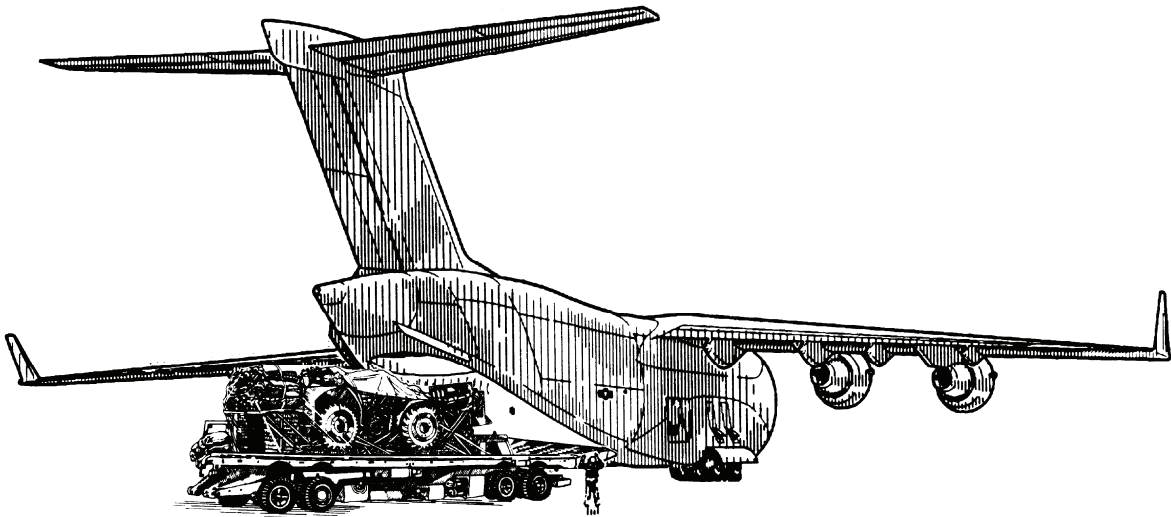


**FM 4-20.119 (FM 10-519)
TO 13C7-10-31**

**Airdrop of Supplies and Equipment:
Rigging 105-Millimeter Howitzers**



MAY 2006

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Field Manual
No. 4-20.119 (10-519)
Technical Order
No. 13C7-10-31

Headquarters
Department of the Army
Department of the Air Force
Washington, DC, 10 May 2006

Airdrop of Supplies and Equipment: Rigging 105-Millimeter Howitzers

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Preface

SCOPE

This manual shows how to rig the M102, M119, and M101A1 105-millimeter howitzers for low-velocity airdrop from a C-130 or C-17 aircraft. The manual includes procedures and equipment for rigging the M102 and M119 105-millimeter howitzer with the 1 ¼-ton High Mobility Multipurpose Wheeled Vehicle (HMMWV) truck as the prime mover on a 32-foot, type V airdrop platform for low-velocity airdrop from a C-130 or C-17 aircraft. In addition, procedures are given for rigging two M119 105-millimeter howitzers on a single platform with two different ammunition loads and with two 81-millimeter mortars for a low-velocity airdrop from C-130 or C-17 aircraft. The manual is designed for use by all parachute riggers.

USER INFORMATION

The proponent of this publication is 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.

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

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Introduction

DESCRIPTION OF ITEMS

The descriptions and unrigged data for the items covered in this manual are provided below.

- The unrigged M102, 105-millimeter howitzer (mounted on an M31 carriage) with an M137E1 cannon tube and roll-over protection structure weighs 3,680 pounds. Its length is 256 inches, reducible to 206 inches. Its height is 68 inches reducible to 62 inches. Its width is 91 inches with dual wheels and 75 inches with single wheels. The M102 howitzer shown in Figure 1 is equipped with single wheels. The rigging procedures for the howitzer with dual wheels are the same. The howitzer shown in Chapter 1, Section I, is rigged with 17 boxes of ammunition weighing 2,040 pounds. The howitzer shown in Chapter 1, Section II is rigged with 23 boxes of ammunition weighing 2,760 pounds. The howitzer shown in Chapter 2 is rigged with a 1 1/4-ton High Mobility Multipurpose Wheeled Vehicle (HMMWV) truck as its primer mover and with 30 boxes of ammunition weighing 3,600 pounds.

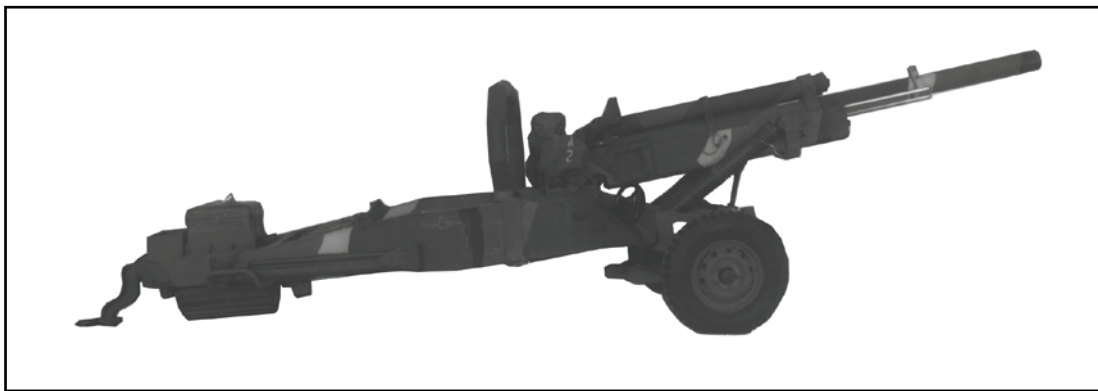


Figure 1. M102, 105-Millimeter Howitzer

- The unrigged M119, 105-millimeter howitzer weighs 4,190 pounds and is shown in Figure 2. Its length is 240 inches, reducible to 192 inches. Its width is 70 inches. Its height is 94 inches, reducible to 54 inches. The howitzer shown in Chapter 3, Section I is rigged with 30 boxes of ammunition and 7 boxes of fuzes weighing 3,713 pounds. The howitzer shown in Section II has the same ammunition load and an 81-millimeter mortar weighing 350 pounds. The howitzers shown in Chapter 4 are rigged with 30 boxes of ammunition, 7 boxes of fuzes, and 1 1/4-ton HMMWV truck. Two M119 howitzers are shown in Chapter 5 rigged with 82 boxes of ammunition on the same platform, as well as a lighter version of this load and a load which includes two 81-millimeter mortars.

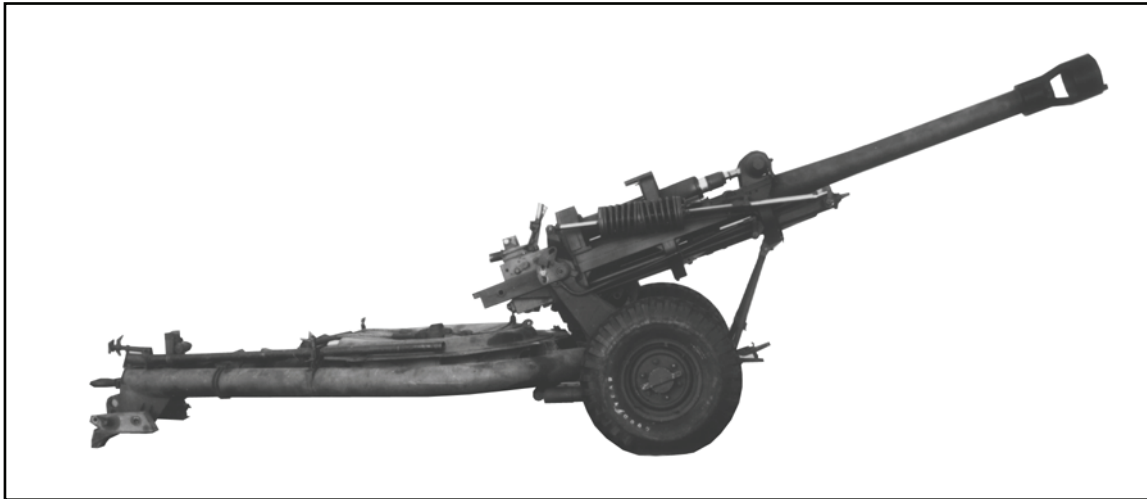


Figure 2. M119, 105-Millimeter Howitzer

- The unrigged M101A1, 105-millimeter howitzer weighs 5,236 pounds. It is 236 inches long, 84 inches wide and 62 inches high. Chapter 6 shows this howitzer rigged with 21 boxes of ammunition weighing 2,100 pounds.

SPECIAL CONSIDERATIONS

Special considerations for this manual are described below.

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

CAUTION

Only ammunition listed in FM 4-20.153/MCRP 4-11.3B/TO 13C7-18-41 may be airdropped.

A copy of this manual must be available to the joint airdrop inspectors during the before- and after-loading inspections.