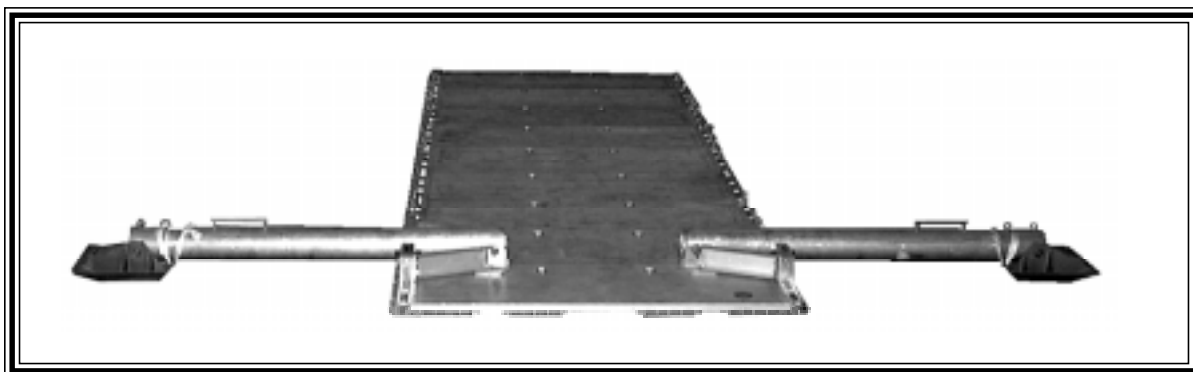




**AIRDROP OF SUPPLIES AND EQUIPMENT:**

# **DUAL ROW AIRDROP SYSTEMS**



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DEPARTMENT OF THE ARMY  
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HEADQUARTERS  
DEPARTMENT OF THE ARMY  
DEPARTMENT OF THE AIR FORCE  
Washington, DC, 3 January 2005

## **AIRDROP OF SUPPLIES AND EQUIPMENT: RIGGING DUAL ROW AIRDROP SYSTEM**

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## PREFACE

### SCOPE

The purpose of this manual is to provide the latest approved procedures for rigging Dual Row Airdrop System (DRAS) airdrop platforms. This manual is written for use by the parachute rigger.

The procedures contained in this manual are typical and serve as the standard from which all DRAS platform rigging is derived. Due to the uniqueness of some equipment and items, **the procedures in a specific rigging chapter may be different from those in chapters 1 through 3. When procedures are different, those in the specific chapter will be followed. When an item of equipment is specified to be used for which its minimum or maximum capacity is exceeded, a notice of exception will be printed at the beginning of each paragraph in each rigging chapter where the exception is authorized.**

Chapters 1 and 2 contain specific limitations and general information about the rigging of DRAS airdrop platform loads for low-velocity airdrop from the C-17 (Globemaster) aircraft.

Chapter 3 shows and tells how to prepare, attach, and safety tie some of the components and systems used in the specific rigging chapters of the FM 4-20.105/TO 13C7-1-51.

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## Chapter 1

# Airdrop Information

### RESPONSIBILITIES

1-1. US Air Force personnel are responsible for loading rigged Dual Row Airdrop System (DRAS) platform loads into the C-17 (Globemaster) aircraft and installing and operating the airdrop system.

### TYPE AND METHOD OF AIRDROP

1-2. As used in this manual, DRAS allows platforms to be loaded side-by-side inside C-17 aircraft. DRAS airdrop is designed to supplement the usual surface methods of delivering supplies and equipment to forces in the field.

**a. Type of Airdrop.** Currently the only type of airdrop used to deliver platform loads is low-velocity airdrop. DRAS low-velocity airdrop delivers platform loads from C-17 aircraft. The G-11D cargo parachutes are used to slow the descent of the loads to ensure minimum landing shock. The number of cargo parachutes can vary as shown in Table 1-1. Loads with different quantities of the same type parachute may be airdropped from the same aircraft or element provided the following conditions are met:

- (1) Airdrop altitude for the aircraft or element will be determined by the type and number of parachutes on the load requiring the highest airdrop altitude.
- (2) Aircraft or elements with lower airdrop altitudes will drop before aircraft or elements with higher airdrop altitudes.
- (3) The transported force accepts strike report responsibility for loads other than the first platform to exit the aircraft or element lead for formation airdrops.

**Table 1-1. Type and Number of Parachutes for Low-Velocity Airdrop**

MINIMUM DROP ALTITUDE (FEET AGL)	PARACHUTES
1,000	<b>G-11D</b> 2 to 4

**CAUTION**  
Drop altitudes reflect MINIMUM drop altitudes.

**b. Method of Airdrop.** The gravity method is used for DRAS platform loads delivered by low-velocity airdrop. The aircraft flies at an incline of approximately 4 degrees, the locks holding the platforms are removed, and the loads roll out of the aircraft by gravitational pull.