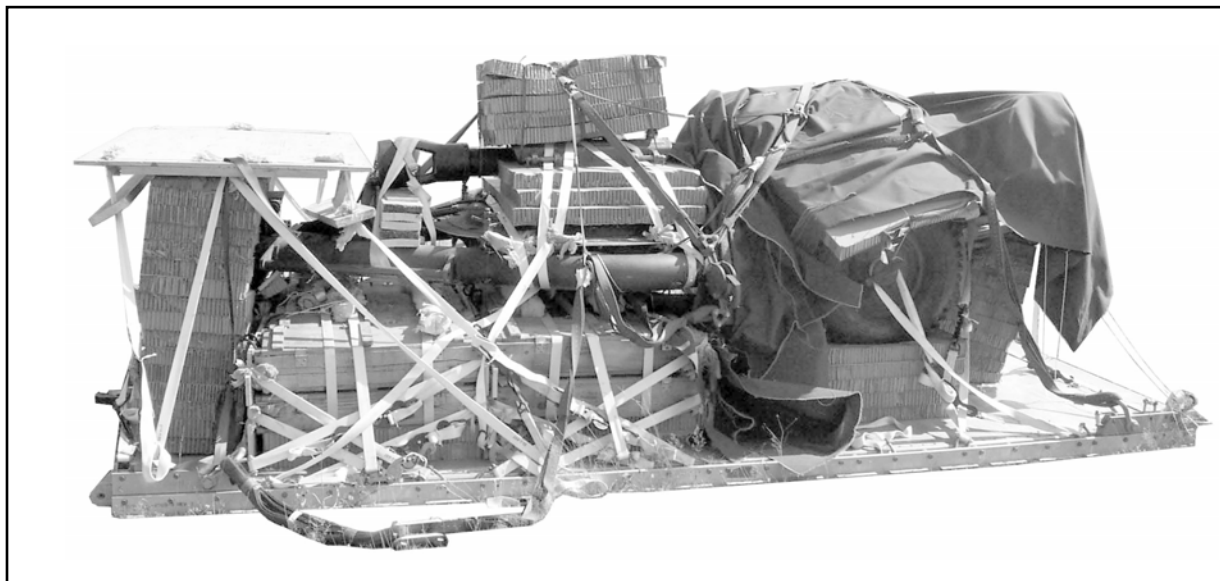




AIRDROP DERIGGING AND RECOVERY PROCEDURES



OCTOBER 2004

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

**HEADQUARTERS
DEPARTMENT OF THE ARMY
DEPARTMENT OF THE AIR FORCE**

This page intentionally left blank.

Airdrop Derigging and Recovery Procedures

Contents

| | Page |
|---|------|
| Preface | iii |
| Scope..... | iii |
| User Information | iii |
| | |
| Chapter 1 Responsibilities and Cautions | |
| Responsibilities..... | 1-1 |
| Cautions..... | 1-1 |
| | |
| Chapter 2 Airdrop Rigging Components | |
| General | 2-1 |
| Types of Platforms..... | 2-1 |
| Outrigger Assembly | 2-2 |
| Cargo Slings | 2-3 |
| Cargo Parachute Release Assemblies..... | 2-4 |
| Link Assemblies..... | 2-5 |
| Clevis Assemblies | 2-6 |
| Covers | 2-6 |
| Modification Hardware Items | 2-6 |
| Common Hardware Items..... | 2-7 |
| Cargo Covers | 2-7 |
| Heavy Drop Derigging System | 2-8 |
| Straps and Webbing | 2-8 |
| Extraction Force Transfer Coupling (EFTC)..... | 2-11 |
| Extraction Parachute Jettison System (EPJS) | 2-12 |

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

*This publication supersedes FM 10-500-7/TO 13C7-1-10, 20 September 1994.

| | | |
|------------------|---|----------------|
| Chapter 3 | Airdrop Derigging Procedures | |
| | General | 3-1 |
| | Airdrop Platform Load Derigging Procedures | 3-1 |
| | Airdrop Container Load Derigging Procedures | 3-6 |
| | Tools Used for Derigging | 3-8 |
| Chapter 4 | Airdrop Equipment Recovery Procedures | |
| Section I | Preparation for Recovery | |
| | General | 4-1 |
| | Preparation for Recovery Operations | 4-1 |
| | Principles of Recovery and Evacuation | 4-2 |
| Section II | Recovery of Airdrop Equipment on the Drop Zone | |
| | Recovery Procedures | 4-4 |
| | Destruction of Airdrop Equipment | 4-7 |
| | Temporary Storage of Parachutes and Related Airdrop Equipment | 4-7 |
| Section III | Recovery of Airdrop Equipment on the Aircraft | |
| | Personnel Equipment | 4-8 |
| | Container Delivery System (CDS) Equipment | 4-8 |
| | Heavy Drop Equipment | 4-9 |
| Chapter 5 | Derigging and Recovery Under Special Conditions | |
| | General | 5-1 |
| | Polar Conditions | 5-1 |
| | Tropical Conditions | 5-2 |
| | Desert Conditions | 5-2 |
| | Marine Conditions (water drop zones) | 5-3 |
| | Mountainous Conditions | 5-3 |
| | Glossary | Glossary-1 |
| | Bibliography | Bibliography-1 |

Preface

SCOPE

This manual gives the latest approved doctrine for derigging, recovery, and evacuation of airdrop supplies and equipment. It is to be used by acting recovery NCOICs or OICs for a unit receiving airdrop supplies. This manual provides critical instructions for recovery of airdrop supplies and equipment. The instructions include: derigging, recovery, and evacuation responsibilities; identification of airdrop items and components; methods of collecting and handling parachutes and related airdrop equipment for recovery and evacuation; derigging and recovery support requirements; and derigging and recovery under special conditions.

USER INFORMATION

The proponent of this publication is HQ TRADOC. You are encouraged to report any errors or omissions and to suggest ways of making this a better manual.

Army personnel, send your comments on DA Form 2028 directly to:

Director
Aerial Delivery and Field Services Department
USA Quartermaster Center and School
1010 Shop Road
Fort Lee, Virginia 23801-1502

Air Force personnel, send your reports on AFTO Form 22 through your respective command Weapons and Tactics to:

Headquarters
Air Mobility Command (AMC/A39T)
402 Scott Drive, Unit 3AI
Scott AFB, Illinois 62225-5302

Air Force personnel in Special Operations Command, send your reports on AFTO Form 22 HQ AMC/A39T will consolidate and forward changes to:

Director
Aerial Delivery and Field Services Department
USA Quartermaster Center and School
1010 Shop Road
Fort Lee, Virginia 23801-1502

Also send an information copy of AFTO Form 22 to:

WR-ALC/LKCB
460 Richard Ray Blvd.
Robins AFB, Georgia 31098-1640

Chapter 1

Responsibilities and Cautions

RESPONSIBILITIES

1-1. Much of the damage to airdrop equipment and supplies occurs during derigging. Airdrop equipment must be derigged and recovered correctly to prevent damage to the fragile nylon airdrop items from cuts, water, and mildew; petroleum product contamination; and excessive exposure to sunlight. Recovery team personnel should be trained by parachute riggers (MOS 92R) prior to an airdrop operation. Riggers may be requested to assist the recovery OIC or NCOIC and to provide technical assistance. Riggers are not responsible for the recovery of airdrop equipment and supplies. The responsibilities for recovery are described below.

a. **THE COMMANDER OF THE RECEIVING UNIT.** The commander is responsible for appointing an OIC, NCOIC, or a supervisor. He is also responsible for organizing teams to recover the supplies and equipment, providing temporary storage if needed, and evacuating all airdrop rigging equipment.

b. **RECOVERY OIC OR NCOIC.** The recovery OIC or NCOIC is responsible for planning and supervising the operation. He supervises the teams needed to recover and evacuate all airdrop rigging equipment.

c. **THE RECEIVING UNIT.** The receiving unit should be capable of conducting the recovery. It is responsible for returning the airdrop equipment to the unit to which it belongs in proper condition as detailed in this manual. The unit can be held accountable for damage to the airdrop equipment as a result of negligence or failure to follow the procedures in this manual.

CAUTIONS

1-2. A majority of airdrop equipment is made of nylon. Nylon is subject to being degraded by sunlight and some types of artificial lighting. Exposure to sunlight, especially for parachutes, must be minimized. Petroleum products such as diesel fuel, gasoline, grease, and oil also have a degrading effect on nylon. Nylon airdrop items may fail or lose strength if they are contaminated with petroleum products. Airdrop equipment systems generally do not require knives for recovery and derigging. If nylon, dacron, or rayon airdrop items are immersed in salt water, they must be evacuated immediately. They should also be rinsed within 48 hours, under the supervision of a qualified parachute rigger, to avoid the possibility of having to condemn the equipment. In the process of recovery, especially in arid climates, exercise caution when recovering airdrop equipment, particularly parachutes. Also small creatures, such as snakes and insects (some poisonous), often seek shelter in the equipment, and they may be evacuated with the airdrop equipment. Take extreme care when recovering damaged airdrop loads containing hazardous materials (ammunition, pyrotechnics, and similar items). The Extraction Parachute Jettison Device (EPJD) contains an explosive squib, Hazard Class Division 1.4S. Extreme caution must be taken when handling this device. Notify Explosive Ordnance Disposal (EOD) personnel before recovery of damaged airdrop loads containing hazardous materials.