

## CHAPTER 14

# A-SERIES CONTAINERS

*Two types of A-series containers are used with rigging door bundles: the A-7A cargo sling and A-21 cargo bag. The containers can be rigged with a drogue or breakaway static line. For Army aircraft, a container load to be air-dropped from a shackle (wing load), helicopter door, or utility aircraft is rigged with a breakaway static line. For high-performance fixed-wing aircraft, loads are normally rigged with parachutes having nonbreakaway static lines. Paratroop door loads that are to be followed immediately by parachutists must be rigged with parachutes having nonbreakaway static lines. Each static line must have a drogue attached to it as outlined in appropriate technical manuals. Loads must be placed in the paratroop doors so the largest dimension is upright/vertical. The parachute must be positioned on top of the load or toward the inside of the aircraft. A ramp load to be followed immediately by parachutists must be rigged with a T-10 parachute (converted for cargo) or a parachute having a breakaway static line.*

### Section I RIGGING PROCEDURES

Door bundles are rigged in such a manner that when placed on the balance point of the jump platform, the parachute is on top or facing the center of the aircraft, based on the largest dimension, and not on the side. The maximum weight of the bundle is 500 pounds (not including parachute weight). Exceptions to this rigging technique are allowed for the 90-mm recoilless rifle and the Stinger missile. In both cases, the bundle is placed upright with the parachute facing the center of the aircraft. Both are rigged using the A-21 container. The skid board on the Stinger is placed inside the canvas cover.

#### 14-1. ASSEMBLIES

When rigging an item, all components needed for its assembly must be packed in the same airdrop bundle. (For example, a radio and battery are packed in the same bundle.) When items such as radio equipment are rigged, each item is

individually wrapped. Padding or honeycomb is placed under the item being prepared and inserted between the items comprising the load to prevent contact. Cellulose wadding, felt, or other suitable material must be used to avoid metal-to-metal or metal-to-wood contact.

#### **14-2. WEBBING**

All excess lengths of webbing are rolled and tied with 1/4-inch cotton webbing in a surgeon's knot and locking knot. This reduces the danger of bundles becoming snagged when ejected or released from the aircraft.

#### **14-3. HAZARDOUS MATERIALS**

If hazardous materials are placed inside bundles, they must have a shipper's certificate completed IAW AFJMAN 24-204/TM 38-250.

NOTE: The shipper's certificate is attached to the manifest, not the bundle.

### **Section II**

#### **A-7A CARGO SLING**

The A-7A consists of the following components:

- Four straps, 188 inches long, constructed of Type X cotton or Type VII nylon.
- A strap fastener at one end of each strap.
- Four D-rings.

#### **14-4. CHARACTERISTICS**

Container components weigh 8 pounds with a maximum weight of 500 pounds (not including the parachute). The minimum weight depends on the parachute used. The dimensions are a maximum 30 inches wide by 48 inches deep by 66 inches high (to include cargo parachute) or 69 inches high to accommodate the 90-mm recoilless rifle or Stinger missile.

#### **14-5. TWO-STRAP BUNDLE**

The jumpmaster lays out one strap perpendicular (length) to the bundle with the thick lip portion of the friction bar on the strap fastener facing down. He lays out one strap parallel (width) to the bundle with the thick lip portion of the friction bar on the strap fastener facing down and over the top of the perpendicular strap. When the straps are in place, they are ready to receive the bundle.

a. Center the bundle on the perpendicular strap. Route the perpendicular strap over the top of the bundle and through the single D-ring (through the rectangular portion of the D-ring), fold, and secure.

b. Route the parallel strap through the D-ring (through the rectangular portion of the D-ring), roll, and secure. Tie all excess webbing to itself using one turn of 1/4-inch cotton webbing tied in a surgeon's knot and locking knot.

c. Tighten all straps. Tie off the excess above the strap fastener; ensure that the excess webbing is not above the top of the bundle. The bundle has one smooth side for ease in ejecting from the aircraft.

#### **14-6. THREE-STRAP BUNDLE**

The jumpmaster lays out one strap parallel (lengthwise) to the bundle. He lays out two straps parallel to each other on top of the parallel strap (ensures strap fasteners are on the same side), at least 16 inches from each other, and centered.

a. Center the bundle on the parallel strap. Route the parallel strap over the top of the bundle and through the two D-rings, fold, and secure. Route the parallel strap through the D-rings from the inside toward the outside so that the D-rings are pointing to each other, fold, and secure. Tie all excess webbing to itself with a surgeon's knot and locking knot.

b. Tighten all straps. Tie off the excess above the strap fasteners; ensure that the excess webbing is not above the top of the bundle. The bundle has one smooth side for ease in ejecting from the aircraft.

#### **14-7. FOUR-STRAP BUNDLE**

The jumpmaster lays out two straps parallel to the bundle and centered. He lays out two straps parallel to each other on top of the parallel straps and centered. The bundle is centered on the parallel straps.

a. Route the parallel straps through the two D-rings (one D-ring per strap), fold, and secure. Route the parallel straps through the D-rings (ensuring that both D-rings point in the same direction), fold, and secure (one D-ring for each strap). Ensure that the strap fasteners are on the same side. Tie all excess webbing to itself with a surgeon's knot and locking knot.

b. Tighten all straps and tape excess. Tie off the excess above the strap fastener; ensure that the excess webbing is not above the top of the bundle. The bundle has one smooth side for ease in ejecting from the aircraft.

### **Section III**

#### **A-21 CARGO BAG**

The A-21 cargo bag consists of the following components.

- Canvas cover: Cotton duck material, 97 inches by 115 inches, with eight strap keepers.
- Sling assembly with scuff pad: One 188-inch main strap; two 144-inch side straps; scuff pad 30 inches by 48 inches; and four lifting handles.

- Quick-release assembly: Quick-release device with safety clip; three quick-release straps; and one fixed quick-release strap.
- Two-ring straps: The ring strap has one 9-inch strap that has a friction adapter, and one 7-inch strap with a D-ring.

#### **14-8. CHARACTERISTICS**

Container components weigh 18 pounds with a maximum weight of 500 pounds (not including the parachute). (The minimum weight depends on the parachute.) Dimensions are a maximum 30 inches wide by 48 inches deep by 66 inches high or 69 inches high for the Stinger missile. (See FM 10-550.) Dimensions include the cargo parachute.

NOTE: See FM 10-500-3 for further information on rigging containers.

#### **14-9. METHOD OF RIGGING**

The jumpmaster spreads the canvas cover on a level surface with all strap keepers facing up. He positions the sling assembly webbing straps down on the canvas cover and threads the straps through the keepers. The sling and canvas cover are turned over as a unit so the sling is beneath the cover. The parachutist centers the load on the canvas cover, using cushioning material, as needed. He wraps the load in the canvas cover, side flap first, and folds all excess material under.

a. Attach the two-ring straps to the 188-inch main strap, keeping the D-ring-to-D-ring contact, and ensuring they are centered. Attach the four quick-release straps to the 144-inch side straps. Ensure that the rotating disk is facing up when the quick-release assembly is placed on top of the load (thick-lip portion of the friction bar facing out).

b. Thread the fixed, quick-release strap with the quick-release assembly attached through the nearest steel rod ring. Thread the remaining quick-release straps through the nearest steel rod rings. Insert the lugs into the quick-release assembly.

c. Tighten the quick-release straps and the two-ring straps; roll all excess webbing. Ensure that it is tied off below the friction adapter with a surgeon's knot and locking knot and that the quick-release device is centered on the bundle.

### **Section IV**

## **CARGO PARACHUTE RIGGING ON A-SERIES CONTAINERS**

After the A-series containers are rigged, the jumpmaster inspects the cargo parachutes and attaches them to the load.

**14-10. INSPECTION**

The cargo parachute is placed on the center of the bundle and is inspected for—

- Four tie-down straps.
- Two risers complete (clevis, clevis pin, safety wire).
- Static line complete with drogue device (clevis, clevis pin, safety wire).  
The drogue device must be attached to the breakcord attaching loop, unless a breakaway static line is used.

**14-11. ATTACHMENT**

The jumpmaster ensures that the risers go directly to the attaching point (D-ring), tie-downs are attached (tied to side straps), static line is free to deploy, and risers are not routed around or under any part of the bundle.

NOTE: The cargo parachute should be attached with the side of the pack where the risers come out, collocated to the rough side of the bundle.