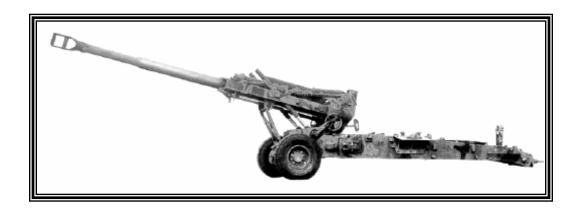


Airdrop of Supplies and Equipment:

Rigging M198, 155-MM Howitzer



JUNE 2004

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited

HEADQUARTERS
DEPARTMENT OF THE ARMY
DEPARTMENT OF THE AIR FORCE



FIELD MANUAL No. 4-20.127 TECHNICAL ORDER No. 13C7-10-191

DEPARTMENT OF THE ARMY DEPARTMENT OF THE AIR FORCE Washington, DC, 29 June 2004

Airdrop of Supplies and Equipment: Rigging M198, 155-MM Howitzer

Contents

		Page
	Preface	
	Introduction	iv
	Description of Load	iv
	Special Considerations	
Chapter 1	Rigging M198, 155-mm Howitzer on a Type V Platform	
	Description of Load	1-1
	Preparing Platform	
	Building and Positioning Honeycomb Stacks	
	Stowing Accompanying Equipment	1-6
	Preparing Howitzer	1-8
	Installing Suspension Slings	1-19
	Setting Howitzer on Platform	1-20
	Lashing Howitzer	1-21
	Covering Load and Safety Tieing Slings	1-22
	Stowing Cargo Parachutes	1-24
	Installing Extraction System	1-28
	Installing Release System	1-29
	Placing Extraction Parachute	1-29
	Installing Provisions for Emergency Restraints	1-29
	Marking Rigged Load	
	Equipment Required	1-30

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

^{*}This publication supersedes FM 10-527, 30 September 1982.

Snapter 2	a Type V Platform	n Load on
	Description of Load	2-1
	Preparing Platform	
	Rigging Accompanying Ammunition Load	2-3
	Preparing and Positioning Honeycomb Stacks	2-12
	Stowing Accompanying Equipment	2-18
	Preparing Howitzer	
	Installing Lifting Slings and Positioning Howitzer	
	Lashing Howitzer	
	Building and Installing Release Stowage Platform	
	Covering Load	
	Installing Suspension Slings	
	Stowing Cargo Parachutes	
	Installing Extraction System	
	Installing Parachute Release System	
	Installing Provisions for Emergency Restraints	
	Placing Extraction Parachute	
	Marking Rigged Load	
Chapter 3	Rigging M198, 155-mm Howitzer with Accompanying Ammunition	
-	Modular Artillery Charge System (MACS) on a Type V Platform	
	Description of Load	3-1
	Preparing Platform	3-1
	Rigging Accompanying Ammunition Load	3-3
	Preparing and Positioning Honeycomb Stacks	3-12
	Stowing Accompanying Equipment	3-12
	Preparing Howitzer	
	Installing Lifting Slings and Positioning Howitzer	
	Lashing Howitzer	
	Building and Installing Release Stowage Platform	
	Installing, Padding and Securing Suspension Slings	
	Stowing Cargo Parachutes	
	Installing Extraction System	
	Installing Parachute Release System	
	Installing Provisions for Emergency Restraints	
	Placing Extraction Parachute	
	Marking Rigged Load	
	Equipment Required	3-42
	Glossary	
	References	References 1

PREFACE

SCOPE

The purpose of this manual is to provide the latest approved procedures for rigging the M198, 155-mm howitzer on the Type V platform for low-velocity airdrop from C-130, C-141 and C-17 aircraft. This manual is written for use by the parachute rigger.

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, route your reports on AFTO Form 22 through: respective command Weapons and Tactics to:

Headquarters Air Mobility Command (AMC/A3KT) 402 Scott Drive, Unit 3AI Scott AFB, Illinois 62225-5302

 $HQ\:AMC/A3KT$ 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

Introduction

DESCRIPTION OF LOAD

This manual shows and tells how to rig the M198, 155-MM howitzer with different modifications and different amounts of accompanying equipment and ammunition. The M198 is rigged in the following configurations:

- **a.** The M198 howitzer with accompanying gun equipment weighing 610 lbs and no accompanying ammunition load.
- **b.** The M198 howitzer with an accompanying load of ammunition, water cans, and gun equipment weighing 1509 lbs.
- **c.** The M198 howitzer with accompanying ammunition load using the Modular Artillery Charge System (MACS), water cans and gun equipment weighing 1509 lbs.

SPECIAL CONSIDERATIONS

CAUTION

Only ammunition listed in FM 4-20.153/MCRP 4-11.3B/TO13C7-18-41 may be airdropped.

NOTICE OF EXCEPTION:

The procedure for using the 25 foot arming lanyard with the M-2 parachute release differs from the FM 4-20.102/ NAVSEA SS400-AB-MMO-010/TO 13C7-1-5. An exception to FM 4-20.102/NAVSEA SS400-AB-MMO-010/ TO 13C7-1-5 is granted. The procedure in this manual MUST be followed.

The loads covered in this manual include hazardous material as defined in AFMAN(I) 24-204/TM 38-250. The hazardous materials must be packaged, marked and labeled as required by AFMAN(I) 24-204/TM 38-250.

A copy of this manual must be available to the Joint Airdrop Inspectors during the before and after loading inspection.

Chapter 1
Rigging M198, 155-MM Howitzer on a Type V Platform



DESCRIPTION OF LOAD

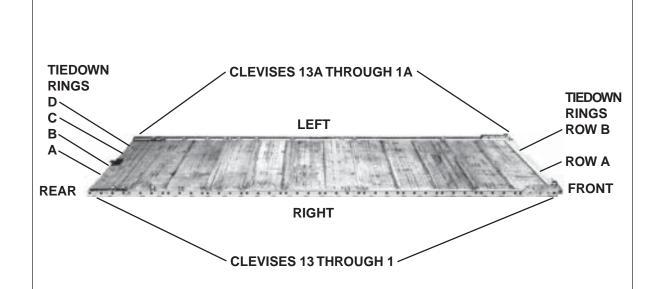
1-1. The M198, 155-mm howitzer is rigged on a 24-foot, type V airdrop platform for low-velocity airdrop from C-130, C-17 and C-5 aircraft. The howitzer is dropped with the accompanying gun equipment (section chest, camouflage net and poles, cleaning pail, and pioneer tools) which weighs 610 pounds. The load may require either four G-11B or five G-11C cargo parachutes depending on the weight.

PREPARING PLATFORM

1-2. Prepare a 24-foot, type V airdrop platform according to TM 10-1670-268-20&P/TO 13C7-52-22. Install two tandem links and 26 tiedown clevis assemblies as shown in Figure 1-1.

Notes: 1. The nose bumper may or may not be installed

2. Measurements given in this chapter are from the front edge of the platfrom, NOT from the front edge of the nose bumper.



Step:

- 1. Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-268-20&P/ TO 13C7-52-22.
- 2. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
- 3. Bolt 13 tiedown clevises to each platform side rail according to FM 4-20.102/ NAVSEA SS400-AB-MMO-010/TO 13C7-1-5. Starting at the front of each side rail, bolt a tiedown clevis to the first bushing of the tandem link and to bushings 9, 20, 22, 28, 33, 35, 36, 37, 39, 42, 45, and 46 of the platform.
- 4. Starting at the front of the platform, number the clevises bolted to the right side rail from 1 through 13 and those bolted to the left side rail 1A through 13A.
- 5. Number the rear row of four deck rings according to FM 4-20.102/ NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.

Figure 1-1. Platform Prepared

BUILDING AND POSITIONING HONEYCOMB STACKS

1-3. Build five honeycomb stacks and place them on the platform as shown in Figures 1-2 through 1-4.

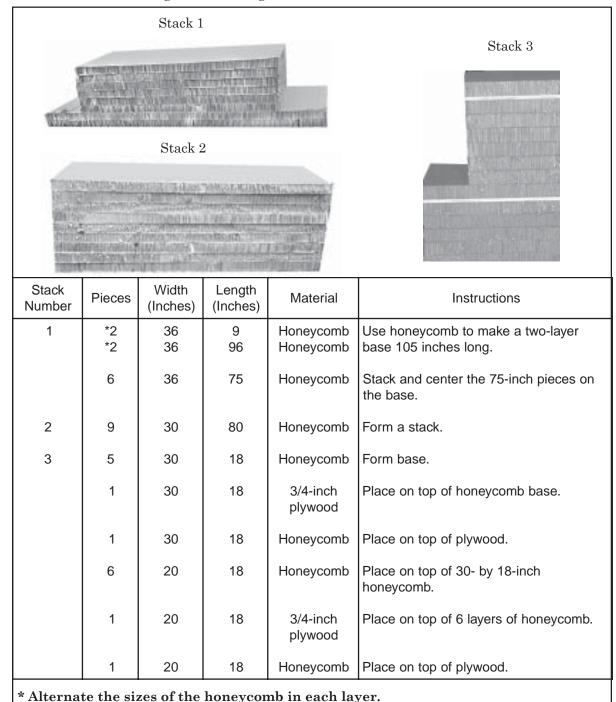


Figure 1-2. Honeycomb Stacks 1, 2, and 3 Prepared