Airdrop of Supplies and Equipment: Rigging Loads for Special Operations

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AIRDROP OF SUPPLIES AND EQUIPMENT:
RIGGING LOADS FOR SPECIAL OPERATIONS

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Preface

SCOPE

This manual tells and shows how to rig the following airdrop loads for special operations:

- Four different High Speed Low Level Aerial Delivery System (HSLADS) container loads rigged for airdrop from the MC-130 aircraft.
- Two different inflated Combat Rubber-Raiding Crafts (CRRC) rigged on a Combat Expendable Platform (CEP) for low-velocity airdrop from a C-130 or C-17 aircraft.
- The Rigging Alternate Method Zodiac (RAMZ) is rigged in an A-22 container for low-velocity airdrop from a C-130 or C-17 aircraft.
- The Naval Special Warfare Rigid Inflatable Boat (NSWRIB) is rigged for low-velocity airdrop on a specially designed platform from a C-130 or C-17 aircraft.
- Two different Advanced Rescue Crafts (ARC) rigged on a combat expendable platform (CEP) for low velocity airdrop from a C-130 or C-17 aircraft.
- The Wind Supported Aerial Delivery System (WSADS) Snow Goose is a low-cost, reusable, fully autonomous, Unmanned Aerial Vehicle (UAV) that can be used to carry out a variety of missions at otherwise inaccessible locations for low velocity airdrop from a C-130 or C-17 aircraft.

APPLICABILITY

This publication applies to the Active Army, the Army National Guard/Army National Guard of the United States, and the United States Army Reserve unless otherwise stated.

USER INFORMATION

The proponent of this publication is the United States Army Training and Doctrine Command (TRADOC). You are encouraged to report any errors or omissions and to suggest ways of making this a better manual.

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Introduction

DESCRIPTION OF ITEMS

The descriptions of the items rigged in this manual are given below:

- **High Speed Low Level Aerial Delivery System (HSLLADS):** The HSLLADS container is an adjustable container made of an A-21 cargo cover and other airdrop items. The dimensions and weight capacity of the container is determined by the load being airdropped.

- **Zodiac F470U Combat Rubber Raiding Craft (CRRC):** The inflated Zodiac 470U boat is airdropped singly or in pairs. Each boat is 75 inches wide, 22 inches high, 185 inches long and may be airdropped utilizing a roll-up floor or hard deck. A single boat weighs approximately 322 pounds.

- **Zodiac F470U Combat Rubber Raiding Craft rigged in an A-22 Container or Rigging Alternate Method Zodiac (RAMZ):** The boat is rigged in an A-22 container rigged for low-velocity airdrop over water. The boat is deflated and rigged for rapid inflation and deployment once in the water.

- **Naval Special Warfare Rigid Inflatable Boat (NSWRIB):** The NSWRIB is 108 inches wide, 100 inches high and 432 inches long. The boat rigged on its platform can weigh a maximum of 20,640 pounds.

- **Advanced Rescue Craft (ARC):** The ARC is rigged on a 48- x 87-inch combat expendable platform for low-velocity airdrop. The load can be rigged with or without a 20-man life raft and a rescue board, a rucksack, and an aid bag. The ARC is 70 inches high, 48 inches wide and 111 inches long. The ARC is 1,140 pounds when rigged.

- **Snow Goose:** The Wind Supported Aerial Delivery System (WSADS) Snow Goose is a low-cost, reusable, fully autonomous, unmanned aerial vehicle (UAV) that can be used to carry out a variety of missions at otherwise inaccessible locations. It is quickly configurable for air or ground launch deployable missions.

SPECIAL CONSIDERATIONS

**CAUTION**

Only ammunition listed in FM 4-20.153/MCRP 4-11.3B/TO 13C7-18-41 may be airdropped. Only ammunition and supplies approved for high velocity or HSLLADS airdrop may be airdropped by HSLLADS. When a dangerous material is being rigged, the container must be marked, labeled and comply with AFMAN 24-204(l)/TM 38-250/NAVSUP PUB 505/MC0 P4030.19H/DLAI 4145.3. A copy of this manual must be available to the joint airdrop inspectors during the before and after loading inspections.

HSLLADS Container. The following items apply to the HSLLADS container:

- A multiple drop of four HSLLADS containers may be airdropped on one pass provided the total weight of the load does not exceed 2,200 pounds.

- The type XXVI nylon webbing used to secure multiple HSLLADS loads will be furnished by the US Army.

- HSLLADS containers are airdropped from the MC-130 aircraft only.
**Note.** For Air Force use only. A HSLLADS container weighing at least 250 pounds may be airdropped for continuance training purposes only, provided the 35 pounds per square foot minimum is maintained. For unilateral training loads honeycomb is not required.

**Boats and Parachutists.** The following items apply to boats and parachutists:

- At no time will the total number of static lines on the anchor line cable for personnel and cargo exceed 20.
- The total rigged weight of rubber raiding craft loads on CEP must be a minimum of 2,100 pounds. Sandbags or other ballast may be added to the platform for this purpose.
Chapter 1

Rigging High Speed Low Level Aerial Delivery System (HSLLADS) Container Loads

SECTION I-RIGGING THE CONTAINER

DESCRIPTION OF LOAD

1-1. The HSLLADS container (Figure 1-1) is an adjustable container made of an A-21 (nylon) cargo cover and other airdrop items. The assembled items are rigged to ensure that the container will withstand the shock of the parachute opening when airdropped at high speeds.

Figure 1-1. High Speed Low Level Aerial Delivery System (HSLLADS)
PREPARING CONTAINER

1-2. Dimensions of the load base in these procedures are typical. The size of the load base may change to fit other supply loads. Prepare the load base and HSLLADS container as shown in Figures 1-2 and 1-3.

CAUTION

When a container is rigged for delivery from Air Force aircraft, the rigged weight divided by the largest surface area (measured in square feet) must be a minimum of 35 pounds per square foot.

1. Drill 1/2-inch diameter holes 4 inches from each corner and 1 inch from the edge of a 3/4- by 30- by 48-inch piece of plywood.

2. Center two additional 1/2-inch diameter holes on each 48 inch side of the skid 4 inches from each other and 1 inch from the edge.

3. Thread a 12-foot length of 1/2-inch tubular nylon webbing through each pair of holes in the skid. (Doubled, type III nylon cord may be used).

Note. Denoted skid tiedown numbers are referred to in Figure 1-7.

Figure 1-2. Skid Prepared
4. Center a 30- by 48-inch piece of honeycomb on the skid.

5. Thread three 12- foot lengths of type X nylon webbing through the keepers on the A-21 cargo cover.

6. Place the cover, with the webbing down, on top of the honeycomb and skid.

7. Center another 3/4- by 30- by 48-inch piece of plywood and a 30- by 48-inch piece of honeycomb on top of the cargo cover. This is the load base.

Figure 1-3. A-21 Honeycomb, Container Cover and Load Base Placed on Skid