a. Linkup points.
b. Fire coordination measures.
c. Communication plans.
d. Liaison.
e. Command relationships and responsibilities.
f. Actions following linkup.

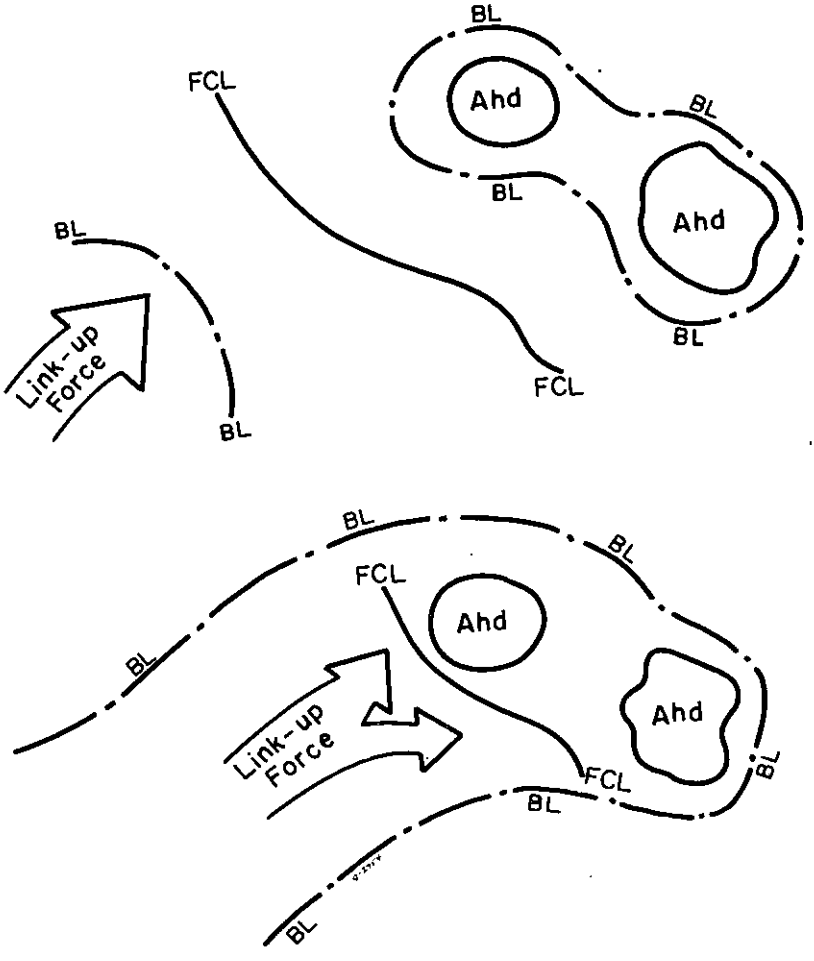


Figure 22. Fire coordination measures in linkup operations.

99. Plans for Exploitation

The mission assigned the division by higher headquarters will indicate the amount of planning required for exploitation after the seizure of the initial airhead. Exploitation plans usually will fall into 1 of 2 general categories.

a. Deliberate. In this case, the mission of the division will indicate that upon seizure, or concurrently with the seizure of the airhead, the division will exploit the tactical situation to accomplish a mission other than that of seizing the initial airhead. In a situation such as this, the division should prepare a detailed division operation plan which will contain most of the information found in a regular division operation order. The subordinate elements of the division will be briefed on the

plan and will also prepare detailed plans of their own to accomplish the required exploitation.

b. Immediate. This type of exploitation will arise from the tactical situation that exists after the division lands and will probably not be planned in any great detail. The division commander will recognize that, although his mission does not require that the situation be exploited, the overall plan of higher headquarters will benefit by employing all or part of the division to exploit a tactical success or opportunity that exists. This type of exploitation will probably take the form of a raid from within the airhead area or the seizing of a key terrain feature or communications center. Opportunities for this type of exploitation will occur frequently in airborne operations as the available intelligence of the area of operations and enemy forces before the actual landing usually is incomplete.

CHAPTER 6

ADMINISTRATIVE PLANNING AND PREPARATIONS

Section I. GENERAL

100. Theater Army Logistical Command

The mission of administratively supporting airborne operations normally is assigned to the theater army logistical command or similar agency. Planning for such operations is on a continuing, long-range basis. Theater Army provides TA Log Command with plans for the contemplated employment of airborne forces sufficiently early to permit the preparation of supporting administrative plans. TA Log Command normally delegates the responsibility for mounting and supporting an airborne operation to one of its subordinate agencies.

101. Planning Procedures

a. Collection and compilation of administrative planning data are initiated early. These data are modified and supplemented as planning progresses. The support group commander in his role as the logistical operator of the division will coordinate closely with the G4 in the preparation of the division logistical plan and order.

b. Each airborne operation normally requires the preparation of a new administrative order to include a marshalling plan.

c. Although TA Log Command has the responsibilities outlined above, the division must be prepared to mount an airborne operation on short notice and with a minimum of assistance provided by agencies outside the division. Many parts of the world where an airborne unit might be employed on very short notice do not have U.S. TA Log Command type forces located in the area. The division must be prepared to mount an airborne operation utilizing locally available material and personnel and with a minimum of assistance normally to be expected when mounting an operation in a well-established TAZ.

Section II. PERSONNEL, CIVIL AFFAIRS, AND SUPPLY

102. Planning, Morale, and Personnel Services

a. Planning. Personnel planning for an airborne operation is more detailed than for normal ground operations because of the requirement for early anticipation of the events that will take place prior to and during the early phases of the airborne assault. Accurately antic-

ipating these requirements will have an effect on all phases of personnel planning and will not be limited to the field of replacements.

b. Coordination. The G1 and the personnel of the administration company will be required to coordinate their plans with higher headquarters. This coordination will frequently be made with headquarters not located in the vicinity of the division. All these factors emphasize the need for detailed personnel planning for an airborne operation.

c. Morale and Personnel Services. Plans are made to insure that, while the division is operating in the objective area, procedures for administrative action are simplified to the maximum extent. The administrative procedures to effect battlefield promotions and other personnel procedures should recognize the austere administrative facilities available in the objective area.

103. Strengths, Records, and Reports

a. Airborne operations should be launched with the division at full strength both in personnel and equipment. As airborne replacements are not always readily available, every effort must be made to initiate early action to bring the division up to strength as early as possible before the operation is to take place. Replacements should be received in time for them to be integrated into their units. Considering that the division may frequently have to provide much of its own mounting area support and that the success of the assault operation frequently is decided by the coordinated efforts of all personnel during the initial assault, it is imperative that the division be kept at full strength. Every effort should be made to avoid introducing personnel with a record of high radiation exposure into the objective area.

b. Detailed plans must be prepared to insure that an accurate record is kept of the personnel participating in the airborne assault and those that remain in the departure area. Command succession rosters must be prepared and kept up to date, and provisions must be made to receive accurate strength reports after both the assault and followup echelons have landed in the objective area.

104. Replacements

a. Overstrength Replacements. The G1 must coordinate with the G2 and G3 and estimate the personnel losses that will be sustained during the initial stages of the airborne operation. On the basis of this loss estimate, overstrength replacements are requisitioned and received prior to the operation. Loss estimates for the air movement and early ground phases are computed separately. Computations are based on current experience tables for airborne operations in the theater, if available, or factors set forth in FM 101–10, modified as appropriate by the nature and duration of the operation, the terrain, and the enemy situation and capabilities, including employment of nuclear

weapons. Initial overstrength replacements are normally held in the departure area under control of the division administration company and will be moved to the airhead area under division control.

b. Normal Replacements. Replacements required after the overstrength replacements have been absorbed by losses are requisitioned in the normal manner.

105. Discipline, Law, and Order

a. The dispersal of the various elements of the division, combined with their probable oversea location may lead to serious disciplinary problems. These factors are considered by the G1, and with the support and guidance of the commander, plans are prepared which will allow the troops maximum freedom of action yet reduce the probability of undesirable breaches of discipline, law, and order.

b. Coordination with the Air Force and the Army departure airfield control officer is effected to insure prompt action in dealing with jump refusals.

106. Prisoners of War

An estimate is made of the number of prisoners of war that will be captured in the objective area particularly during the early phases of the operation. Plans are made to insure the orderly handling of the prisoners within the airhead and to insure that the care and processing of them is as little a burden as possible on the combat units. Plans should include provisions for the following:

a. Holding and possible evacuation of the prisoners during the early phases of the assault by the combat teams.

b. Setting up a division collecting point in the objective area as rapidly as the tactical situation will permit.

c. Supplying guards for the prisoners while they are being evacuated by air from the objective area to the departure area.

d. Supplying adequate personnel and facilities to handle the prisoners when they arrive in the departure area; this is normally a function of TA Log Comd.

107. Recovery and Disposition Collecting Point

Plans provide for the establishment of a recovery and disposition collecting point for the combat teams during the early phase of the operation in the objective area. A division collecting point should be opened as soon as possible and provisions should be made for the establishment of a temporary division cemetery. Further disposition of the remains will be as determined by higher headquarters.

108. Civil Affairs

The division normally will have attached, on a long term basis, a civil affairs (CA) section to meet its recurring CA problems. This com-

mand support unit and any required area support units must be obtained early enough to permit them to be integrated into the division and briefed concerning the operation. Elements of the command support unit may enter the objective area during the assault phase. The remainder of this unit, and any attached area support units, normally will be air-landed in the followup echelon.

109. Supply

a. General. The quantity and types of supplies and equipment carried by assault airborne forces are influenced by the availability and carrying capacity of aircraft, projected date of linkup or withdrawal, all-weather flight capability of the aircraft, anticipated weather, and enemy capabilities. Surface followup forces normally carry supplies for elements of the division within the objective area, within limitations of transportation available to them. A minimum level of 2 days' supply should be maintained in the airhead at all times, with the exception of raid operations. When feasible, maintenance of a 3-day level is desirable.

b. Phases of Supply. Phases of supply are accompanying supply, followup supply, and routine supply. Procedures employed vary with the category of supply being delivered.

c. Accompanying Supply. So far as possible, accompanying supplies are issued to units prior to marshalling. With the exception of raid operations, the desired quantity of accompanying supplies carried is that amount deemed sufficient to sustain operations for 3 days. The tonnage in classes III and V may be such as to require a second lift on D-day in order to obtain the desired supply level. Accompanying supplies are carried as follows:

(1) *Unit prescribed load* on individuals, in aerial delivery containers, and in unit vehicles.
(2) *Additional supplies* in aerial delivery containers and/or bulk loaded in assault aircraft.

d. Followup Supply. Followup supply is delivered by air-landing, parachute, or free fall and as close to the using unit as other considerations will permit. It is discontinued as soon as routine supply procedures can be implemented. Followup supply is classed as automatic and on call.

(1) *Automatic.* Automatic followup supply is delivered to units in the airhead(s) on a planned schedule. The quantities and times of delivery of automatic followup supply depend upon the specific situation. Automatic followup supply continues until replaced by routine supply procedures.
(2) *On-call.* On-call followup supply is either prepackaged or immediately available for packaging and held in readiness in the departure area. It is delivered to units in the objective

area on a specific request basis initated through the division logistics operations center (DLOC). Class I, III, and V, and selected class II and IV supplies and repair parts are prepackaged to correspond to anticipated daily requirements. Normally, a minimum of 2 days' requirements is so prepared. In addition, a small stock of specific critical items, normally class II and repair parts and secondary items are packaged on an individual basis to meet emergency requests for such items. In the event on-call followup supply is used, expended amounts are reconstituted immediately in the departure area. These on-call supplies provide for emergencies throughout the operation.

e. Routine Supply. Routine supply consists of replacement and consumption supplies plus reserve supplies delivered to the objective area in bulk to replace daily consumption and meet buildup requirements.

f. Responsibility. The TA Log Comd agency designated to support the airborne operation is responsible for supervising the preparation and delivery of followup and routine supplies.

Section III. MARSHALLING

110. General

Marshalling is the process by which the units of the division participating in the airborne operation move to temporary camps in the vicinity of departure airfields or air-landing facilities, complete the final preparation for the airborne assault, and prepare for loading into the aircraft for movement to the objective area. Marshalling is a phase of the overall mounting procedure and usually will be accomplished in 48 hours or less by the airborne division. The temporary camps located in the vicinity of departure airfields or air-landing facilities are referred to as marshalling areas. Once the various elements of the division close in the marshalling areas, they normally are sealed in the areas and maximum security restrictions are imposed.

111. Marshalling Plan

The division G4 is the general staff officer normally designated to prepare the marshalling plan and to coordinate the accomplishment of the marshalling activities. The marshalling plan is based on the air movement plan and must consider such important factors as security, dispersion, and availability of departure airfields. Based on these factors, the division normally will be marshalled in multiple, dispersed marshalling areas.

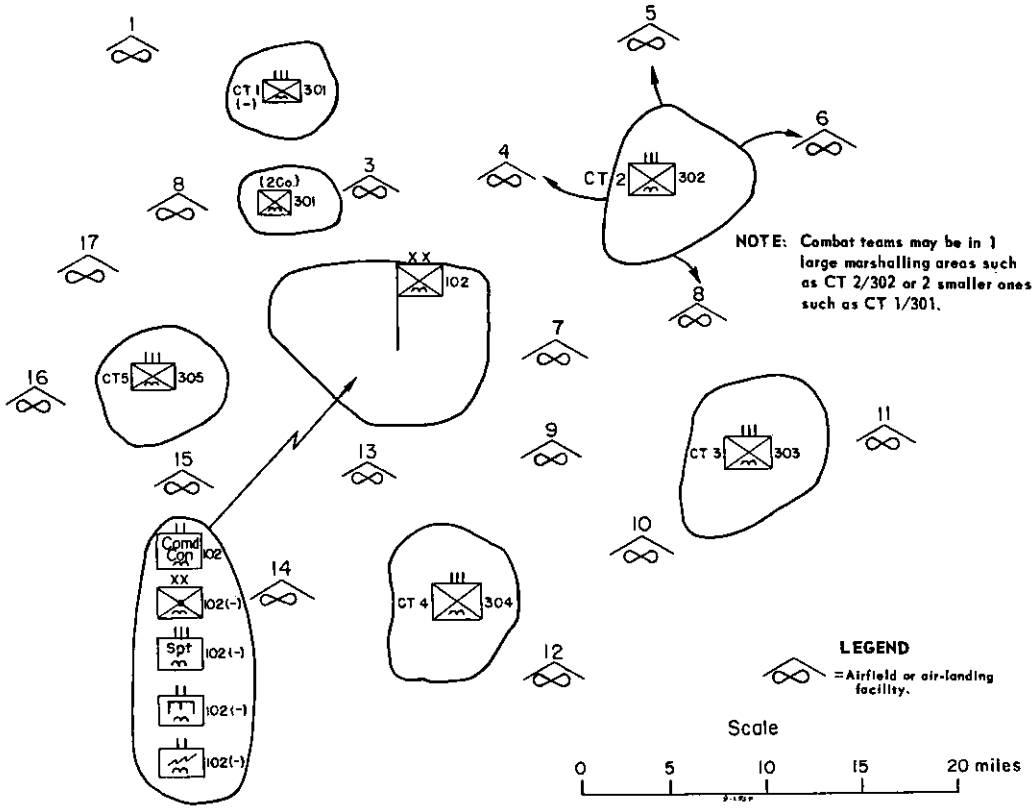


Figure 23. Airborne division in dispersed marshalling areas.

112. Preparation

When enough information concerning the operation is available, the division G4 coordinates with the appropriate supporting TA Log Comd agency. He makes known the requirements of the division for administrative support of all types. The provision of administrative assistance by the TA Log Comd agency is based on the concept that during the marshalling phase the division should be concentrating on final preparations for the assault, and the TA Log Comd agency should provide the bulk of the administrative assistance. Using this concept as a basic working concept, the G4 and the TA Log Comd agency will coordinate and reach a decision concerning the amount of support required and the personnel, facilities, or means to be provided by each. Examples of assistance normally provided by the supporting TA Log Comd agency are—

a. Transportation for movement to departure airfields.

b. Communications between marshalling areas and to appropriate higher headquarters.

c. Special service activities.

d. Maintenance support.

e. Storage facilities.

f. Military police services.

113. Activities in the Marshalling Area

Once the division elements are sealed in the marshalling areas, the final preparations for the airborne assault are completed. Because of the limited time that the division will be in the marshalling areas (normally 48 hours or less), detailed schedules are prepared for the marshalling area activities. Some of the more important final preparations to be completed in the marshalling areas are—

a. A detailed briefing plan is prepared by the G3 and is closely coordinated with the G2. Prior to the sealing of the units in the marshalling areas, information concerning the operation is disseminated only to those individuals that must have it for planning purposes. After the units are sealed, all personnel are briefed on the overall division plan and subordinate units conduct detailed briefings concerning the specific plan for their unit. Briefings normally are conducted in small groups and do not exceed company size. Great emphasis is placed on these briefings in order that each individual soldier will be able to perform to the maximum in the objective area.

b. Final checks are made to insure that all equipment to be taken to the objective area is available and operational.

c. Individual parachutes are fitted; maps, ammunition, and assault rations are issued; and religious and recreational activities are provided.

d. Aerial delivery containers for accompanying supplies are rigged and platform loads are prepared.

114. Movement to Departure Sites

a. The actual movement of personnel, supplies, and equipment from the marshalling areas to the departure airfields normally is planned and coordinated by the G4. The priority of movement of units is established by the division commander (G3) and is based on the previously prepared air movement plan.

b. The supporting TA Log Comd agency normally provides the required transportation means for the movement and will exercise overall movement control. Maximum security measures are enforced. Personnel and equipment should arrive at the departure airfield at the latest possible time consistent with the requirements for last minute briefings and the rigging of individual parachutes.

115. Loading

a. Upon arrival at the departure airfield or air-landing facility, movement is controlled by the Air Force. Aircraft normally are located at dispersed loading sites at the airfield. Personnel in charge of each aircraft load are prebriefed concerning the location and route of movement of their respective aircraft.

b. Certain basic principles apply in loading aircraft in airborne operations. These are—

(1) Unit commanders strive for tactical loading. All individuals carry their complete combat equipment. Ammunition accompanies each weapon.
(2) Key personnel and equipment are distributed throughout several aircraft.
(3) Every load is safely balanced and lashed and manifested.
(4) So far as possible, items of equipment with all parts or accessories needed to make them operational are loaded in the same aircraft.
(5) Crews accompany crew-served weapons.

Section IV. PREPARATION OF PLATFORM LOADS

116. General

Dispersed marshalling areas complicate the problem of rigging and loading the numerous platform loads that will accompany the assault echelon of the airborne division.

117. Considerations

The following are the major, critical factors that must be considered:

a. The rigging and loading of such a large number of items is a time-consuming and manpower-consuming operation.

b. Skilled, technical supervision is required to insure that each load is properly rigged.

c. Numerous hoist devices are required.

d. A system, or method, is required to move the rigged load to the aircraft that will carry it.

e. The number of standard-type hoist devices available is seldom adequate, and field expedients are frequently required.

118. Assembly Line

An evaluation of all the above factors indicates that some type or variation of an assembly line technique for the rigging of multiple platform loads is the most effective solution to the problem. An assembly line procedure offers the following advantages:

a. Fewer highly skilled, technical supervisors are required.

b. Personnel performing the majority of the work on the assembly line (under the supervision of the skilled technical supervisors) become more efficient the longer the assembly line stays in operation.

c. Fewer hoist devices are required.

119. Field Expedients

Depending on the locale and equipment available, the variety of field expedient hoist devices that can be procured or constructed are numerous. Units should develop SOPs for the construction of the various types of hoist devices that they will need to lift their organic platform load items.

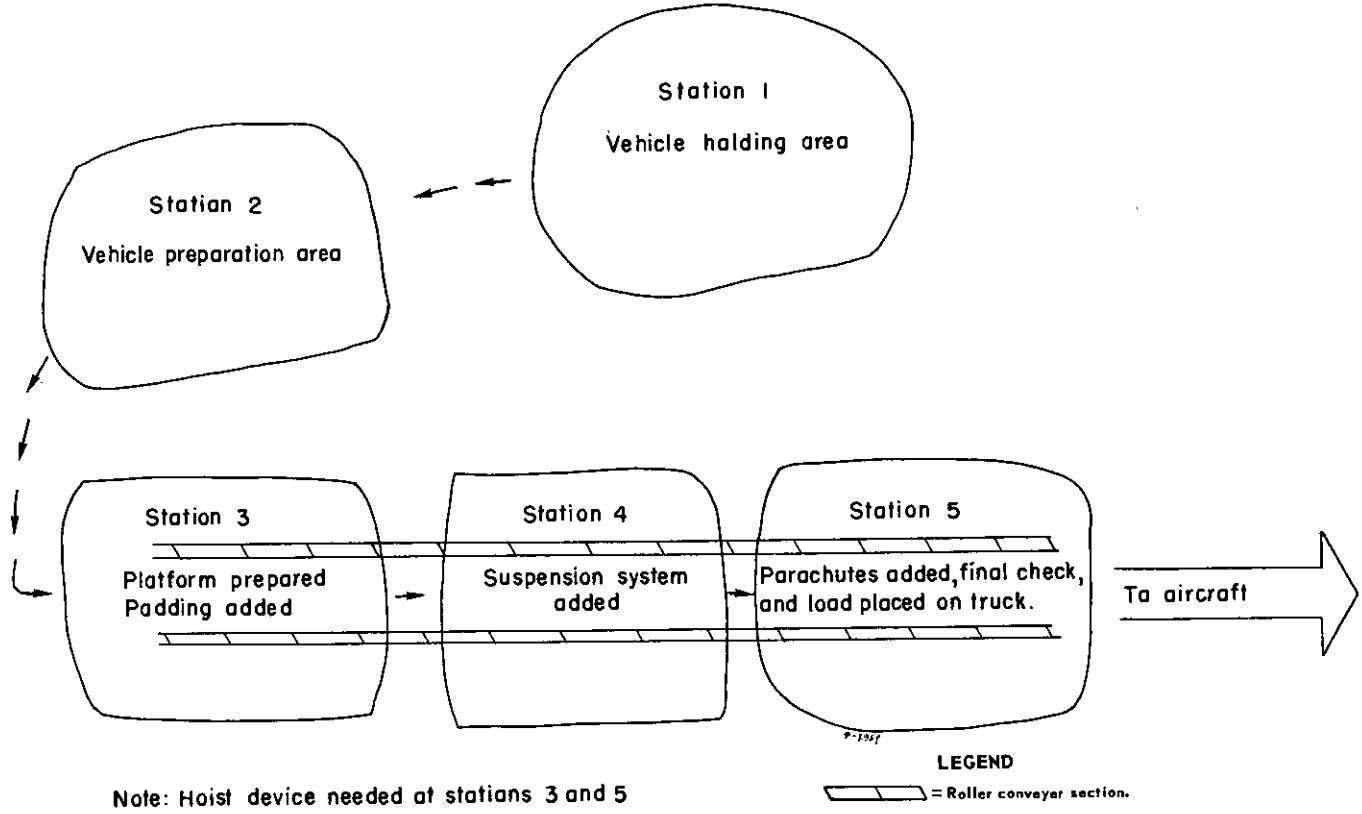


Figure 24. Aerial delivery platform assembly line.

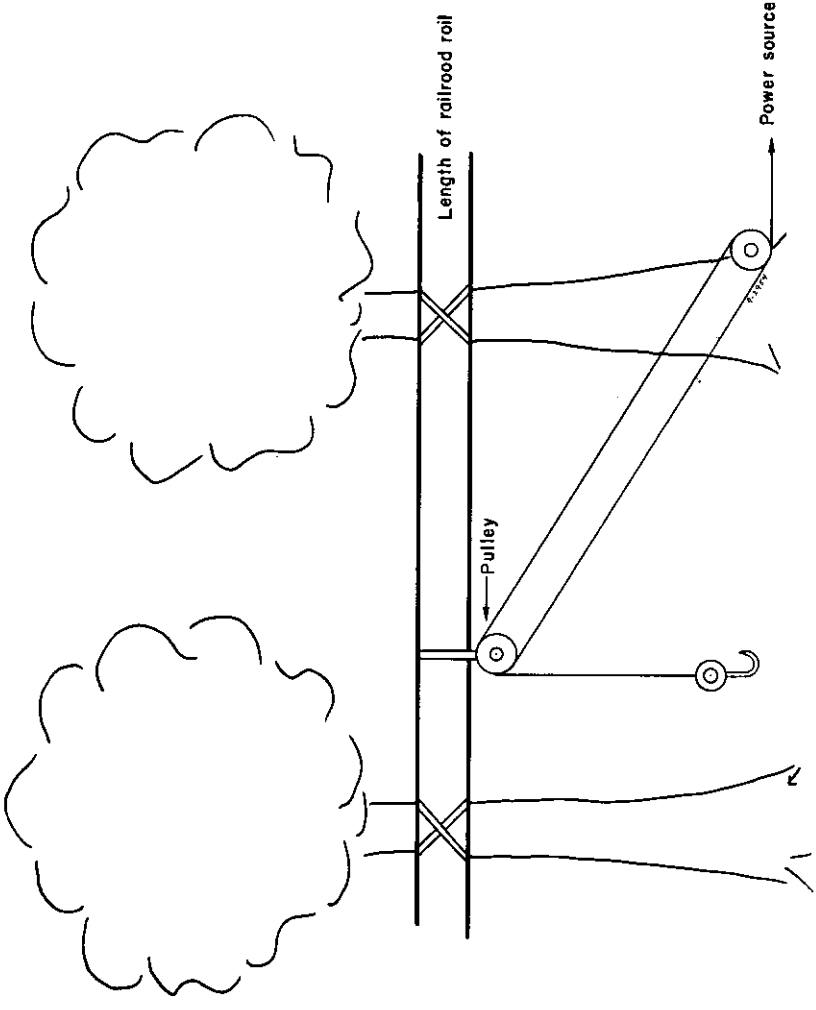


Figure 25. Field expedient hoist device.

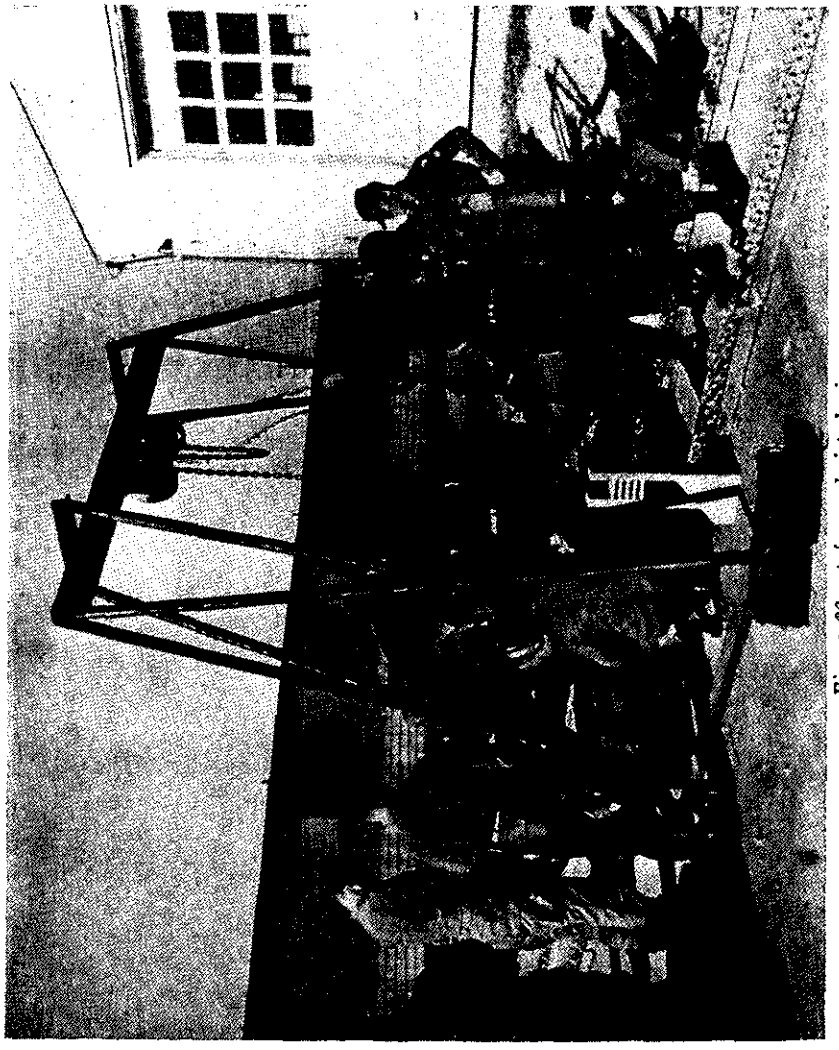


Figure 26. A-frame hoist device.

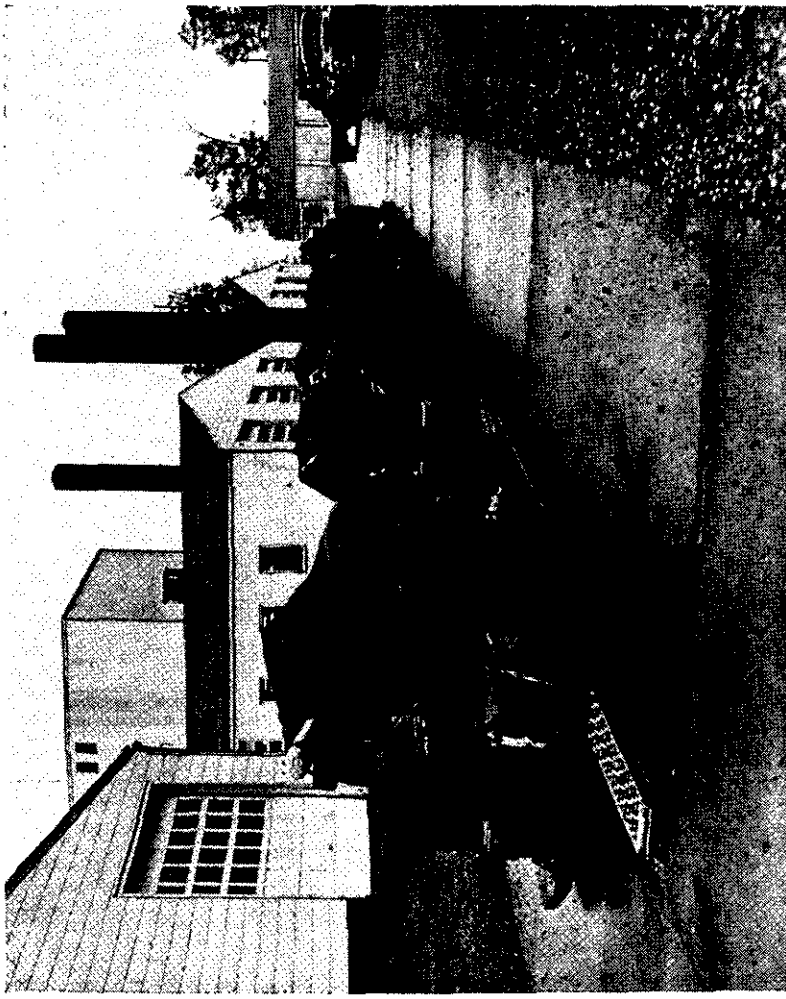


Figure 27. 105-mm howitzers prepared for aerial delivery.

Figure 28. Supplies prepared for aerial delivery.

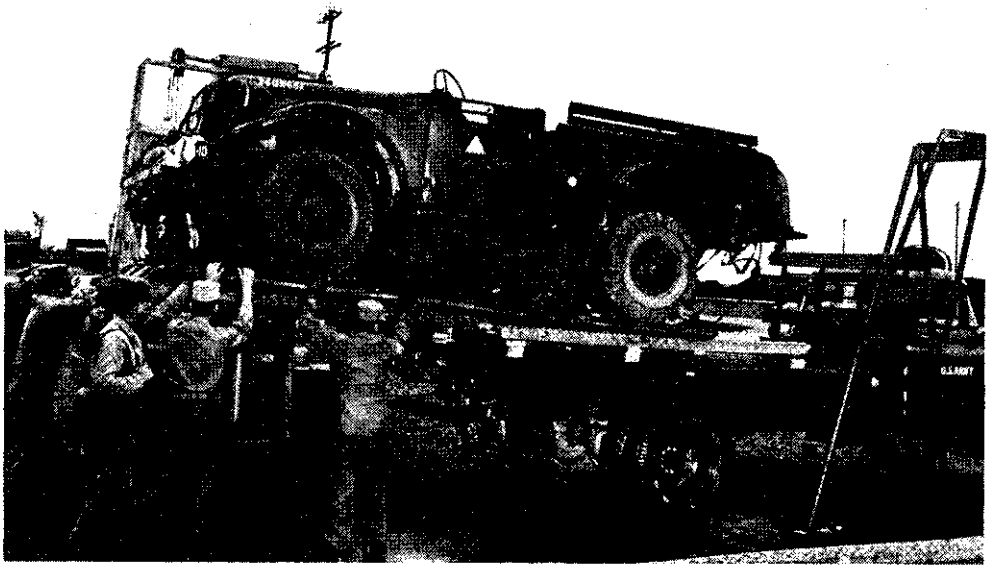


Figure 29. Aerial delivery platform being loaded on truck for movement to aircraft.

CHAPTER 7

SUPPORT GROUP

Section I. ORGANIZATION

120. Support Group

a. Mission. The mission of the support group is to provide command, planning, and supervision and execution of logistical operations at division level (except engineer construction and supply of maps and water).

b. Organization.

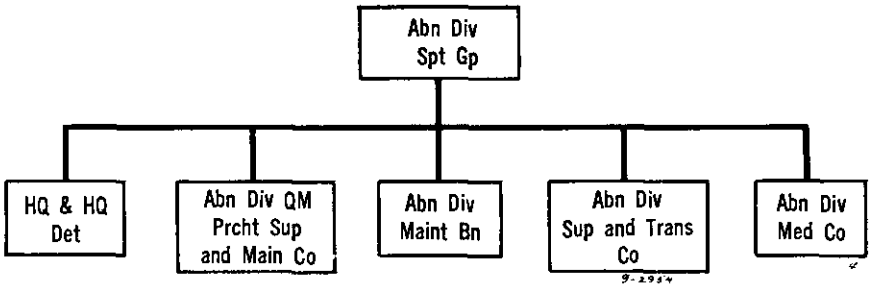


Figure 30. Support group.

c. Capabilities. At full strength, the unit has the following capabilities:

(1) Provides division level logistical support to include intransit storage and distribution of all classes of supplies, transportation of personnel, supplies and resupply, except map and water supply.

(2) Provides limited graves registration service.

(3) Provides second echelon maintenance support, except aircraft and medical and third echelon maintenance support for all equipment in the division to include procuring, storing and issuing repair parts and other secondary items, technical assistance service, and establishing and operating the division collecting point.

(4) Provides third echelon medical service to include evacuation of unit medical installations, operation of division clearing stations, emergency dental treatment, aviation medicine service and medical supply and intelligence.

(5) Procures, inspects, packs, stores, maintains, and issues quartermaster air-type equipment required for aerial delivery of personnel supplies and equipment. Also provides inspection and technical assistance in packing and rigging supplies and equipment for aerial delivery.

d. Employment.

(1) The support group is responsible for the implementation and efficient working of the division logistical plan. The support group commander is a logistical operator.

(2) All routine logistical activities are handled directly between the logistical units organic to the support group and the other units of the division. The support group headquarters does not directly concern itself with these routine operations but merely monitors them.

(3) The group commander coordinates with the division G4 in the determination of the logistical support needed for an airborne operation.

(4) The support group assists in the marshalling of units of the division that are participating in raid type operations and provides logistical support elements to the units of the division when they are in dispersed marshalling areas.

121. Headquarters and Headquarters Detachment, Support Group

a. Mission. The detachment provides the means for command, staff planning, and supervision of logistical operations at division level (less engineer construction and the supply of maps and water). It also provides administrative support (except medical and maintenance) to the units organic to or attached to the support group.

b. Organization.

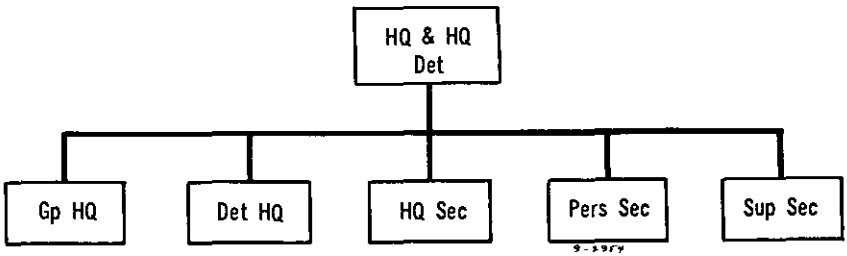


Figure 31. Headquarters and headquarters detachment, support group.

c. Capabilities. At full strength, the unit has the following capabilities:

(1) Provides the means for command, staff planning, and supervision of logistical operations to include the DLOC.

(2) Provides administrative support (less medical and maintenance) to units organic or attached to the support group.
(3) Provides local security for the support group headquarters.
(4) Coordinates the security of the support group.

d. Employment. The group headquarters contains the personnel charged with the command supervision and staff planning of both the support group operations and internal administration. Included are a commander, a deputy commander, an executive officer, an S3 and assistant, an S1, a chaplain, an S4, and three liaison officers. The operation of these personnel may be broken down into the general functions for which the group commander is responsible.

(1) The support group commander is provided with a single staff which consists of a unit staff element and a logistical staff element.
   (*a*) The unit staff element is responsible for the internal operations of the support group.
   (*b*) The *logistical staff element* coordinates the provision of logistical support for the entire division. This staff element is composed of the commander of the division maintenance battalion, the division surgeon, division supply officer and parachute supply officer.
(2) The deputy group commander normally operates the DLOC for the support group commander. See paragraphs 130 through 132 for detailed functions of the DLOC.

122. Supply and Transport Company

a. Mission. The mission of the company is to provide and operate transportation (except aircraft) to supplement other organic transportation of the division and to provide all classes of supply, except repair parts and secondary items, medical supplies, aircraft parts and supplies, maps, water, and quartermaster air-type equipment.

b. Organization. See figure 32.

c. Capabilities. At full strength, this unit has the following capabilities:

(1) Requisitions, picks up, provides in-transit storage for, and distributes supplies and replacement items or equipment.
(2) Provides transportation for unit distribution of supplies and equipment when operating in an airhead.
(3) Operates division supply points for class I, II, III, IIIA, IV, and V supplies.
(4) Provides and maintains the division reserve of class I, II, III, and IV supplies.
(5) Where augmented, this unit provides graves registration facilities for the division.

d. Employment. The company or elements thereof will operate in

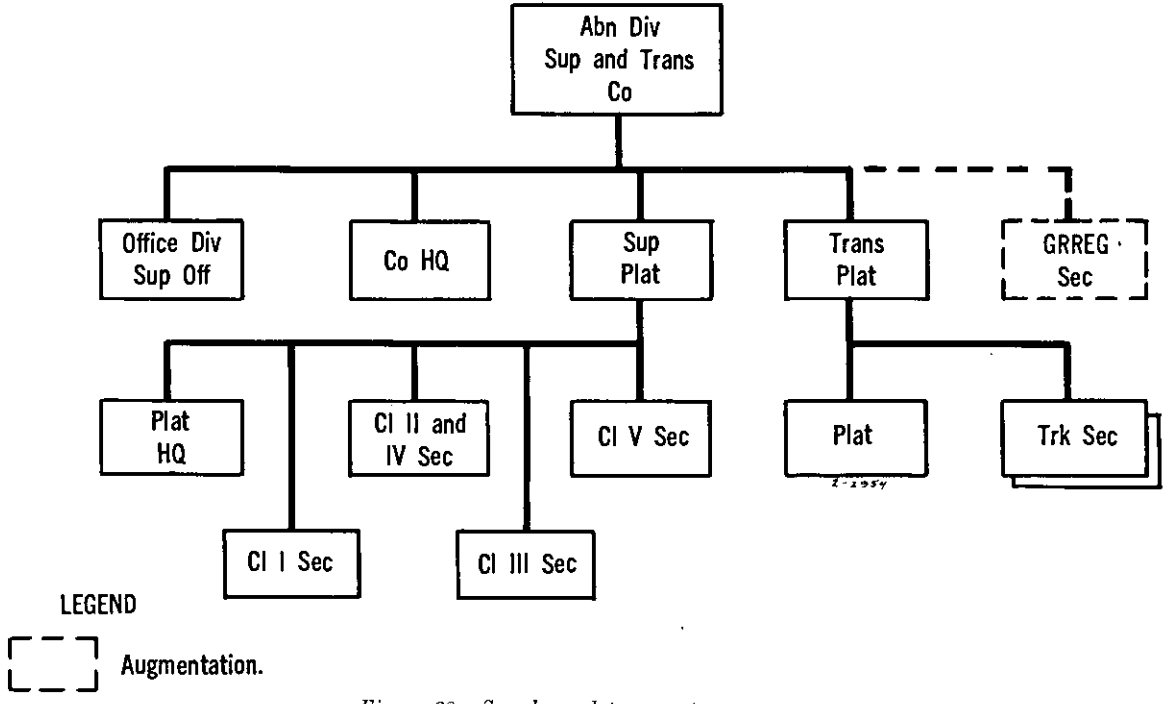


Figure 32. Supply and transport company.

support of the division in garrison or in the field. When required, essential elements of the company accompany the assault echelon to establish supply points and facilitate the buildup of logistical support within the objective area. During combat operations, a representative of the company normally remains in the departure area for the purpose of obtaining major items of equipment for use in rehabilitation of the division when the operation is completed. The company consists of a company headquarters, a supply platoon, and a transportation platoon.

123. Medical Company

a. Mission. The mission of this company is to provide medical services for the airborne division and attached elements.

b. Organization.

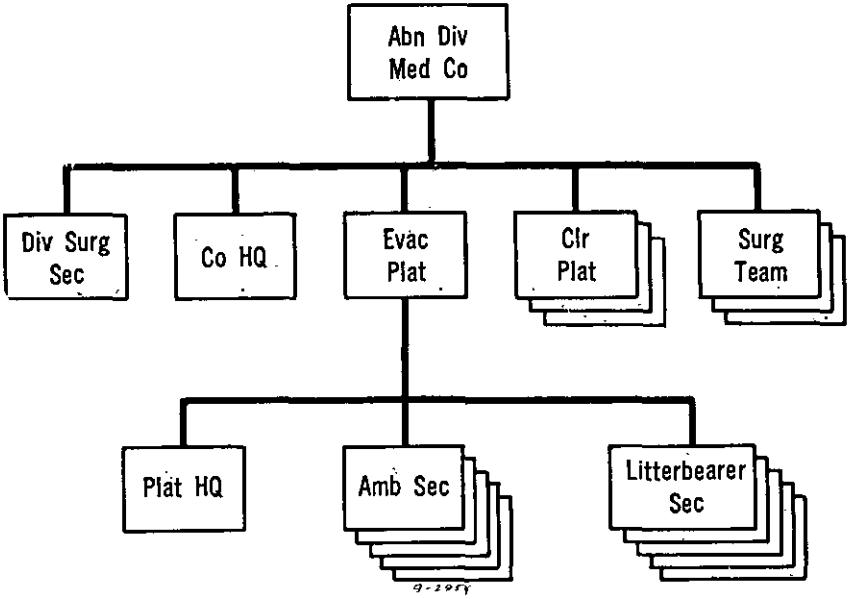


Figure 33. Medical company.

c. Capabilities. At full strength, the unit has the following capabilities:

(1) Evacuates unit medical installations.
(2) Operates division medical facilities for short term medical, surgical, psychiatric, and dental care of patients.
(3) Receives, sorts, and prepares casualties for treatment, further evacuation, or return to duty.
(4) Operates the division medical supply service.
(5) Supports medical service performed by all organic or attached medical units of the division.
(6) Plans, coordinates, and supervises aeromedical evacuation for the division.

d. Employment. In order to treat and hold casualties until aeromedical evacuation is established, delivery of the advance party consisting of members of company headquarters, a minimum of one clearing platoon and surgical team, and indicated ambulance support is required early in the objective area. The clearing platoons establish and operate the division clearing station(s). Supply functions and aviation medical functions are carried out by the division medical supply officer and the aviation medical officer. Both of these officers are members of the company headquarters.

124. Maintenance Battalion

a. Mission. The maintenance battalion provides organizational maintenance except for medical, aircraft, and quartermaster air-type items and some third echelon maintenance capability except for medical and quartermaster air items, on a direct support basis to all elements of the airborne division.

b. Organization.

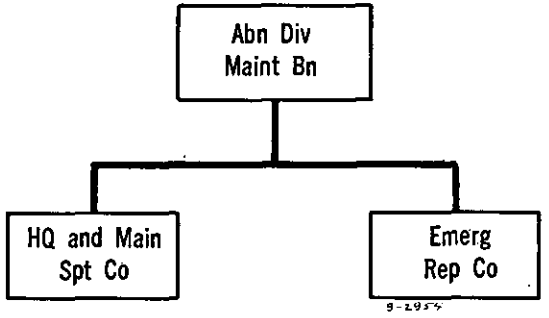


Figure 34. Maintenance battalion.

c. Capabilities. At full strength, this unit has the following capabilities:

(1) Performs organizational and third echelon maintenance on all equipment of all services, except as in *a* above.

(2) Procures, stocks, and issues repair parts, which are those repair parts, major and minor assemblies, and secondary items used primarily in support of maintenance. Included are individual tools, components of tool sets, common hardware, cleaning and preserving materials, and technical publications pertaining to maintenance. Specifically excluded are quartermaster expendables, such as office and housekeeping supplies, and engineer expendables, such as acetate, grease pencils, and like items. Repair parts also include such items as wet batteries, automobile light bulbs, wire brushes, bore brushes, waste, gun patches, individual tools, and cleaning rods.

(3) Provides recovery and evacuation support within its capabilities to supported units for all supported equipment.

(4) Operates the division classification point.

d. Employment. The maintenance battalion is organized to integrate all except second echelon aircraft maintenance services and includes a headquarters and main support company and an emergency repair company. The battalion headquarters consists of the battalion commander, the executive officer, and the supply officer. As an additional duty, the battalion commander serves as the division maintenance officer on the staff of the support group commander. Normally, during combat operations, the battalion commander and the operations sergeant from company headquarters and other necessary assistants accompany the emergency repair company into the airhead. The executive officer remains with the division rear echelon where he commands the rear elements of the maintenance battalion.

e. Headquarters and Main Support Company. This company is organized, trained, and equipped to provide scheduled preventive maintenance services except for medical aircraft, and quartermaster air-type items, some third echelon maintenance capability except for medical and quartermaster air-type items, and direct repair parts supply support for all elements of the division during periods of noncombat. The headquarters and main support company includes a battalion headquarters section and the main support company. The main support company includes the company headquarters, a shop office, a preventive maintenance platoon, a supply service and evacuation platoon, an electronic maintenance platoon, and a mechanical maintenance platoon.

f. Emergency Repair Company. This company is a fully mobile, lightly equipped and stocked, combat support maintenance organization capable of providing emergency repairs within the objective area during airborne operations. The company is so organized as to permit simultaneous employment in two separate airheads. One of the primary functions of the company in noncombat situations is to provide aggressive technical service assistance to supported units, including assisting the battle group commanders in the supervision of motor stables and operator training. The company includes a company headquarters and shop office, 5 battle group support platoons for support of five battle groups, a repair parts section, and 2 light maintenance platoons for support of the other elements of the division.

125. Parachute Supply and Maintenance Company

a. Mission. The mission of the company is to requisition, inspect, pack, store, maintain, and issue quartermaster air-type equipment required for the aerial delivery of personnel, supplies, and equipment. The company also provides technical assistance in the packing, rigging, and loading of supplies and equipment.

b. Organization.

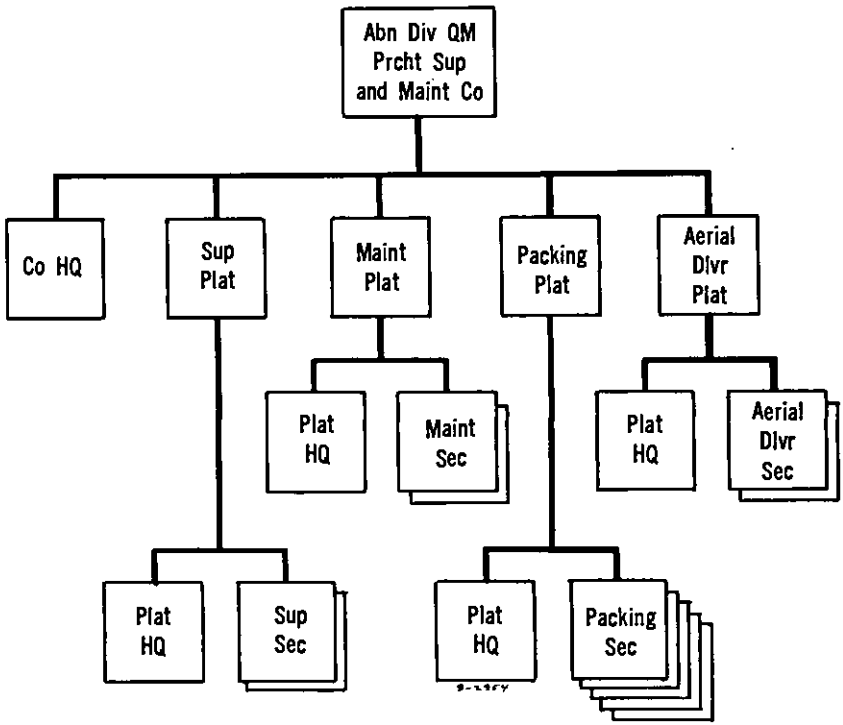


Figure 35. Quartermaster parachute supply and maintenance company.

c. Capabilities.

(1) Requisitions, receives, stores, and issues quartermaster air-type equipment. It is capable of receiving and stockpiling sufficient quartermaster air-type equipment for packing, rigging, and loading of supplies and equipment by the units prior to an airborne operation, to include the accompanying supplies that are to be delivered by parachute. However, once the division is committed, the continuing daily aerial supply requirements must be provided by a quartermaster aerial supply company.

(2) Inspects and packs parachutes.

(3) Provides organizational maintenance for quartermaster air-type equipment.

(4) Supervises and assists in the evacuation of air-type equipment after a drop.

(5) Can provide small detachments to support elements of the division that are dispersed.

(6) Provides technical assistance in the packing, rigging, and loading of supplies and equipment for aerial delivery.

d. Employment.

(1) *Company headquarters.* The company headquarters provides the necessary command and supervision for the unit to include planning, supervising, and coordinating operations of the company and administration, mess, communication, security, and training activities. The company commander is responsible for the establishment of the company command post and routine administrative activities of the unit.

(2) *Supply platoon.* The supply platoon requisitions, stores, and issues quatermaster air-type equipment required by the airborne division. It maintains supply records for this equipment; inspects and assembles rigging components and related equipment; and provides personnel who supervise the shakeout drying of parachutes after an airdrop. To accomplish the above functions, the platoon is organized with a platoon headquarters and two supply sections.

(3) *Maintenance platoon.* The maintenance platoon performs organizational maintenance on quartermaster air-type equipment in the airborne division. When required, it attaches parachute assemblies to cargo that is to be dropped and/or assists in packing of personnel parachutes or cargo parachute assemblies. To accomplish the above functions, the platoon is organized with a platoon headquarters and two maintenance sections.

(4) *Packing platoon.* The packing platoon performs inspections and packing of personnel and cargo parachute assemblies, and assists in the fitting and adjusting of parachutes to wearers. Personnel that initially go into the objective area will be used primarily to provide technical assistance to the units of the division in recovering and evacuating quartermaster air-type equipment. To accomplish the above, the platoon is organized with a platoon headquarters and five packing sections.

(5) *Aerial delivery platoon.* The aerial delivery platoon performs heavy cargo parachute packing, platform load rigging, and preparation of aerial delivery containers, and provides technical assistance to units of the division in preparing for an airborne operation. It provides personnel to establish a training program for training division personnel in the techniques of rigging and loading platform load equipment and other supplies required in an airborne operation. The platoon is organized with a platoon headquarters and two aerial delivery sections.

e. This company is not mobile and normally will operate in support of the division in garrison or in the mounting area, and will accompany the division on administrative moves. In a tactical operation, selected

personnel of the units, organized as teams, may accompany the assault echelon of one or more battle groups.

f. Quartermaster air-type equipment supply and maintenance requirements and aerial delivery requirements that exceed the organic capabilities of the quartermaster parachute supply company must be provided by such units as the quartermaster aerial supply company, the quartermaster air equipment repair and depot company, and quartermaster supply and maintenance (aerial) teams EA through EE. These units normally are located in the Comm Z.

Section II. EMPLOYMENT

126. Scope

The support group is organized to provide functionalized logistical support for the airborne division. The group commander is the logistical operator for the division and is responsible to the division commander for the implementation of the division logistical plan. The support group commander has the same authority and relationship with the subordinate units of his group as does any other commander. In addition to this normal command responsibility, the group commander is responsible for divisional level of—

Supply (except maps and water).
Transportation (except aircraft).
Maintenance (except medical and cryptographic).
Parachute and other air type equipment supply.
Medical service.
Limited graves registration service.

The personnel and equipment needed to provide the above support are organic to one of the subordinate units of the support group.

127. Relationships

a. The relationship between the division staff and the support group commander is the same as that between the staff and any other major subordinate commander of the division.

b. Control over attached elements is as prescribed by the division commander. Although the mission of his group is basically logistical, the support group commander is subject to general staff supervision by all members of the general staff within their respective fields of interest.

c. During the planning phase of an operation, the support group commander coordinates with and assists the division G4 in preparing the division logistical plan. The logistical specialists organic to the support group must also be available to the division G4 and other general staff officers and divisional units on a direct contact basis to provide information and advice.

128. Operations of the Support Group

a. The Unit Staff Element. The S3 and his assistant and the S1 perform their normal staff functions. Intelligence staff functions required by the support group headquarters are accomplished as additional duties by the S3 and his assistant. The chaplain serves all organic and attached units in the support group. The personnel officer supervises the support group personnel section. The support group supply officer supervises the supply support rendered by the supply section of the headquarters and headquarters detachment to the organic and attached units of the group. The liaison officers provide liaison between the DLOC and other agencies to include such agencies as the supporting TA Log Comd section, troop carrier air transport movements control organization in the departure area, troop carrier control element in the objective area, aviation company, and/or the division G4.

b. The Logistical Staff Element. The logistical staff element of the support group is a functional staff in which each staff officer is responsible for a particular logistical function rather than for a technical service function. One or more technical services functions may be grouped under a single functional staff officer. The functional staff element consists of a division maintenance officer, a division supply officer, a division surgeon, and a division parachute supply officer. The division maintenance officer also commands the division maintenance battalion. In addition to serving on the staff of the support group commander, each of these officers serves as a division special staff officer in his field of interest and prepares necessary detailed plans concerning his specialized field.

129. Rear Area Security and Rear Area Damage Control

a. Mounting Area. In the mounting area, TA Log Comd subordinate commands have overall responsibility for rear area damage control and security. The division security and rear area damage control plans are coordinated by the staff with appropriate TA Log Comd agencies. Because of the dispersion of the division in multiple base camps, area responsibilities are delegated to the major subordinate commanders of the division. The support group commander is responsible for the security of units in his area of responsibility. The bulk of the support group is dispersed in providing support to various elements of the division and is under the control of other commanders for rear area security and rear area damage control. When the assault element of the division is marshalled and committed in the airborne assault, the support group commander may be given overall responsibility for the elements of the division remaining in the mounting (departure) area. He directs rear area security and rear area damage control.

b. Short Duration Operations. In the objective area, during short duration operations, divisional service support units are located in battle

group areas of responsibility. These service elements are responsible for local security of their installations. When it is necessary or desirable to group several such elements together, an integrated security area may be established under a designated officer. The officer assigned this mission is normally the one commanding or controlling the bulk of the troops in the area. He operates under the direction of the commander having overall area responsibility. The support group commander seldom has area responsibility in a short duration operation.

c. Long Duration Operations. In long duration airborne operations in which the division is committed for an extended period of time, the division normally establishes a rear area within the objective area. The support group commander is charged with rear area security and rear area damage control. He uses his unit and logistical staff elements to assist in planning and the unit staff element to supervise the execution of the plans for rear area security and rear area damage control. The DLOC serves as the nerve center for processing information and requests for essential services in conjunction with these functions in the support group area of responsibility.

Section III. DIVISION LOGISTICS OPERATIONS CENTER

130. Purpose

a. The DLOC is an agency established for the coordination and supervision of logistical operations other than those handled on a preplanned or supporting agency direct to user basis.

b. The DLOC provides a single agency to which all units of the division assigned or attached may direct requests for other than routine support or medical supplies. The DLOC monitors and enforces priorities as established by the division general staff and coordinates and supervises the division logistical operations. However, the DLOC does not habitually operate directly in supply channels. All routine logistical activities are handled directly between the logistical units organic to the support group and the other units of the division. The functions of the DLOC in the field of logistics are similar to those of the FSCC in the field of fire support.

c. The DLOC also acts as a nerve center to assist the support group commander in exercising his responsibilities for rear area security and rear area damage control.

131. DLOC Operating Personnel

a. Supervisor. In addition to being the principal assistant to the group commander, the deputy commander supervises the operations of the DLOC. However, in situations where adequate TA Log Comd support is not available the deputy commander may be required in the departure area to coordinate support group activities and the flow of

timely logistical support into the objective area. In this case, the support group executive officer normally supervises the operation of the DLOC.

b. Representatives From Support Group.

(1) The division maintenance officer or his representative is charged with the responsibility for maintenance activities in the DLOC. He receives and processes requests for maintenance over and above that provided by attached or direct support units. He determines the support required from higher echelons and coordinates the activities of all attached and supporting maintenance units.

(2) The division supply officer or his representative is charged with all supply activities of the DLOC except medical, maps, water, quartermaster air items, and repair parts. He receives and processes requests for supplies other than those delivered on a routine basis.

(3) The division surgeon, or a medical representative, coordinates medical services performed by all organic or attached medical units. In conjunction with the troop carrier movement control agency, the division aviation officer, the division aviation medical officer, and the clearing platoons, the surgeon or his representative coordinates evacuation of casualties within the objective area and from the objective area to the departure area.

(4) The parachute supply officer or his representative receives and processes all requests for aerial delivery personnel, equipment, or supplies not provided on a planned or routine basis.

c. Other DLOC Representatives.

(1) The assistant G4, transportation, may operate in the DLOC to control and coordinate all movements of personnel, supplies, and equipment by transportation means available to the division. He accomplishes this function in accordance with priorities established by G4. He coordinates with the Army aviation representative for the logistical use of Army aircraft. While the bulk of supplies delivered into the objective area by troop carrier aircraft are planned for delivery to battle groups, the transportation officer is responsible for requesting additional or special sorties as required.

(2) An Army aviation representative may be located at the DLOC to coordinate the use of Army aviation on logistical missions.

(3) A G5 representative may be located in the DLOC when appropriate.

(4) Representatives of the unit staff element, as necessary, will operate in the DLOC to prepare and supervise the execution of plans for rear area security and rear area damage control.

(5) The DLOC will, as required, maintain liaison officers at the division command post, supporting TA Log Comd agency, troop carrier movement control agency in the objective area, and such arrival air-landing facilities, or drop zones, as are deemed necessary.

132. Operations of the DLOC

a. General. So far as possible, the units providing logistical support to elements of the division respond to user requests directly without prior references to the DLOC. When requests for logistical support are received by the DLOC, they are evaluated; the availability of the requested supplies or service is determined; and the necessary orders or requests are initiated. All requests for logistical support that must be obtained from sources outside the objective area are processed through the DLOC. Requests from units for medical supplies are made informally to the medical unit in direct support. These requests are consolidated by the division medical supply officer and forwarded by the DLOC to TA Log Comd support agencies. The DLOC is normally established in the objective area and staffed as necessary with the minimum number of representatives of those units or agencies concerned with providing logistical support for the division. When extensive logistical support will be required in the objective area, the growth of the support group command and DLOC establishment might proceed as shown below.

Initially, the support group is represented in the objective area by a skeletonized DLOC. As the operation grows and the situation stabilizes, the DLOC expands and becomes a part of the support group forward command post complex. Further evolution brings the major part of the support group headquarters into the objective area and only the rear elements of the support group remain in the departure area. As the situation becomes stabilized, the DLOC recedes into the overall support group command post complex. The DLOC at this stage has resumed its natural position as an operational agency of the support group. However, the DLOC retains the capability of separating from support group and moving with the tactical or assault elements of the division. When required, the more cumbersome and larger support group CP complex would then follow at a later time and the buildup process would repeat itself.

b. Short Duration Operations. Normally, it is not necessary or desirable to maintain a large operational DLOC in the objective area. When a DLOC is to be established in the objective area, a skeletonized organization is employed initially and functions in close proximity to the division G4 section. The skeletonized DLOC utilizes communication facilities established for the division command post. When oper-

ating as a skeletonized organization, only those logistical representatives as are deemed essential are present.

c. Long Duration Operations. After the followup echelon has arrived in the objective area, the DLOC normally operates with the forward support group CP as a separate divisional agency and is no longer dependent on division headquarters (G4) for communications or other support. The skeletonized DLOC is expanded to include representatives from additional agencies and more personnel are provided to assist in the operation of the expanded DLOC.

d. Reports. In order for the division commander to make logistical command decisions, he must have information concerning logistical as well as tactical matters. During the early stages of the airborne operation, periodic operation reports are required of subordinate units. These operation reports normally are received over the division command radio nets and include essential data concerning supply, maintenance, medical evacuation, and transportation. The division administrative radio nets are usually brought into the objective area with the followup echelon. The establishment of the administrative net and the expansion of the DLOC allows the DLOC to receive, maintain, and display more detailed information concerning the division logistical situation.

e. Communications. When established as a separate agency, the DLOC together with the support group headquarters, is provided a separate communications center in the division area communication system. The support operations platoon of the command operations company, signal battalion, provides telephone, teletype, radio, radio relay terminal, and message center facilities for the support group headquarters and DLOC. It links the DLOC and support group headquarters with the division command nets 2 and 3, the division administrative net, and the base administrative net.

CHAPTER 8

ADMINISTRATIVE PROCEDURES

Section I. GENERAL

133. Staff Procedures

The functions and scope of operations of the members of the airborne division staff are similar to those of any other division-sized army organization.

134. Operational Administrative Units

The division administration company is the unit that provides the personnel and organization to handle the functions falling under the general staff supervision of the G1. The support group is the principal operating agency for logistical operations within the division and thus is of primary interest to the G4.

Section II. MAINTENANCE

135. General

The maintenance battalion of the support group is the organization responsible for maintenance support of units of the airborne division. The maintenance battalion commander commands and coordinates the efforts of the battalion, serves as the division maintenance officer on the logistical staff of the support group commander, and, in addition, serves as a division special staff officer in his field of interest. The battalion has an emergency repair company that is designed to provide immediate maintenance support in the objective area and a headquarters and main support company that provides garrison-type maintenance support and backup assistance for the emergency repair company. The battalion is designed to support short duration airborne operations and, utilizing the emergency repair company, is capable of supporting operations in an objective area behind the enemy lines. The battalion does not have the heavier equipment nor the necessary personnel to accomplish complete maintenance for the division while in garrison or under conditions of sustained combat. It is essential that backup support be provided from other units for approximately 60 percent of the field maintenance in all technical service fields of responsibility.

136. Garrison Operations

a. General. The headquarters and main support company is the unit primarily responsible for maintenance support when the division is

in garrison or bivouac areas. The company has practically no organic mobility and, during periods when the division is engaged in assault operations, remains with the rear echelon. During periods of noncombat, the emergency repair company will provide direct corrective second and third echelon maintenance support by placing the appropriate battle group support platoon or light maintenance platoon in support of elements of the division and will receive backup support from the main support company. One of the primary functions of the emergency repair company is to provide aggressive technical assistance service to support units, including motor stables and operator training.

b. *Preventive Maintenance.*

(1) *General.* Signal, vehicular, and engineer second echelon preventive maintenance is a service performed by the maintenance battalion for the using unit while the equipment remains under the physical control of that unit. When the assembly line method for vehicular maintenance is used, the unit will provide assigned operator personnel to deliver, drive through the line, and return all vehicles undergoing preventive maintenance services.

(2) *Organization.* The preventive maintenance platoon of the headquarters and main support company is staffed, trained, and equipped to provide preventive maintenance services for all supported equipment of the division except aircraft and heavy engineer equipment. The platoon is divided into three sections, each of which is capable of operating independently of the platoon. These sections usually will employ production-line maintenance procedures.

(3) *Procedures.* The platoon leader acts in the capacity of a division motor officer and is the custodian of all vehicular preventive maintenance records. Preventive maintenance will consist of "Q" service. Vehicular maintenance may be scheduled in 1 of 2 general ways. It may be scheduled and performed by complete unit or by taking a percentage of the vehicles of several different units. It is imperative that the division master training schedule recognize the need for and include appropriate preventive maintenance periods. During periods of noncombat, the preventive maintenance platoon headquarters will operate in or adjacent to the shop office, where vehicle records will be readily available in connection with normal third echelon maintenance activities. Third echelon ordnance automotive repairmen have been assigned to provide a third echelon capability in each preventive maintenance section for the purpose of accomplishing minor second and third echelon repairs during the course of preventive maintenance inspec-

tions. This reduces the number of vehicles which would otherwise be sent to the third echelon shops on job order.

(4) *Capabilities.* The staffing and equipment of the preventive maintenance platoon provides sufficient means to perform the platoon mission under normal working conditions. While adequate buildings are desirable, tentage has been provided. Minimum facilities will include a hard-surface area such as a section of paved road or airstrip. Commercial-type labor saving devices to be included in the ultimate shop sets for this platoon are not easily adaptable to field or bivouac use. Required spot-check and technical inspections frequently will be conducted in conjunction with scheduled preventive maintenance services; in this case, the platoon might be augmented by personnel of other operating elements of the maintenance battalion.

c. *Aircraft Maintenance.*

(1) *General.* The aviation company is responsible for first and second echelon maintenance, and the maintenance battalion provides third echelon support. During garrison operations, all aircraft maintenance activities for the division are usually located in one central location.

(2) *Procedures.*

(*a*) The aircraft maintenance officer will coordinate the efforts of all aircraft maintenance elements of the division to insure the division's daily aircraft requirements are met. To accomplish the aircraft maintenance mission, the efforts of the aircraft maintenance elements of the aviation company and main support company are coordinated by the aircraft maintenance officer of the maintenance battalion.

(*b*) Operator maintenance is defined as preflight and postflight inspections, refueling operations, and supervision of loading and unloading of aircraft. This type of maintenance will be performed by the crew chief. The crew chief should accompany his aircraft to the next higher echelon of maintenance to be employed within his capabilities to assist in maintaining his aircraft.

(3) *Maintenance units.* The aircraft maintenance section of the headquarters and main support company is equipped, staffed, and trained to provide normal third echelon maintenance on all Army aircraft of the division. Third echelon maintenance not performed by this section because of assigned skills, tools, or special equipment will be accomplished by an appropriate direct support aircraft maintenance company in the area. In addition to this third echelon capability, personnel of this section may augment the maintenance personnel of the aviation

company as needed to accomplish the second echelon (preventive maintenance) functions pertaining to aircraft. Normally, this section is best utilized when located in an area adjacent to the division air maintenance base of operations. The service platoon of the aviation company performs organizational maintenance for the aircraft of the company.

d. Electronic Maintenance. Electronic maintenance units contained in the maintenance battalion, and their capabilities are listed below.

Unit	*Capability*
Electronic maintenance platoon, headquarters and main support company.	Provides third echelon maintenance, beyond the capabilities of the emergency repair company, for electronic and electric equipment of the division.
Battle group support platoon, emergency repair company.	Provides emergency maintenance for all electronic and electric equipment organic to the battle group within the limits imposed by time, tools, parts, and personnel available.
Light maintenance platoon, emergency repair company.	Provides emergency maintenance for all electronic and electric equipment organic to all elements of the division, except the battle groups within the limits imposed by time, tools, parts, and personnel available.

e. Mechanical Maintenance. Mechanical maintenance units contained in the battalion, and their capabilities are listed below.

Unit	*Capability*
Mechanical maintenance platoon, headquarters and main support company.	Provides third echelon maintenance support for mechanical equipment for all divisional units beyond the capabilities of the emergency repair company. Is also capable of repairing unserviceable assemblies and subassemblies for return to supply channels particularly items for direct exchange in support of the preventive maintenance line. Has the only tire repair capability within the division. Is capable of repairing the launching equipment for rockets and missiles, but cannot maintain the rockets or missiles.
Battle group support platoon, emergency repair company.	Provides emergency mechanical maintenance for all the mechanical equipment organic to the battle group to the limit of time, tools, parts, and personnel available.
Light maintenance platoon, emergency repair company.	Provides emergency mechanical maintenance for all the mechanical equipment organic to units of the division, except battle groups, to the limit of time, tools, parts, and personnel available.

f. Miscellaneous. The service section of the headquarters and main support company is equipped to provide metal working service for all elements of the battalion. It includes, in general, a machine shop and

a body shop. The body shop is capable of repairing wood and metal bodies as well as glass, leather, and canvas items. The general maintenance section of the headquarters and main support company provides normal third echelon maintenance of such items as typewriters, teletypewriters, optical instruments, protective masks, and immersion heaters.

137. Assault Operations

a. General. The unit primarily responsible for maintenance support in the objective area in an airborne operation is the emergency repair company of the maintenance battalion. The majority of the headquarters and main support company normally remains in the departure area with the rear echelon. Unless otherwise stated, all remarks in the remainder of this paragraph refer to activities of the emergency repair company. The emergency repair company is a fully mobile, lightly equipped and stocked maintenance organization capable of providing emergency repairs within the objective area during airborne assault operations. It is equipped with special tools and equipment specially designed for its peculiar mission. All this equipment can be transported in assault-type aircraft and/or dropped by parachute. All personnel in this organization are parachute qualified. It is the sole contact for the user in obtaining maintenance within the objective area. Unserviceable material is initially and centrally located and is used as a source of parts through controlled cannibalization until normal maintenance, evacuation, and supply channels are established. Evacuation will then be controlled by the maintenance battalion. Normally, the maintenance battalion commander with his operations sergeant and other selected personnel will accompany the emergency repair company into the objective area.

b. Emergency Repair. Emergency repair normally will be practiced only during combat operations. It is defined as that on-site repair required to return an unserviceable or inoperable item of equipment to a combat usable condition in the shortest possible time by replacement of parts, cannibalization of other equipment, or field expediency. This type of repair is not intended to follow currently prescribed maintenance practices. Speed will be the controlling factor in the type and extent of repairs performed.

c. Battle Group Support. Each of the 5 battle group support platoons is organized, trained, and equipped to provide emergency repairs for the equipment of 1 battle group. These platoons are initially attached to the supported unit. Attachments cease when the support group and maintenance battalion commander arrive in the airhead and assume control; the platoons then revert to a direct support role. The extent of repairs accomplished will be dictated by the time, tools, and repair parts available. All personnel are highly skilled technicians specially

trained in methods and techniques required for this type of operation. Normally, all work will be performed on site and the platoon will not establish a shop as such. Each battle group support platoon will carry a stock of selected repair parts as required. In addition, each platoon may stock selected major items for maintenance exchange purposes.

d. Division Support (Less Battle Groups). Each light maintenance platoon has a mechanical maintenance section and an electronic maintenance section. This organization is designed to facilitate simultaneous operations in two separate airheads. The senior officer within the platoon will act as the platoon leader. The platoon is organized, trained, and equipped to provide on-site emergency repairs for all elements of the division within an airhead except the battle groups. Supported units normally will include the command and control battalion, division artillery, engineer battalion, signal battalion, supply and transport company, medical company, and support group headquarters. It is not intended that the light maintenance platoon furnish backup support to the battle group support platoons. Maintenance teams may be assigned to support specific units. However, maintenance support will normally be provided on an area basis. In addition, each operating section may stock selected major items for maintenance exchange purposes.

Section III. SUPPLY

138. General

a. The supply and transport company of the support group supports the division by providing all classes of supply, except repair parts and secondary items, medical supplies, maps, water, and quartermaster air-type equipment.

b. The company is organized and equipped to—

(1) Determine requirements for all supplies for which responsible.
(2) Requisition, pickup, provide in-transit storage for, and distribute supplies.
(3) Make unit distribution of supplies as required when division supply points are established.
(4) Operate division supply points for class I, II, III, IIIA, IV and V supplies.
(5) Provide and maintain the division reserve of class I, II, III, and IV supplies.

c. When required, essential portions of the unit will accompany the assault echelon to establish supply points and to facilitate the buildup of support facilities within the objective area. During combat operations, a representative of the supply and transport company will remain in the departure area for the purpose of obtaining major items of equipment for use in the rehabilitation of the division after completion of the operation.

d. When employed, the supply and transport company supervises the receipt, recovery, and issue of supplies delivered to the division supply points. Either supply point distribution or unit distribution, or a combination of both, may be instituted for those supplies handled by division. So far as practicable, planned use of transport helicopters, organic or attached to the division for relift and shifting of supply, will be employed to reduce or eliminate the need for ground transport of the supply and transport company.

139. Delivery of Supplies

a. Accompanying supplies are recovered by combat and service units of the airborne division. Each unit recovers or protects its own accompanying supplies. Battle group distributing points are established. Division service units recover assault supplies transported under division control and establish division supply points. When established, division supply points are in the vicinity of the air-landing facilities utilized for delivery of supplies.

b. Prior to the availability of air-landing facilities in the objective area, supplies are delivered to major using units by aerial delivery and/or air-landing on landing zones. Later, followup supplies are delivered so far as possible, by air-landing on minimum criteria air-landing facilities. Ideally, each battle group will have one air-landing facility in, or convenient to, its sector. Supplies will be delivered to the air-landing facility most convenient to the receiving unit. Habitually high tonnage items (class I, III, IIIA, and V) will be delivered fully forward whereas those items of class IV and repair parts that are consumed at a less predictable rate will be delivered to division supply points.

c. Routine supply procedures usually are instituted only in long duration operations, after linkup, or when the division is not committed to tactical operations. Such supply is handled in generally the same manner as in normal ground operations.

140. Class I Supply

a. General. The class I section of the supply platoon receives and assists in the determination of class I requirements, the preparation of the daily ration request, and the operation of the division class I supply point(s).

b. Requisitioning Procedures. During periods of combat, rations are delivered based on planned requirements throughout the followup supply phase. When routine supply procedures are established or in noncombat situations, daily at a time announced in the division administrative order, each organization transmits a formal or informal ration request (by radio or messenger) to the supply and transport company. These requests are assembled or consolidated as a division

daily ration request which is transmitted to the unit which provides class I supply support.

c. Distribution. During the assault phase, and when practicable for the entire operation, the battle groups will be supplied by direct delivery from the departure area. When supplies are delivered for issue through division supply points, supplies received will be segregated according to the using unit at the supply point. A combination of unit and supply point distribution will be employed as the immediate situation requires or permits. To reduce transportation requirements, maximum consideration must be given to locating distributing points as near to combat units as feasible and the delivery of supplies fully forward by air to these points. In garrison, or when operating in the departure area, supplies will be delivered by the supporting supply agency to the division supply point. In the division area, supplies are broken down and issued to the requesting units by means of unit distribution.

d. Records. All records for the administration of class I supply are maintained by the class I supply section.

e. Reserves. Normally 3 days' rations will accompany the assault echelon in an airborne operation. Prescribed levels of class I supplies will be maintained by the supply and transport company as an organic division reserve.

f. Types of Rations.

(1) Assault and individual combat rations are carried by all airborne units entering the objective area.

(2) Combat rations are normally used for followup supply of airborne forces.

(3) All types of rations may be included in routine supply.

141. Class II and IV Supply

a. General. The class II and IV section of the supply platoon is responsible for consolidating division class II and IV requirements, submission of requisitions to appropriate supply agencies, and operation of the division class II and IV supply point(s).

b. Supply Procedures. In general, supply procedures for all technical service class II and IV items are similar. Followup supplies are delivered based on planned estimates, modified as the situation requires or permits. A limited stock of selected items will normally be established in a division supply point in the objective area. When routine supply procedures are initiated, divisional units submit their requirements to the supply and transport company representative in the DLOC, where they will be assembled or consolidated as a division requisition which will be transmitted to the appropriate supply agency. Separate requisitions for regulated items will be submitted for approval by the appropriate supply agency.

c. *Distribution.* See paragraph 140c.

d. *Supply Levels.*

(1) *Class II.*

(*a*) Limited amounts of essential class II items are included in followup supply.

(*b*) Minimum stocks of individual clothing and equipment are included in followup and routine supply.

(2) *Class IV.* The amount of class IV supply brought into the objective area is limited; consequently, local resources are exploited to the fullest extent.

142. Class III and IIIA Supply

The class III supply section of the supply platoon receives and assists in determining division class III and IIIA requirements. It prepares and submits requisitions (daily status reports) for class III supplies, and operates the division class III supply point.

a. *Supply Procedures.* When routine supply procedures are in effect, divisional units transmit daily class III and IIIA status reports (by radio or messenger), to the supply and transport company (to the DLOC in tactical operations) according to the schedule and procedure announced in the division administrative order. The requirements indicated by these status reports are assembled or consolidated as a divisional daily class III status report and transmitted to the appropriate supply agency. Formal requisitions are not required since class III supplies are issued on demand.

b. *Distribution.* During the assault phase and when operating in the objective area, fuel supplies will be delivered to the division in 5-gallon cans or 55-gallon drums by aerial delivery or air-landing. Powered vehicles and machinery are enplaned with fuel tanks filled to the safe level (generally three-fourths full). Additional amounts of fuel and lubricants are carried on each vehicle. When facilities in the objective area permit, fuel supplies should be delivered in bulk. In garrison or in the mounting area, divisional units normally will be supplied gasoline in tank trucks provided by quartermaster petroleum supply units, by utilizing filling station operations, or by a combination of the two methods. Packaged oils and lubricants will be issued at the same time as gasoline.

c. *Records.* The class III supply section maintains daily records on the operation of the division class III supply point which reflect the receipts, issues, and balance on hand of all gasoline, oils, and greases.

d. *Reserves.*

(1) The class III reserve is maintained in the objective area by the supply and transport company. The prescribed level of class III supplies normally required by the airborne di-

vision during the assault phase will approximate that required to move the division approximately 100 miles across country. To meet this prescribed level, any additional containers required will be provided as class IV items, or the required supplies will be furnished from theater stocks for delivery to the objective area.

(2) Normally, the division class IIIA supply point in the objective area is located at or near the division base airstrip and prescribed reserves of class IIIA supplies are maintained at this point.

143. Class V Supply

a. Class V Supply Section. The class V supply section of the supply platoon is responsible for maintenance of records and data concerning the available supply rate. When routine supply procedures are in effect, this section will also authenticate all ammunition requisitions, will provide explosive ordnance disposal service, and will operate the division class V supply point within the airhead. This section may have a representative in the DLOC.

b. Supply Procedures. Ammunition is supplied automatically during the followup supply phase based on estimated requirements. Replenishment of expended supplies in excess of those planned will normally be accomplished by direct air delivery to the battle groups and division artillery elements. When expenditure rates approximate available rates as established by the prescribed load, delivery will be by automatic followup supply. If expenditure rates materially exceed available rates, on-call followup supply procedures will be employed. When routine supply procedures are established, using units will transmit their class V requirements, i.e., ammunition requisitions (by radio or messenger) to the division ammunition supply officer located at or adjacent to the division class V supply point. The division ammunition officer informs the DLOC of all ammunition requirements so that expenditures can be compiled and transmitted to the appropriate supply agency.

c. Distribution. The missile battery employs supply point distribution of rocket ammunition, using its organic vehicles.

d. Records. Normally, records will consist of data on the available supply rate and records which reflect receipts, issues, and balance on hand of all ammunition in the objective area class V distributing point(s).

e. Reserves. Units are responsible for maintaining their prescribed loads of ammunition. A prescribed load is designated for each operation and is based upon—

(1) Degree of opposition anticipated during and after the landing.

(2) Number and type of weapons landed with the airborne force and requirements for bulk allotment items.

(3) Planned time before followup supply becomes available.

(4) Number and types of aircraft to be used.

(5) Experience factors.

144. Repair Parts and Captured Supplies

a. General. Repair parts consist of items used primarily in support of maintenance such as assemblies and secondary items. Included are individual tools, components of tool sets, common hardware, cleaning and preserving materials, and technical publications pertaining to maintenance. Specifically excluded are quartermaster expendables, such as office supplies, and engineer expendables, such as grease pencils and acetate.

b. Procurement and Stockage. Repair parts are procured and stocked for issue to all elements of the division by the headquarters and main support company of the maintenance battalion.

c. Repair Parts Section. In the objective area the repair parts section of the emergency repair company acts as a backup source of supply to the five battle group support platoons and the light maintenance platoon. It receives, stocks, and issues repair parts to those forward elements and will normally carry a prescribed load of approximately 7 days' anticipated expenditure of selected items. This section is fully mobile and will normally operate within the objective area in a dispersed manner and will rely to a large extent on cannibalization for procurement of scarce items. In this connection, it is necessary that the section be notified of the locations and types of equipment destroyed within the objective area. The section is organized and loaded in such a manner as to facilitate simultaneous employment in two separate locations or airheads. In addition, the section may carry a utility stock of selected major items for maintenance exchange purposes.

d. Captured Supplies and Salvage.

(1) Within limitations prescribed by technical services and intelligence requirements, full utilization is made of captured or abandoned enemy materiel.

(2) Logistical considerations require recovery of salvagable equipment, especially parachutes and aerial delivery containers.

145. Water and Maps

The provision of water and maps for all units of the division is a responsibility of the division engineer.

146. Special Supplies and Equipment

Airborne operations may necessitate additions, deletions, and substitutions in standard equipment and prescribed loads of units. Pallets and materials handling equipment may be employed to expedite the handling of cargo.

147. Medical Supplies

The division medical supply officer of the medical company is responsible for requisitioning and distributing all medical supplies for the division. The division medical supply point(s) should be located near the division clearing station(s), and distribution is normally made by evacuation vehicles returning to supported medical installations. Requests for medical supplies are made informally to the medical unit in direct support. Requests for medical supplies to TA Log Comd support agencies are consolidated by the medical supply officer and are requested, received, and distributed to the medical supply points through the DLOC.

148. Quartermaster Air-Type Equipment

The parachute supply officer is responsible for requisitioning, receiving, storing, performing organizational maintenance, and issuing all quartermaster air-type equipment for the division.

Section IV. TRANSPORTATION

149. Transportation Movements

a. Transportation movements are exercised over movement of troops and supplies into, within, and out of the airborne objective area, in conformity with the movement plan.

b. Transportation movements are largely achieved through centralized planning, control, and coordination of movement planning at division level, and through timely dissemination of information and direction to those agencies exercising control over the transport means. These agencies include tactical units, the flight operation center of the aviation company, Air Force combat control teams or other control agency, and the DLOC for that portion of the airlift and truck lift directly allocated and provided for the intraobjective area movement of cargo. Continuous close coordination between the G3 and G4 is essential; for this reason, an assistant G4 transportation officer is provided in the G4 section. While control and employment of transportation means is decentralized in the early phases of the operation, a degree of centralized control is achieved by allocations made during the planning for the operation.

c. Maximum utilization of returning aircraft for evacuation of casual-

ties, prisoners of war, and equipment is obtained through planning and control of return movements.

150. Troop Carrier Aircraft

Airborne forces, prior to effecting juncture, are dependent upon air lines of communications. Movement of troops, materiel, and supplies over air lines of communications is planned by Air Force and Army commanders and controlled by the airborne force commander. Air operations and flight routes are planned by the troop carrier commander. Flexibility of cargo airlift is exploited and ground transportation is saved by delivering supplies as close to using units as practicable.

151. Army Aircraft

The use of Army aircraft of the division aviation company falls under the staff supervision of the G3. The aircraft can be used to support tactical and logistical operations. Since the aviation company is designed primarily to support tactical operations, requests for other uses will be coordinated with the G3 and will be acted upon in conformance with the existing situation and guidance of the division commander. When employed primarily for logistical missions, the G4 exercises staff supervision and maintains close coordination with the G3.

152. Ground Transportation

a. Ground transport is pooled as necessary at division level. It consists of organic vehicles of the supply and transport company and such other motor vehicles as are available and usable.

b. The transportation platoon of the supply and transport company is designed to provide and operate transportation means, except aircraft, for transportation of personnel, supplies, and equipment; to supplement means available to other elements of the division; and to make unit distribution of supplies when supply point distribution is not utilized. Transportation requirements within the objective area may vary with each operation, and only that portion of the transportation platoon required to support a given operation should be taken into the objective area. To accomplish the above functions, the platoon is organized with a platoon headquarters and two truck sections.

(1) *Transportation platoon headquarters.* This element is responsible for planning, coordinating, and supervising the employment of the organic vehicles and other vehicles that may be pooled or attached to the supply and transport company for an operation.

(2) *Truck sections.* These sections are responsible for providing vehicles and drivers for the performance of scheduled or re-

quested transportation missions. Each truck section is composed of fifteen 2½-ton cargo trucks, five ¾-ton trucks, and ten 1½-ton cargo trailers. The 40 vehicles of the 2 truck sections have a single lift capability of 160 tons of general cargo, 800 personnel, or a combination of the two when all vehicles are operable.

Section V. PERSONNEL PROCEDURES AND CIVIL AFFAIRS

153. Strengths, Records, and Reports

As soon as possible after the assault landings have been made, the units of the division submit strength reports. In the early phases of the operation, these reports are in many cases only an approximation. The report should also include the number of personnel from other units that have joined the reporting unit. Provisions are made for reports concerning excessive losses to a unit, the loss of key personnel, or units with a high accumulation of radiation dosage. As soon as practicable, accurate reports concerning the strengths of all units are prepared. This will enable replacements to be phased into the objective area on a required basis.

154. Replacements

Replacements are normally delivered to the objective area under division control and are received in the objective area by elements of the replacement detachment of the division administration company. It is desirable to deliver replacements to the objective area, utilizing air-landed means. Replacements required after the overstrength replacements have been absorbed by losses are requisitioned and processed in the normal manner.

155. Discipline, Law, and Order

The control of stragglers is decentralized during the early phase of the operation. Subordinate units responsible for sectors of the airhead(s) make provisions for the control of stragglers within their sectors. The number of stragglers deliberately avoiding combat duty will probably be small; however, personnel who have been separated from their unit after landing must be directed to their parent unit. The enforcement of division orders concerning looting, treatment of civilians, and other similar matters is decentralized during the early phase of the operation.

156. Morale and Personnel Services

a. Personnel on leave are recalled when a mission is assigned or a unit is alerted for operations. During the early stages of an airborne

operation, quotas to leave areas usually are suspended. However, care must be exercised to maintain the secrecy of the operation.

b. Provisions are made to safeguard unit and personal funds during the operation. Funds taken into the objective area must be in the proper currency. For security reasons, currency exchanges are not made until troops are sealed for the operation.

c. Outgoing mail is suspended several days prior to D-day for security reasons. Provisions are made for the expeditious delivery of incoming mail throughout the operation except when units are on a short duration mission.

157. Prisoners of War

Evacuating and guarding prisoners of war is initially a battle group responsibility. In division-size operations, prisoners of war are evacuated from prisoner of war collecting points to division collecting points as the situation permits. Whenever possible, evacuation from battle group areas to division is accomplished by division military police. Normally, most prisoners of war are evacuated by air from division prisoner of war collecting points to the departure area. Prisoner of war collecting points are located near air-landing facilities to facilitate air evacuation.

158. Recovery and Disposition

During the early phase of the operation, the combat teams normally establish recovery and disposition collecting points and hold remains until a division collecting point or temporary cemetery is established. Designated personnel within the combat teams should be oriented concerning recovery and disposition procedures. Once the division collecting point is established, remains are evacuated to it by the subordinate commands. Isolated burials are resorted to only in emergency cases and are reported as soon as possible.

159. Civilian Personnel

No civilian personnel accompany the division into the objective area unless specifically authorized by the airborne force commander. The utilization of indigenous personnel within the objective area will be in conformance with theater policies.

160. Civil Affairs

When required, civil affairs personnel and units enter the objective area early in the operation. CA activities frequently assume added importance in airborne operations because of a greater degree of dependence upon exploitation of local civilian resources.

Section VI. SERVICE

161. Service Troops

Only minimum required service elements accompany the airborne division in the initial assault. Depending upon the nature and duration of the operation, additional service units may be phased in subsequent to the assault. As a general rule, only such service units are phased in as are absolutely essential. These service units are phased in at the latest practicable time on a when-needed basis. Many services are either performed in the departure area or deferred, thus reducing the requirement for service units in the objective area.

162. Airfield Construction

Construction of air-landing facilities in the objective area during the assault phase of an airborne operation is a responsibility of the airborne engineer battalion. This battalion may be augmented as required with additional engineer equipment and operators or specialists from an engineer light equipment company or other appropriate engineer support units. When required, engineer support units are attached to assist in the construction of air-landing facilities to allow the division engineer battalion to provide other combat engineer support. The development and maintenance of air-landing facilities in the marshalling area is accomplished by engineer units other than those designated to make the airborne assault.

Section VIII. MEDICAL EVACUATION AND HOSPITALIZATION

163. General

In short duration operations, a short term evacuation policy of approximately 48 hours is normal. Air-transportable casualties are evacuated by air if aircraft can land in the objective area. When air evacuation is possible, necessary medical installations are located in the proximity of suitable air-landing facilities. When aircraft cannot land for purposes of evacuation, additional medical units may be required within the objective area.

164. Division Surgeon

The division surgeon is a staff officer on the logistical staff of the support group commander. Although assigned to the medical company, he does not command this unit. The division surgeon performs duties as outlined in FM 101–5 which pertain to providing technical advance and assistance, planning, and staff supervision of division medical service at all echelons. His responsibility includes—

a. Assisting the support group commander in providing advice to the division commander and staff on all medical matters.

b. Staff supervision over the training of all troops in medical subjects.

c. Staff supervision over the technical training of all medical personnel.

d. Staff supervision of the physical and mental examinations of all personnel.

e. Sanitary inspections and reports.

f. Reports of morbidity and mortality incident rates.

g. Initiation of measures for the prevention or reduction of disability and morbidity in the command.

h. Maintenance of staff supervision over medical service within the objective area to insure that all troops are provided adequate medical service.

i. Providing information to the surgeon of the next higher command of the medical situation within the division.

165. Aviation Medical Officer

The aviation medical officer is assigned to the medical company and functions as follows:

a. Provides professional advice to the division surgeon pertaining to the selection, preparation, and processing of casualties for aeromedical evacuation, including establishing priorities among evacuees.

b. Supervises, at designated air-landing facilities during assault airborne operations, the clinical care, loading, and unloading of patients received from within the objective area or being transshipped to the Comm Z in troop carrier aircraft. Coordinates and assigns aviation medical mission priorities for the division surgeon.

c. Provides aeromedical evacuation information to the DLOC for the division surgeon.

d. Maintains continuous medical liaison with division aviation and supporting Air Force agencies.

e. Provides aviation medical service to assigned and attached flying personnel of the division.

166. Medical Company

a. The medical company provides the following services for the division and attached elements:

(1) Evacuation of unit medical installations.

(2) Operation of division medical facilities for short term medical, surgical, psychiatric, and dental care of patients.

(3) Sorting and preparation of casualties for treatment, further evacuation, or return to duty.

(4) Support of medical service performed by all organic or attached medical units of the division.

(5) Planning, coordinating, and supervising aeromedical evacuation for the division.

b. In order to treat and hold casualties until aeromedical evacuation is established, delivery of the advance party consisting of members of company headquarters, a minimum of one clearing platoon and surgical team, and the indicated ambulance support is required early in the objective area. The clearing platoon(s), augmented by surgical team(s) when required, establish and operate the division clearing station(s). The remainder of the medical company is landed as dictated by the situation. The medical company commander or his representative operates at the DLOC.

167. Evacuation Within the Airhead

a. Evacuation Platoon. The evacuation platoon of the medical company is divided into a platoon headquarters and two sections and functions as follows:

(1) *Platoon headquarters.* Personnel of the evacuation platoon accompany the battle group(s) assault echelon in order to coordinate the evacuation of casualties to the division clearing station(s). During the initial phases of the assault and in coordination with the division surgeon, casualties may be evacuated directly from battle group aid station(s) by assault aircraft.

(2) *Litter bearer section.* The five litter bearer sections have the mission of transporting patients from unit aid stations to collecting points, or, when necessary, to the division clearing station(s). Litter bearer squads will also provide temporary augmentation of medical platoons of the battle groups during the initial assault. A habitual attachment of a litter bearer section of the evacuation platoon to each battle group participating in the initial assault is required.

(3) *Ambulance section.* The five ambulance sections of the platoon, equipped with ¾-ton litter ambulances, have the mission of transporting patients from unit aid stations and collecting points to the division clearing station(s). Ambulance sections may also provide temporary augmentation of medical platoons of the battle groups. Depending upon the nature of the objective area and the employment of the battle group in the assault, attachment may be required of an ambulance section of the evacuation platoon.

All attachments normally revert to medical company control when evacuation is established from battle group aid stations to division clearing station(s).

b. Aeromedical Evacuation. Aeromedical evacuation of casualties within the objective area is an Army responsibility. Requests for aero-

medical evacuation within the objective area, like other requests for aviation support originating from the battle groups, are transmitted directly by battle group flight commanders to the aviation company operations section, providing means are not available in the battle group for emergency air evacuation. Battle group surgeons and the division aviation medical officer provide essential medical advice at either end of the request system.

168. Air Force Aeromedical Evacuation

Aeromedical evacuation from the objective area is normally accomplished by utilizing Air Force troop carrier aircraft if adequate landing facilities are available. The Army commander is responsible for collecting, treating, transporting, and holding patients within the objective area. The division transports casualties to the designated air-landing facility for aeromedical evacuation from the objective area. During the initial phases of the assault, casualties may be evacuated from the airhead directly from battle group aid stations. Planning for evacuation of patients by returning aircraft must include provisions for property exchange (litters, blankets, etc.) and the necessary medical attendants. When providing aircraft for evacuation of casualties from the objective area to the departure area, the appropriate Air Force agencies—

a. Provide, operate, and control necessary airlift.

b. Coordinate aeromedical evacuation requirements with other transport operations.

c. Monitor intransit patient handling.

d. Process all casualties received in the aeromedical evacuation system to include—

(1) Receipt.
(2) Manifesting.
(3) Medical care in flight.
(4) Aircraft loading and unloading.
(5) Patient movement regulation.

e. Provide within the airhead casualty staging facilities when required.

f. Accomplish necessary liaison with Army medical installations.

169. Hospitalization and Service

a. Clearing Platoons.

(1) The treatment section of the clearing platoon(s) examines all patients delivered to the clearing station(s), sorts them according to extent and type of treatment needed, and coordinates their evacuation from the objective area. Treatment provided at the clearing station is more elaborate than that of the aid station, but is necessarily limited to life sav-

ing measures and those required to permit further evacuation or return to duty.

(2) The provision of airhead casualty staging facilities for patients awaiting Air Force aeromedical evacuation from the objective area is an Air Force responsibility. During short duration operations, Air Force patient staging facilities will not be required and such facilities will be provided by the clearing platoon.

(3) Whenever evacuation of battle group casualties from the aid station(s) is considered unlikely, attachment of holding facilities from the clearing platoon(s) to the battle groups may be required.

b. Surgical Teams.

(1) The three surgical teams normally are attached to the clearing platoons as required to provide operative units capable of performing emergency, resuscitative surgery.

(2) The surgical teams are limited to support procedures and their primary purpose is to render casualties transportable for rapid evacuation from the objective area.

CHAPTER 9

CONDUCT OF AIRBORNE OPERATIONS

Section I. AIR ELEMENTS

170. Air Movement

a. Loading. Aircraft will assemble at departure airfields at the latest practicable time for loading. It is undesirable for units and their major items of equipment be loaded at different departure sites. So far as possible, loading of aircraft should take place during the hours of darkness.

b. Parachute Serials. Troop carrier aircraft fly in serials varying in size to fit the landing plan and to preclude unacceptable losses to a single nuclear weapon. When both are going to the same drop or landing zones, parachute serials precede assault aircraft serials. A time interval between the last parachute serial and the first assault aircraft serial is necessary to allow time to clear the landing zone of personnel and equipment.

c. Air-Landed Serials. Air-landed serials land and discharge their loads according to a predetermined plan and then return to departure airfields over a predetermined route. The aircraft may return empty or may be used to evacuate prisoners of war, casualties, key civilians, or equipment.

d. Army Aircraft. Whenever possible, Army aircraft should fly to the objective area under their own power. The range of the Army aircraft permitting, the aircraft will generally be able to infiltrate to the objective area and refuel in the area utilizing fuel that has been delivered to the objective area with the assault or followup echelons of the airborne division.

171. Tactical Air Support

a. During the initial stages of an airborne assault, tactical aircraft are maintained in air alert over the objective area and on runway and ground alert. Control of this close air support in the objective area requires a tactical air coordinator, accompanied by a representative of the airborne commander, to coordinate air support until the FSCC is established on the ground. The tactical air coordinator may direct an air strike if it does not interfere with his primary role.

b. Initially, requests for air strikes are transmitted by air control

teams (ACT) directly to the tactical air coordinator who allocates aircraft to execute approved missions. The forward air controller (FAC) with the ACT then directs the strike.

c. When the division FSCC becomes operational within the objective area, control and allocation of tactical air support follows normal procedures.

Section II. LANDING AND REORGANIZATION

172. General

a. The airborne division is most vulnerable to enemy attack during the landing and reorganization of its assault elements. The landing and reorganization must be accomplished with maximum speed and precision.

b. Airborne troops are landed on or as close to their objectives as possible. Time is required to collect equipment and assemble as tactical units before engaging in combat. The provision of the ½-ton capacity infantry equipment truck, "mechanical mule," facilitates rapid movement of the assault troops.

173. Landing

a. The assault echelon of an airborne division can be landed in the objective area in approximately an hour. Combat teams customarily land in their assigned sectors. Division troops and the division reserve land on prescribed drop and landing zones in one or more of the combat team areas. Command echelons of the division are assigned to different serials to insure adequate dispersion.

b. Landing of combat elements is made by serials organized to facilitate implementation of the ground tactical plan and to avoid presenting profitable nuclear targets while en route to and in the departure area. Dispersion of landing areas is essential to minimize vulnerability of the force to nuclear weapons. As much equipment as practicable is attached to individuals to increase their combat readiness upon landing and to reduce the time required for assembly. Additional equipment and supplies are dropped as separate bundles or landed by assault aircraft.

c. Air-landed elements of the assault echelon follow the parachute elements and land on landing zones as near as practicable to parent unit dispositions. The rapidity with which air-landed elements land is dependent upon the availability and capacity of secured landing areas or airfields. When equipment and supplies must be air-landed on a continuing basis, time is required for the construction of airfields or improvement of existing airfields or air-landing facility sites to support repeated aircraft landings.

174. Reorganization

a. Combat teams and separate units reorganize in a prearranged manner, making use of predesignated assembly areas, assembly aids, and identification markings for personnel and equipment. Assembly areas are selected in close proximity to landing areas. They are identified by prominent landmarks and/or marked by appropriate assembly aids.

b. The primary requirements to facilitate reorganization after a drop or air-landing are—

(1) Detailed briefing of *every* member of the unit concerning the assembly plan.

(2) Emphasis on speed.

(3) Selection of assembly areas that are easily identifiable from the ground or insuring that adequate visual or audio devices are provided to mark the assembly area.

c. Upon landing, the lead elements of a unit are charged with the responsibility of gaining and maintaining security of the drop and landing zones. Remaining elements move quickly to their assembly areas carrying with them such equipment as is immediately required for the mission assigned. Upon arrival in assembly areas, unit commanders report the status of their units, receive any new instructions, and continue with the operation.

d. Reorganization of units is accomplished as rapidly as possible. The report of readiness for action received by the division commander permits him to make any necessary changes in missions because of unforeseen circumstances. Seizure of assault objectives will be undertaken without waiting for the reorganization of all elements of the combat team or task force.

e. Designated personnel remain on the drop and landing zones to protect the area, to assemble stragglers, to establish prisoner of war collecting points, to care for casualties, and to complete removal of supplies. On those landing zones scheduled for improvement to permit continued air-landings, the initial engineer effort commences without delay.

f. Elements of air-landed units move intact by plane load from the deplaning area to a rendezvous point and then to designated assembly areas. They carry with them all equipment needed to accomplish initial tasks. This movement is controlled by guides and route markers. Designated personnel remain at the landing zone to unload aircraft and remove supplies and equipment from the landing zone.

g. Reorganization of the division is complete when assault elements of all units are reorganized and communication is established.

Section III. THE ASSAULT

175. General

a. Initially, the division effort is decentralized to the battle group or combat team level. The battle groups use every possible means to seize their assigned assault objectives rapidly. As the battle groups seize their objectives, the efforts of the division become directed toward the consolidation of the airhead seized in the initial assault. During this period the division commander regains centralized control of the unit of the division. The defensive phase of the operation will continue until surface linkup is accomplished, withdrawal is effected, or the division undertakes further operations from the airhead.

b. In short duration airborne operations conducted on a division scale, the division usually seizes and defends the minimum objectives and terrain area necessary. The area defended must include adequate dispersion and maneuver room, and protected drop or landing zones for resupply. Expansion of the initial airhead is not usually contemplated. When the mission requires the seizure and defense of objectives so widely dispersed as to deny the prospect of establishing and maintaining a division airhead containing all major divisional elements, division elements based on the battle group establish separate airheads.

c. The high ratio of rifle strength in this division gives it the capability of conducting a strong and tenacious defense of an airhead area. The division also has a strong capability in the field of offensive operations that depend upon the riflemen to provide the bulk of the offensive combat power.

d. The airborne division usually will be able to land successfully in the objective area with a high degree of tactical surprise. This surprise, coupled with detailed planning, should enable the units of the division to seize their assault objectives and establish the division airhead before the enemy has time to react in force. Although the enemy will probably not be able to react in force with any great speed, he can be expected to launch uncoordinated attacks quickly along major avenues of approach with any forces locally available. Progressively, the degree of coordination and strength of these attacks will increase and the division must have correspondingly greater strength in its defensive positions.

e. Control of the maneuver of the airborne force is facilitated by the designation of the RSP, airhead(s), objectives, and boundaries (ch. 5).

176. Initial Assault

a. The control of the initial assault is decentralized and stresses the coordinated action of small units to seize initial objectives rapidly before the advantage of surprise is lost. All commanders attack as

rapidly as the situation permits utilizing all available fire support. When possible, units assigned to perform reconnaissance and security missions land in early serials to establish roadblocks, to locate enemy forces, to disrupt enemy communication facilities, and to provide the commander with early warning, security, and information. When initial objectives are lightly defended, the bulk of the force may be employed in clearing assigned sectors and preparing defensive positions in depth. Extensive patrolling is initiated early between adjacent defensive positions within the airhead line and between the airhead and the RSP. Contact with any friendly guerilla forces in the area is established as rapidly as possible. Aircraft from the division aviation company are well suited for the support of this patrolling.

b. The use of aerial vehicles as armed transport, combat reconnaissance, and air-to-ground fire support means in conjunction with ground action will greatly facilitate the accomplishment of missions visualized for airborne forces. The ability to create helicopter mobile task forces within the resources of the division separately or in augmentation of other mobile-type task forces, increases the commander's flexibility in the organization of an immediately responsive task force for the accomplishment of a given mission. A mobile task force mounted in armed helicopters can effectively reconnoiter large areas. This type of unit is capable of living in the battle area, and is not affected by terrain obstacles that restrict surface movement. Appropriate missions for these completely air-mobile forces are—

(1) Exploitation of initial airborne assault.
(2) Armed aerial reconnaissance and counterreconnaissance.
(3) Early warning of guerilla, airborne, or other infiltration threats.
(4) Support of RSP.
(5) Exploitation of our own nuclear fires and to counter enemy exploitation of his mass destruction weapons.
(6) Engagement and destruction of enemy ground forces by highly mobile fire and maneuver tactics.
(7) Domination of unoccupied areas between highly dispersed friendly positions.
(8) Provision of immediately responsive air-to-ground fire support for either air or surface mobile task forces.
(9) Provision of tactical and logistical support for guerilla and special forces.
(10) Provision of organized raid-type forces.
(11) Tactical cover and deception.

c. Units or personnel landed in areas other than those planned direct their efforts to furthering accomplishment of the general mission and establishing contact with their respective headquarters as soon as practicable.

d. As soon as communications and the tactical situation permit, centralized control is regained.

e. The commander influences the action by shifting or allocating fire support means, redisposing forces, modifying missions, changing objectives and boundaries, employing reserves, and, especially during the initial assault, by placing himself where he can best exercise personal influence.

f. When intial objectives have been secured, subordinate units may seize farther objectives to facilitate the establishment of a coordinated division defense or the conduct of future operations. Defensive positions are organized, communications supplemented, reserves reconstituted, and other measures taken to prepare the force to repel enemy counterattacks, to minimize effects of attack by nuclear weapons, or to resume the offensive.

177. Division Artillery

a. Organization for Combat.

(1) Considerations governing the organization for combat of the airborne division artillery are—

(*a*) Mission of the force.

(*b*) Ground tactical plan.

(*c*) Centralized versus decentralized control.

(*d*) Fire capabilities.

(*e*) Availability of suitable position areas and helicopters for rapid displacement of artillery pieces.

(*f*) Disposition and composition of current and planned tactical groupings.

(*g*) Future operations.

(2) Tactical missions for division artillery batteries are assigned by the division artillery commander as approved by the division commander.

(3) Any attached air defense artillery will be deployed in accordance with the air defense support plan prepared under the supervision of the division artillery commander and approved by the division commander.

b. The Assault Phase.

(1) The principal mission of artillery in the assault is to support infantry elements in seizing their assigned objectives and clearing their assigned sectors. A secondary mission is to provide supporting fires to forces on the RSP and the cavalry troop. Initial artillery position areas are selected with these missions in mind.

(2) The division artillery organization for combat is designed to provide effective support for the battle groups. It may be desirable to attach all howitzer batteries to battle groups, or

to attach one or more howitzer batteries to certain battle groups and retain the remainder under division artillery control. Howitzer batteries attached to battle groups normally reinforce the heavy mortar battery of the battle group.

c. Phases Subsequent to the Assault.

(1) Regardless of the organization for combat in the assault, central control of all division artillery units is regained at the earliest practicable time after the establishment of the airhead(s). Under centralized control, the majority of the general support artillery must be capable of supporting forces engaged at any particular point in the objective area.

(2) After assault objectives have been seized, artillery units may displace to previously selected positions well forward within the airhead in order to support the reconnaissance and security positions more effectively. In some situations, artillery may be emplaced outside the airhead to perform its mission adequately. When troops on the RSP withdraw, the artillery displaces to previously selected position within the airhead.

(3) If not attached, howitzer batteries may be assigned a mission of general support, or general support reinforcing the fires of a mortar battery.

(4) The field artillery missile battery remains in general support under division artillery control.

(5) Airborne artillery, after reorganization has been completed, adheres closely to the tactics and techniques applicable to other artillery units.

178. Fire Support Coordination

a. During the assault phase of the operation, the FSCC will consist of the minimum number of personnel required to implement or modify prearranged plans. The FSCC will normally be located at the division main command post in the vicinity of the G2 and G3 sections. The FSCC will become operational as soon as communications with fire support agencies can be established and will become more and more active as the division commander regains centralized control of the tactical units of the division.

b. The establishment of a FSCC in the objective area is habitual in airborne operations. The distribution of forces shown in figures 14 through 16 will determine the location of the division FSCC. Generally, forces sufficiently close to each other to provide mutual support require a higher degree of supervision and a highly responsive central control of fire delivery means. Fire supporting forces that are widely separated, as in figure 16, can be controlled with less minute-to-minute supervision. Normally, fire support coordination functions at lower echelons

and are exercised informally by the personnel involved through close liaison, frequent meetings, and flexible communication. See paragraphs 54 through 59 for details concerning fire support coordination.

179. Battle Group

When augmented, the battle group forms the main element of the airborne combat team and is normally used in the early stages of an airborne assault operation. The combat team lands in the objective area, seizes the initial assault objective assigned to it, clears and maintains control over its assigned sector, or accomplishes any other assigned mission. The combat team rapidly establishes forces on its portion of the RSP and may reinforce a part of the RSP, if the tactical situation permits, to exploit a tactical advantage, to gain additional delay along a main avenue of approach, or to facilitate dispersion.

180. Cavalry Troop

The cavalry troop is normally employed under division control to provide reconnaissance and security forces beyond the RSP. The troop normally operates on major avenues of approach to the airhead and as far out from the airhead as division requirements dictate and the enemy situation permits.

181. Engineer Battalion

The engineer battalion can provide limited engineer support to the combat teams during the assault phase of the operations; usually, a platoon is attached to each committed combat team in the initial assault phase. The remainder of the engineer battalion, with any attachments, operates under division control and is capable of limited construction of minimum criteria air-landing facilities or repair of airfields in the objective area. Pending return of the engineer platoon(s) to division controls, construction of minimum criteria air-landing facilities cannot be considered a primary mission.

182. Aviation Company

The aviation company enters the airhead under its own power and under division control if the range from friendly territory permits. Once the company closes the objective area, the normal attachments or supporting elements of the company join their respective supported units. The company establishes a flight operations center (FOC) in the objective area and provides a representative to the Airhead Air Traffic Control Center (AATCC). Aircraft are used primarily in support of tactical operations; however, some aircraft may be allocated for emergency logistical requirements.

Section IV. DEFENSIVE OPERATIONS

183. General

a. The period of time involved in defensive operations, if any, will vary depending upon the mission assigned, the size and composition of the force, the enemy reaction, and the type of operation contemplated.

b. The requirement for a defensive phase in short duration missions undertaken by elements of the division in isolated objective areas may often be eliminated. This may be accomplished by complete or virtually complete destruction or dispersion of the enemy forces in the immediate objective area during the assault followed by a relift of the striking force prior to the execution of a coordinated enemy counterattack.

184. Conduct of Defensive Operations

a. The airborne division usually defends an airhead by organizing strongly critical terrain within the airhead and dominating likely avenues of approach. Areas between the occupied positions are denied the enemy by using a combination of patrols, mines, fire, and natural and artificial obstacles. Reconnaissance between positions within the airhead, between the airhead and the RSP, and forward of the RSP is aggressively conducted and receives increased emphasis during the hours of darkness. The configuration of the airhead facilitates the rapid shifting of reserves and supporting fires and enables the commander to shift forces quickly from one part of the airhead to reinforce another sector that is under strong attack.

b. Regardless of the form of defense adopted, positions are prepared in depth within the capabilities of the force available.

c. Should withdrawal from the initial positions be required, the final area to which the airborne force withdraws must contain adequate space for maneuver, for protection of critical installations, and for such air-landing or air evacuation operations as are planned.

185. Defense Against Armor

a. During the initial phases of an airborne operation, one of the primary defenses against enemy armor is tactical air support. Aircraft attack enemy armor targets as they appear. Such action assists the division to effect reorganization in seizing initial assault objectives and in the organization of initial defenses. Throughout the operation, enemy armor is attacked as far as possible from the objective area and remains under observation and attack as long as it poses a threat to the airborne force.

b. Strong points defending the airhead utilize natural obstacles augmented by minefields, tank traps, demolitions, and similar artificial

obstacles to strengthen their defenses. Antitank weapons are located in depth along favorable avenues for armor. All dangerous avenues of approach are covered by planned nonnuclear and nuclear fires.

c. Properly coordinated, the rifle grenades, rocket launchers, and 106-mm recoilless rifles of the rifle companies, the M–56 self-propelled 90-mm guns of the battle groups, and antitank weapons of other units of the divisions give the airborne division a substantial amount of antitank firepower. The 90-mm guns of the battle group in division reserve are employed to deepen division antitank defenses and to provide a mobile antitank force to move to a threatened sector. A part of the antitank weapons organic to battle groups holding sectors not under armored attack may be moved to reinforce threatened sectors.

d. The principal antitank weapons of the airborne division are the 106-mm recoilless rifles and the M–56 self-propelled 90-mm gun. The majority of these weapons are organic to the battle groups of the division. In order for the division to effect a coordinated, flexible antitank defense plan, it is apparent that the division must prepare plans to shift the organic weapons of the battle groups to counter major enemy armored threats that may occur in any sector of the airhead. One means of accomplishing this is to require each battle group to form, and have available for immediate use, mobile tank killer teams that can be dispatched on division order to reinforce the antitank defenses of any threatened area (fig. 36). The composition of the mobile tank killer teams must be predesignated and the personnel briefed. Routes of movement to and from the battle group sectors should be designated, rendezvous points selected, and personal reconnaissance made by the tank killer team leaders. When required, the team (less the self 90-mm guns) can be rapidly shifted by means of helicopters.

186. Defense Against Nuclear Attack

a. The capability of the airborne division to defend against enemy nuclear attack lies mainly in the fields of—

Speed.
Dispersion.
Personal protective measures.
Duplication of key installations.
Counterintelligence.

b. In the objective area, the airborne division is most vulnerable to nuclear attack immediately after landing. Speed, in moving off the drop or landing zones, in gaining the assault objectives, and in digging in and providing overhead cover, must be emphasized. The nature of the airhead defense provides for dispersion and once the troops seize their objectives and gain the personal protection afforded by foxholes, the division's vulnerability to nuclear attack is greatly reduced.

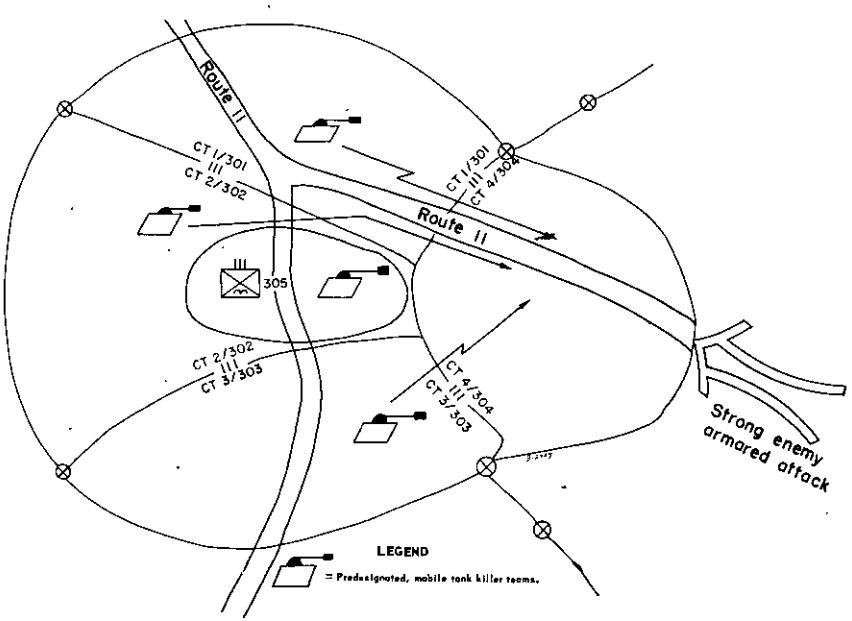


Figure 36. Mobile tank killer teams.

c. The possibility of losing a major element to one or more nuclear weapons requires emphasis on replacement planning to include provision of units of company and battle group size for emergency movement into the airhead.

187. Defense Against Air Attack

The airborne division has no organic unit primarily designed for active air defense. If the airborne division needs an air defense unit for a designated operation, the unit will have to be attached to the

division by higher headquarters. In short duration airborne operations, the division may operate without the support of Army air defense units and will depend on the counterair efforts of the Air Force and passive defense measures such as camouflage, deception, and an air raid warning system for its protection against the enemy air effort. The efforts that the division is making to reduce its vulnerability to nuclear strikes will also reduce the division's vulnerability to air attack.

188. Defense Against Airborne Attack, Guerilla Action, and Infiltration

a. The division plans for the conduct of the defensive phase of the operation must make provisions for countering enemy threats in the fields of airborne attacks and actions by guerilla and infiltrating forces that may attack the division airhead area. The basic method of defending against all these forms of attack is to have an extensive patrol and warning system, all-around defense, and the designation of reserve units that will be ready to move out quickly to destroy the enemy force when it is located.

b. The hours of darkness will give the enemy his best opportunity to use infiltration tactics. The division must be especially alert at this time and prevent the enemy from infiltrating forces that can build up in the airhead interior and exercise a significant tactical influence on the operation. Small enemy forces will doubtlessly succeed in infiltrating the airhead area during the hours of darkness; however, these units must be located and destroyed during the hours of daylight and be prevented from building up and operating in the interior of the airhead area.

c. The capability of the enemy to conduct helicopterborne operations must be recognized and defended against. The use of helicopters will afford the enemy one of his best means of rapidly moving significant tactical forces to the airhead area.

Section V. AIRBORNE RAIDS

189. General

a. The organization, equipment, and capabilities of the airborne division give it the ability to conduct airborne raids behind the enemy lines. Dispersed and fluid-type warfare provides frequent opportunities for the conduct of airborne raids.

b. The airborne division, or elements of it, may be employed to destroy, neutralize, capture, or harass enemy forces, installations, facilities, headquarters, or individuals. A planned withdrawal is executed upon completion of the assigned mission. Army, Air Force, or Navy aircraft may be used to transport the raiding force. The airborne raid may be of either strategic or tactical significance.

190. Characteristics

Airborne raids are similar to ground raids except that the raiding force uses air transport to move to the objective area and may withdraw by air. Air transport permits the raiding force to bypass enemy positions, and to overcome terrain barriers and distance factors. The objective of the airborne raid is more apt to be beyond supporting distance of the parent unit than other types of raids. Airborne raids are characterized by boldness of concept and execution; plans should not be rejected solely because they appear novel or unconventional.

191. Mission and Objectives

a. Airborne raids may be conducted to destroy enemy installations or positions, capture or kill enemy personnel, rescue friendly personnel, harass or disrupt enemy operations, or seize critical equipment or similar intelligence objectives. The types of objectives selected may vary. Suitable objectives may be found deep in enemy territory or relatively close to the area of combat. The airborne force may operate separately or in conjunction with guerilla forces to attain the objectives most likely to hamper enemy operations and to promote the success of friendly forces. Tactical and logistical support of guerilla forces may be expeditiously accomplished by using Army aircraft.

b. When there is a choice of objectives, the objective which most nearly fulfills the following conditions will probably give the best chance of success:

(1) Can be engaged with small forces.
(2) Can be lightly defended or easily isolated.
(3) Is difficult for the enemy to reinforce.
(4) Is easily accessible by parachute, assault aircraft, or helicopter.
(5) Is easy to locate under conditions of poor visibility.

192. Planning Level

Overall planning is done at division or higher level. This is necessary because of the relatively great amount of coordination that is required with nondivisional agencies. When subordinate elements of the division comprise the raiding force, the division coordinates the planning. The raiding force concerns itself chiefly with the actual scheme of maneuver to be employed within the objective area. Division coordinates the operation with other Army agencies, Air Force units, and Naval units that might be involved. Division will issue a detailed plan. The time required for planning an airborne raid depends on the following factors:

a. The nature of the task.
b. The availability of intelligence.
c. The experience and knowledge of the planning staff.
d. The standard of training of the participating forces.

193. Preparation

Preparation for airborne raids closely parallels that required for the airborne assault with emphasis on the following aspects:

a. Detailed intelligence is essential to the successful planning and conduct of the airborne raid. The major source for intelligence is higher headquarters. The study of detailed airphotos, maps, and intelligence studies of the area must substitute for ground reconnaissance. All intelligence should be disseminated to the lowest level, consistent with the requirement for security.

b. Deception and counterintelligence plans are required.

c. Withdrawal from the objective area requires detailed plans, to include alternate plans.

d. Force composition assumes added importance because of raid characteristics.

194. Training

Except in cases when raids must be mounted on very short notice, special training for each operation should be conducted. The training should be done immediately before the operation and should be designed to teach the raiding force its duties and role in a particular raid. Training should be culminated with at least one joint rehearsal of the entire operation to include the withdrawal phase. This rehearsal should be carried out sufficiently early to insure that any lessons learned can be incorporated in the operational plan.

195. Force Composition

The nature of the mission may require attachment of specialized units or equipment to the airborne unit conducting the raid. The size of the force is kept to the minimum that can be expected to accomplish the mission. Personnel not required by the mission are left in the departure area. As the raiding force must be withdrawn, no man or equipment should be landed for whom there is no definite task. The raiding force is normally reorganized into self-contained elements tailored to accomplish special tasks. Such elements include assault parties, security parties, and a reserve. However, the table of organization and equipment structure is retained to the greatest degree practicable to permit the use of the established chain of command. It may be preferable at times for a reserve, if constituted, to be kept outside the objective area until required so as to maintain a high degree of flexibility.

196. Time and Duration of the Raid

Airborne raids can be carried out at night, dawn, or twilight; in fog or mist; or under other conditions of low visibility. Raids conducted under such conditions facilitate gaining surprise and the delivery of

the raiding force to the objective area with a minimum risk of detection. The execution of a daylight raid usually requires a greater use of support fires, including tactical air support, and the utilization of measures to limit enemy observation and intelligence.

197. Conduct of the Raid

a. Immediately upon landing, the elements of the raiding force assemble independently and carry out their assigned task without further assembly. The actions of the raiding parties are decentralized and each operates as required by its own missions. As far as practicable, these actions are coordinated by the raid commander. In the attack of objectives, speed should be emphasized.

b. The force going into the objective area is strong enough to defeat the enemy forces in the immediate area of operations and to accomplish the assigned mission. Therefore the key to the success of the overall mission lies in isolation of the objective area to prevent the enemy from moving strong tactical forces into the objective area and defeating the raiding force. The isolation of the battle area can be accomplished in one of two general ways.

(1) *Stealth.* The raiding force can enter the objective area with such speed and stealth that the enemy forces will have insufficient time to locate the raiding force and react with combat power of a significant nature. Stealth operations are possible when the objective area is located in a remote part of the enemy area or when the mission can be accomplished in a relatively short period of time.

(2) *Force.* In this instance the mission cannot be accomplished before the enemy is able to locate the raiding force and move tactical forces to the area in time to attack them. The raiding force requires extensive support from outside agencies in order to isolate the objective area, to keep the enemy from moving forces to the area, and to prevent the enemy from launching a nuclear or significant air attack into the objective area. It must be assumed that the enemy air and nuclear capabilities have been reduced to the point that there is reasonable chance of success for the mission or it would not have been launched. The degree of risk to be assumed will depend on the importance of the objective that has been assigned the raiding force.

198. Means of Isolating the Objective Area

Air and missile fire support and guerilla forces are the main means used to isolate the objective area. The coordinated efforts of the means available are directed toward destroying or disrupting enemy forces moving toward the objective area. In this connection the destruc-

tion of bridges, blocking of defiles, and the sowing of nuisance mines and other devices along the main enemy avenues of approach by all possible means must be fully exploited. Also, depending on the degree to which chemical and biological (CB) warfare is being employed, consideration should be given to the contamination of certain areas using either radioactive materials or toxic chemicals.

199. Withdrawal

The withdrawal is carefully planned since it is frequently the most difficult part of the operation to execute. The raiding force may be withdrawn by air, land, sea, or a combination thereof.

a. The airborne withdrawal may be made by assault or medium transport aircraft, helicopter, or water-based aircraft and may be preceded by overland withdrawal to pickup points. Space in the returning aircraft is restricted. Every effort must be made to evacuate all equipment and supplies; however, this must be approached with a realistic attitude and plans should be made to concentrate on the withdrawal of personnel rather than equipment. All items of equipment that cannot be withdrawn are destroyed. An early decision must be made concerning the landing areas required in the objective area. This decision must be made early in the planning phase and should not be changed at the last moment.

b. The raiding force may withdraw overland by evasion and infiltration. This method of withdrawal is favored by the following conditions:

(1) The distance to friendly lines is relatively short.

(2) The terrain provides cover and concealment for the movement of small groups on foot and limits the employment of mobile units against the raiding force.

(3) Enemy forces are widely dispersed or are under such pressure that they have difficulty in concentrating against the raiding force.

(4) The raiding force is lightly equipped and does not have the mission of evacuating captured personnel or materiel.

(5) The raiding force moves through an area occupied by friendly civilians, or where partisan or guerilla forces can assist the withdrawal.

(6) When enemy fire, operations of enemy aircraft, adverse weather, or other factors prevent withdrawal by air, the raiding force may be withdrawn overland to rendezvous with aircraft away from the objective area.

c. Evacuation by sea is practicable wherever water approaches exist. Submarines, destroyers, and small boats may be used. Plans provide for alternate beaches and in some instances for naval gunfire to cover the withdrawal.

200. Requirements for Army Aircraft

The characteristics of Army aircraft, particularly helicopters, make them ideal vehicles for employment in raid operations. Habitual employment of the same Army aviation personnel during raid type training will alleviate the requirement for extensive rehearsal prior to raid operations. Army aircraft are needed in the objective area to provide for reconnaissance and to facilitate the movement and evacuation of the last forces left in contact with the enemy.

201. Communications

In a raid there will be many changes required in time schedules and fire support. A reliable communications system must be established within the objective area and from the objective area to the headquarters outside the area that is controlling the overall operation.

202. Command Structure

An airborne raid requires frequent and timely decisions concerning many aspects of the operation. The headquarters controlling the operation must have command control over all the units directly participating in the operation. Even more so than in a normal joint airborne operation, control of all participating elements by one commander is essential. There will be little if any time available for coordination of effort; and strong, instantaneous command reaction will be required.

Section VI. AREA INTERDICTION MISSIONS

203. General

The airborne division, or its subordinate elements, may be assigned an area interdiction mission to prevent or hinder enemy operations in a specified area. This type operation will normally be conducted in conjunction with a major offensive by friendly forces and may be of short or long duration. Such an operation encompasses many of the characteristics of guerilla operations. Areas of operations are assigned to each element of the force employed. Within each area, forces are assigned mission type orders. The force commander retains overall control of the operation.

204. Operations

Elements of the force employed operate over a wide area. Small teams are organized to accomplish missions such as destruction of bridges, cratering roads, cutting rail lines, destroying enemy communication facilities, harassing supply installations, neutralizing enemy antiaircraft, missile, and electronic facilities and creating obstacles of all types to hinder enemy movement (FM 57–30).

APPENDIX I

REFERENCES

DA Pam 108–1	Index of Army Motion Pictures, Filmstrips, Slides and Phono-recordings
DA Pam 310-series	Military Publications
DA Pam 320–1	Dictionary of United States Military Terms for Joint Usage
AR 320–5	Dictionary of United States Army Terms
AR 320–50	Authorized Abbreviations and Brevity Codes
FM 6–18	Mortar Battery, Infantry Division, Battle Group
FM 6–20	Artillery Tactics and Techniques
FM 7–100	Infantry Division
FM 8–5	Medical Department Units of a Theater of Operations
FM 10–33	Airborne Quartermaster Parachute Supply and Maintenance Company
FM 19–10	Military Police Operations
FM 19–15	Civil Disturbances and Disasters
FM 19–25	Military Police Traffic Control
FM 19–30	Physical Security
FM 19–40	Handling Prisoners of War
FM 19–90	The Provost Marshal
FM 20–32	Employment of Land Mines
FM 21–5	Military Training
FM 21–6	Techniques of Military Instruction
FM 21–30	Military Symbols
FM 27–10	The Law of Land Warfare
FM 30–5	Combat Intelligence
FM 30–7	Combat Intelligence; Battle Group, Combat Command and Smaller Units
FM 31–40	Tactical Cover and Deception (U)
FM 31–( )	Communications Security (to be published)
FM 31–8	Medical Service in Joint Oversea Operations
FM 31–10	Barriers and Denial Operations
FM 31–21	Guerilla Warfare and Special Forces Operations
FM 41–5	Joint Manual of Civil Affairs/Military Government
FM 41–10	Civil Affairs/Military Government Operations

FM 41–15	Civil Affairs/Military Government Units
FM 44–1	Antiaircraft Artillery Employment
FM 57–30	Airborne Operations
FM 57–35	Army Transport Aviation, Combat Operations
FM 100–1	Field Service Regulations; Doctrinal Guidance (U)
FM 100–5	Field Service Regulations; Operations
FM 100–10	Field Service Regulations; Administration
FM 100–15	Field Service Regulations; Larger Units
FM 101–1	The G1 Manual
FM 101–5	Staff Officers Field Manual: Staff Organization and Procedure
FM 101–10	Staff Officers Field Manual: Organization, Technical, and Logistical Data
FM 101–31	Staff Officers Field Manual: Atomic Weapons Employment (U)
FM 110–5	Joint Action: Armed Forces
TM 57–210 and 57–210A	Air Movement of Troops and Equipment
TM 57–220	Technical Training of Parachutists
TC 26(1951)	Quartermaster Aerial Supply Company
TC 10–1(1955)	Field Expedients and Vehicles for Outloading Heavy-Drop Equipment

APPENDIX II. ORGANIZATION CHART, AIRBORNE DIVISION

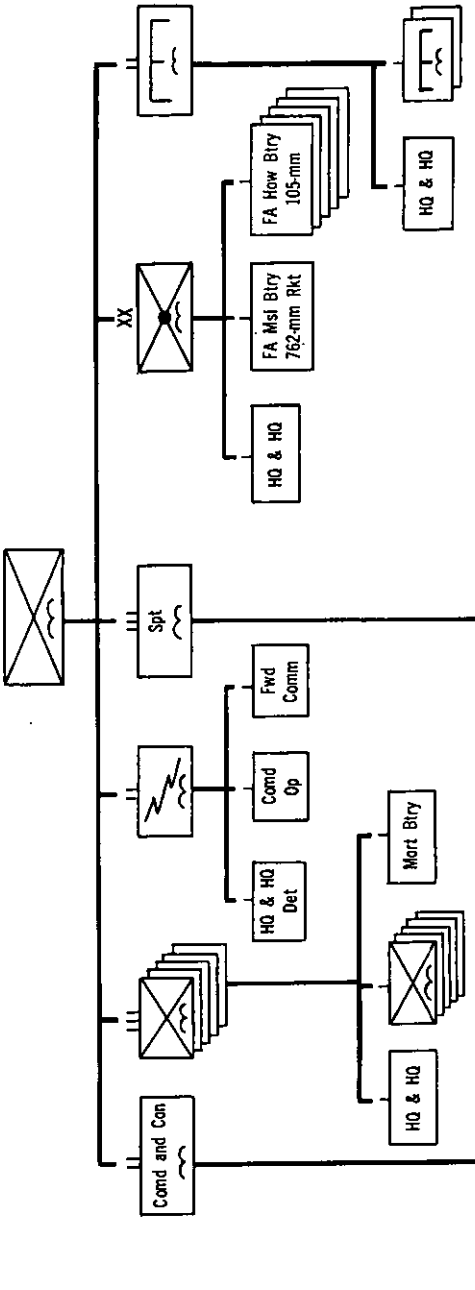


Figure 37. Organization Chart, Airborne Division.

APPENDIX III

AIRBORNE DIVISION WEAPONS

Weapons	Div total	Comd and con bn					Abn BG				Div arty				Engr bn			Sig bn				Spt gp							Augmentation						
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
		Bn total	HQ and HQ co	Admin co	Avn co	Cav trp	BG total (5)	HQ and HQ co	Rifle co (6)	Mort btry	Div arty total	HQ and HQ btry	105-mm how btry (3)	Msl btry	Bn total	HQ and HQ co	Engr co (2)	Bn total	HQ and HQ det	Comd op co	Fwd comm co	Gp total	HQ and HQ det	Sup and trans co	Med co	QM prcht sup co	HQ and main spt co	Emerg rep co	Augmentation total	Air obsr	Recov and depo	CAMG det	Repl det	Lt cgo hel mech and aviator	Acft maint
Gun, machine, 7.62-mm, LW, GP	438	43	3	4		40	270	8	40	6	37	5	20	12	30	12	18	15			15	39												
Gun, machine, cal .50, HB	4																	2		1	1	2					2							
Gun, SP, full-tracked, 90-mm	30						30	6																										
How, 105-mm	25										25		25																					
Launcher, grenade, T	765						735	7	140		30	6	15	9																				
Launcher, grenade, rifle, 7.62-mm																																		
Launcher, rkt, 3.5 in	451	11	9		2		365	3	55	15	42	9	25	8	12	2	10	10	1	3	6	18		8		1	6	3							
Launcher, rkt, 762-mm	4										4			4																				
Mort, 81-mm	75						75		15																									
Mort, heavy	40						40			8																								
Pistol, auto, .45 cal	1,964/20	129/15	36/2	13/1	69/12	11	1,760	21	330	1	19/5	13/5	5	1	12	10	2	6	4	1	1	38	4	3	20	1	6	4	20	5		2	1	12	
Rifle, 7.62-mm	8,864/70	663/48	242/4	103/26	156/18	162	5,555	222	750	139	805	165	505	135	437	145	292	350	31	156	163	1,054/22	42	156/9	217	212	284/13	143	70		9	4	26	18	13
Rifle, auto, 7.62-mm	644	20					600		120						24		24																		
Rifle, 106-mm, on mount	55	5				5	50		10																									
Sniperscope, infrared, set 1	110	5				5	105	21																										

Notes.

1. Figures shown below/ =augmentation and are also reflected in columns 28–34.
2. Figures shown in columns 6, 8, 12, and 16 are for total number of units indicated.

APPENDIX IV

VEHICLES—AIRBORNE DIVISION

Veh	Div total	Comd and con bn					Abn BG				Div arty				Engr bn			Sig bn					Spt gp						Augmentation					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
		Bn total	HQ & HQ co	Admin co	Avn co	Cav trp	BG total (5)	HQ & HQ co	Rifle co (5)	Mortar btry	Div arty total	HQ & HQ btry	105-mm how btry (5)	Msl btry	Bn total	HQ & HQ co	Engr co (2)	Bn total	HQ & HQ det	Comd op co	Fwd comm co	Gp total	HQ & HQ det	Sup and trans co	Med co	QM prchi svp co	HQ and main spt co	Emerg rep co	Augmentation total	Air obsr	Recon and dspo sec	CAMG det	Repl det	Gar fin sec
Airplane, obsn	10	10			10																													
Airplane, util	4	4			4																													
Hel, recon	18	18			18																													
Hel, util	20	20			20																													
Compressor, air, tlr mtd, pneumatic gas driven, 105 CFM	3														3	1	2																	
Crane-shovel, power unit, abn 7½-T, ½ cu yd	2														2	2																		
Grader, road mtz, diesel, pneumatic tires 8,975-lb press at blade	6														6	6																		
Trac, full track, low speed, diesel driven 12,100–17,000 DBP	6														6	6																		
Trac, wheeled w/1½ cu yd bucket loader	6														6	6																		
Tlr, 2 wheel, util, pole-type, 2½-T inf raft eqp, a/o pneumatic brg eqp	3														3	3																		
Tlr, 762-mm rkt, M329A1	8										8			8																				
Tlr, cgo, ¼-T, M100	249/1	41/1	16	9/1	9	7	100	15		5	43	7	25	11	18	8	10	6		1	5	41	7	4	10	3	9	8	1				1	
Tlr, cgo, ¾-T, 2-wheel, M101	156	20	5		13	2	30	3		3	43	13	20	10	1	1		18	2	16		44	1	4	14	2		23						
Tlr, cgo, 1½-T, 2-wheel	73/1	7/1	1	2/1	4		25	5			6	6			3	3						32		20		4	8		1				1	
Tlr, tk, water, 1½-T	34/1	4/1	1	1/1	1	1	10	2			7	1	5	1	3	1	2	2		1	1	8	1	1	3	1	1	1	1				1	
Trk, util, ¼-T, M151	454/3	110/3	28/2	9/1	11	62	195	28	5	6	71	20	35	16	20	10	10	12	1	5	6	46	7	4	10	3	9	13	3			2	1	
Trk, ¾-T, M408	338	24	8		14	2	100	15		5	85	17	55	13	24	6	18	52	4	28	20	53	1	4	14	2		32						
Trk, cgo, ¾-T, 4x4	10																					10		10										
Trk, ¾-T, M408, w/litter kit	62	1	1				30	6			1	1										30			30									
Trk, amb, frontline, ¼-T, 4x4 M170	1														1	1																		
Trk, cgo, 2½-T, 6x6 LWB	90/1	10/1	2	3/1	4	1	20	4			11	1	5	5	3	1	2	2		1	1	44	1	27	2	4	9	1	1				1	
Trk, cgo, 2½-T, 6x6 LWB, w/winch	27/1	0/1		0/1			15	3			6	6										6		4	1	1			1				1	
Trk, dp, 2½-T, 6x6	12														12	8	4																	
Trk, inf eqp, ½-T, M274	475	1	1				435	4	60	23					25	1	24	5		5		9		4			4	1						
Trk, tk, gasoline, 2½-T	4	4			4																													
Trk, van shop, 2½-T, 6x6	3	2			2																	1				1								
Trk, van shop, 2½-T, 6x6 w/winch	1																					1				1								
Trk, wrecker, ¾-T, 6x6 M408	9																					9				2	7							
Trk, wrecker, lt, 2½-T w/winch, M218	1																					1				1								
Trk, wrecker, med, 5-T, 6x6 w/winch	5										4			4								1				1								
Rep shop, Sig Corps trk, mounted, 2½-T, 6x6	1																					1				1								
Trac, whse, gas, 4,000-lb, DBP, 4 wheel pneumatic tire	3																					3		1		2								
Tlr, whse, 6,000-lb, 48x108-in	30																					30		6		24								
Trk, forklift, gas, 15,000-lb, 210-in lift, pneumatic tire	2																					2				2								
Trk, forklift, gas, 6,000-lb, pneumatic tire, rough terrain	7																					7		3		4								

Notes.

1. Figures shown below/ =augmentation and are reflected in columns 28 through 32.
2. Figures shown in columns, 6, 8, 12, and 16 are for total number of units indicated.

APPENDIX V

COMMUNICATIONS EQUIPMENT—AIRBORNE DIVISION

Signal equipment	Characteristics						Location in Division																										Remarks
							Comd and Con bn					BG				Div arty				Engr bn			Sig bn				Spt gp							
							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
	Range in mi	Sig	Type mount	Frequencies	Weight (lb)	Div total	Bn total	HQ & HQ co	Admin co	Am co	Cav trp	BG total (5)	HQ & HQ co	Rifle co (5)	Mort btry	Div arty total	HQ & HQ btry	105-mm how btry (6)	Msl btry	Bn total	HQ & HQ co	Engr co (2)	Bn total	HQ & HQ det	Comd op co	Fwd comm co	Gp total	HQ & HQ det	Sup and trans co	Med co	QM prchl sup co	HQ and main spt co	Emerg rep co	
AN/ARC-27	Line of sight	AM (Voice) MCW (UHF)	Veh	225-3999	85	1										1	1																	Gd to air, 1,750 channels.
AN/GRR-5	Receiver only	AM (Voice) CW or MCW	Veh or grd	1.5-18	54	9	7	1		6						2	2																	10 channels AAAIS intelligence net.
AN/PRC-6	1	FM (Voice)	Portable	47-55.4	6.5	720	8	8				675		130	5	5		5		32		32												43 channels.
AN/PRC-9	3-5	FM (Voice)	Portable or veh	27-38.9	26	90						65			13	26	4	20	2															Continuous, 120 channels
AN/PRC-10	3-5	FM (Voice)	Portable or veh	38-54.9	26	572	29			3	26	515	18	85		1	1			4	4		15		5	10	8	3		5				Continuous, 170 channels.
AN/URC-4	Line of sight	AM (Voice)	Portable	120-130	5.8	14	14			14																								2 present channels, emergency air-sea rescue.
AN/VRC-9	Sta: 15 Moving: 10	FM (Voice)	Veh or grd	27-38.9	152	51	1			1		25			5	25	11	5	9															120 channels.
AN/VRC-10	Sta: 15 Moving: 10	FM (Voice)	Veh or grd	38-54.9	152	183	55	28		1	26	80	13		3	2	2			15	5	10	9	1	2	6	22	1	4	6		1	10	170 channels, same as AN/GRC-7.
AN/VRC-17	10-15	FM (Voice)	Veh	27-38.9	127	18										18	1	15	2															120 channels.
AN/VRC-18	10-15	FM (Voice)	Veh	38-54.9	127	21	3				3	15	3							1	1						2			2				170 channels, same as AN/GRC-7.
AN/VRQ-2	Sta: 15 Moving: 10	FM (Voice)	Veh	27-38.9	230	6										6	1	5																120 channels; 2 VRC-9 sets; rad relay.
AN/VRQ-3	Sta: 15 Moving: 10	FM (Voice)	Veh	38-54.9	230	102	23	2		13	8	60	7	5		1	1			3	1	2	9	1	3	5	6	4	1				1	170 channels; 2 VRC-10 sets; rad relay.
AN/VRC-30			Veh		264	8						5			1	3	3																For ACTs.
AN/AAS-6 abn infrared det					280	1	1			1																								
AN/CVX-1 beacon					120	12	2				2	10	2																					
AN/GRN-6 beacon set, rad						1	1			1																								
PP-775/U charger btry w/tlr mtd genr					3,400	2										2			2															
PU-322/G gear set, tlr-mtd					2,546	8																	8		3	5								
AN/FPN-33 radar set	40		Veh or hel	9000-9100	4,020	1	1			1																								Gd radar for use w/acft.
AN/TPS-21 radar set					280	10						10	2																					
AN/TPQ-10 radar set						1	1			1																								
AN/PPS-4 radar set	.5-5	Audio and meter	Portable		85	25						25	5																					
AN/TRN-9 rad set, beacon		AM (MCW)		75	50	1	1			1																								Beacon for acft.
AN/GRC-46 radio-teletype	50 voice 75 CW	AM (Voice) CW, FSK	Mbl	.5-.32	1,050	21	2			1	1	10	2			3	3						6		6									Small mbl radioteletype-mtd in shelter on trk.
AN/GRC-39 rad terminal	Line of sight up to 50 mi	FM (Voice or CW)	Veh	54-70.9	600	10																	10			10								Rad-relay.
AN/MRC-68 rad terminal	Line of sight up to 50 mi	FM (Voice)	Mbl	54-70.9	2,260	12																	12		7	5								
AN/GMD-1 RAWIN set					3,124	1										1	1																	
SB-86/P swbd					199	9										1	1						8		3	5								
AN/PGC-1 teletype set	25				236	15						5	1										10		5	5								
TH-5/TG terminal telegraph					18.5	3																	3			3								
AN/GRC-65						9	3			2	1					2	2			1	1		3		3									
AN/GRN-11						12	2				2	10	2																					
AN/GRC-87						5																												
AN/VRC-24						2	2			2																								
RT 67/GRC						2						5	1			2	2																	
RT 68/GRC						12	2				2	10	2																					
SB-22/PT						97	5		2	2	1	55	4	5	2	18	5	10	3	1	1		14		4	10	4		1	1	1	1		

Note. Figures Shown in Columns 6, 8, 12, and 16 are for Total Number of Units Indicated.

APPENDIX VI

AIRCRAFT REQUIREMENTS, AIRBORNE DIVISION, AIRBORNE ASSAULT

Section I. EXPLANATION

1. General

a. Section II of this appendix presents the aircraft requirements for airborne assault operations of the airborne division. The data are applicable for general planning purposes only and do not reflect either the final echelonment of units or the exact number of aircraft which may be required in every situation.

b. Data contained in section II are based on TOE 57D, and the following assumptions:

(1) The radius of action for aircraft is 380 nautical miles with no refueling available in the objective area.
(2) Prepared landing fields are not available in the objective area.
(3) Landing zones which will receive the C–123 aircraft are available in the objective area.
(4) Allowable cargo load for aircraft:

	Aerial delivery	*Air-landed*
C–119	14,290	------
C–123	13,005	13,005
C–130	30,600	------

(5) The weight of the completely equipped soldier averages 260 pounds for parachutists and 240 pounds for others.
(6) The followup echelon arrives within 72 hours.
(7) Excess cargo space available will be sufficient for loading miscellaneous cargo of each unit, over and above individual and major item weights.

2. Equipment and Supplies

a. General. Section II, columns 16 and 31, indicate the weight of the parachute and the air-landed elements for each unit in the assault and the followup echelons. This figure is the sum of the weights of personnel, equipment, and accompanying supply. Aerial delivery equipment required for parachute delivery of vehicles and heavy equipment weigh approximately 293 tons.

b. Equipment. Unless otherwise indicated, all units enter the objective area with all crew served weapons and essential fire control and communications equipment. Those vehicles essential to the accomplishment of the unit mission are delivered to the objective area by parachute or by air-landing, depending on the urgency with which they are needed. Kitchen vehicles and equipment together with other nonessential items are assigned to the rear echelon.

c. Supply. All units enter the objective area with sufficient accompanying supply to sustain operations for 3 days. Those supplies carried on the individual are included in the assumed weight for the individual soldier, and those supplies carried as bulk cargo are incorporated in the unit aircraft loads. The major items of supply considered are classes I, III, and V. The accompanying classes II and IV supply are limited to critical items and are usually in such small amounts that their weights are incidental and are not included.

(1) Class I supply is based on 3 days to accompany each unit. One day supply is issued to and carried on the individual. Two days' supply is carried by each unit as bulk cargo.

(2) Class III supply is based on the weight of gasoline, oil, and lubricants required to operate vehicles a minimum of 100 miles. Class III supply for organic aircraft is sufficient for 18 hours operation.

(3) Class V supply weights are based on a prescribed load which represents 3 days of supply for the operation being planned. Ammunition supply data of FM 101–10 were revised to reflect weapons of TOE 57D and provide the basis for class V weights.

3. Aircraft Requirements

a. Aircraft requirements of section II were computed by the type-load method. Consideration was given to the mission of each element, and unit integrity was maintained.

b. The C–123, or other aircraft with a capability to make assault landings on unimproved terrain, must be used to transport the air-loaded elements.

c. For some operations it may be necessary to use types of aircraft other than those utilized for section II, or it may become impracticable to use the types indicated in the same combination. Data given in section II will serve as a basis for computing aircraft requirements in such a case. In making substitutions among the 3 types of airplanes used, the C–123 may be substituted for the C–119 on a 1 for 1 basis. Either the C–119 or the C–123 may be substituted for the C–130 on a 3 for 2 basis.

d. Excess cargo space available indicated in columns 20 and 34, section II, is available for loading only high density cargo. This space

was determined through the examination of the type loads used for loading each unit shown in column 1. The space indicated for a particular unit is a total figure and represents space distributed throughout the aircraft utilized by the unit and by those elements which are shown as loading with the unit.

e. Where tonnage of a unit is indicated in notes 1, 2, and 3 as being loaded with another unit, this tonnage consists of bulk cargo.

Section II. Aircraft Requirement Table, Airborne Division, 380 Nautical-Mile Radius Airborne Assault Operation

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
		Assault echelon																		Followup echelon														Rear echelon									
			Trucks and powered vehicles							Trailers and towed loads					Wt tons	Acft rqmt			Wt tons		Trucks and powered vehicles					Trailers and towed loads				Wt tons	Acft rqmt		Wt tons		Trucks and powered vehicles				Trailers and towed loads				
Unit	Type delivery	Pers	¼-ton	½-ton	¾-ton	¾-ton w/litter kit	Amb ¼-ton front-line	2½-ton	Miscellaneous	¼-ton	¾-ton	1½-ton	Miscellaneous	Principal weapons	Pers eqp sup	* C-119	* C-123	* C-130	** Excess cgo space	Pers	¼-ton	½-ton	¾-ton	2½-ton	Miscellaneous	¼-ton	¾-ton	1½-ton	Miscellaneous	Pers eqp sup	* C-123		** Excess cgo space	Pers	¼-ton	¾-ton	2½-ton	Miscellaneous	¼-ton	¾-ton	1½-ton	Tk water	Miscellaneous
Div and atch	Prcht	8,940	315	464	126					143	59				3,174	270		231	140																								
	Air-landed	1,138	91	4	159	56	1	7		62	62	2			994		206		244	404	36	3	62	27		30	34	29		620	123		148	999	17	2	56		17	2	42	32	
	Fly	90																																									
Comd and con bn	Prcht	283	79							19					137			32	6																								
	Air-landed	255	14	1	22	1		3		10	18	2			301		45		7	59	11		2			6	2			48	9		8	147	6		7		6		5	4	
	Fly	70														Fly in div organic acft																											
HQ and HQ co	Prcht	83	13							10					13			7	5																								
	Air-landed	127	7	1	7	1				3	4				56		9			41	8		1			3	1			18	9		8	27			2				1	1	
Admin co	Prcht	3														Loaded w/HQ and HQ co, comd and con bn																											
	Air-landed	4													1	Loaded w/HQ and HQ co, comd and con bn				6	3					3				5	Loaded w/HQ and HQ co, comd and con bn			105	6		3		6		2	1	
Avn co	Prcht	21	4							2					13			2																									
	Air-landed	114	7		13			3	(18) H-13 hel	7	12	2	(1) Lab darkroom (1) PU 294 (1) PU 256 (1) PU 290		[1]237		34			12			1		(4) 2½-T, trk gas		1			25	Loaded w/HQ and HQ co, comd and con			8			1	(2) 2½-T shop trks			2	1	
	Fly	70							(10) Airplane, obsn (4) Airplane, util (20) H-34 hel																																		
Cav trp	Prcht	176	62							7				(5) Rifle, 106-mm	111			23	1																								
	Air-landed	10			2						2				7		2		7															7			1					1	
5 BG (ea)	Prcht	1,448	30	87	4					13	4				430	40		24																									
	Air-landed	68	7		12	6				5	2				51		12		26	6	2		4			2				9	3		11	63			4				5	2	
(5) HQ and HQ co (ea)	Prcht	154	19	4	1					8	1			(6) Gun 90-mm, M56	116			14																									
	Air-landed	57	7		10	6				5	2				46		12		26	6	2		4			2				9	3		11	28			4	(3) 2½-T trk w/winch			5	2	
(5) Mort btry (ea)	Prcht	124	6	23	3					5	3			(8) Hv mort	64			10																									
	Air-landed	11			2										5	Loaded w/HQ and HQ co, BG																		5									
(25) Rifle co (ea)	Prcht	234	1	12										(3) 81-mm mort (2) Rifle 106-mm	[2]50	8																											
	Air-landed																																	6									
Div Arty	Prcht	646	54		73					31	34				498	70		21	38																								
	Air-landed	126	16		11	1		4		11	8				170		37		9	14	1		1			1	1	6		51	10		13	39			7					7	
HQ and HQ btry	Prcht	106	12		11					3	8				51			11																									
	Air-landed	45	7		5	1				3	4				30		37		9	14	1		1		(6) 2½-T trk, w/winch	1	1	6		51	10		13	14			1					1	
(5) How btry-105-mm (ea)	Prcht	98	7		11					5	4			(5) How 105-mm	[3]83	14																											
	Air-landed																																	4			1					1	
Msl btry	Prcht	50	7		7					3	6				32			10	38																								
	Air-landed	81	9		6			4	(4) 2½-T trk, LWB w/winch[4]	8	4		(2) PU 775	[5](4) Launcher, 762-mm XM 33 (8) Tlr, 762-mm w/rkt	140	Loaded w/HQ and HQ btry, div arty																		5			1	(4) 5-T wrecker (4) Launcher, 762-mm				1	
Engr bn	Prcht	359	16	24	11					15					251			34	41																								
	Air-landed	65	3	1	13		1			2	1				75		9			28	1					1		3		105	17			21			3					3	
HQ and HQ co	Prcht	85	6		3				(6) Road graders (6) Bulldozers (6) Trac buket loader	5			(1) Compressor, air, tlr-mtd		171			18	1																								
	Air-landed	35	3	1	3		1			2	1		(1) Water purifier		45		9			24	1				(8) 2½-T trk, dp	1		3	(3) Tlr, 2-wheel, util, pole (3) Water purifier	81	17			11			1	(2) Crane, shovel				1	
(2) Engr co (ea)	Prcht	137	5	12	4					5					40			8	20																								
	Air-landed	15			5								(1) Compressor, air, tlr-mtd		15	Loaded w/HQ and HQ co, engr bn				2					(2) 2½-T trk, dp					12	Loaded w/HQ and HQ co, engr bn			5			1					1	
Sig bn	Prcht	200	8	5	18					5	1				91			17	39																								
	Air-landed	85	2		16						5				65		12		10	54	2		18			1	12			50	13		30	17			2					2	
HQ and HQ det	Prcht	5													1																												
	Air-landed	12			1						1				4					11	1		3				1			7	Loaded w/comd op co			7									
Comd op co	Prcht	56	2	5	3						1		(1) SB 611		21			4	13																								
	Air-landed	53	2		10						4		(5) AN/MRC 68 (5) SB 611 (8) PU 322		44		12		10	43	1		15			1	11		(2) PU 322 (3) AN/MRC 68	43	13		30	5			1					1	
Fwd comm co	Prcht	139	6		15					5			(10) PU 322 (5) AN/MRC 68		69			13	26																								
	Air-landed	20			5										17	Loaded w/comd op co																		5			1					1	
Spt gp	Prcht	193	7		4					7	4				43			7	16																								
	Air-landed	240	18	2	36	24				13	19				119		43		88	213	10	3	21	27		10	19	20		317	59		42	447	11	2	17		11	2	12	6	
HQ and HQ det	Prcht	7	1							1					2			7	16																								
	Air-landed	3	1							1					2		8			18	5		1			5	1			12	21		34	19			1						
Sup and trans co	Prcht	3	1							1					2	Loaded w/HQ and HQ det, spt gp																										1	
	Air-landed	58	3	2	12					3	2				48	Loaded w/HQ and HQ det, spt gp				90		2	2	26	(4) 2½-T trk w/winch		2	20		228	38		8	8			1	(1) Trac, whse (6) Tlr, whse (2) Forklift, 6,000 lb				1	
Med co	Prcht	87	5		4					5	4				27	Loaded w/HQ and HQ det, spt gp																											
	Air-landed	66	3		3	24				3	3				51		15		39	72	2		7	1	(6) ¾-T trk, w/litter (1) 2½-T trk, w/winch	2	7		(2) Tlr, water	46	Loaded w/HQ and HQ co, spt gp			12			1					1	
QM prcht sup and maint co	Prcht	95													12	(11) Pers loaded with each BG																											
	Air-landed	1													1	Loaded w/HQ and HQ det, spt gp																		117	3	2	4	(1) 2½-T trk w/winch (2) Trac, whse (24) Tlr, whse (2) Forklift, 15,000 lb (4) Forklift, 6,000 lb	3	2	4	1	
HQ and main spt co (maint bn)	Prcht	1														Loaded w/HQ and HQ det, spt gp																											
	Air-landed	2	1							1					2	Loaded w/HQ and HQ det, spt gp																		287	8		9	(1) 2½-T wrecker (4) ½-T trk (1) 2½-T trk, rep shop sig (1) 5-T wrecker (2) 3-T wrecker (1) 2½-T van, w/winch (1) 2½-T van, wo/winch	8		8	1	
Emerg rep co (maint bn)	Prcht																																										
	Air-landed	110	10		21				(6) ¾-T wrecker	5	14				15		20		49	33	3	1	11		(1) ¾-T wrecker	3	9			31	Loaded w/HQ and HQ det, spt gp			4			1					1	
Augmentation	Prcht	5													1																												
	Air-landed	27	3		1					1	1				9					6	1					1				4				13									
	Fly	20																																									
CAMG sec	Prcht																																										
	Air-landed	6	2												3	Loaded w/HQ and HQ co, comd and con bn																											
Repl det	Prcht																																										
	Air-landed	2														Loaded w/HQ and HQ co, comd and con bn				6	1					1				2	Loaded w/HQ and HQ det, spt gp												
Avn co	Fly	20														Fly in div org acft																											
	Air-landed	10													1	Loaded w/avn co																											
R&D sec	Prcht																																										
	Air-landed	9	1		1					1	1				5	Loaded w/HQ and HQ det, spt gp																											
Air observers	Prcht	5													1	Loaded w/HQ and HQ btry, div arty																											
	Air-landed																																										
	Fly																																										
HQ and main spt co	Prcht																													2													
	Air-landed																																	13									
Atch	Prcht	14	1							1					3																												
	Air-landed																																										
8 FAC	Prcht	8													1	(1) Ea mort btry (3) Loaded w/HQ and HQ btry																											
	Air-landed																																										
Air ln team	Prcht	6	1							1					2	Loaded w/HQ and HQ co, comd and con bn																											
	Air-landed																																										
Additional Data for Organizing Task Forces																																											
Rifle plat	Prcht	47		1											8	1.2			1																								
Hv mort plat	Air-landed	32	1	8						1				(4) Hv mort	20			2.8																									
Engr plat	Prcht	36	1	3	2					1					13			2.5	4																								
Litterbearer sec	Prcht	8														0.2																											
Cmbt spt flt	Air-landed	3	1						(1) H-13 hel	1					4		2		9																								
Pack sec	Prcht	19													3	0.5																											
BG spt plat (emerg rep co)	Air-landed	15	1		3				(1) Wrecker, ¾-T		2				11		3		8																								
Area comm cen plat (fwd comm co)	Prcht	28	1		3					1			(1) Generator (1) AN/MRC 68		13			3	8																								
	Air-landed	3			1										3		1		2																								
	Total	31	1		4										16		1	3	10																								
MP sqd	Air-landed	12	2							1					3		1		2.5																								

[1] 10-T loaded w/HQ and HQ co, comd and con bn, prcht element; 12-T loaded w/HQ and HQ co, comd and con bn air-lifted element.
[2] 1-T loaded w/mort btry.
[3] 5-T loaded w/HQ and HQ btry, div arty, prcht element; 9-T loaded w/HQ and HQ btry, div arty, air-landed element.
[4] Added to msl btry—not reflected in TOE.
[5] Lt wt eqp not reflected in TOE.

* To determine total acft rqmt for assault echelon, use total of columns 16, 17, and 18; for following echelon, use total of columns 32 and 33.

** Excess cgo space is available for small items of bulk sup. Excess cgo space is the difference in weight of loaded items, such as vehs, and the useful cgo capacity of the acft expressed in tons. The excess cgo space cannot be eliminated by consolidation of loads because volume, not weight, is more often the basis for allocation of acft.

This table based on TOE 576D
Allowable cargo load
C-119 — 14,290 (prcht aslt)
C-123 — 13,005 (air-land)
C-130 — 30,600 (prcht aslt)

APPENDIX VII

AIRCRAFT REQUIREMENTS, AIRBORNE DIVISION, AIR-LANDED OPERATION

Section I. EXPLANATION

1. General

Section II of this appendix represents the aircraft requirements for an airborne division engaged in a 1,000-nautical mile range air-landed operation. The aircraft requirements presented are useful for general planning purposes only and do not represent exact requirements or final echelonment of units for every situation. Data contained in section II are based on the airborne division as organized under TOE 57D and the following assumptions:

a. The airborne division with 3 days' accompanying supply, plus normal augmentations and attachments, will be transported in medium and heavy transport aircraft to a secured arrival area 1,000-nautical miles distant.

b. In this situation, the airborne division will be committed to combat by surface movement subsequent to air-landing at its destination. Additionally, the division will retain a capability for conducting airborne assault operations after staging in the air-landed arrival areas.

c. Only C–130 and C–124 aircraft will be available in sufficient quantities to transport the entire division. Allowable cargo loads for these aircraft on a 1,000-nautical mile air-landed mission with refueling available at their destination are:

C–130	29,500 pounds
C–124	40,500 pounds

d. The weight of the individual soldier with complete individual equipment, rations, and ammunition is 240 pounds.

e. Administrative support normally provided by a theater administrative zone will not be available for an indefinite period subsequent to the division's closing in the arrival area.

f. Excess cargo space available will be sufficient for landing miscellaneous cargo, of each unit, over and above individual and major item weights.

g. The followup echelon arrives within 72 hours.

h. H–34 helicopters will be available in the objective area and will not be transported.

2. Equipment and Supplies

a. In general, accompanying supply is computed on the same basis as for the 380-nautical mile airborne assault operation of section II, appendix VI. Supplies sufficient to sustain operations for 3 days will accompany each unit. However, in order to support subsequent operations until the arrival of a theater administrative zone type agency, all equipment authorized by the TOE is transported to the arrival area by aircraft. For most units this equipment weighs relatively little, and it is loaded in the excess cargo space available to the unit. For the quartermaster parachute supply company, approximately 1,620 tons of miscellaneous class II and IV supply, most of which is aerial delivery equipment, must be transported to the arrival area. Eighty C–124 aircraft or one hundred ten C–130 are required to transport the 1,620 tons of miscellaneous class II and IV supply for the quartermaster parachute supply and maintenance company.

b. The experimental lightweight rocket system for the missile battery was loaded with the battery's initial echelon to facilitate that unit's employment in an airborne operation. Heavy items of standard equipment were loaded with the rear echelon. Among these items, the truck-mounted launcher, weighing 41,750 pounds, exceeds the allowable cargo load limit of the aircraft utilized. Stripping is required to accommodate this weapon to the aircraft.

3. Aircraft Requirements

a. Aircraft requirements for section II were computed by the type-load method. Economy of aircraft was realized through the administrative loading of some elements. The degree to which this is possible depends on the tactical situation and may be permitted only when the landing area is secure.

b. Excess cargo space available indicated in columns 18, 32, and 46, section II, is available for loading only high density cargo. This space was determined through the examination of the type loads used for loading each unit. The space indicated for a particular unit is a total figure and represents space distributed throughout the aircraft utilized by the unit.

c. Columns 16, 17, 30, 31, 44, and 45 are to be used separately. Where both types of aircraft are required for a specific unit this is indicated as an "and" in the unit line of the table.

Section II. Aircraft Requirement Table, Airborne Division, 1,000-Nautical Mile Range Air-Landed Operation

Initial echelon

1 Unit	2 Pers	3 Trks and powered veh ¼-ton	4 ½-ton	5 ¾-ton	6 ¾-ton w/litter kit	7 Amb ¼-ton front-line	8 2½-ton	9 Miscellaneous	10 Tlrs and towed loads ¼-ton	11 ¾-ton	12 1½-ton	13 Miscellaneous	14 Principal wpns	15 Wt tons Pers eqp sup	16 Acft rqmt * C-130	17 or * C-124	18 Wt ton ** Excess cgo space aval
Div and atch	10,058	406	468	284	56	1	7		205	121	2			4,162.6	385		414
																240	329
Comd and con bn	608	93	1	22	1		3		29	18	2			456	43		94
																26	53
HQ and HQ co	210	20	1	7	1				13	4				69	9		14
																5	20
Admin co	7														HQ and HQ co (loaded w/) Comd and con bn.		
Avn co[1]	205	11		13			3		9	12	2	(1) Lab darkroom (1) PU 294 (1) PU 290 (1) PU 256		269	23		77
																14	21
Cav trp	186	62		2					7	2				118	11		3
																7	12
5 BG (ea)	1,516	37	87	16	6				18	6			(8) Hv morts (6) M56 90-mm SP Guns	479	39		8
																24	4
Div arty	772	70		84	1		4		42	42				669	72		113
																46	128
HQ and HQ btry	151	19		16	1				6	12				82	10		32
																7	46
(5) FA how btry 105-mm	98	7		11					5	4			(5) 105-mm how	83	8		9
																5	15
Msl btry	131	16		13			4	(4) 2½-T trk w/winch	11	10		(8) Tlr 762-mm w/rkt (2) PU 775	(4) Launchers, XM 33[2]	172	22		36
																14	7
Engr bn	424	19	25	23		1			17	1				324	28		31
																16	12
HQ and HQ co	120	9	1	5		1		(6) Road graders (6) Bulldozers (6) Tracs, bucket loader	7	1		(1) Water purifier (1) Compressor, air trl, mtd.		212	18		21
																10	2
(2) Engr co (ea)	152	5	12	9					5			(1) Compressor, air tlr, mtd.		56	5		5
																3	5
Sig bn	285	10	5	34					5	6		(6) SB 611 (18) PU 322 (10) AN/MRC 68		156	17		49
																11	26
Spt gp	338	25	2	40	24			(6) ¾-T wrecker	20	23				149	30		87
																21	90
Augmentation	37	3		1					1	1				10.6			
CA sec	6	2												3	Loaded w/HQ and HQ co, Comd and con bn.		
Repl det	2														Loaded w/HQ and HQ co, Comd and con bn.		
Avn co	15													2	Loaded w/avn co Comd and con bn.		
R & D sec	9	1		1					1	1				5	Loaded w/spt gp		
Air observers	5													0.6	Loaded w/HQ and HQ btry Div Arty		
HQ and main spt co, main bn																	
Atch	14	1							1					3			
8 FAC	8													1	(5) one per BG (3) Loaded w/HQ and HQ btry, Div Arty.		
Air ln team	6	1							1					2	Loaded w/HQ and HQ co, Comd and con bn.		

Followup echelon

1 Unit	19 Pers	20 Trks and powered vehs ¼-ton	21 ½-ton	22 ¾-ton	23 2½-ton	24 Miscellaneous	25 Tlrs and towed loads ¼-ton	26 ¾-ton	27 1½-ton	28 Miscellaneous	29 Wt tons Pers eqp sup	30 Acft rqmt * C-130	31 or * C-124	32 Wt tons ** Excess cgo space aval
Div and atch	423	36	3	63	27		30	34	31		723	83		328
													53	272
Comd and con bn	59	11		2			6	2	2		85	10		39
													7	35
HQ and HQ co	41	8		1			3	1			35	10		39
													7	35
Admin co	6	3					3				5	Loaded w/HQ and HQ co, Comd and con bn.		
Avn co[1]	12			1		(8) H-13, hel		1	2	(4) 2½-T trk, gas (2) 2½-T trk, shop, van.	45	Loaded w/HQ and HQ co, Comd and con bn.		
Cav trp														
5 BG (ea)	6	2		4			2				9	2		12
													1	10
Div arty	14	1		1			1	1	6		51	6		32
													4	30
HQ and HQ btry	14	1		1		(6) 2½-T trk w/winch	1	1	6		51	6		32
													4	30
(5) FA how btry 105-mm														
Msl btry														
Engr bn	32	1		1			1		3		121	12		20
													7	0
HQ and HQ co	28	1		1		(8) 2½-T trk, dp (2) Crane, shovel	1		3	(3) 2½-T tlr, util pole (3) Water, purifier	97	12		20
													7	0
(2) Engr co (ea)	2					(2) 2½-T trk, dp					12	Loaded w/HQ and HQ co Engr Bn.		
Sig bn	54	2		18			1	12		(2) PU 322 (2) AN/MRC 68	51	9		42
													6	44
Spt gp	213	10	3	21	27	(6) ¾-T w/litter kit (5) 2½-T trk w/winch (1) ¾-T wrecker	10	19	20	(2) Tk, water	366	36		135
													24	113
Augmentation	21	1					1				4			
CA sec														
Repl det	6	1					1				2	Loaded w/HQ and HQ co, Comd and con bn.		
Avn co	15										2	Loaded w/HQ and HQ co, Comd and con bn.		
R & D sec														
Air observers														
HQ and main spt co, main bn														
Atch														
8 FAC														
Air ln team														

Rear echelon

1 Unit	33 Pers	34 Trks and powered vehs ¼-ton	35 ¾-ton	36 2½-ton	37 Miscellaneous	38 Tlrs and towed loads ¼-ton	39 ¾-ton	40 ½-ton	41 Tk water	42 Miscellaneous	43 Wt tons Pers eqp sup	44 Acft rqmt * C-130	45 or * C-124	46 Wt tons ** Excess cgo space aval
Div and atch	1,109	17	2	57		17	2	42			2,591	191 and 9		285
													143	212
Comd and con bn	147	6		7		6		4	3		92	11		44
													7	4
HQ and HQ co	27			2				1	1		18	11		44
													7	4
Admin co	105	6		3		6		2	1		58	Loaded w/HQ and HQ co, Comd and con bn.		
Avn co[1]	8			1				1			8	Loaded w/HQ and HQ co, Comd and con bn.		
Cav trp	7			1					1		8	Loaded w/HQ and HQ co, Comd and con bn.		
5 BG (ea)	63			4	(3) 2½-T trk w/winch			5	2		54	7		28
													4	19
Div arty	39			7					7		208	7	and 8	42
													12	34
HQ and HQ btry	14			1					1		9	7	and 8	42
													12	34
(5) FA how btry 105-mm	4			1					1		8	Loaded w/HQ and HQ btry Div Arty		
Msl btry	5			1					1	(4) Launcher, 762-mm	159	Loaded w/HQ and HQ btry Div Arty		
Engr bn	17			3					2		40	3		19
													2	16
HQ and HQ co	7			1	(4) 5-T wreckers						24	3		19
													2	16
(2) Engr co (ea)	5			1					1		8	Loaded w/HQ and HQ co Engr Bn.		
Sig bn	17			2					2		17	2		12
													1	3
Spt gp	542	11	2	17	(1) 2½-T trk, wrecker (1) 2½-T trk w/winch (4) ½-T trk, inf carr (3) Trac, whse (7) Forklift, 6,000 lb cap (2) Forklift, 15,000 lb cap (3) 2½-T trk, shop, van (w/winch) (1) 5-T wrecker (2) ¾-T wrecker	11	2	12	6	(30) Trl, whse	1,944	[3]140 and 1		28
													[4]101	60
Augmentation	32			1				1	1		20			
CA sec														
Repl det	19			1	(1) 2½-T trk, w/winch			1	1		18	Loaded w/HQ and HQ co, Comd and con bn.		
Avn co														
R & D sec														
Air observers														
HQ and main spt co, main bn	13										2	Loaded w/spt gp		
Atch														
8 FAC														
Air ln team														

[1] This table differs from the abn aslt op table in that all Army acft with exception of H-34 hel are flown in AF acft. H-34 hels are assumed to be aval at destination and therefore are not included in this table.

[2] Not included in TOE.

[3] Would require 30 C-130s if aerial delivery items were prestocked in area of deployment.

[4] Would require 21 C-124s if aerial delivery items were prestocked in area of deployment.

* To determine total number of aircraft required for initial echelon use column 16 or column 17, follow up echelon use column 30 or column 31, rear echelon use column 44 or 45. Combine totals of aircraft required in columns indicated above only where "and" appears in the unit line.

** Excess cgo space is available for small items of bulk sup. Excess cgo space is the difference in weight of loaded items, such as vehs, and the useful cgo capacity of the acft expressed in tons. The excess cgo space cannot be eliminated by consolidation of loads because volume, not weight, is more often the basis for allocation of acft.

This table is based on TOE 57D

Allowable cargo loads:
C-130 .... 29,500 pounds
C-124 .... 40,500 pounds

APPENDIX VIII

STANDING OPERATING PROCEDURES, AIRBORNE DIVISION ASSAULT

(Classification)

102d Abn Div
* * *
1 Sept 58

STANDING OPERATING PROCEDURES

1. GENERAL
   a. Purpose. This standing operating procedure (SOP) is published in order to simplify the planning for, and execution of, tactical operations. These provisions will apply unless modified by division order.
   b. Conformity. Subordinate unit SOPs will conform within pertinent scopes.
   c. Organization.
      (1) The division is organized for airborne operations into assault, followup, and rear echelons. Combat team formations cease on division order.
      (2) Annex A, Task Organization for Airborne Assault.
      (3) Division commander exercises direct and personal command over assault echelon. Commanders of followup and rear echelons will be designated by division commander for each operation.
      (4) If the Army aircraft of the division can be flown to the objective area under their own power, attachments will be effective after the aircraft arrive in the airhead. Movement to the airhead will be under division control.
   d. Combat orders and distribution.
      (1) Operation orders, plans, or letters of instruction will be submitted by combat team/battle group and battalion-size units to G3, this headquarters, in two copies. During operational phase complete written orders only when time permits and for the record. Maximum oral and fragmentary orders.

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(2) Operation orders/plans will normally be limited in distribution to major subordinate and attached units as indicated below. Others will be informed through staff or liaison to extent necessary. Distribution "F" when used includes—

Number of copies:

3	Corps (or army)
3	Appropriate troop carrier unit(s)
3	Appropriate TA Log Cmd section(s)
3	Appropriate tactical air force
3	Appropriate naval force(s)
3	Appropriate surface units effecting linkup
2	Each attached unit
1	Each adjacent unit
1	Commanding general
1	Each assistant division commander
2	Chief of staff
1	G1
1	G2
4	G3
3	G4
2	G5
1	Adjutant general
1	Aviation officer
1	Chaplain
1	Finance officer
1	Information officer
1	Inspector general
1	Staff judge advocate
1	Postal officer
1	Provost marshal
1	Special services officer
3	Each battle group
4	Division artillery
4	Support group
2	Engineer battalion
2	Signal battalion
2	Command and control battalion
1	Aviation company
1	Cavalry troop

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(3) Other standard distributions will be published by the adjutant general as necessary.

(4) Attached, supporting, or assisting units. Orders attaching a unit to another unit or directing unit to support or assist another unit carry authority of direct communication by units or commands concerned for arrangement of pertinent details.

(5) Annex B, Orders and Reports.

2. COORDINATION OF TACTICAL OPERATIONS

a. Command and control.

(1) Command post.

(a) After landing CP established in vicinity of drop/landing zone(s). During subsequent combat, CP established along predetermined axis. Commanders of major units select and report location of CPs with time of opening and closing.

1. Commanders of major units designate alternate CP locations.

2. To reduce the danger of multiple loss of major headquarters/CP from enemy nuclear weapons, major command headquarters (except headquarters, support group, and headquarters, division artillery) will maintain a 3,000-yard distance separation from one another so far as practicable.

(b) During movement: at head of main body.

(c) Reestablishment of command facilities.

1. In the event of the loss or temporary neutralization of division headquarters/CP, division command facilities will be furnished by the following headquarters in accordance with the sequence in which listed:

(a) Headquarters, division artillery.

(b) Headquarters, reserve battle group(s), in order of seniority of commanders.

(c) Headquarters, combat team/battle group(s), in contact in order of seniority of commanders.

2. Within division artillery and battle groups, the sequence will be as prescribed by the respective commanders.

3. With the loss or neutralization of headquarters facili-

ties, the senior surviving commander within the command affected will move to the designated headquarters facility and assume command. Pending the arrival of the senior surviving commander, command will be exercised by the commander of the headquarters which has become the new CP.

4. Surviving staff personnel will report their location and activities by appropriate means and promptly move to the new headquarters facility. Pending receipt of other instructions, continue assigned function(s).

(2) Liaison and coordination.

(a) Liaison officers will be dispatched to division from combat teams/battle groups, division reserve, and attached tactical units. Report to chief of staff at division main CP, immediately after landing in airborne assault and prior to movement or combat operations.

(b) Liaison officers will be dispatched to supported units by supporting units.

(c) Liaison officers will be provided transportation, radio communications (when available), and bedding by parent unit.

(d) Units will maintain contact from left to right.

(3) Signal communications.

(a) General.

1. Current signal operating instructions (SOI) and standing signal instructions (SSI) will be in effect.

2. Report immediately the loss or compromise of current SOI and SSI.

3. All subordinate and attached units will notify the division signal officer of new CP locations, alternate locations, and intended changes as far in advance as possible.

4. Axis of signal communication for division and combat teams will be announced prior to landing.

5. Responsibility for establishing signal circuits: higher to lower, left to right, and supporting to supported.

(b) Radio.

1. Radio silence (transmitters and receivers off) or listening silence (transmitters off) when prescribed.

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2. Restrictions on radio nets lifted upon contact with enemy.
3. Radio communication will be established by the 102d Sig Bn from the objective area to higher headquarters, the army operations center (air requests), and division rear.
4. VFH systems will be established to the area communication center in support of each combat team/battle group and support group.

(c) Wire.
1. Field wire lines will be established when time, distance, and the tactical situation permit.
2. Existing wire lines within the airhead will be utilized to the fullest extent possible.

(d) Reestablishment of signal communications in event of nuclear attack. See Annex C, Signal.

(e) Annex C, Signal.

b. Intelligence.

(1) Prisoners of war.
(a) Disarm prisoners at once.
(b) Conversation between prisoners and between prisoners and guards limited to necessary orders until after interrogation.
(c) At division collecting point, valuables and personal effects placed in prisoner's property sack or envelope, forward in custody of guard when prisoners evacuated.
(d) Fraternizing with prisoners forbidden.
(e) One IPW team attached to each combat team.

(2) Local civilians.
(a) Civilian movement discouraged.
(b) Civilians engaged in or suspected of collaboration, sabotage, espionage, and similar activities apprehended, searched, disarmed, and confined. Report this headquarters.

(3) Captured documents. Documents of potential intelligence value forwarded to G2 through intelligence channels by fastest possible means.

(4) Technical intelligence and captured materiel.
(a) Technical intelligence requirements submitted to G2.
(b) Captured materiel.
1. Captured materiel reported to G4.
2. Nameplates or other identifying markings on captured

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materiel will not be removed by persons other than authorized members of technical service intelligence detachments.

3. Captured supplies, including munition, will be placed under security guard and reported by most expeditious means to G4.
4. Captured materiel required for immediate use in operations may be utilized by capturing unit, but must be reported to G4.
5. Enemy materiel, munitions, and/or fuel will not be used in US equipment unless cleared by representative of support group commander and approved by G4.
6. G4 reports to G2 new items of captured equipment.

(5) Communications intelligence. See Annex C, Signal.

(6) Maps and terrain models.
   (a) Map procurement, storage, and distribution by division engineer. Basis for issue and priorities established by G2.
   (b) Terrain models issued automatically when received.

(7) Weather.
   (a) General weather reports disseminated by G2.
   (b) Weather minimums and authorized delays established for each airborne operation.
   (c) Data required for nuclear weapons employment, see Annex D, Fire Support Coordination.

(8) Ground reconnaissance.
   (a) Reconnaissance and security elements proceed to assigned locations immediately upon landing. Reconnaissance beyond the reconnaissance and security position aggressively conducted to maximum distance situation permits.
   (b) Patrols coordinated at each successive echelon. Night patrol routes, strengths, and time of departure reported to G2 4 hours prior to patrol ETD. Return of patrols reported as occurs.
   (c) Report location of observation posts to G2 upon establishment.

(9) Air reconnaissance and photography. See Annex E, Intelligence.

(10) Counterreconnaissance, counterintelligence, and surveillance of unoccupied areas. See Annex E, Intelligence.

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(11) Counterinfiltration. Maximum effort during hours of darkness to prevent enemy from infiltrating between positions.

(12) Attached and supporting intelligence specialists and units. Annex E, Intelligence.

c. Procedures.

(1) Fire support coordination.

(a) The division fire support coordination center (FSCC) will operate in the vicinity of the G2/G3 operations center.

(b) Requests for preplanned air support to G3 air by 1600 hours daily.

(c) Annex D, Fire Support Coordination.

(2) Coordination of use of air space over the objective area, see Annex F, Army Aviation.

(3) Electronics, see Annex C, Signal.

d. Techniques. Operation Order, see Annex B.

e. Special considerations.

(1) Actions to minimize effects of nuclear attack. Unless otherwise directed, nuclear defense plans will be based on the possibility of enemy employment of nuclear weapons of a maximum yield of 50 KT. Annex G, Actions To Minimize Effects of Nuclear Attack.

(2) Combat deception. On division order for each operation.

(3) Army aviation. Annex F, Army Aviation.

(4) Chemical and biological warfare. Toxic chemical agents employed only on order this headquarters. Annex H, Chemical and Biological Warfare.

(5) Combat surveillance. Annex E, Intelligence.

(6) Target acquisition and evaluation. Annex D, Fire Support Coordination.

(7) Antitank and Barrier Plan. Annex I, Antitank and Barrier.

(8) Electronic Warfare. Annex C, Signal.

(9) Unconventional Warfare.

(a) Psychological warfare. Employed only on division order and coordinated by G3. Battle groups plan for employment of loudspeaker and leaflet units in a tactical role.

(b) Escape and Evasion. Annex E, Intelligence.

3. COORDINATION OF ADMINISTRATIVE SUPPORT OPERATIONS

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a. Coordinating agencies.

(1) Division logistics operations center (DLOC).

(a) In addition to those personnel organic to the support group, the DLOC may be augmented by the following personnel:

1. Assistant G4, transportation.
2. CA representative.
3. Army aviation representative.

(b) Specific augmentation of the DLOC will be announced for each operation.

(2) Division administration center. This center will normally be composed of the personnel sections of subordinate units and the division administration company.

b. Procedures.

(1) The division administration center will normally be located in the departure area and will operate under the technical supervision of the division adjutant general.

(2) The minimum operating elements of the DLOC necessary for the initial coordination and supervision of the implementation of the division logistical plan will enter the objective area with the assault echelon.

c. Techniques. Sample copies of orders and reports, pertinent to administrative support units, are contained in Annex B, Orders and Reports.

d. Detailed considerations.

(1) Logistics.

(a) This paragraph prescribes routine logistical procedures for the planning, coordination, and execution of logistical support for an airborne operation.

(b) Logistics procedures will be based on maximum preplanning and—

1. For short duration raid and relift operations. Assault delivery of major units with estimated logistical self-sufficiency based upon firm air communications for evacuation.

2. For short duration operations.

(a) Assault delivery of major units with 72 hours logistical self-sufficiency based upon early provision and use of a fixed-wing air-landed capability for air evacuation.

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(b) Air-landing of automatic followup supply fully forward.

(c) Maintenance of selected items of on-call followup supply (for parachute delivery, if required).

(d) Initial decentralization of reserve stocks and maintenance.

(e) DLOC initially located at division CP with G4.

(f) Early establishment of centralized control of reserve stocks by all units.

(g) Reserves maintained in dispersed locations under major commands for shifting between major units under division direction as the situation requires. Essential reserve stocks also maintained directly under division control in either or both the departure and objective areas.

3. For long duration airborne and sustained ground operations. (In addition to (b) 2 above.)

(a) The early establishment of routine (replacement and consumption type) supply.

(b) The eventual establishment and operation of the DLOC separate from the division CP with complete centralized logistics operations.

(c) Continued use of air fully forward.

(c) Supply.

1. Class I.

(a) Three days' supply for each individual in assault echelon.

(b) Supplemental hospital rations with clearing platoons based on estimated loss rates.

(c) Initial resupply by planned automatic and on-call followup delivery as confirmed or modified based on actual situation.

(d) Support group maintains 1 day's combat rations (effective D+1) as division reserve. Emergency issue on call to DLOC.

2. Classes II and IV.

(a) Prescribed 3-day level with all units in the assault.

(b) Assault based on minimum essential equipment (as opposed to full TOE).

(c) Provision of containers and necessary quartermaster air items to major units for accompany-

ing equipment and supply based upon unit loading tables as approved by division.

(d) Selected critical major equipment to be prepared and held in the departure area for on-call delivery.

(e) Minimum use of delivery by automatic followup procedure for major items.

(f) Division medical supply points in objective area established by the division medical company in the immediate vicinity of clearing stations.

(g) Units carry required fortification material to implement barrier plan as part of accompanying supply.

3. Class III.

(a) All vehicles delivered with sufficient gas for 100 miles' operation, plus additional gas required for radio operation. (In absence of contrary instructions, vehicles delivered with gas tanks three-fourths full and for M274 and ¼-ton truck, with one 5-gal can; for ¾-ton trucks, with two 5-gal cans; for 2½-ton truck, with three 5-gal cans.

(b) Extra 5-gal cans filled to 4 gal.

(c) Early D-day delivery of sufficient AVGAS in 55-gal containers to permit 8 hours' operation for all organic aircraft.

4. Class V.

(a) Prescribed 3-day level at the required rate with all units in the assault.

(b) In absence of information for determination of required rate, planning will be based on D-day delivery of basic load.

(c) With the exception of the on-individual portion, not over one-half basic load for artillery units will normally be delivered by parachute.

(d) Transportation order used in routine (replacement and consumption) supply phase only.

(e) When established, class V officer operates DAO at division ADP.

5. Repair Parts.

(a) Support group attachments delivered in assault

with prescribed load designed to provide units with self-sufficiency for 72 hours.

(b) Cannibalization authorized in objective area through followup supply phase.

(c) Emphasis on on-call centralized delivery and unit distribution by helicopter within the objective area of required fast-moving items.

6. Responsibility for types of supplies.

(a) Accompanying supplies: units assisted by support group.

(b) Automatic followup supplies:

(1) For parachute delivered portion. Support group assisted by units, and as available by TA Log Comd.

(2) For air-landed. Support group and as available by TA Log Comd.

(c) On-call. Support group and as available by TA Log Comd.

7. Maps. Annex E. Intelligence.

8. Water.

(a) Engineer WSP equipment delivered in previously secured areas by air-landed means.

(b) Individuals carry full canteen and water purification tablets.

(c) Units delivered with 5 gal per 20 men.

(d) Engineer WSP source excepted; other objected area water sources considered contaminated.

(e) Each transport aircraft with personnel will carry one 5-gal can for en route consumption.

(f) Additional water purification tablets supplied automatically with rations.

9. Salvage.

(a) Major nonrepairable equipment items recorded at major unit level for either—

(1) Destruction prior to withdrawal.

(2) Turnover to relieving units.

(3) Evacuation after linkup.

(b) Units recover quartermaster air items for early direct air evacuation from battle group sectors.

(c) Air evacuation of heavy and bulky equipment items will not be planned.

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(d) Transportation.

1. Vehicular priorities determined by G4.
2. Planned use of air delivery to using units and objective area use of helicopters to reduce airhead requirements for ground transportation.
3. Organic and attached aviation priorities established by G3.

(e) Service.

1. Maintenance. Means from emergency repair company attached initially. Upon termination of attachment, battle group support platoons continue in direct support.
2. Construction.
   (a) Emphasis on provision of multiple hastily prepared low criteria air-landing facilities to permit D-day landing of assault-type aircraft on a continuing basis.
   (b) D-day requirement of a minimum of one air-landing facility per battle group.
3. Service elements phased into objective areas on a when-needed basis only.
4. Maximum use of unit distribution by air from departure area direct to battle group sectors with plane-side pickup by transportation and labor from the using unit.

(f) Medical evacuation and hospitalization.

1. Clearing platoon elements and a holding capability means attached to—
   (a) Independent battle groups and task forces.
   (b) Assault battle groups in situations not permitting a reasonable prospect of ground evacuation to division clearing stations by H+12 hours.
2. Units report location aid stations to DLOC through the division medical company, the division surgeon, or direct.
3. Intra-airhead aeromedical evacuation by use, as the tactical requirement permits, of preplanned helicopter support means directly responsive to the battle group surgeon, consisting of either or both—
   (a) H–13s attached or in DS.
   (b) H–34s available from the aviation company

through the division medical company representative (the aviation medical officer) at the FOC.

4. See Annex J, Medical.

(g) Marshalling.

1. Marshalling procedures based on the concept of marshalling the elements of the division in dispersed areas with minimum assistance from TA Log Comd or other supporting agency.
2. Annex K, Marshalling.

(h) Miscellaneous.

1. All units report logistics installation location to next higher headquarters.
2. S4 periodic reports as of 1800 hours daily to DLOC by 2000 hours.
3. Changes in (or additional requests for) logistical support from departure area to be placed by support group (DLOC) through support group (rear) as soon as possible but to be completed not later than 2100 hours daily.

(2) Personnel

(a) Strengths. See Annex B, Orders and Reports.

(b) Replacements.

1. Requisitions for initial overstrength replacements submitted maximum number of days practicable prior to assault based on estimated losses D-day through D+1.
2. Requests for unit replacements submitted to G3.
3. Requests for individual replacements to AG.

(c) Discipline, law, and order.

1. Collection and disposition of stragglers. Stragglers returned to units by most expeditious means. Stragglers physically or mentally incapacitated escorted nearest medical installation. When disciplinary action appears warranted, report of circumstances under which straggler was apprehended delivered with him to parent organization.
2. Joint use of military police. Army, Air Force, or Navy military police authorized and empowered to maintain order, to enforce authority, and to apprehend without regard to nationality of personnel

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arrested or Service to which they belong. Soon as practicable after arrest, subject individuals turned over to own Service.

3. Jump refusals. An airborne officer at each departure site designated investigating officer. He will meet returning aircraft, take custody of alleged jump refusals, keep them separated and under armed guard, and allow them to communicate with no one not briefed on the operation until public announcement of operation. He will investigate jump refusal incidents, to include taking statements from crew members of aircraft in which refusal returned. Statements and individuals turned over to parent unit rear echelon detachment for further action.
4. Disposition of general prisoners. This headquarters responsible for arrangements for detention of general prisoners or persons awaiting trial by general court.
5. Looting. Commanders and military police responsible for immediate apprehension of any person pilfering or looting, and report of incident this headquarters.
6. Souvenirs. Following articles enemy origin considered souvenirs: swords, bayonets, knives, helmets, field packs, flag, decorations, bags, belts, shoes, and indigenous currency in small amounts. Certificate authorizing possession required for a souvenir.

(d) Prisoners of war

1. Evacuation.
   (a) PW evacuated to division collecting point by capturing unit.
   (b) Division collecting point established vicinity primary air-landing facility.
   (c) PW collecting points established out of sight and hearing of CP.
   (d) PW requiring hospitalization evacuated through medical channels.
2. Treatment and care. Commanders concerned responsible that treatment and care of PW conforms to provision of FM 27–10, and Geneva Conventions.
3. Processing.
   (a) In echelons below division, interrogation normally brief.

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(b) Processing limited to accomplishment of PW tag.

(c) For processing event of death of PW, see par 3d(2)(e)2(b).

(e) Graves registration service.

1. Location of cemeteries.
   (a) Division establishes temporary cemetery.
   (b) Subordinate units operating independently will establish temporary cemeteries. Isolated burials only in emergencies.
2. Responsibilities.
   (a) Company, battery, or similar units designate 1 officer and 1 or more noncommissioned officers to familiarize themselves with graves registration prescribed by this headquarters.
   (b) Commanders responsible for collection, identification, and evacuation of U.S., Allied, and enemy dead. Battle groups report location of collecting points to DLOC.
   (c) Religious ceremonies provided to degree consistent with situation.
3. Disposition of effects.
   (a) Identification tags and personal effects not removed from bodies of U.S. dead except by recovery and disposition personnel.
   (b) Personal effects remain with deceased until arrival at recovery and disposition collecting point.
4. Evacuation. Dead will be evacuated by supply and transport company or by available unit transportation.
5. Death of PW. In event of death of PW, commanders concerned forward essential information concerning prisoner and circumstances of death direct to division headquarters.

(f) Civilian personnel.

1. No civilian employees accompany division in assault operations.
2. Indigenous civilians employed subsequent to assault hired in accordance with procedures established by theater policy.

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(g) Morale and personal services.

1. Army exchange activities. Army exchange service continued during marshalling.
2. Special services activities. Commanders continue special services activities maximum feasible extent during marshalling.
3. Religious activities. Services held during marshalling and as tactical situation permits in objective area.
4. American Red Cross activities. Attached Red Cross field representatives accompany unit followup echelons.
5. Postal service. Delivery and posting service established for letter mail and packages during marshalling. No mail service in objective area in short duration operations. Commanders inform personnel all mail routed through U.S. Army postal service. Outgoing mail not dispatched until operation disclosed or canceled.
6. Pay. When practicable, individuals paid in full to include last day of month preceding marshalling.

(h) Personnel procedures. Recommendations for battlefield promotions, appointments, and decorations to division headquarters.

(i) Interior management. Shelter and billeting priority: hospitals, headquarters, shops. See division command post SOP.

(j) Miscellaneous. Recovered U.S. PW, U.S. nationals, and Allied nationals.

1. After medical attention, and processing and clearance with G2, recovered U.S. PW evacuated by air.
2. Processing of recovered U.S. and Allied nationals same as recovered U.S. PW.
3. Local officials and other civilians handled in accordance with theater policy.
4. This headquarters notified immediately when PW camp uncovered, including location, number of prisoners by nationality, and general conditions in camp.

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(3) Civil affairs.

(a) General.

1. Delegation of authority. Battle group commander responsible for initiating civil affairs operations in assigned area of responsibility.

2. Initiate and develop surveys to determine assistance or control measures, and the availability of local resources to include utilities, services, facilities, and supplies.

3. Establish CA policy checklist to include specific requirements for policy guidance to include date and time requested and received.

(b) Government.

1. Establish law and order.

2. Develop and institute measures to control orphans:

(a) Civilian movement discouraged.

(b) Evacuate civilians only on approval of this headquarters.

(c) Civilians engaged in or suspected of collaboration, sabotage, espionage, and similar activities apprehended, searched, disarmed, and confined under civilian guard if practicable. Report this headquarters.

(d) Prepare for reception of refugees. Establish and report location of collecting points.

(c) Economics.

1. Report availability of resources above established minimum to meet civilian requirements.

2. Institute measures to safeguard public works, utilities, fuel and food dumps, airfields, and oil storage installations or other vital facilities and supplies. Units report upon capture or discovery.

3. Take preliminary steps to determine assistance necessary to insure military support from local economy.

4. Establish control measures over fiscal resources and operations.

(d) CA responsibility assumed by division at earliest practicable time.

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(e) See Annex L, Civil Affairs.

(4) Rear area security.

(a) Mounting area. Coordinated by division with appropriate TA Log Comd agency. When the division is dispersed, area responsibilities will be delegated to major subordinate commands.

(b) Short duration operations. Normally a responsibility of battle group commanders within their respective sectors.

(c) Long duration operations. Normally a division rear area will be established within the objective area and the support group commander will be resonsible.

(d) Annex M, Rear Area Security.

(5) Rear area damage control. Annex N, Rear Area Damage Control.

(6) Public information and community relations. Annex O, Public Information.

Annexes:

A—Task Force Organization
B—Orders and Reports (omitted)
C—Signal (omitted)
D—Fire Support Coordination (omitted)
E—Intelligence (omitted)
F—Army Aviation
G—Actions To Minimize Effects of Nuclear Attack (omitted)
H—Chemical and Biological Warfare (omitted)
I—Antitank and Barrier (omitted)
J—Medical (omitted)
K—Marshalling (omitted)
L—Civil Affairs (omitted)
M—Rear Area Security (omitted)
N—Rear Area Damage Control (omitted)
O—Public Information (omitted)

Distribution: PORTER
OFFICIAL: Maj Gen
/s/ BLUE
BLUE
G3

102d Abn Div
* * *
1 Sep 58

Annex A (Task Organization) to SOP
1. ASSAULT ECHELON

CT 1/301
1st Abn BG, 301st Inf
Btry A, 60th Arty
1st Plat, Co A, 102d Engr Bn
1st Area Comm Cen Plat, Co A (Fwd Comm), 102d Sig Bn
1st Cmbt Spt Flt, 102d Avn Co
1st BG Spt Plat, Co B (Emerg Rep), 102d Maint Bn
1st Litter Bearer Sec, Evac Plat, 102d Med Co
1st Sqd, 1st Plat, MP Det
1st Pack Sec, Pack Plat 102d QM Prcht Sup Co

CT 3/303
3d Abn BG, 303d Inf
Btry C, 60th Arty
3d Plat, Co A, 102d Engr Bn
3d Area Comm Cen Plat, Co A (Fwd Comm), 102d Sig Bn
3d Cmbt Spt Flt, 102d Avn Co
3d BG Spt Plat, Co B (Emerg Rep), 102d Maint Bn
3d Litter Bearer Sec, Evac Plat, 102d Med Co
3d Pack Sec. Pack Plat, 102d M Prcht Sup Co

CT 2/302
2d Abn BG, 302d Inf
Btry B, 60th Arty
2d Plat, Co A, 102d Engr Bn
2d Area Comm Cen Plat, Co A (Fwd Comm), 102d Sig Bn
2d Cmbt Spt Flt, 102d Avn Co
2d BG Spt Plat, Co B (Emerg Rep), 102d Maint Bn
2d Litter Bearer Sec, Evac Plat, 102d Med Co
2d Sqd, 1st Plat, MP Det
2d Pack Sec, Pack Plat, 102d QM Prcht Sup Co

CT 4/304
4th Abn BG, 304th Inf
Btry D, 60th Arty
1st Plat, Co B, 102d Engr Bn
4th Area Comm Cen Plat, Co A (Fwd Comm), 102d Sig Bn
4th Cmbt Spt Flt, 102d Avn Co
4th BG Spt Plat, Co B (Emerg Rep), 102d Maint Bn
4th Litter Bearer Sec, Evac Plat, 102d Med Co
4th Pack Sec, Pack Plat, 102d QM Prcht Sup Co

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CT 5/305
5th Abn BG, 305th Inf
Btry E, 60th Arty
2d Plat, Co B, 102d Engr Bn
5th Area Comm Cen Plat, Co A (Fwd Comm), 102d Sig Bn
5th Cmbt Spt Flt, 102d Avn Co
5th BG Spt Plat, Co B (Emerg Rep), 102d Maint Bn
5th Litter Bearer Sec, Evac Plat, 102d Med Co
2d Sqd, 2d Plat, MP Det

(Classification)

(Annex A (Task Organization) to SOP—102d Abn Div)

5th Pack Sec, Pack Plat, 102d QM Prcht Sup Co

2. FOLLOWUP ECHELON
   Announced for each operation
3. REAR ECHELON
   102d Admin Co (–)
   102d Maint Bn (–)
   102d QM Prcht Sup Co (–)
   102d Sup and Trans Co (–)
   Other unit rear echelons

Div Res
From 1 rifle company to 1 battle group as designated.

Div Trp
102d Comd and Con Bn (–)
102d Sig Bn (–)
102d Engr Bn (–)
102d Spt Gp (–)
102d Div Arty (–)

Distribution: A

OFFICIAL:

/s/ BLUE
BLUE
G3

PORTER
Maj Gen

(Classification)

(Classification)

102d Abn Div
* * *
1 Sep 58

Annex E (Army Aviation) TO SOP

1. APPLICATION

Applies except when modified by div order or change to div SOP.

2. ORGANIZATION FOR COMBAT

a. Tac grouping.

(1) DS plat.

(a) Arty sec.

1. Ds div arty.
2. Provide acft and personnel to cmbt spt sec as directed.

(b) Cmbt spt sec.

1. See paragraph 2, main body SOP.
2. Acft and personnel provided cmbt spt sec from other elm avn co as directed by avn annex to div op order. Cmbt spt sec normally atch when div operating in CT formation but may be centralized as directed by div order.

(c) Target acquisition sec. Atch or DS cav trp.

(2) Gs plat.

(a) GS; comd trans, aeromedical evac, courier svc.

(b) Provide additional acft to cmbt spt sec as required.

(3) Tac trans plat.

(a) Recon spt sec. DS cav trp.

(b) Utility sec.

1. Provide acft and personnel to cmbt spt sec as directed.
2. Utility sec (minus) staff supervision div avn officer to provide organic airlift for personnel, equipment, and supplies in spt of div msn.

b. Control.

(1) Div avn officer—

(a) Exercises operational control over div avn co.

(b) Supervises avn matters within the comd.

(2) Div flt op officer—

(a) Establishes and maintains the FOC (flight operations center).

(b) Controls army air traffic in the div sector and coord with the appropriate Air Force air traffic control agency.

(3) Commanding officer, div avn co—

(a) Is responsible for comd and administrative supervision of the avn co.

(Classification)

(b) Performs op msn as directed by the div avn officer.

(4) Req for avn spt—

(a) Intelligence photo msn and msn requiring use of electronic detection devices. Through intelligence channels to G2, this HQ.

(b) Air movement of trp, courier and messenger svc, wire-laying, and staff trans. Through S3 channels to G3, this HQ.

(c) Air movement of supplies and equipment. Through S4 channels to G4, coord by G4 with G3, this HQ.

(d) Aeromedical evacuation. Annex K, Medical.

(5) Attached avn. Avn attached to or in spt of div under staff supervision div avn officer for employment as required in spt of div msn.

3. INTELLIGENCE

a. Recon and surveillance.

(1) Planned visual and/or photo air recon msn within capabilities of DS or attached elements assigned by unit being spt.

(2) Avn capabilities of organic Army avn fully exploited prior to req for inter-Service spt.

(3) Rept all en activity as obtained.

(4) Observers will be provided by the spt unit.

(5) Area coverage by all organic avn elements coord by div avn sec.

b. En material. Acft maint officer provides tech assistance to div G2 for captured en avn materiel.

c. Req for avn charts. Direct to div engr.

4. OPERATIONS

a. Local security of base airstrip responsibility of avn co cmdr. Area defense responsibility of comdr in whose area facility is located.

b. DS or attached avn elements cease on div order.

c. Req for lifting of friendly fires to permit organic avn employment.

(1) DS elements by req to FSCC.

(2) Attached elements by req through comd channels.

d. Rept location all airstrips prior to occupation.

e. Req for engr spt coordinated with div avn officer.

f. CB.

(1) Defensive. See Annex H, div SOP.

(2) Offensive. Organic or attached avn employed in CB distr on order div comdr.

(Annex E to SOP—102d Abn Div)

g. Organic or attached avn employed in distr smoke coord with FSCC.

h. Organic or attached avn employed as illumination means on div order.

i. Acft atk by en air or gnd fire take evasive action and immediately rept location, type, and quantity of en action to this HQ or FOC.

j. All avn elements constantly alert for en action indicating employment of nuclear weapons. Following employment of nuclear wpns by en, obsn and surveillance effort concentrated on detection of en attempt to exploit effects.

(1) Tac trans plat. Provide acft for control and assessment teams.

(2) GS plat. Provide airlift for instrument survey and monitoring of blast and fallout areas.

k. Normally, in addition to the div primary airfield, there will be an airstrip established in the vicinity of each battle group CP.

l. Helicopter landing sites will be located in the vicinity of the div clearing station, each battle group, div arty, and the div tac, main, and rear CP, when established.

m. Movement.

(1) DS or attached elements displace with spt unit.

(2) Div avn sec displace with div main CP.

(3) Avn co (minus) displace as appropriate.

5. LOGISTICS

Materiel and svc.

a. Supply

(1) Cl I.

(a) DS or attached elements by spt unit.

(b) Avn co (minus) as prescribed.

(2) Cl II and IV.

(a) DS or attached avn element req avn items directly from avn co. All other items through spt unit.

(b) Remainder of co by req to HQ and HQ co, comd and con bn, or DLOC.

(3) Cl III and IIIA.

(a) All elements maintain prescribed load.

(b) Resupply of Cl IIIA at div base airstrip.

b. Salvage. Avn items salvaged by avn co.

6. REPORTS

Daily status rept for all acft submitted with cmbt status rept by—

(Annex E to SOP—102d Abn Div)

a. Spt units for DS or attached acft.

b. Avn co for all other acft.

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APPENDIX IX

OPERATION ORDERS AND ANNEXES

This appendix contains an example of an operation order and an administrative order for an airborne division in an assault operation and the following sample annexes:

a. Task organization.
b. Operation overlay.
c. Marshalling plan.
d. Air Movement plan.
e. Administrative overlay.

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OpO 5
References: Maps, Strategic Planning Map, 1:5,000,000. EURASIA; GREECE, 1:250,000, KHANIA–IRAKLION; CRETE, M702, 1:50,000, sheets 1–29.
Time zone: A
Task organization: Annex A, Task Organization.

1. SITUATION
   a. Enemy forces Annex B, Intelligence.
   b. Friendly forces.
      (1) Army Forces, MTO—
         (a) Continue present mission.
         (b) Provide logistical support for this operation.
         (c) Assume control of CRETE; target date—D+10.
      (2) Naval TF provides—
         (a) Preassault bombing and close air support from carrier forces as directed in separate instructions.
         (b) Navigational aids for air operations over water.
         (c) Naval gunfire and missile support.
         (d) Carrier task element to lift organic and attached Army

(Classification)

(OpO 5—102d Abn Div)

aviation from departure area to within 50 miles of objective areas.

(3) Air Force Forces, MTO—

(a) 7th TAF provides—

1. Two fighter–bomber wings on ground, runway, and air alert beginning H–hour, D–day, for missions as requested by 2d Abn TF.
2. Air reconnaissance as requested.

(b) 3d TAF provides required airlift.

(4) 2d Abn TF lands by airborne assault commencing H–hour, D–day, seizes central portion of CRETE; prepares plans for further airborne operations.

(5) 2d Corps assumes control of ground operations on order; clears island of enemy; initiates base development.

(6) 20th Inf Div lands in MESARA Valley commencing D+1, assists in clearing CRETE of enemy.

c. Attachments and detachments. Annex A. Task Organization.

2. MISSION

Div by airborne assault H–hour, D–day, seizes airheads in MESARA Valley and vic IRAKLION; protects and assists landing of 20th Inf Div on D+1; assists in clearing CRETE of enemy.

3. EXECUTION

a. Concept of operation. This operation involves the simultaneous seizure of two separate airheads by airborne assault, employing TF COBBALS vic IRAKLION and div (—) in the MESARA Valley. The operation is supported throughout, to include preparation fires, by nuclear weapons.

Elements in two airheads establish surface contact at earliest practicable time. Div res consists of two rifle companies organized as TF DUNNETT. Helicopterborne operations will be employed in the exploitation. Annex C, Operation Overlay.

b. TF COBBALLS.

(1) Land vic IRAKLION beginning H–hour, D–day.

(2) Block enemy movements along highway RETHIMNON—IRAKLION—AYIOS—NIKOLAS.

(3) Initiate development of air–landing facility.

(4) Conduct ground reconnaissance to south and effect contact with reconnaissance elements from forces in MESARA Valley.

(5) Seize IRAKLION.

(OpO 5—102 Abn Div)

c. CT 1/301.
   (1) Block enemy movement into airhead from northwest.
   (2) Conduct ground reconnaissance along road RETHIMNON—TIMBAKION.
   (3) Prepare to conduct helicopterborne operations to northwest.

d. CT 3/303.
   (1) Block enemy movement into airhead from north.
   (2) Conduct ground reconnaissance along highway AYLA VARVARA–IRAKLION and effect contact with reconnaissance elements of TF COBBALLS.

e. CT 4/304.
   (1) Block enemy movement into airhead from east.
   (2) Be prepared to furnish two–company task force as div res after H+6.

f. Trp A, 30th Cav.
   (1) Reconnoiter and maintain surveillance over routes TIMBAKION—RETHIMNON; PRAITORIA (213103)—KALLORI (219122).
   (2) Maintain aerial surveillance over route AYLA VARVARA—IRAKLION until ground contact established between TF COBBALLS and CT 3/303.
   (3) Maintain aerial surveillance in priority northwest, north, east-northeast.

g. Div arty.
   (1) Btry F, 60th Arty: GS.
   (2) Btry A, 1st How Bn, 45th Arty: GS.
   (3) Btry B, 1st FA Bn, 46th Arty: GS.
   (4) Annex D, Fire Support Plan.

h. 102d Avn Co. Annex E, Aviation.

i. 102d Engr Bn.
   (1) Priority air-landing facility development.
   (2) Annex F, Engineer.

j. Div res: TF DUNNETT.
   (1) Priority employment sector CT 1/301, CT 3/303.
   (2) Prepare for helicopterborne lift to reinforce TF COBBALLS on order.
   (3) Protect air-landing facilities 2 and 3.
   (4) Annex G, Counterattack Plans.

k. Coordinating instructions.
   (1) Tentative H-hour, D-day: 080815A Sep.

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(OpO 5—102d Abn Div)

(2) Postponement or cancellation only on authority CG, 2d Abn TF, via trp carr and/or Army communications.

(3) Alternate plan executed on order responsible commander. Annex H, Alternate Plans.

(4) Annex I, Barrier Plan.

(5) Annex J, Air Movement Plan.

4. ADMINISTRATION AND LOGISTICS

AdminO 3.

5. COMMAND AND SIGNAL

a. Signal.

(1) Annex K, Signal.

(2) Index 4, SOI.

b. Command.

(1) Div tac CP initially with CT 1/301.

(2) Others confirm on opening.

Acknowledge.

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Annexes: A—Task Organization
B—Intelligence (omitted)
C—Operation Overlay
D—Fire Support Plan (omitted)
E—Aviation (omitted)
F—Engineer (omitted)
G—Counterattack Plans (omitted)
H—Alternate Plans (omitted)
I—Barrier Plan (omitted)
J—Air Movement Plan
K—Signal (omitted)
L—Distribution (omitted)

Distribution: Annex L, Distribution

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Annex A (Task Organization) to OpO 5

References: Maps, Strategic Planning Map, 1:5,000,000, EURASIA; GREECE, 1:250,000, KHANIA-IRAKLION; CRETE, M702, 1:50,000, sheets 1-29.

Attachments and detachments (effective 011200A Sep 19__)

563d Abn Engr Lt Eqp Co
592d Abn Engr Lt Eqp Co
1402d Trans Avn Co
Air In team (2)
FAC team (9)
Trp carr cmbt con team (5)
Div naval gunfire ln team (2)
1st Plat, 5210th CAMG Co
Btry A, 1st How Bn, 45th Arty
Btry B, 1st FA Bn, 46th Arty

ASSAULT ECHELON

(Maj Gen Porter, Commanding)

CT 1/301
- 1st Abn BG, 301st Inf
- Btry A, 60th Arty
- One ACT
- 1st Plat, Co A, 102d Engr Bn
- 1st Area Comm Cen Plat, Co A (Fwd Comm), 102d Sig Bn
- 1st Cmbt Spt Flt, 102d Avn Co
- 1st BG Spt Plat, Co B (Emerg Rep), 102d Maint Bn
- 1st Litter Bearer Sec, Evac Plat, 102d Med Co
- 1st Sqd, 1st Plat, MP Det
- 1st Pack Sec, Pack Plat, 102d QM Prcht Sup and Maint Co
- Two FAC
- One shore fire con party
- 1st Plat, 563d Abn Engr Lt Eqp Co

CT 3/303
- 3d Abn BG, 303d Inf
- Btry C, 60th Arty
- One ACT
- 3d Plat, Co A, 102d Engr Bn
- 3d Area Comm Cen Plat, Co A (Fwd Comm), 102d Sig Bn
- 3d Cmbt Spt Flt, 102d Avn Co
- 3d BG Spt Plat, Co B (Emerg Rep), 102d Maint Bn
- 3d Litter Bearer Sec, Evac Plat, 102d Med Co
- 3d Sqd, 1st Plat, MP Det
- 3d Pack Sec, Pack Plat, 102d QM Prcht Sup and Maint Co
- Two FAC
- One shore fire con party
- 2d Plat, 563d Abn Engr Lt Eqp Co

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(Anx A (Task Org) to OpO 5—102d Abn Div)

DIV RES
TF DUNNETT
(Lt Col Dunnett, commanding)
Co A, 5th Abn BG, 305th Inf
Co E, 5th Abn BG, 305th Inf
DIV TRP
Comd and Con Bn (—)
102d Abn Div Arty (—)
HQ & HQ Btry, 102d Abn Div Arty (—)
Det, Btry F, 60th Arty
102d Engr Bn (—)
592d Engr Lt Eqp Co
102d Sig Bn (—)
Spt Gp (—)
HQ Det, 102d Maint Bn
Co B (Emerg Rep) (—), 102d Maint Bn
102d Med Co (—)
Det, 102d Sup and Trans Co
One team, Repl Sec, 102d Admin Co
Air In team
1st Plat, 5210th Civil Affairs Co (A)
Trp carr cmbt con team (4)
Adv Party, 20th Inf Div
1402d Trans Avn Co (LH)
One div naval gunfire ln team
CT 4/304
4th Abn BG, 304th Inf
Btry D, 60th Arty
One ACT
2d Plat, Co A, 102d Engr Bn
4th Area Comm Cen Plat, Co A (Fwd Comm), 102d Sig Bn
4thCmbt Spt Flt, 102d Avn Co
4th BG Spt Plat, Co B (Emerg Rep), 102d Maint Bn
4th Litter Bearer Sec, Evac Plat, 102d Med Co
1st Sqd, 2d Plat, MP Det
4th Pack Sec, Pack Plat, 102d QM Prcht Sup and Maint Co
Two FAC
One shore fire con party
TF COBBALLS
(Brig Gen Cobballs, commanding)
2d Abn BG, 302d Inf
5th Abn BG, 305th Inf (—Co A and Co E)
Btry B, 60th Arty
Btry E, 60th Arty
Det. HQ & HQ Btry, 102d Abn Div Arty
Co B, 102d Engr Bn
563d Abn Engr Lt Eqp Co (—)
Co A (Fwd Comm) (—), 102d Sig Bn
Det, Sup Gp
Det, HQ & HQ Det, Spt Gp
Composite Co, 102d Maint Bn
Two BG Spt Plat, Co A (Emerg Rep)
One Lt Maint Plat, Co A (Emerg Rep)
Det, Co B (HQ and Maint Sup)
Composite Plat, 102d Sup and Trans Co
One Sec, Sup Plat
One Sec, Trans Plat
Det, Co HQ
Composite Plat, 102d Med Co
One Surg Team
One Clr Plt
Det, Evac Plat
Det, Co HQ

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(Anx A (Task Org) to OpO 5—102d Abn Div)

Composite Plat, 102d Prcht
Sup and Maint Co
Sec, Sup Plat
Sec, Pack Plat
Det, Co HQ
Composite Co, 102d Comd and Con Bn
Det, HQ and HQ Co
Composite Plat, 102d Avn Co
Two Plat, Co A, 30th Cav Trp
One repl team, 102d Admin Co
Three FAC
One Air ln team
One Trp carr cmbt con team
Two shore fire con party

FOLLOWUP ECHELON

(Lt Col Keirley, commanding)

Det, Spt Gp
102d Sup and Trans Co (—)
102d Med Co (—)
1st Hosp Unit (augmented), 1102d Fld Hosp
Btry F, 60th Arty (—)
Btry A, 1st How Bn, 45th Arty
Btry B, 1st FA Bn, 46th Arty
Followup elements of assault echelon units

REAR ECHELON

(Lt Col Mehaffon, commanding)

Admin Co (—)
Det, Spt Gp
Co A (Main Spt), 102d Maint Bn
102d Prcht Sup and Maint Co (—)
Det, 102d Sup and Trans Co (—)
Other unit rear echelons
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Annex C (Operation Overlay) to OpO 5

References: Maps, GREECE, 1:250,000, KHANIA--IRAKLION;
CRETE, M702, 1:50,000, sheets 1-29.

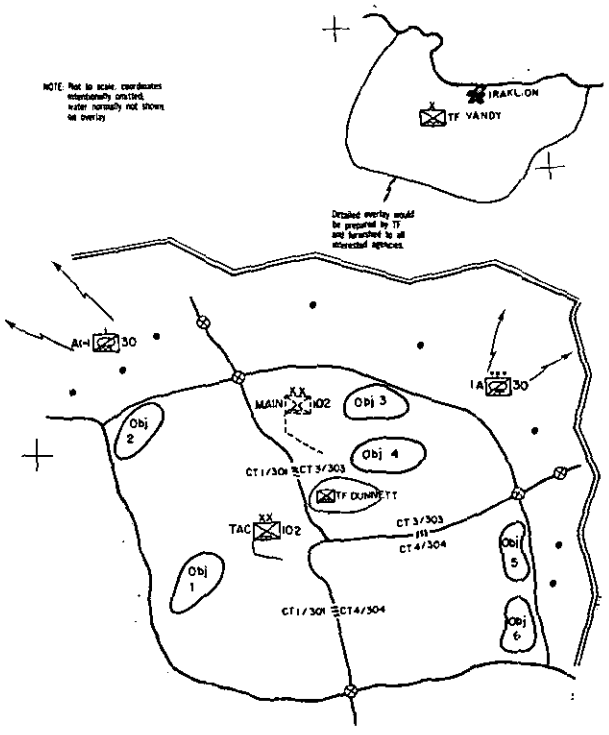

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Figure 88. Operation overlay.

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Annex: J (Air Movement Plan) to OpO 5

References: Maps, Strategic Planning Map, 1:5,000,000, EURASIA; GREECE, 1:250,000, KHANIA–IRAKLION; CRETE, M702, 1:50,000, sheets 1–29.

1. FLIGHT PLAN
   Location of departure sites and flight routes are shown in Appendix 1, Flight Route Diagram.
2. AIR MOVEMENT TABLE
   Appendix 2, Air Movement Table.
3. LANDING PLAN
   a. Location of landing areas. Appendix 3, Landing Areas.
   b. Landing schedule. Appendix 2, Air Movement Table.
4. LOADING
   Annex D, Marshalling Plan, to AdminO 3.

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App: 1—Flight Route Diagram
2—Air Movement Table
3—Landing Areas (omitted)

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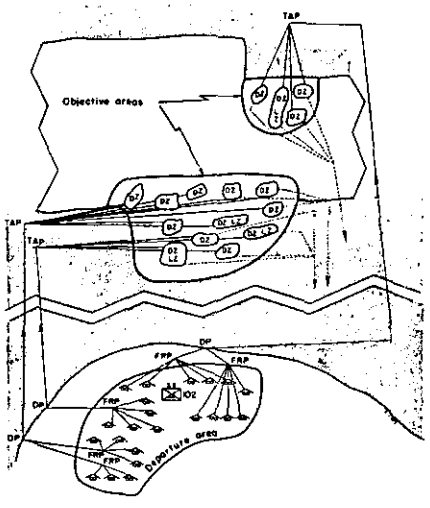
Appendix 1 (Flight Route Diagram)[1] to Annex J (Air Movement Plan) to Op0 5

References: Maps, Strategic Planning Map, 1:5,000,000, EURASIA;
GREECE, 1:250,000, KHANIA--IRAKLION;
NORTH AFRICA, 1:250,000, BENGAZI, DERNA, AGHEILA, EL HASEIAT, ANTELAT;
CRETE, M702, 1:50,000, sheets 1-29.



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[1] This diagram is not to scale, and the departure area and objective area are not to the same scale. The flight route diagram is prepared by the troop carrier unit and may be included in the airborne unit operation order for information.

Figure 89. Flight route diagram.

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Appendix 3 (Air Movement Table) to Annex J (Air Movement Plan)
to OpO 5

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References: Maps, NORTH AFRICA, 1:250,000, BENGAZI, DERNA, AGHEILA, EL HASEIAT, ANTELAT;
GREECE, 1:250,000, KHANIA--IRAKLION;
CRETE, M702, 1:50,000, sheets 1-29.

1	2	3	4	5	6	7	8	9	10	11	12	13	
			Air Force units				Army units		Time				
Departure site	Serial Nr	Chalk Nr	Troop carr unit	Serial comdr	Nr and type of acft	Employment	Acft req and unit loaded	Serial comdr	Hour loading begins	Station time	Takeoff time	Destination DZ/LZ	Time
A-3	1	1-17	510th Wg	Lt Col ____	17 C-119	Prcht	— —	Col ____	0220	0515	0530	DZ A	0815
A-4	2	1-9	510th Wg	Col _____	9 C-119	Prcht	— —	Col ____	0224	0519	0534	DZ B	0819
A-2	2	1-11	510th Wg	Col _____	11 C-119	Prcht	— —	Col ____	0228	0523	0538	DZ B	0819
A-7	3	1-20	511th Wg	Lt Col ____	20 C-119	Prcht	— —	Lt Col ____	0236	0531	0546	DZ C	0822
A-12	15	1-12	523d Wg	Maj _____	12 C-123	Asslt acft	— —	Lt Col ____	0530	0630	0645	LZ J	0927

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Figure 40. Air movement table.

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References: Maps, Strategic Planning Map, 1:500,000, EURASIA; GREECE, 1:250,000, KHANIA–IRAKLION; CRETE, M702, 1:50,000, sheets 1–29.

Time zone: A

1. GENERAL

This AdminO provides for admin spt to the 102d Abn Div op on the island of CRETE. Div tac SOP applies. Annex A, Admin Overlay.

2. MATERIEL AND SERVICE

a. Supply.

(1) C1 I.

(a) Unit distr to battle groups effective D+1.

(b) Supply point distr to div (—) eff D+1. Issues times per div SOP.

(c) Battle group medical platoons carry 1 day's supplemental hospital rations in assault echelon.

(2) C1 II and IV.

(a) Replacement of critical items on "as required" basis on request to DLOC.

(b) Units carry 2 days' supply of dry batteries in assault echelon. Batteries supplied daily with rations effective D+1.

(3) C1 III.

(a) Emergency stock for aircraft with Naval TF 41.

(b) Units carry adequate fuel in accompanying supply for 2 days' operations.

(c) Unit distr to battle groups eff D+1.

(d) Supply point distr to div (—) eff D+1.

(e) Spt gp maintain 2 days' supply eff D+1 as div reserve.

(4) C1 V.

(a) Basic load carried in assault echelon.

(b) Followup supply to units on daily basis eff D+1.

(c) Aval sup rates, D-day through D+2, 25% of basic load.

(d) Prescribed nuclear load.

1. TF COBBALLS ---------- 0

2. Div (—)

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(AdminO 3—102d Abn Div)

BRAVO HJ ---------- 2
CHARLIE HJ ---------- 1
Other yields ---------- 0

(5) Repair Parts. SOP.

(6) Water. Div WSP open D+1; locations to be announced.

(7) Special.

(a) Initial distr. In the following table, the symbol 3/1 indicates that a total of 3 days' accompanying supply is carried by the unit, and that 1 of the 3 days of supply is retained under unit control and is available for immediate shifting.

Unit	Cl I	Cl II & IV	Cl III	Cl V	Cl VI	Remarks
CT 1/301 CT 3/303 CT 4/304	3/1	3/1	3/1	3/1	3/1	
TF DUNNETT	3/1	3/1	3/2	3/2	3/2	Res stock taken over by div on commitment.
102d Abn Div Arty	3/1	3/1	3/1	3/1	3/3	
Comd and con bn	3/1	3/1	3/1	3/1	---	
102d Engr Bn	3/1	3/1	3/1	3/1	---	
102d Sig Bn	3/1	3/1	3/1	3/--	---	
Div con	1 (D+1)	---	2 (D+2)		Lt maint plat	Res stocks delivered w/div res and recovered by div res and elements of spt gp.
TF COBBALLS	3/1	3/1	3/1	3/1	3/1	

(b) Followup supply.

1. Automatic. One day's supply delivered daily beginning D+1 as follows:

CT 1/301 LZ E

(AdminO 3—102d Abn Div)

CT 3/303	LZ F
CT 4/304	LZ D
TF DUNNETT	LZ C
102d Abn Div Arty	LZ C
Comd and con bn	LZ B
102d Engr Bn	LZ B
102d Sig Bn	LZ F
TF COBBALLS	1/2 ea to LZ X and LZ Y

2. On call. Requests to DLOC or TF COBBALLS.

b. Transportation.

(1) Requests for helicopter spt for emergency shifting of supplies to DLOC or HQ, TF COBBALLS.

(2) Trans off at DLOC eff D+1.

c. Service.

(1) Attachment and composition of units. See Annex A (Task Org) to OPO5.

(2) Engr. Priority to air-landing facility construction.

(3) Air-landing facility construction priorities.

(a) Ahd North:

LZ Y—open H+3.
LZ X—open H+4.

(b) Ahd South:

LZ A—open H+6.
LZ B—open H+6.
LZ C—open H+6.
LZ D—open H+6.
LZ E—open H+6.
LZ F—open H+6.

3. MEDICAL/EVACUATION AND HOSPITALIZATION

a. TF COBBALLS operates evac and hosp facilities in ahd North.

b. Evac with and from ahd South coordinated by DLOC.

c. Units report loc of coll sta to DLOC,

d. Civilian medical supplies used only on approval div surg.

4. PERSONNEL

a. Replacements. Delivered to ahd under div con commencing D+1.

b. Prisoners of war. Div coll point opens H+8.

c. Burial and graves registration.

(1) Requests for mass burials to this HQ.

(2) Isolated burials only in emergencies.

d. Civilian personnel. No civilians auth to accompany div w/o specific approval this HQ.

(Classification)

(AdminO 3—102d Abn Div)

5. CIVIL AFFAIRS

Annex B, CA.

6. MISCELLANEOUS

a. TF COBBALLS submit six copies of AdminO to this HQ.

b. Direct contact between TF COBBALLS and departure area installations is authorized.

c. Prior to linkup in the objective area, all routine admin matters handled by TF COBBALLS without reference to this HQ.

d. Annex C, Admin Plan 4 (estimated to be effective D+2), effective for planning on receipt; for execution, on order this HQ.

Acknowledge.

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Annexes A—Admin Overlay
B—CA (omitted)
C—Admin Plan (omitted)
D—Marshalling Plan

Distribution: Annex L, Distribution to OpO 5

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(Classification)

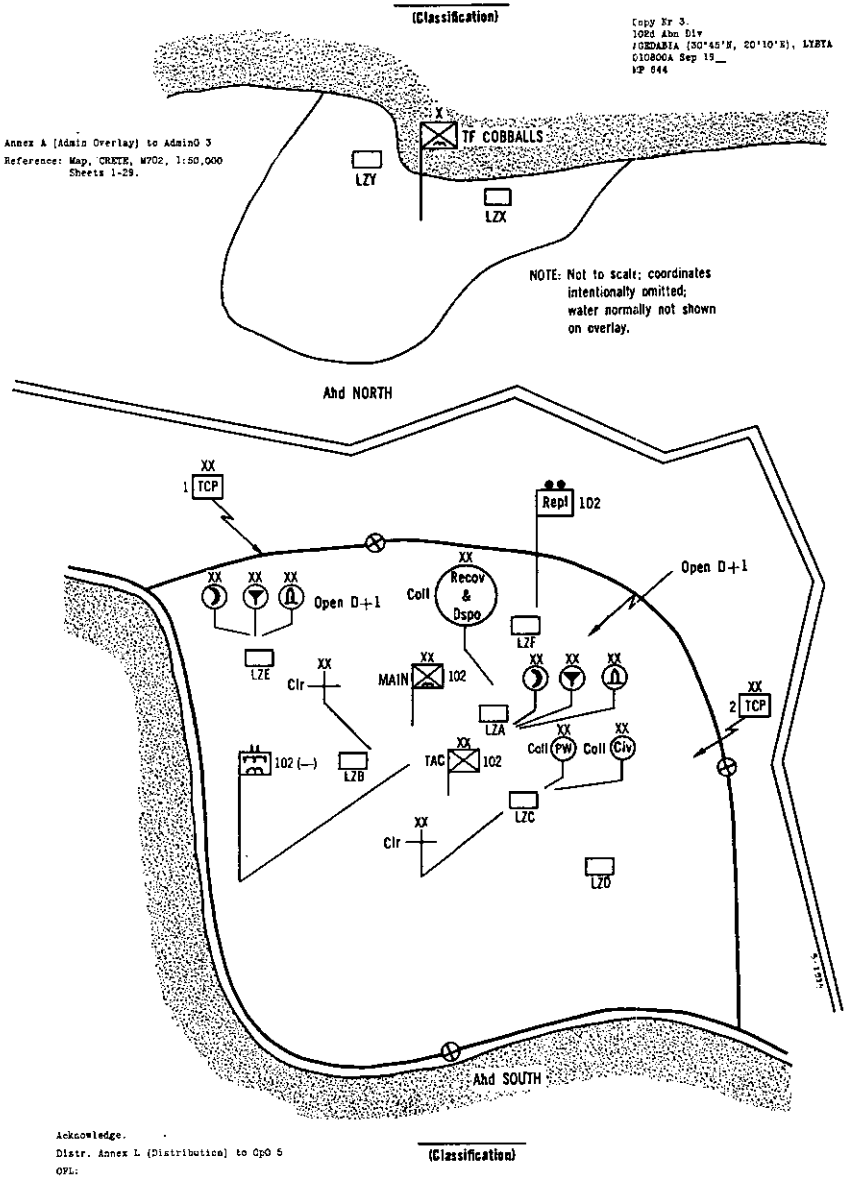

Figure 41. Administrative overlay.

(Classification)

Copy Nr 3
102d Abn Div
AGEDABIA (30°45′N, 20°10′E), LIBYA
010800A Sep 19__
MP 844

Annex D (Marshalling Plan) to AdminO 3
References: Maps, NORTH AFRICA, 1:250,000, BENGAZI, DERNA, AGHEILA, EL HAZLIAT, ANTELAT.

1. GENERAL
   a. Supporting forces.
      (1) 369th Log Comd (C)—
         (a) Provides required transportation for the movement of 102d Abn Div to temporary camps and departure sites.
         (b) Exercises overall control of movements of 102d Abn Div units.
         (c) Provides and operates temporary camps as required for 102d Abn Div.
         (d) Provides logistical support for 102d Abn Div during marshalling.
      (2) 3d Air Division (Trp Carr)—
         (a) Provides essential facilities at departure sites for establishment of joint Army—Air Force and necessary Army command posts required for the outloading of 102d Abn Div.
         (b) Provides maximum assistance in outloading the 102d Abn Div.
   b. 102d Abn Div.
      (1) Coordinates movement of units of 102d Abn Div. to temporary camps and departure airfields with 369th Log Comd (C).
      (2) Establishes liaison with the troop carrier combat airlift support unit (CALSU) operating at each departure site from which personnel and equipment of 102d Abn Div will be outloaded.

2. EXECUTION
   a. 102d Abn Div (–TF COBBALLS) marshals in unit camps beginning 0500 hours, D–2. Appendix 1, Location of Areas.
   b. TF COBBALLS assigned temporary camps M–V.
   c. CT 1/301 reserves sufficient facilities at Camp A–C during the period D–2 through D-day for the marshalling of 360 personnel from Headquarters, 102d Abn Div.

(Classification)

(Anx D (Marshalling Plan) to AdminO 3—102d Abn Div)

d. All subordinate commanders—

(1) Marshal organic and attached units in assigned camps during periods indicated in Appendix 2, Allocation of Units to Areas.

(2) Prepare organic and attached units for departure from designated airfields and air-landing facilities at times indicated in Annex J (Air Movement Plan) to OpO 5.

(3) Seal units in camps for marshalling at 0500 hours, D–2.

(4) Initiate briefing without delay after sealing.

(5) Prepare and load platform loads in accordance with unit loading tables; complete loading of aircraft by 2400 hours, D–1. (App 2, Aerial Delivery Loads.)

(6) Complete preparation of accompanying aerial delivery containers.

(7) Fit personnel parachutes beginning 0800 hours, D–1; place in kit bags; and tag with name, serial number, unit, and aircraft chalk number.

(8) Load personnel parachutes and accompanying aerial delivery containers beginning 2030 hours D–1 and complete by 0215 hours D-day.

3. PERSONNEL

a. AdminO 2.

b. Reports.

(1) Paragraph 3d(2)(a), 102d Abn Div SOP.

(2) Other personnel reports will be retained by units in the assault echelon and submitted to division headquarters in the objective area.

c. Miscellaneous. Provision will be made to convert personal funds to proper currency for the objective area prior to 1200 hours, D–1.

4. LOGISTICS

a. AdminO 2.

b. Supply.

(1) Operational requirements classes I and V issued not earlier than 0800 hours, D–2.

(2) Showdown inspections completed not later than 1200 hours, D–1.

c. Transportation.

(1) Appendix 4, Marshalling Movement Table.

(2) Report time of departure of motor convoys to Transportation

(Anx D (Marshalling Plan) to AdminO 3—102d Abn Div)

Movements Officer, Rear Headquarters, 102d Abn Div, by fastest means available.

(3) Movement of personnel and equipment to departure sites prior to 1700 hours, D–1, for preparation for outloading will be minimized and controlled by this headquarters.

(4) Requests for administrative transportation will be submitted 24 hours in advance of date required to DLOC.

d. Service. Technical service inspection and maintenance teams will be provided by 369th Log Comd (C) on a scheduled basis. Appendix 5, Technical Service Inspections and Maintenance.

5. MISCELLANEOUS

a. Operation of temporary camps. TF COBBALLS will assist 369th Log Comd (C) in operating temporary Camps M–V by providing personnel on the basis of 3 men for each 100 men or fraction thereof in each respective camp.

b. Headquarters.

(1) 102d Abn Div (Tac and Main) (Camp A) (D–1 to D-day).
(2) 102d Abn Div Rear AGEDABIA, LIBYA.
(3) CT 1/301, Camp I (D–1 to D-day).
(4) CT 3/303, Camp K (D–1 to D-day).
(5) CT 4/304, Camp J (D–1 to D-day).
(6) TF COBBALLS, Camp P (D–1 to D-day).
(7) Div res, TF DUNNETT, Camp C (D–1 to D-day).
(8) Div trp, Camp B (D–1 to D-day).

c. Security. Annex B (Intelligence) to OpO 5.

d. Communications. Annex K (Signal) to OpO 5.

e. Command.

(1) The senior commander present in each camp will command the camp and will be responsible for the security of the camp.

(2) The Air Force commander at an airfield or air-landing facility will command all troops at that field so far as overall operation and use of facilities are concerned.

f. CALSU. Departure sites will open at 1800 hours, D–2. Appendix 6, Combat Airlift Support Units.

g. Loading.

(1) Orders of each unit of battle group size or lower will include detailed loading plan including parking diagram, routes to be used on air-landing facilities, and unit air-loading tables.

(Anx D (Marshalling Plan) to AdminO 3—102d Abn Div)

(2) One copy of loading tables of battle group size or smaller to this headquarters by 1200 hours, D–2.

(3) Distribution of flight manifests (one copy each) as follows:

Army plane load commander
Assistant Army plane load commander
Pilot, aircraft
Company commander
Next higher Army Headquarters
Air Force commander of departure site

(4) Annex J (Air Movement Plan) to OpO 5.

h. SOP. 102d Abn Div SOP is in effect except as otherwise indicated herein.

i. Effective date of plan.

(1) For planning—on receipt.

(2) For execution—on order, this headquarters.

Acknowledge.

PORTER
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Appendixes: 1—Location of Areas (omitted)
2—Allocation of Units to Areas (omitted)
3—Aerial Delivery Loads (omitted)
4—Marshalling Movement Table (omitted)
5—Technical Service Inspections and Maintenance (omitted)
6—Combat Airlift Support Units (omitted)

Distribution: Annex L, Distribution, to OpO 5.

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APPENDIX X

GLOSSARY

Abort—An aircraft that is required to turn back from an aerial mission before its completion, especially for reasons other than enemy action.

Airborne assault—The landing of parachute and assault aircraft elements of an airborne force on unsecured and unprepared drop and landing zones to attack and seize selected objectives. The transport aircraft will normally be executing a radius-type air movement.

Air column—Two or more serials following a lead formation over the same flight route.

Airfield—A complex landing facility normally consisting of paved or surfaced runways and taxiways, operations tower, fire-fighting equipment, fuel storage facilities, permanent night lighting, water system, personnel messes and quarters, and other refinements. Construction requires several engineer battalion months.

Airhead(s)—Area seized in an airborne operation which provides the space necessary for the accomplishment of the mission.

Airhead Line(s)—Line(s) defining the outer limits of the airhead(s).

Air-landing facilities—Air-landing facilities are those minimum provisions for landing, handling, and takeoff of aircraft which can be constructed to meet minimum essential requirements, with full recognition given to the risks justified. These areas are selected to make maximum use of existing features such as roads and compacted and level cleared fields. Engineer effort is required to remove or mark obstacles, improve glide angles and landing clearances, and facilitate ground traffic.

Airhead air traffic coordination center (AATCC)—An agency established by a joint force commander to exercise air traffic regulation over all aircraft operating within a designated regulation area, including the airborne objective area. It contains Army, Air Force, and Navy elements as required and operates as directed by the joint force commander.

Air traffic director (ATD)—A deputy for the joint force commander, vested with authority to direct effective operations of the AATCC. The ATD for each phase of the operation will normally be selected from the Service which has dominant interest at that time in airspace control.

Combat airlift support unit (CALSU)—A functional troop carrier unit established to provide movement control and unit ground support at an airfield or air-landing facility during combat operations, usually under field conditions.

Combat control team—A small team of highly trained Air Force personnel, qualified parachutists, with the mission of establishing and operating navigational and aircraft control facilities in connection with airborne assault operations. They are part of the joint airborne advance party (see below).

Computed air release point (CARP)—A computed air position at which parachutists, supplies, and equipment to be dropped by parachute are released to land at a specified point on the ground.

Departure area—The general area encompassing all base camps, bivouacs, departure airfields, and air-landing facilities. (See marshalling area.)

Departure site(s)—Include individual airfields and/or air-landing facilities which are used by an airborne force to launch an airborne operation.

Division logistical operations center (DLOC)—An agency established to control and coordinate at a central location other than routine logistical operations of the division.

Fire coordination line (FCL)—A line established between airborne forces and linkup forces and between elements of the airborne force operating in separate airheads. It is used to regulate flat-trajectory and high-angle fires as well as offensive air strikes. Units will not fire beyond the FCL or permit more than negligible effects of fires to extend beyond the FCL without coordinating with the unit on the other side.

Followup supply—That supply which is prepackaged for automatic or on-call delivery direct to forces in the objective area.

Functional(ized)—The organizational grouping of staff or operating and control units by support functions performed (supply, maintenance, personnel) as distinguished from the basis of currently assigned technical and administrative services responsibilities.

Joint airborne advance party (JAAP)—Selected airborne (pathfinder trained) and Air Force (combat control team) personnel who are jointly trained to precede or accompany the lead elements of an airborne force into an objective area. The JAAP establishes navigational aids, assists in assembly of troops, surveys landing sites, acts as flight control, performs radiological survey, and provides terminal guidance for Army aircraft.

Landing strip or landing field—A prepared area suitable for landing and takeoff of aircraft. See air-landing facility.

Landing zone (LZ)—An unimproved area used for landing assault aircraft.

Marshalling area—The general area in which a unit camps and from which the air movement is initiated.

Mounting area—A general locality where forces preparing for an airborne operation, with all their authorized equipment and supplies, are assembled, prepared, and loaded into aircraft preparatory to an assault operation. It includes or has available in installations nearby the following:

1. Camp area for the unit.
2. Storage facilities for all equipment and supplies of the force.
3. Maintenance and repair facilities for the equipment of the force.
4. Airfield areas for the aircraft involved.
5. Loading facilities.
6. Spotting area for equipment and supplies to be loaded, located in vicinity of loading facilities. Provision must be made for personnel of rear echelon and equipment and supplies left behind. A training area nearby should be provided in case the units remain for a considerable time in the mounting area. A mounting area includes a marshalling area.

Phase back—The term used in connection with the echelonment of an airborne unit for an airborne operation. It means that an element of the force or equipment that was scheduled to enter the objective area at a particular time in the operation must enter the objective area at a time later than that originally planned. Phasing back is usually a result of a shortage of aircraft or the sudden insertion into the movement plan of a high priority unit that must be delivered to the objective area early in the operation.

Range—The maximum distance that an airplane can safely travel without refueling. Operations under range conditions are those in which the aircraft fly to a destination at which they must be refueled before further flight can be made.

Reconnaissance and security positions (RSP)—A series of outposts, observation posts, road blocks and reconnaissance elements located on principal approaches and/or dominating terrain outside an airhead.

Repair parts—Supplies which consist of spare parts, assemblies, and secondary items used primarily in support of maintenance. Included are individual tools, components of tool sets, common hardware, cleaning and preserving material, and technical publications pertaining to maintenance. Excluded are expendables such as office supplies, grease pencils, acetate, and like items.

Routine supply—Supply which consists of replacement and consump-

tion supplies delivered to the airhead in bulk, based on actual need for distribution by normal supply procedures plus reserve supplies to build up to the desired level.

Serial—A compact formation of aircraft, under control of one commander, separated from other formations by time and space, traveling from the departure area to a single drop or landing zone or airfield.

Strategic air movement—A long-range movement of units by air, usually intertheater in nature. The move may be made by either medium or heavy transport aircraft and is a range-type air movement. It may be culminated by an airborne assault launched from an intermediate base.

Target approach point (TAP)—A navigational check point over which the final turn on drop zone/landing zone run-in heading is made.

Weather minimums—The minimums which prescribe the worst weather allowing full-scale participation by all forces.

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[AG 322 (12 Aug 59)]

By Order of *Wilber M. Brucker*, Secretary of the Army:

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General, United States Army,
Chief of Staff.

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R. V. LEE,
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PMST Sr Div Units (2)
PMST Jr Div Units (2)
PMST Mil Sch Div Units (2)
GENDEP (2)
MAAG (2)
Mil Msn (2)

NG: State AG (3); Div (1) (ea CC(1)); Corp Arty (1); ADABde (1) Regt, Gp, ng (1).

USAR: Same as Active Army:

For explanation of abbreviations used, see AR 320–50.

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