Airdrop of Supplies and Equipment:

Rigging M198, 155-MM Howitzer

JUNE 2004

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Rigging M198, 155-MM Howitzer

Contents

Preface ................................................................. iii
Introduction ....................................................... iv

Description of Load ........................................... iv
Special Considerations ....................................... iv

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

Description of Load ........................................... 1-1
Preparing Platform ............................................. 1-1
Building and Positioning Honeycomb Stacks .......... 1-3
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 Tying 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 .......................................... 1-30
Equipment Required .......................................... 1-30

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*This publication supersedes FM 10-527, 30 September 1982.
Chapter 2  Rigging M198, 155-mm Howitzer with Accompanying Ammunition Load on a Type V Platform

Description of Load .................................................................................................. 2-1
Preparing Platform ................................................................................................ 2-1
Rigging Accompanying Ammunition Load .............................................................. 2-3
Preparing and Positioning Honeycomb Stacks ....................................................... 2-12
Stowing Accompanying Equipment ...................................................................... 2-18
Preparing Howitzer .............................................................................................. 2-24
Installing Lifting Slings and Positioning Howitzer ................................................. 2-24
Lashing Howitzer ................................................................................................. 2-26
Building and Installing Release Stowage Platform .............................................. 2-31
Covering Load ...................................................................................................... 2-33
Installing Suspension Slings .............................................................................. 2-35
Stowing Cargo Parachutes .................................................................................. 2-37
Installing Extraction System ............................................................................. 2-43
Installing Parachute Release System ................................................................ 2-44
Installing Provisions for Emergency Restraints ................................................. 2-46
Placing Extraction Parachute ............................................................................ 2-46
Marking Rigged Load ......................................................................................... 2-46
Equipment Required .......................................................................................... 2-46

Chapter 3  Rigging M198, 155-mm Howitzer with Accompanying Ammunition Load, 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 ........................................................................................... 3-17
Installing Lifting Slings and Positioning Howitzer ............................................. 3-24
Lashing Howitzer ............................................................................................... 3-25
Building and Installing Release Stowage Platform ............................................ 3-30
Installing, Padding and Securing Suspension Slings ........................................... 3-33
Stowing Cargo Parachutes ................................................................................ 3-35
Installing Extraction System ............................................................................ 3-39
Installing Parachute Release System ................................................................ 3-40
Installing Provisions for Emergency Restraints ................................................. 3-42
Placing Extraction Parachute ............................................................................ 3-42
Marking Rigged Load ......................................................................................... 3-42
Equipment Required .......................................................................................... 3-42

Glossary .................................................................................................................. Glossary 1
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:

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

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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 platform, 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.
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.

<table>
<thead>
<tr>
<th>Stack Number</th>
<th>Pieces</th>
<th>Width (Inches)</th>
<th>Length (Inches)</th>
<th>Material</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>36</td>
<td>9</td>
<td>Honeycomb</td>
<td>Use honeycomb to make a two-layer base 105 inches long.</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>36</td>
<td>96</td>
<td>Honeycomb</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>36</td>
<td>75</td>
<td>Honeycomb</td>
<td>Stack and center the 75-inch pieces on the base.</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>30</td>
<td>80</td>
<td>Honeycomb</td>
<td>Form a stack.</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>30</td>
<td>18</td>
<td>Honeycomb</td>
<td>Form base.</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>30</td>
<td>18</td>
<td>3/4-inch plywood</td>
<td>Place on top of honeycomb base.</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>30</td>
<td>18</td>
<td>Honeycomb</td>
<td>Place on top of plywood.</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>20</td>
<td>18</td>
<td>Honeycomb</td>
<td>Place on top of 30- by 18-inch honeycomb.</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>20</td>
<td>18</td>
<td>3/4-inch plywood</td>
<td>Place on top of 6 layers of honeycomb.</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>20</td>
<td>18</td>
<td>Honeycomb</td>
<td>Place on top of plywood.</td>
</tr>
</tbody>
</table>

* Alternate the sizes of the honeycomb in each layer.

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