



CHAPTER 17

AIRDROP OPERATIONS

INTRODUCTION

Airdrop is a field service that may be required on the battlefield at the onset of hostilities. This chapter outlines, in broad terms, the current Army doctrine on airborne insertions and airdrop resupply. Airborne insertions involve the delivery of a fighting force, along with its supplies and equipment, to an objective area by parachute. This category deals with airborne forces exclusively. Airborne insertions are covered in detail in FM 100-27. Airdrop resupply operations apply to all Army forces. This chapter is devoted primarily to airdrop resupply, including emerging concepts and systems.

RESPONSIBILITIES

Responsibilities for the airdrop function are spread throughout the theater. Some of the major responsibilities are explained here.

Divisions

The airborne division is the only division with organic airdrop support capability. The airdrop support company in the airborne division has the primary responsibility for supporting an airborne insertion. This company provides the necessary air delivery equipment in a ready-to-use configuration. It prepares division equipment for airdrop. After the division has been inserted, the airdrop support company provides limited airdrop resupply for 10 days. The unit also provides support for recovery of airdrop equipment. This allows the company to prepare for a second insertion, if required. All divisions, to include the airborne division, request and receive airdrop resupply support from the corps or

theater. Most airdrop operations will support a division deployed close to the FLOT.

Corps

Each corps requires an airdrop support unit. This unit may be assigned to one of four force compositions (COMPO). The four are COMPO 1, active Army; COMPO 2, Army National Guard; COMPO 3, Army Reserve; and COMPO 4, unresourced force composition. This unit provides airdrop resupply support to all elements of the corps. As a rule, it provides this support to the divisions and separate units located near the FLOT. Under unusual circumstances, units at EAD may require airdrop resupply. Requirements that are beyond the capability of the corps unit are passed to the supporting TAACOM.

EAC

For a fully developed theater of operations, airdrop support units are required in each TAACOM. An airdrop supply company provides airdrop resupply to elements in the corps and forward areas when the corps airdrop support unit is unable to furnish it.

Special Operations Forces (SOF)

SOF have a limited TOE airdrop capability in the special operations support battalion. The ranger regiment has a TDA capability, and the special forces groups have a TOE capability. The theater Army commander can be tasked for airdrop support of these forces after they are deployed.

Long-Range Surveillance Units

Long-range surveillance units are found at both division and corps levels. The airdrop support unit at corps or theater level provides personnel parachute support and airdrop resupply support to these units.

Combined Operations

At corps and below, command organizations are usually national. Airdrop resupply is normally a national responsibility. Normally, each country has its own airdrop capability. However, the airdrop request form is addressed under a NATO STANAG. When directed by the supreme allied commander, the doctrine in this chapter can be changed to fit the situation.

CONCEPT OF OPERATIONS

The onset of hostilities, which may severely disrupt land LOCs, may require the use of airdrop. Later increases in combat intensity, depth, and duration may also dictate its use. Airdrop is a vital link in the distribution system. It extends ALOC and serves as an important combat multiplier. It provides the flexibility required of the supply and distribution systems. Normally, airdrop in a theater of operations is a joint effort involving Air Force aircraft and Army ground support. Joint service FMs of the 10-500 series give the procedures for rigging supplies and equipment. Some Army helicopters are capable of airdropping small bundles. However, aircraft range and weight restrictions severely limit the use of Army aircraft in airdrop operations.

Advantages of Airdrop

Airdrop resupply has several advantages over conventional distribution systems. These advantages include the following:

- Airdrop permits throughput of supplies from the corps and TAACOM area directly to the using unit, even if a unit is in an otherwise unreachable area. In contingency operations where stocks have been established and prerigged, supplies can

be throughput directly from CONUS or OCONUS locations outside the contingency theater.

- Airdrop reduces the need for forward airfields or landing zones.
- It permits greater dispersion of ground tactical forces.
- Airdrop reduces delivery time.
- It reduces congestion at forward airfields and reduces the need for materials handling equipment.
- Airdrop provides a shorter turnaround time for aircraft than air landing, thus increasing their availability.

Disadvantages of Airdrop

While airdrop gives flexibility to supply and distribution systems, commanders and other planners must weigh the disadvantages. These disadvantages include the following:

- Vulnerability to enemy aircraft and ground fire.
- Fewer supplies and equipment that can be carried because of the need to carry special airdrop equipment and air items.
- The need for specially trained rigging personnel and appropriate airlift aircraft with trained crews.
- The impact of adverse weather on delivery capabilities and accuracy.

Unit Responsibilities

The unit requesting the airdrop resupply must select, prepare, and secure the drop zone. It must also control the drop zone in the absence of the Air Force combat control team, recover supplies and equipment, and recover and provide for the retrograde or destruction of air delivery equipment as the situation dictates.

Request Procedures

There are two types of airdrop resupply requests--preplanned and immediate. They are described here.

Preplanned requests. These are based on known or projected requirements and can be programmed in advance. Figure 17-1 (page 17-4) shows the channels for a preplanned request. The request normally flows through logistic channels (S4 or G4) to the appropriate support level (corps or TAACOM). The MMC and MCC direct Army actions. Army responsibilities include moving the supplies and equipment from the storage site to the rigging site. After they are rigged, they are moved to the supporting airfield. They should then be loaded aboard the delivery aircraft. If not loaded immediately, they are temporarily stored in a location chosen by the supporting aerial port personnel. Loading on Air Force aircraft is an Air Force responsibility, although Army personnel may help. The senior Army validator submits an airlift request to the joint force commander's (JFC) designated agent. The JFC agent validates the request, assigns a priority, and then sends it to the Air Force Airlift Control Center (ALCC) for execution. The ALCC directs the Air Force actions.

Immediate airdrop. These requests stem from unanticipated, urgent, or priority requirements. These requirements are critical for a unit to survive or complete its tactical mission. An immediate request may be filled by an immediate mission or by diverting an aircraft from a preplanned mission. These requests flow through Army operational channels (S3 or G3) to the validating authority. This saves time. When possible, the request is passed at the same time through Air Force channels. This allows maximum time for identifying support aircraft and coordinating with the JFC agent. DD Form 1974 is the airlift request form. The use of this form is explained in Joint Publication 1-02 and FM 100-27. STANAG 3093 also endorses DD Form 1974 for use in communications between the US and its allies. The information on the form is required to plan and perform a successful airdrop. An airdrop request is considered to be validated when it is passed to the next level.

Retrograde

The unit receiving the airdrop resupply is responsible for recovering and initially evacuating airdrop equipment. If the situation permits, the unit collects the equipment from the drop zone and returns it to the nearest salvage collection point or collection and classification point. Airdrop equipment is expensive and usually in limited supply. It should be retrograded as quickly as possible for maximum reuse. If the tactical situation does not permit the recovery and retrograde of this equipment, it should be destroyed or buried.

PLANNING CONSIDERATIONS

Airdrop planning factors are found in FM 101-10-1/2. Staff planners at all levels use these factors. Planning factors help determine force structure and aircraft requirements, airdrop work load, air delivery equipment stockage levels, and equipment recovery rates.

Force Composition

Many airdrop support units are in force compositions other than the active Army (COMPO 2,3, or 4). An important consideration for the airdrop planner at theater, corps, or division level is the location and availability of airdrop forces to support the force. Division logistics planners should be sure that the supporting COSCOM and theater logistics planners address these points". If the required force structure is not available in a particular COSCOM or TAACOM, then the planner should--

- Examine the appropriate TPFDL to determine when the forces will be available.
- Determine whether the designated airdrop support units are in the active Army, Army National Guard, Army reserve, or unresourced force structure.
- **Determine the** state of unit readiness.
- Determine if the units are committed to more than one TPFDL.

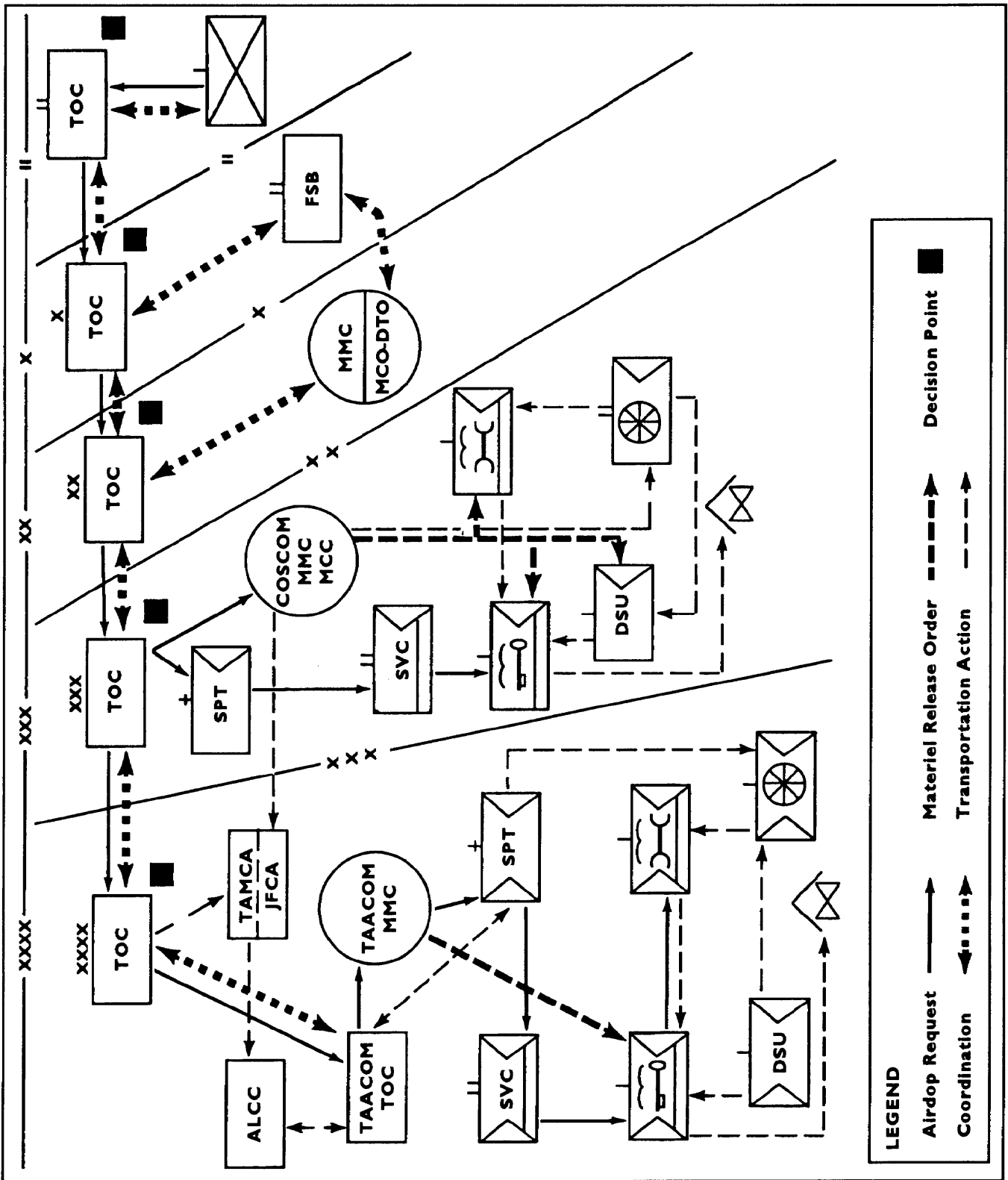


Figure 17-1. Channels for airdrop requests

Alternatives

Airdrop support units may not be available or may not arrive in time to influence the action. Therefore, planners should consider alternatives. One alternative is to prerig critical supplies and equipment for airdrop. This task can be done as an OPROJ. The logistics planner must determine--

- The types and quantities of supplies to be prerigged.
- The air delivery equipment required for rigging supplies.
- How much storage area is required for the prerigged supplies.
- Who will rig the supplies and perform in-storage inspections.
- How the unit will request delivery of the prerigged supplies.

SAFETY

An airdrop support unit's main contribution is to enable the supply and distribution systems to provide continuous sustainment support to forward elements. Airdrop support operations are dynamic in nature. This is true whether the requirement is for parachutists (airborne insertion) or for airdrop resupply.

Operations

Procedural manuals and regulations outline various safety precautions and procedures. These must be followed to allow airdrop rigging operations to be conducted in a relatively accident-free environment. They also ensure that the delivery aircraft will not be damaged during extraction or release of airdrop loads (a prime consideration). The main goal of airdrop resupply operations is the timely delivery of supplies or equipment to the user in a usable condition.

Threat

Most airdrop support units will be located in the corps rear area or at the operational level. Modern threat capabilities and doctrine make them susceptible to many threat tactics. The units use

normal defensive procedures before a threat attack. Airdrop support units must provide as much NBC protection as possible for airdrop equipment. No decontamination procedures are now available for the nylon components of airdrop equipment. Some effective passive measures include decentralization of storage locations, the use of indoor storage facilities, and the use of some type of protective cover for supplies stored in the open. Decentralization of storage locations is especially effective against direct and indirect fire weapons. During periods when NBC contamination is present, rigging operations stop. This is necessary because--

- Airdrop equipment will be contaminated if it is rigged when contamination is present. Once a contaminated area has been cleared and airdrop supplies and equipment have been checked for contamination, rigging operations can continue.
- Contaminated airdrop equipment will not normally be allowed on board an airdrop aircraft.

DISTRIBUTION

Combat units take only the supplies and equipment needed to keep them operational until they can be resupplied, so planning and coordination must be continuous. The airdrop distribution system allows the timely delivery of supplies and equipment to supported units. While classified as a field service, airdrop provides a vital link in the distribution system, so both field service and transportation planners must consider it carefully.

EMERGING CONCEPTS AND SYSTEMS

Within the next few years, a new airdrop support concept should be in place. There are several new airdrop systems in research and development that will improve survivability in relation to the threat. The new systems pertain to the airdrop aircraft and the actual supplies and equipment being dropped.

Concepts

A new airdrop support concept is outlined in FM10-500-1. Basically, each corps is authorized a light airdrop supply company. This unit can rig 120 tons of supplies per day for airdrop delivery using the container delivery system (CDS), primarily with the A-22 container. A single A-22 container will hold up to 2,200 pounds of supplies. A C-130 aircraft can deliver up to 16 of these containers in a single pass across a drop zone. The C-141 can deliver up to 40 containers on a single pass. Supply and maintenance support for the light airdrop supply company will come from an airdrop equipment repair and supply company located in the supporting TAACOM. Airdrop resupply support for the heavier loads, such as bridging materials, will be forwarded to a heavy airdrop supply company located in the TAACOM. See FM 10-500-1 for more details of the new airdrop support concept.

Systems

In the 1980s Army and Air Force personnel examined threat air defense capabilities and determined that future airdrop systems should be capable of being used on aircraft flying low and fast. A new airdrop aircraft is being tested by the Air Force. It has been designed with the capability of flying airdrop missions at low altitudes (300 feet above ground level (AGL)) and high speeds (up to 235 knots indicated air speed (KIAS)). The container delivery system has already been changed to allow airdrop at altitudes down to 300 feet AGL. An improved version will allow the airdrop of the CDS at speeds up to 250 KIAS. The thrust of Army developmental efforts in airdrop

equipment is to reduce vulnerability and capitalize on the delivery capability of developmental aircraft. The 60,000-pound-capacity airdrop system will allow platform loads weighing from 42,000 to 60,000 pounds to be dropped from the C-5 and developmental aircraft. The Army and Air Force are jointly revalidating the need for low and fast systems. The need for a high-altitude, offset delivery capability is also being explored.

RELATED DOCTRINE

A number of publications expand on the information contained in this chapter. The major ones are listed in Table 17-1.

Table 17-1. Publications related to airdrop operations

Field Manuals	Topic
10-500-series	Specific rigging procedures for all types of loads approved for airdrop
10-500-1	Airdrop support operations in a theater of operations
10-500-9	Operating details of the various airdrop support units
100-27/ AFM 2-50	Army and Air Force joint doctrine for airborne and tactical airlift operations
Technical Manuals	Topic
10-1670-series	Organizational, GS, and DS maintenance instructions for Army parachutes and other airdrop equipment