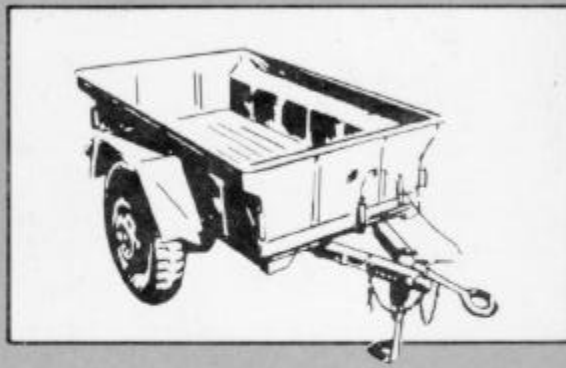


**ARMY FM 10-543
AIR FORCE TO 13C7-2-1011**

AIRDROP OF SUPPLIES AND EQUIPMENT:

**RIGGING 1/4-TON TRUCK
WITH 1/4-TON TRAILER
AND
COMMUNICATIONS EQUIPMENT
AND TACTICAL DEFENSE
ALERT RADAR SYSTEM
(TDARS)**



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DEPARTMENTS OF THE ARMY AND THE AIR FORCE

CHANGE
NO. 1

C1, FM 10-543/TO 13C7-2-1011
HEADQUARTERS
DEPARTMENT OF THE ARMY
AND THE AIR FORCE
Washington, DC, 7 October 1987

AIRDROP OF SUPPLIES AND EQUIPMENT RIGGING ¼-TON TRUCK WITH ¼-TON TRAILER AND COMMUNICATIONS EQUIPMENT AND TACTICAL DEFENSE ALERT RADAR SYSTEM (TDARS)

This change revises Chapter 1 and Chapter 2 to provide information for airdrop of the Tactical Defense Alert Radar System (TDARS). Chapter 3 is added to provide procedures for rigging the TDARS for low-velocity airdrop.

FM 10-543/TO 13C7-2-1011, 3 November 1983, is changed as follows:

1. New or changed material is identified by a vertical bar in the margin opposite the changed material.
2. Remove old pages and insert new pages as identified below:

<u>Remove Old Pages</u>	<u>Insert New Pages</u>
Cover Page	Cover Page
i through v	i through v
1-1	1-1 and 1-2
2-1 and 2-2	2-1 and 2-2
2-23 through 2-26	2-23 through 2-26
	3-1 through 3-51
References-1	References-1

3. File this transmittal sheet in front of the publication for reference purposes.

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

By Order of the Secretary of the Army and the Air Force:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:

R. L. DILWORTH
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

Active Army, USAR, and ARNG: To be distributed in accordance with DA Form 12-11A, requirements for Airdrop—Rigging ¼-Ton Truck with ¼-Ton Trailer (Qty rqr block no. 925).

CHANGE
NO. 2

C2, FM 10-543/TO 13C7-2-1011
HEADQUARTERS
DEPARTMENT OF THE ARMY
AND THE AIR FORCE
Washington, DC, 17 September 1992

**AIRDROP OF SUPPLIES AND EQUIPMENT
RIGGING 1/4-TON TRUCK WITH 1/4-TON TRAILER
AND COMMUNICATIONS EQUIPMENT AND
TACTICAL DEFENSE ALERT RADAR SYSTEM (TDARS)**

This change adds Section 3 to Chapter 3 to provide procedures for rigging the TDARS and six stinger missiles for low-velocity airdrop. Chapter 4 is added to provide information for rigging the TDARS in the M1025 or M1026 Armament Carriers for low-velocity airdrop. Also with this change, the DISTRIBUTION RESTRICTION statements on the cover of the basic manual and Change 1 transmittal sheet must agree with the below statement.

FM 10-543/TO 13C7-2-1011, 3 November 1983, is changed as follows:

1. New or changed material is identified by a vertical bar in the margin opposite the changed material.
2. Remove old pages and insert new pages as identified below:

<u>Remove Old Pages</u>	<u>Insert New Pages</u>
i through v 1-1 and 1-2	i through v 1-1 through 1-2 3-51 through 3-67 4-1 through 4-13
Glossary-1 References-1	Glossary-1 References-1

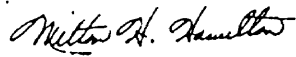
3. File this transmittal sheet in front of the publication for reference purposes.

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

By Order of the Secretaries of the Army and the Air Force:

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:



MILTON H. HAMILTON
Administrative Assistant to the
Secretary of the Army

02199

DISTRIBUTION:

Active Army, USAR, and ARNG: To be distributed in accordance with DA Form 12-11-E, requirements for FM 10-543/TO 13C7-2-1011, Airdrop of Supplies and Equipment: Rigging 1/4-Ton Truck with 1/4-Ton Trailer and Communications Equipment and Tactical Defense Alert Radar System (Qty rqr block no. 0925).



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
AERIAL DELIVERY AND FIELD SERVICES DEPARTMENT
U.S. ARMY QUARTERMASTER CENTER AND SCHOOL
1010 SHOP ROAD
FORT LEE, VIRGINIA 23801-1502

ATSM-ADFSD


7 October 1998

MEMORANDUM FOR Commander, US Army Training Support Center, ATTN: ATIC-TIST (Mr. Baston), Fort Eustis, VA 23604

SUBJECT: Distribution Restriction Notice on Airdrop Rigging Manuals

1. As proponent for development of all 10-500 series airdrop rigging field manuals and the 10-450 sling load manuals, it has been determined that the distribution restriction on these field manuals should be changed to read: Approved for public release, distribution unlimited.
2. It is requested that unrestricted release of these field manuals be made via the Army Training Digital Library.
3. The new distribution notice will be added to the cover pages as future changes/revisions are made to the manuals.
4. Enclosed you will find a numerical list and the number of changes of the manuals that have unlimited distribution.
5. The point of contact for this action is Mr. Roger Hale, DSN 687-4769.

Encl


THEODORE J. DLUGOS
Director, Aerial Delivery and
Field Services Department

Distribution restrictions for the following Airdrop field manuals should read "**Approved for public release; distribution is unlimited.**"

10-450-3	10-524, c2	10-552, c2
10-450-4	10-526, c3	10-554
10-500-2, c2	10-527, c3	10-555, c2
10-500-3, c1	10-528, c6	10-556
10-500-7, c1	10-529, c1	10-557
10-500-45	10-530	10-558, c1
10-500-53	10-531, c2	10-562
10-500-66, c1	10-532, c4	10-564, c6
10-500-71	10-533	10-567, c1
10-508, c1	10-534, c2	10-569, c1
10-510, c3	10-535	10-571
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10-516	10-541, c1	10-575, c2
10-517, c5	10-542, c2	10-576, c1
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10-520, c3	10-547, c1	10-584
10-521, c2	10-548, c1	10-586
10-522, c1	10-549	10-588
10-523, c2	10-550, c3	10-591, c1



DEPARTMENT OF THE ARMY

HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-5000

REPLY TO
ATTENTION OF

ATCD-SL (70-1f)

21 Oct 96

MEMORANDUM FOR DEPUTY CHIEF OF STAFF OPERATIONS AND PLANS,
400 ARMY PENTAGON, ATTN: DAMO-FDL, WASHINGTON
DC 20310-0400

SUBJECT: Quartermaster (QM) Functional Area Assessment (FAA)
Response

1. References:

a. Message, HQDA, DAMO-FDL, 231825Z Apr 96, subject: QM FAA Results.

b. Memorandum, HQ TRADOC, ATCG, 29 Jul 96, Army Airdrop Capabilities Assessment.

2. At the 29 Mar 96 QM FAA briefing to the Director of Army Staff, the decision was reached to revisit the Army's decision to "shelf" Low Altitude Parachute Extraction System (LAPES) (reference 1a).

a. Reference 1b, solicited CINCs input for their positions on LAPES and assessments of airdrop capabilities. The CINCs responses will be used to chart the direction and role for airdrop in the 21st century.

b. Based on the responses received (enclosure), there is no strong support for LAPES airdrop capability at this time. The consensus for the airdrop capabilities is to continue support for current Low Velocity Airdrop System (LVAD), develop a 500-foot LVAD and further explore Advanced Precision Aerial Delivery System (APADS).

3. Further, we will continue to maintain a range of airdrop capabilities to support all contingencies throughout the Army. The results of the Army Airdrop Capabilities Assessment also will be incorporated into the Operational Concept for Aerial Delivery Operations and Improved Cargo Aerial Delivery Capability Mission Needs Statement being developed by the Quartermaster Directorate of Combat Developments, U.S. Army Combined Arms Support Command (CASCOM).

4. The HQ TRADOC POC is MAJ Higgins, Airborne Airlift Action Office, ATCD-SL, E-mail: higginsn@emh10.monroe.army.mil, DSN 680-2469/3921, datafax DSN 680-2520.

ATCD-SL

SUBJECT: Quartermaster (QM) Functional Area Assessment (FAA)
Response

FOR THE DEPUTY CHIEF OF STAFF FOR COMBAT DEVELOPMENTS:

Encl

JOHN A. MANDEVILLE
Colonel, GS
Director, Combat Service Support

CF:

USACASCOM (ATCL-CG/ATCL-QC/ATCL-MES)

USAQMC&S (ATSM-CG/ATSM-ABN/FS)

USANRDEC (SSCNC-UT/AMSSC-PM)

ORGANIZATION	LAPES	LVAD	500' LVAD	APADS	SPTS/ NOT SPEC
USSOCOM		X	X	X	
EUCOM					X
CENTCOM		X	X		
FORSCOM		X	X	X	
TRANSCOM					X
SOUTHCOM	X			X	
VIII ARMY					X
ACOM					X

USSOCOM: Memorandum specifically states that the command does not support LAPES airdrop capability, but supports LVAD as well as APADS.

EUCOM: Draft memorandum specifically states that the command support the need for a low level airdrop capability. However, memorandum summarizes that the specific capability is not important as to have a capability to meet the required mission/threat profile.

CENTCOM: Memorandum specifically states that the command does not support LAPES airdrop capability, but support both current LVAD and 500-foot LVAD airdrop capabilities.

FORSCOM: 1st Endorsement specifically states that the command does not support LAPES airdrop capability, however supports LVAD, 500-foot LVAD and APADS.

TRANSCOM: Memorandum does not specifically address any airdrop capability as it talks to the 21st century requiring the full spectrum of tactical delivery methods.

SOUTHCOM: Memorandum specifically supports LAPES and APADS airdrop capabilities for their command.

VIII ARMY: E-Mail note for VIII Army states that the command has no input to the assessment as their plans call for a limited employment of airdrop.

ACOM: Sent request for input on 30 Sep 96. Received verbal response on 16 Oct 96 stating command is indifferent on the specific capability received.



DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-3000

REPLY TO
ATTENTION OF

6 SEP 1995

ATCD-SL (70-1f)

MEMORANDUM FOR

Major General Thomas W. Robison, Commander, U.S. Army Combined
Arms Support Command and Fort Lee, Fort Lee, VA 23801-6000
Major General Robert K. Guest, Commander, U.S. Army Quartermaster
Center and School, Fort Lee, VA 23801-5030

SUBJECT: Low Altitude Parachute Extraction System (LAPES)
Disassembly.

1. References:

a. Message, HQ TRADOC, ATCD-SL, 100930Z Jan 95, subject:
LAPES.

b. OVVM Note, HQ USACASCOM, 30 March 95, subject: TRADOC
Disassembly of LAPES.

2. The U.S. Army and other services recently have concurred that
LAPES will be terminated, as this capability is no longer required
as a viable wartime contingency airdrop option. However,
Headquarters, Department of the Army (DA), Deputy Chief of Staff
for Operations and Plans, has agreed that LAPES technology will be
shelved, and all specialized equipment preserved for possible
future use.

3. Take the necessary steps to terminate training and leader
development concerning LAPES operations. Major General Guest's
questions regarding the disassembly of LAPES (enclosed) with
following guidance will be utilized:

a. "Does the U.S. Army Quartermaster Center and School
(USAQMC&S) continue to publish LAPES procedures in their joint
field manual (FMs)/technical order manuals?" "Do we publish the
LAPES procedures that have been written but not been printed yet?"
Publishing LAPES procedures in all joint publications, Army FMs,
regulations, etc., will be discontinued and addressed in the next
revision of the aforementioned documents. Concurrently, all LAPES
procedures that have been written and not printed will not be
published.

6 SEP 1995

ATCD-SL
SUBJECT: Low Altitude Parachute Extraction System (LAPES)
Disassembly

b. "Do we keep LAPES in our programs of instruction (POIs)?" "Do we teach LAPES to other services and our allies?" The USAQMC&S will remove LAPES procedures from PCI and cease teaching LAPES to other services and/or allies.

c. "What do we teach to folks that have LAPES equipment in their war reserves?" All instruction concerning LAPES procedures will be discontinued whether LAPES equipment is located in units or in war reserves.


d. "What is the DA/TRADOC guidance on disposition of unit, depot, and war reserves LAPES equipment?" All LAPES equipment in war reserves and depot should be preserved with the exception of a few items that can be utilized in other existing airdrop capabilities. Specifically, the Type V airdrop platforms and attitude control bars of the LAPES system are being utilized to augment current Low Velocity Airdrop Systems (LVADS) loads.

e. "What is the guidance to U.S. Army Test and Experimentation Command on force development test and experimentation certification of LAPES loads?" The certification of all LAPES loads at the Airborne Special Operations Test Directorate will be redirected toward testing and certification of LVADS loads.

4. HQ TRADOC POC is CPT Higgins or CPT Phillips, ATCD-SL, DSN 680-2469/3921, datafax DSN 680-2520.

FOR THE COMMANDER:

Encl


JOE N. BALLARD
Major General, GS
Chief of Staff

CF:
HQDA (DAMO-FDL)
CDR, NRDEC (SAFNC-UA)
CDR, FORSCOM (FCJ3-FC)
CDR, OPTEC (CSTE-CS, CSTE-OPM)
CDR, ATCOM (AMSAT-W-TD)
DIR, ABNSOTD (ATCT-AB)
HQ TRADOC (ATCD-L, ATCD-RM, ATDO-A, ATTG-IT)

Date and time 07/18/95 10:28:11

From: HIGGINSN--MON1
To: HIGGINSN--MON1

From: OPT NEIL HIGGINS, (AAACO), 680-2469
Subject: TRADOC "DISASSEMBLY" OF LAPES

* AIRBORNE AIRLIFT ACTION OFFICE *
* (AAACO) *

** Forwarding note from BRUNEAUN--OMSNAMES 07/18/95 10:27 ***
Received: from LEE-EMH2.ARMY.MIL by MONROE-EMH2.ARMY.MIL (IBM VM SMTP V2R2)
with TOP; Tue, 18 Jul 95 10:27:22 EDT
Received: from LEE1 by LEE-EMH2.ARMY.MIL (IBM VM SMTP V2R2) with SMTP id 3547;
Tue, 18 Jul 95 10:29:34 EDT
Comments: Converted from PROFS to RFC822 format by PUMP V2.2X
Date: Tue, 18 Jul 95 10:29:26 EDT
From: NORMAN BRUNEAU <BRUNEAUN@LEE-EMH2.ARMY.MIL>
Subject: TRADOC "DISASSEMBLY" OF LAPES
To: "NEIL HIGGINS- AAACO " <HIGGIN@MONROE-EMH1.ARMY.MIL>

** Resending note of 06/30/95 09:23

From: LARRY MC MILLIAN AAA <MCILLI@MONROE-EMH1.ARMY.MIL>
To: NORMAN BRUNEAU
Subject: TRADOC "DISASSEMBLY" OF LAPES

NEIL- HERE ARE THE QUESTIONS THAT MG GUEST WANTS DA/ TRADOC TO ANSWER RE LAPES, AS I UNDERSTAND HIS GUIDANCE. I HAVE DISCUSSED THESE W/ OUR ABN DPT. IF THESE QUESTIONS MAKE SENSE, GIVE ME AN "UP" BEFORE I FORMALLY SEND ANYTHING OUT. MG GUEST WANTS SPECIFIC GUIDANCE FM TRADOC ON LAPES, RESPONSE NEEDS TO BE CLEAR AND TO THE POINT. A LOT OF THIS WILL HINGE ON WHAT ACC PLANS TO DO W/ LAPES NOW THAT THE AIR STAFF HAS GIVEN THEM THE GREEN LIGHT TO KILL IT. IF THEY PLAN TO PLACE IT ON THE SHELF OR KEEP A LIMITED OR CONTINGENCY CAPABILITY, THAT WILL DRIVE YOUR ANSWER TO US, AT THIS POINT I THINK ACC WILL DO WHATEVER THE ARMY WANTS, AS THEIR PRIMARY CUSTOMER. I WILL NOT REHASH HOW THE ARMY DECIDED THEY DIDNT NEED LAPES. QUESTIONS FOLLOW:

- DOES THE GMS CONTINUE TO PUBLISH LAPES PROCEDURES IN THEIR JOINT FM/TO MANUALS?
- DO WE PUBLISH THE LAPES PROCEDURES THAT HAVE BEEN WRITTEN BUT HAVE NOT BEEN PRINTED YET?
- DO WE REMOVE ALL LAPES PROCEDURES FROM ALREADY PUBLISHED MANUALS?
- DO WE KEEP LAPES IN OUR POI?
- DO WE TEACH LAPES TO OTHER SERVICES AND OUR ALLIES?
- WHAT DO WE TEACH TO FOLKS THAT HAVE LAPES EQUIPMENT IN THEIR WAR RESERVES?
- WHAT IS THE DA/TRADOC GUIDANCE ON DISPOSITION OF UNIT, DEPOT, AND WAR RESERVE LAPES EQUIPMENT?
- WHAT IS THE GUIDANCE TO TEXCOM ON THE FUTE CERTIFICATION OF LAPES LOADS?

I KNOW THESE ARE TOUGH QUESTIONS, BUT THEY HAVE TO BE ASKED. HQ STAFFS CANNOT SIMPLY SAY "KILL IT" AND MOVE ON TO THE NEXT ISSUE. I DONT THINK WE ARE DOING OUR JOB IF WE LEAVE IT UP TO THE SCHOOLHOUSE TO INTERPRET SKETCHY GUIDANCE. THAT PLACES US IN THE POSSIBLE POSITION OF BEING ACCUSED OF NOT FOLLOWING ORDERS.

LETS TALK.....NORM

TRK 2/47

SEP 11 11 08:30AM CSSRD FT MONROE VA 66 11

DEPARTMENT OF THE ARMY
QUARTERMASTER CENTER AND SCHOOL
1201 22D STREET
FORT LEE, VIRGINIA 23801-1601

ATSM-ABN-FS

15 Dec 96

MEMORANDUM FOR RECORD

SUBJECT: Airdrop Equipment Update

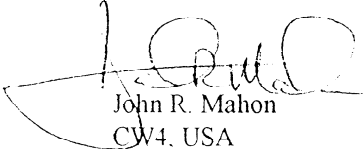
Reference:

- a. Phone conversation between CW4 Mahon, CASCOM and Dick Harper, Weapons System Management Office, Army Aviation Troop Command. Subject : sab
- b. Phone conversation between CW4 Mahon, CASCOM and Don Stump, Logistics Management Specialist, Office, Deputy Chief of Staff for Logistics. Subject. sab
- c. Phone conversation between CW4 Mahon, CASCOM and Chief Msgt Okraneck, Hqrs Air Combat Command. Subject sab
- d. msg dtg R 181348Z Feb 94. subject: FCIF item: Type II platforms, PEFTC and SL/CS for Air Force unilateral training

1. Based on information received from the references a-c above, the following update is provided per request ref c, above.

- a. The type II modular platform no longer exists within any contingency stocks. Therefore, maintaining Joint Inspection training program is no longer required for this equipment.
- b. The Parachute Extraction Transfer Force Coupling (PEFTC) no longer exists within any contingency stocks. Therefore, maintaining Joint Inspection training program is no longer required for this equipment.
- c. The metric platform interim rigging procedures are no longer valid as they apply to metric platforms. Those rigging procedures which have dual application with the type V platform are still valid for the type V platform.
- d. The static line connector strap (SL/CS) currently has limited application. Only those loads that specifically require this system are authorized use of this system. The SL/CS is not an across the board substitute for the Extraction Force Transfer Coupling (EFTC). These authorized loads are specific in nature and will normally be found in the special operations arena of airdrop loads. This system is not authorized for use IAW ref d, above.

2. For additional questions/information contact the undersigned at DSN 687-4733, Fax 3084.


John R. Mahon
CW4, USA
Senior Airdrop Systems
Technician

FIELD MANUAL
NO 10-543
TECHNICAL ORDER
NO 13C7-2-1011

HEADQUARTERS
DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
Washington, DC, 3 November 1983

**AIRDROP OF SUPPLIES AND EQUIPMENT:
RIGGING 1/4-TON TRUCK WITH 1/4-TON TRAILER
AND COMMUNICATIONS EQUIPMENT AND
TACTICAL DEFENSE ALERT RADAR SYSTEM (TDARS)**

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*This publication supersedes FM 10-543/TO 13C7-2-1011, 30 September 1981.

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CHAPTER 4

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PREFACE

SCOPE

This manual shows and tells how to prepare and rig the M151, 1/4-ton truck and the M416, 1/4-ton trailer for low-velocity airdrop from the C-130 or the C-141 aircraft and for delivery by low-altitude parachute-extraction (LAPE) from the C-130 aircraft. The manual also covers procedures for rigging the truck and trailer with the mounted AN/VSC-2 radio set. Procedures for rigging the AN/MTC-10 telephone control office group or the AN/MGC-34 teletypewriter mounted in the truck and trailer are included for LAPE airdrop. In addition, procedures for rigging the tactical defense alert radar system (TDARS) with or without the M151, 1/4-ton truck and the M416, 1/4-ton trailer, and rigging the TDARS in the M1025 or M1026 armament carriers are included for low-velocity airdrop.

USER INFORMATION

The proponent of this publication is HQ TRADOC. You are encouraged to report any errors or omissions and to suggest ways for making this a better manual. Army personnel, send your comments on DA Form 2028 directly to:

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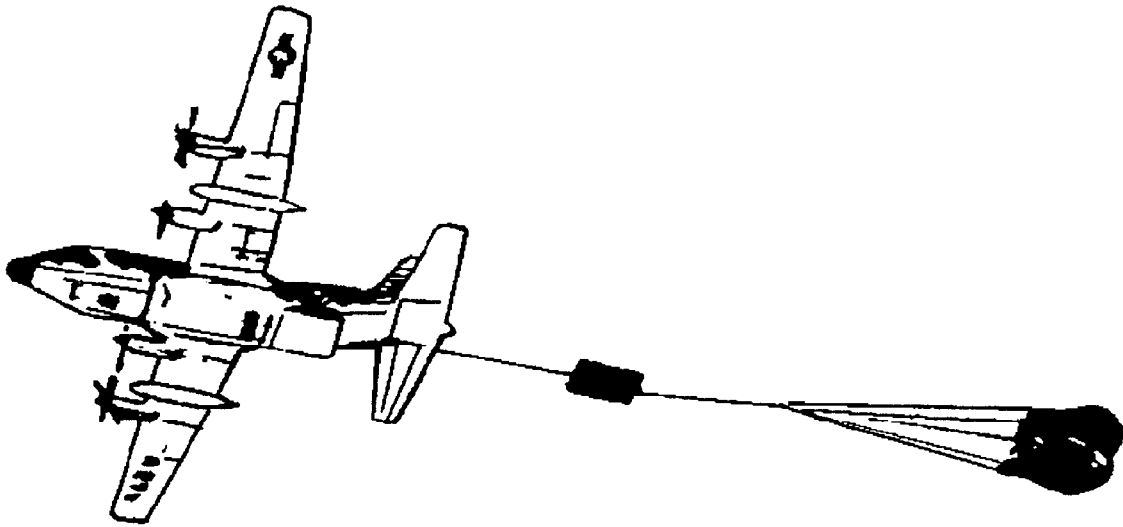
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CHAPTER I INTRODUCTION

1-1. Description of Items

The unriggered data for the items covered in this manual are as described below.

a. Truck and Trailer for Low-Velocity Airdrop.

(1) The M151 truck weighs 2,400 pounds. It is 133 inches long and 64 inches wide. The height of the M151 is 71 inches (reducible to 60 inches).

(2) The M416 trailer weighs 570 pounds. It is 109 inches long, 61 inches wide, and 44 inches high.

(3) The accompanying load shown on the platform is ammunition. It must weigh not more than 690 pounds nor less than 500 pounds.

b. Truck and Trailer for LAPE Airdrop.

(1) The M151 truck is the same as in a(1) above.

(2) The M416 trailer is the same as in a(2) above.

c. Truck and Trailer with AN/VSC-2 Radio Set for Low-Velocity Airdrop.

(1) The M151 truck with radio set weighs 3,230 pounds. It is 133 inches long, 64 inches wide, and 71 inches high (reducible to 58 inches).

(2) The M416 trailer weighs 570 pounds. It is 109 inches long, 61 inches wide, and 44 inches high.

(3) The accompanying load is the same as in a(3) above.

d. Truck and Trailer with AN/VSC-2 Radio Set for LAPE Airdrop.

(1) The M151 truck is the same as in c(1) above.

(2) The M416 trailer is the same as in c(2) above.

(3) The accompanying load is the same as in a(3) above.

e. Truck and Trailer with AN/MGC-34 Teletypewriter for LAPE Airdrop.

(1) The M151 truck weighs 2,410 pounds. It is 133 inches long and 64 inches wide. The height of the M151 is 71 inches (reducible to 52 inches).

(2) The M416 trailer with teletypewriter weighs 1,660 pounds. It is 111 inches long and 59 inches wide. The height of the M416 is 80 inches (reducible to 68 inches).

f. Truck and Trailer with AN/MTC-10 Telephone Control Office Group for LAPE Airdrop.

(1) The M151 truck weighs 2,690 pounds. It is 133 inches long and 64 inches wide. The height of the M151 is 71 inches (reducible to 52 inches).

(2) The M416 trailer with AN/MTC-10 weighs 1,755 pounds. It is 110 inches long, 61 inches wide, and 80 inches high.

g. Truck and Trailer with TDARS for Low-Velocity Airdrop.

(1) The M151 truck is the same as in a(1) above.

(2) The M416 trailer with TDARS is the same as in a(2) above.

(3) The TDARS components weigh 1,710 pounds.

h. TDARS Rigged in a Double A-22 Cargo Bag. TDARS components weigh 1,710 pounds.

i. TDARS with Stinger Missiles in a Double A-22 Cargo Bag. TDARS components with six stinger missiles weigh 1,177 pounds.

j. M1025 and M1026 Armament Carriers with TDARS for Low-Velocity Airdrop.

(1) The M1025 and M1026 Armament Carriers are the same as in Chapter 1 of FM 10-517/TO 13C7-1-111.

(2) The TDARS components weigh 735 pounds. One box of 105-mm ammunition or its

equivalent, weighing 110 pounds, is added to meet weight requirements.

1-2. Special Considerations

Special considerations for this manual are given below.

a. This manual covers the information necessary for rigging the M151, 1/4-ton truck and the M416, 1/4-ton trailer together for low-velocity airdrop. Separate low-velocity airdrop rigging procedures for the 1/4-ton trailer with the AN/VSC-2 can be found in FM 10-510/TO 13C7-2-451. Separate procedures for rigging the 1/4-ton trailer with either the AN/MGC-34 or the AN/MTC-10 can be found in FM 10-518/TO 13C7-3-371.

b. Loads covered in this manual may include hazardous material as defined in AFR 71-4/TM 38-250. If hazardous material is included, it must be packed, marked, and labeled as required by AFR 71-4/TM 38-250.

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

CAUTION

Only ammunition listed in FM 10-553/TO 13C7-18-41 may be airdropped.

Section II

RIGGING TDARS IN A DOUBLE A-22 CARGO BAG

3-17. Description of Load

The TDARS is rigged in a double A-22 cargo bag for low-velocity airdrop. The TDARS load consists of two 5-gallon cans of fuel, two 5-gallon cans of water, a 1.5-kilowatt DC generator, three cases of MREs, two cases of 5.56-millimeter SAW, and three cases of 5.56-millimeter M-16 ammunition. Also included are four 12-volt batteries; camouflage poles and nets; a transceiver and a display container; a quadropod container; and a

screen container. This load can be airdropped from a C-130 or a C-141 aircraft.

3-18. Preparing Skid Board

Cut a 3/4- by 48- by 96-inch piece of plywood as the skid board. Cut two pieces of 2- by 6- by 85-inch lumber and two pieces of 2- by 6- by 48-inch lumber as the supports. Prepare the skid board according to FM 10-501/TO 13C7-1-11 and as shown in figures 3-8 and 3-9.

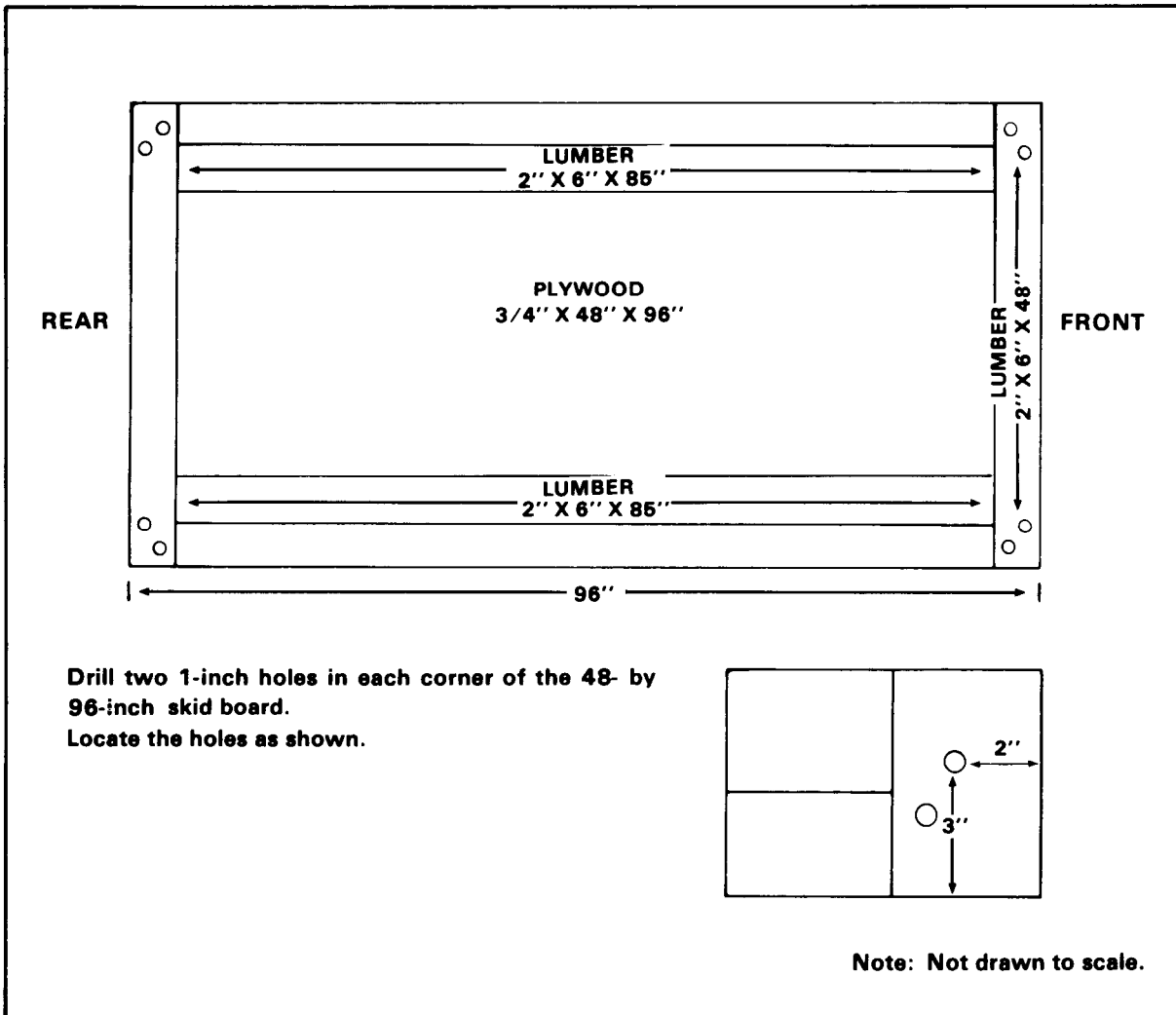


Figure 3-8. Construction details for skid board.

3-19. Preparing and Positioning Honeycomb
Type A-52 Ring Assembly
Position two A-52 ring assemblies on top of the honeycomb as shown in figure 3-10.

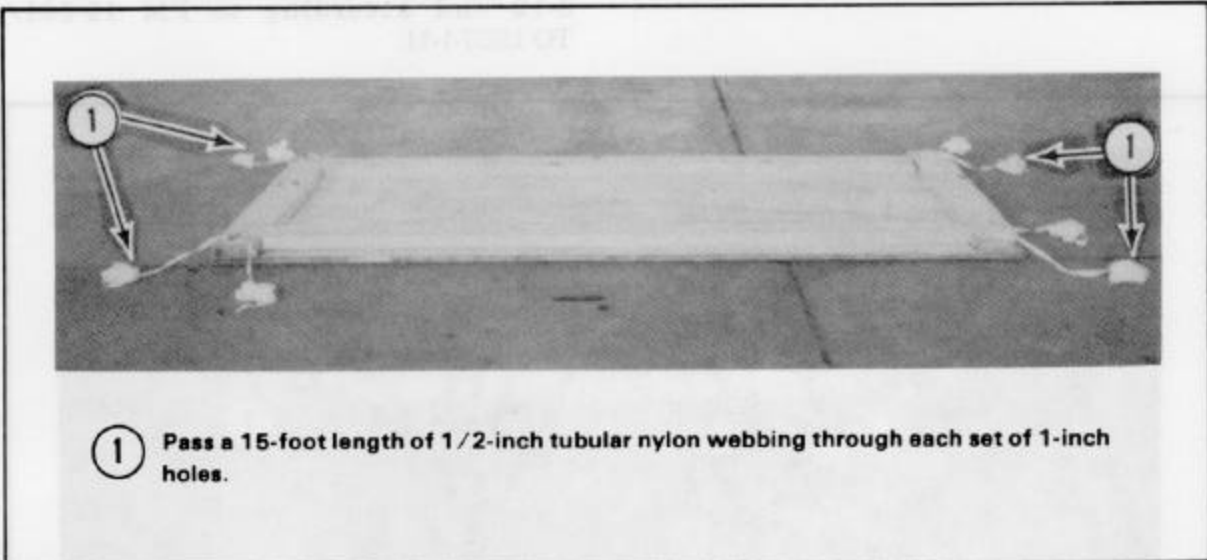


Figure 3-9. Skid board prepared.

3-19. Preparing and Positioning Honeycomb

Place a 46- by 96-inch layer of honeycomb on top of the skid as shown in figure 3-10.

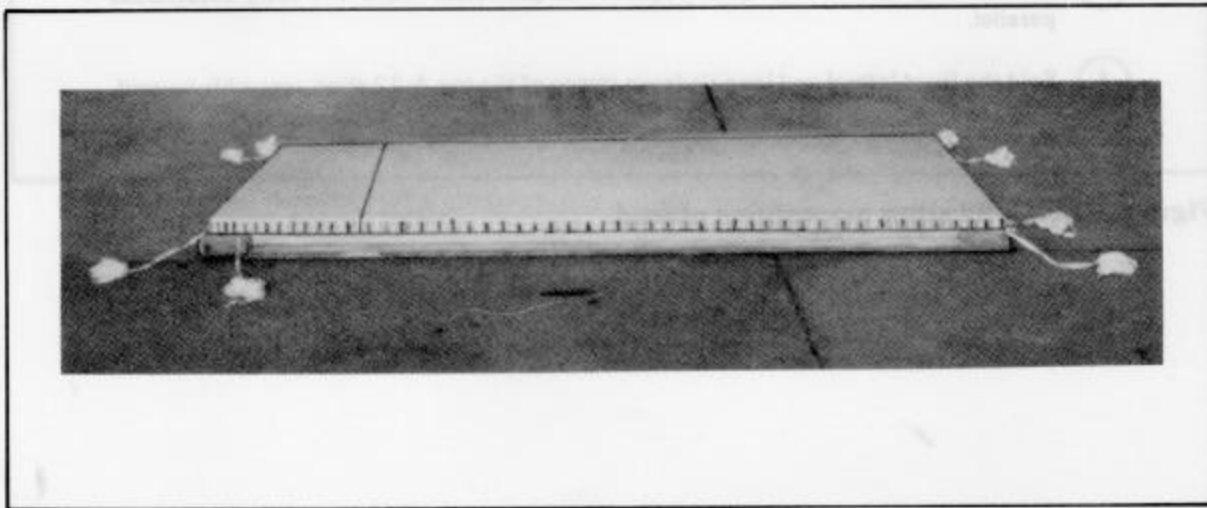
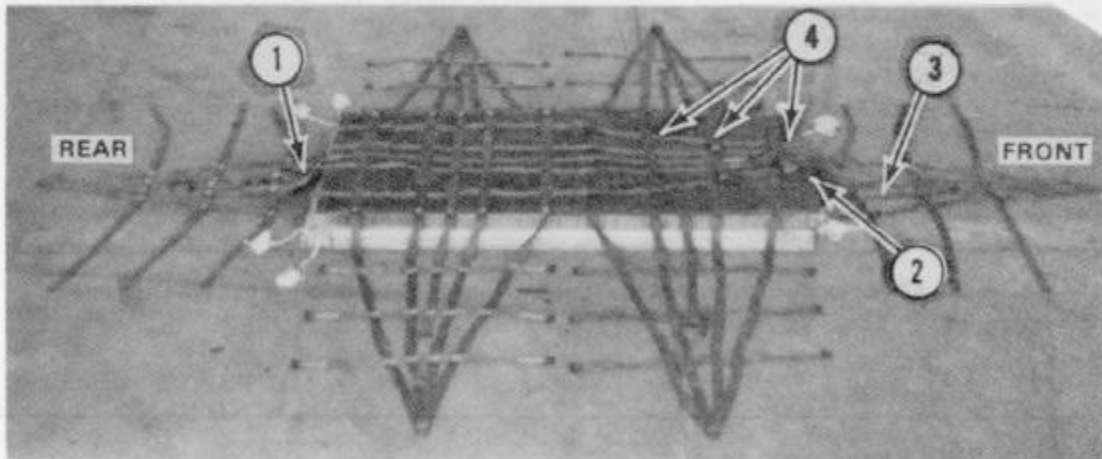


Figure 3-10. Honeycomb placed.

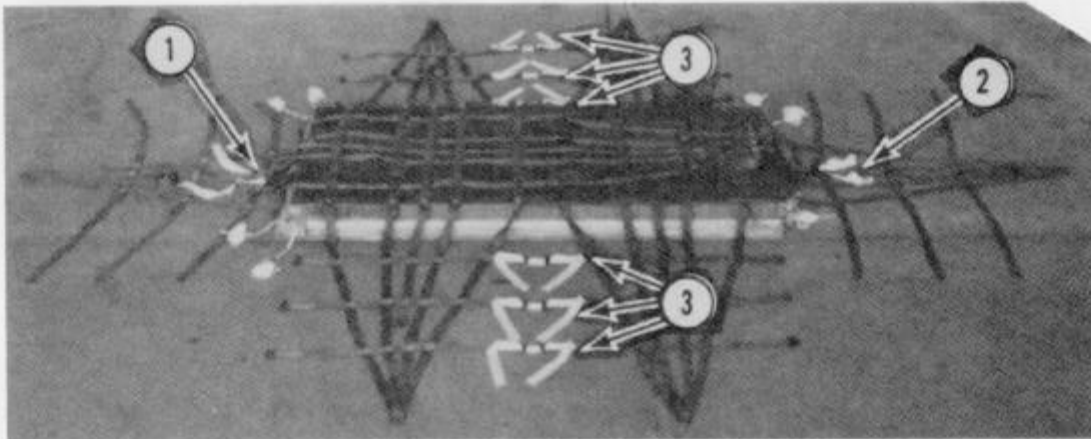
3-20. Positioning and Connecting Two A-22 Sling Assemblies

Position two A-22 sling assemblies on top of the honeycomb as shown in figures 3-11 and 3-12 and according to FM 10-501/TO 13C7-1-11.



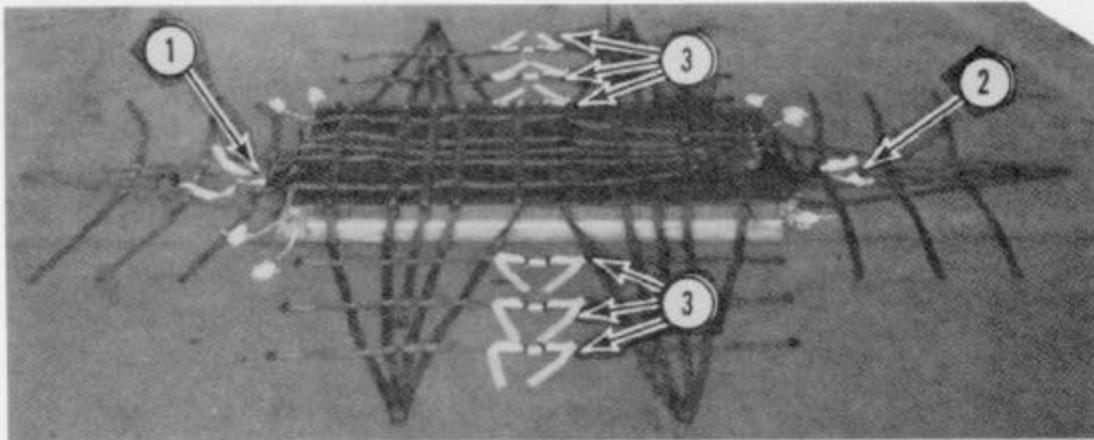
- ① Place the bottom A-22 sling assembly on the front end of the platform with the support web D-ring placed over the rear end of the platform.
- ② Fold the rear lateral and long straps inward on top of the sling assembly.
- ③ Place the top A-22 sling assembly on the rear of the platform with the support web D-ring hanging over the front edge of the platform. Make the sling assemblies parallel.
- ④ Fold the front lateral and long tiedown straps of the top A-22 sling assembly inward.

Figure 3-11. A-22 sling assemblies placed.



- ① Pass a length of type VIII nylon webbing through the bottom support web D-ring and around the webbing of the top sling assembly. Tie the ends of the webbing together.
Note: Do not tighten the webbing ends in steps 1, 2, and 3 at this time. Tighten them later when the sling assemblies are closed.
- ② Pass a length of type VIII nylon webbing through the top support web D-ring and around the webbing of the bottom assembly. Tie the ends of the webbing together.
- ③ Pass a length of type VIII nylon webbing through each pair of inside friction adapters.

Figure 3-12. Bottom and top webbing D-rings secured.



- ① Pass a length of type VIII nylon webbing through the bottom support web D-ring and around the webbing of the top sling assembly. Tie the ends of the webbing together.

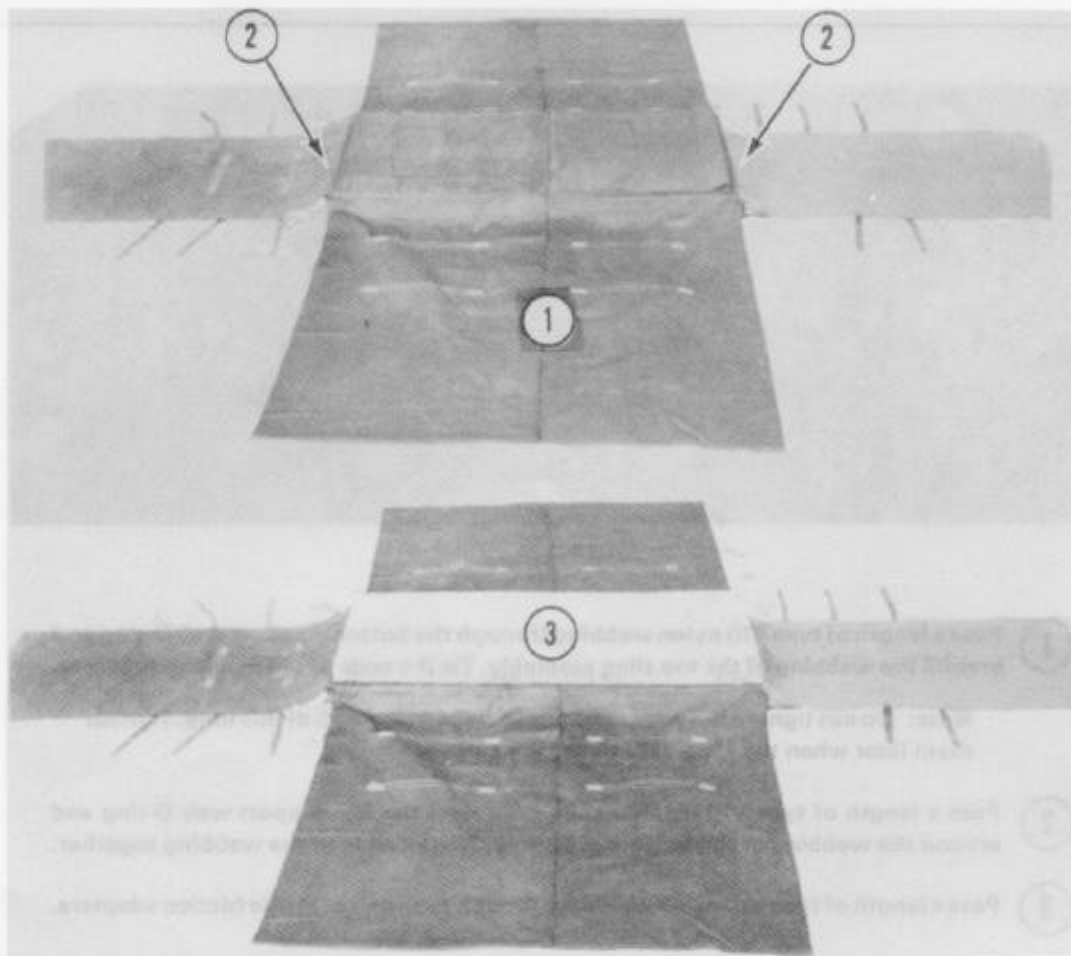
Note: Do not tighten the webbing ends in steps 1, 2, and 3 at this time. Tighten them later when the sling assemblies are closed.

- ② Pass a length of type VIII nylon webbing through the top support web D-ring and around the webbing of the bottom assembly. Tie the ends of the webbing together.
- ③ Pass a length of type VIII nylon webbing through each pair of inside friction adapters.

Figure 3-12. Bottom and top webbing D-rings secured.

3-21. Positioning A-22 Cargo Bag Covers and Honeycomb

Position the A-22 cargo bag covers and the honeycomb according to figure 3-13 and FM 10-501/TO 13C7-1-11.

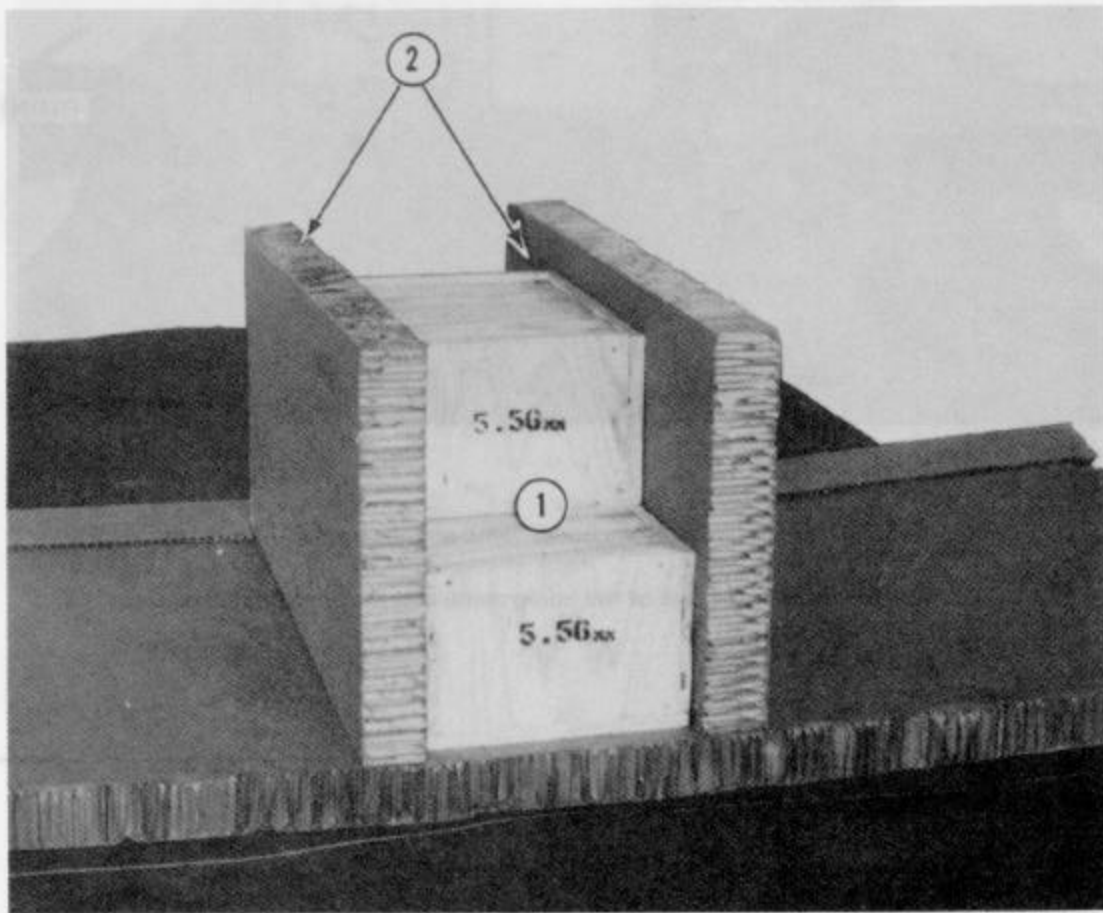


- ① Place two A-22 cargo bag covers on the platform.
- ② Fold the front end flap toward the center of the platform so that the fold is even with the front of the platform. Fold the rear end flap toward the center of the platform so that the fold is even with the rear of the platform.
- ③ Place a 48- by 96-inch layer of honeycomb in the center of the cargo bags.

Figure 3-13. Cargo bag covers and honeycomb placed.

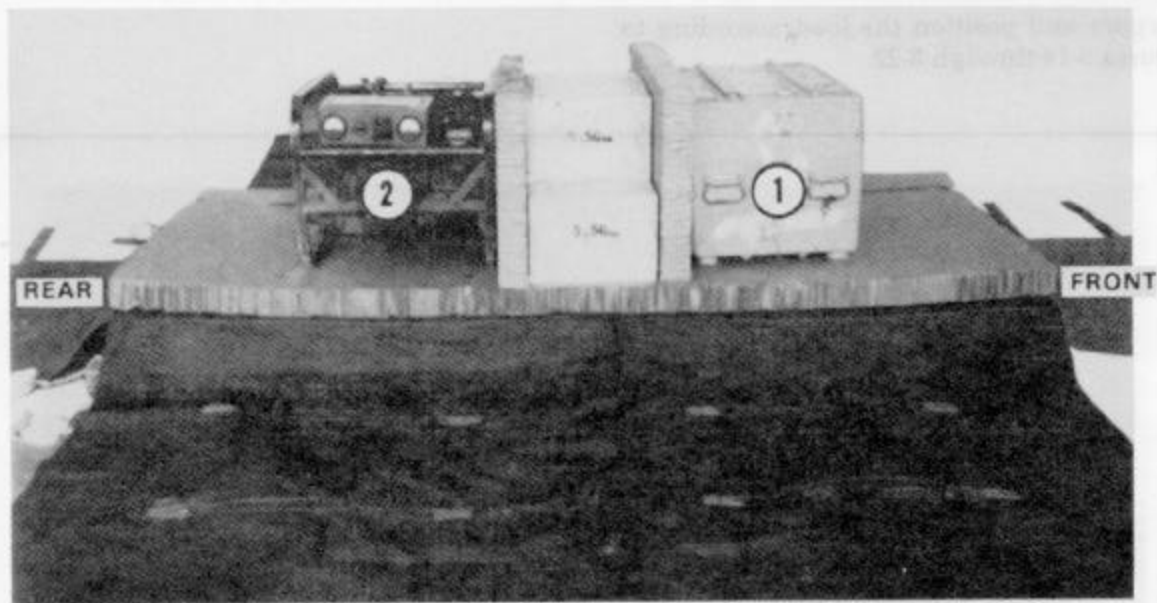
3-22. Preparing and Positioning Load

Prepare and position the load according to figures 3-14 through 3-22.



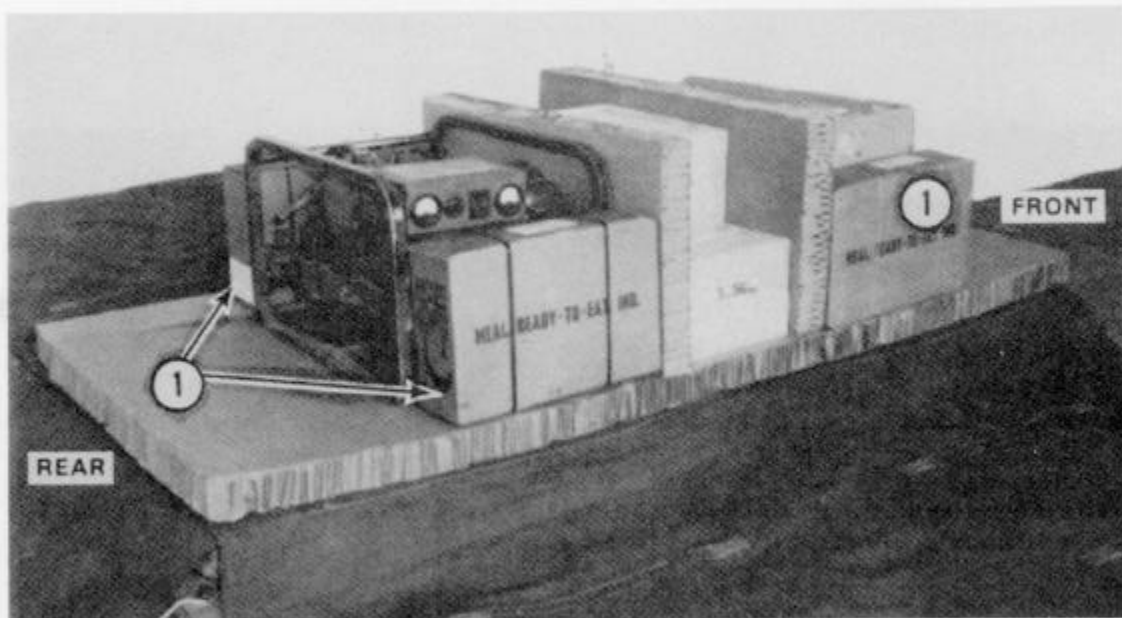
- ① Place two ammunition boxes side by side in the center of the honeycomb. Center another ammunition box on top of the other two ammunition boxes.
- ② Place a piece of 19- by 36-inch honeycomb at the front and rear of the ammunition boxes.

Figure 3-14. Ammunition boxes positioned.



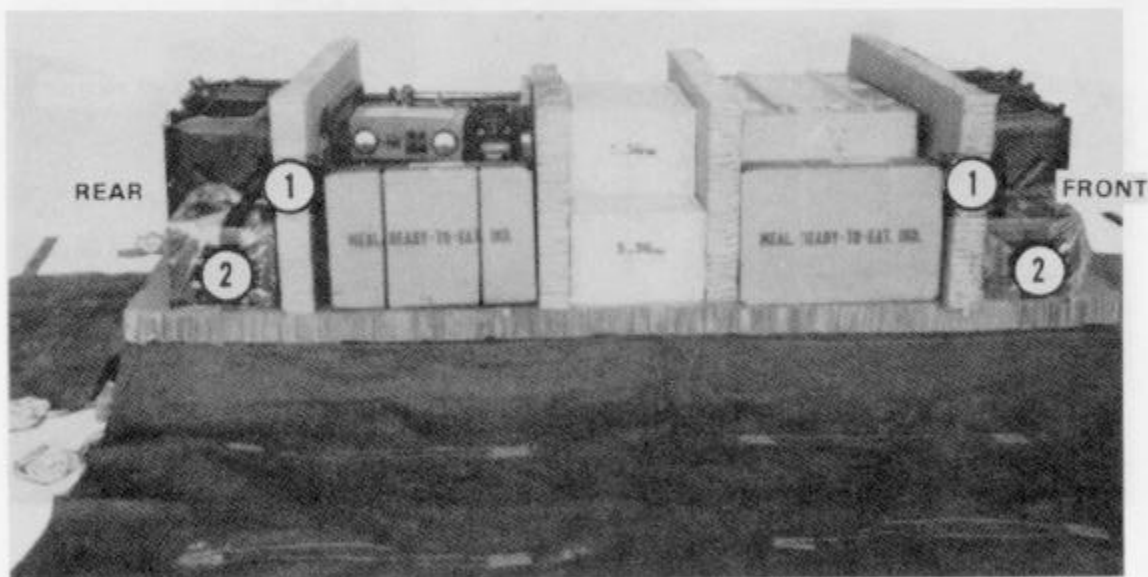
- ① Center the transceiver in front of the honeycomb and the ammunition boxes.
- ② Center the generator to the rear of the honeycomb and the ammunition boxes.

Figure 3-15. Transceiver and generator centered on honeycomb.



- 1 Place a box of MREs on both sides of the generator. Place one box of MREs to the right of the transceiver.

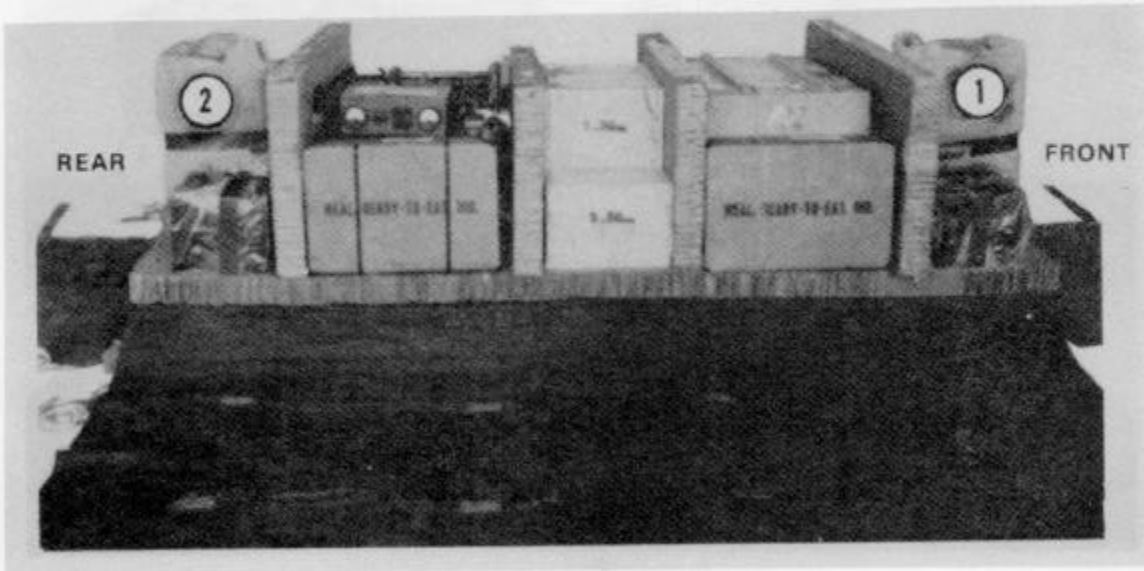
Figure 3-16. MREs placed.



- ① Place one piece of 16- by 39-inch honeycomb to the rear of the generator and one piece at the front of the transceiver.
- ② Place one 12-volt battery on each corner of the 48- by 96-inch piece of honeycomb. Place the batteries next to the 16- by 39-inch pieces of honeycomb.

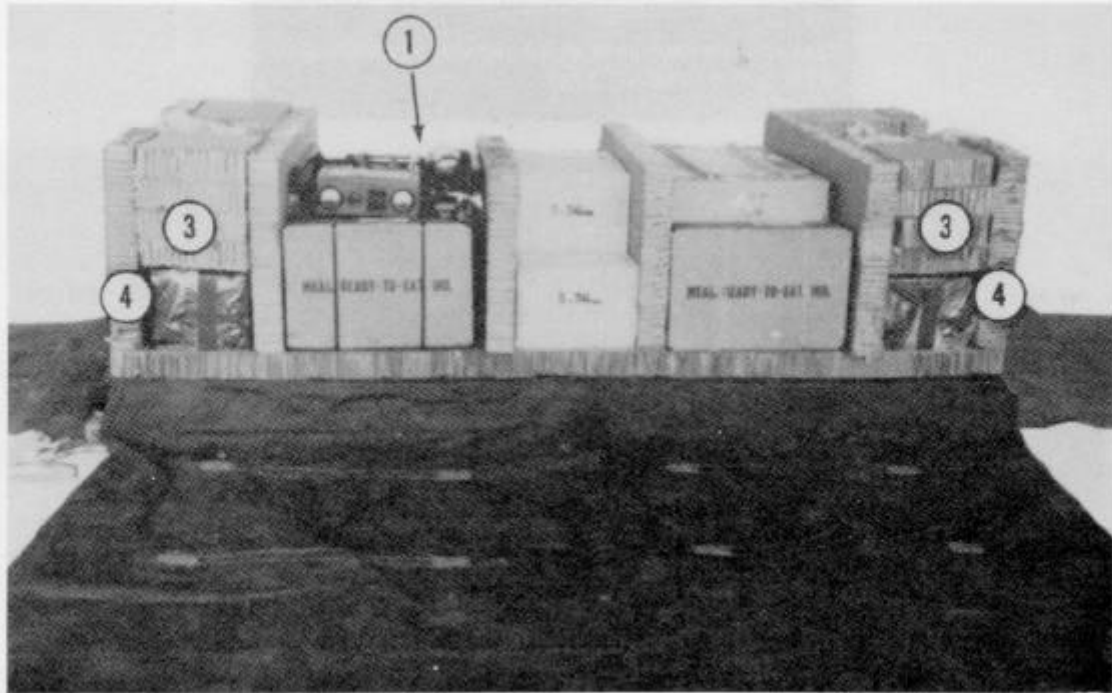
Figure 3-17. Honeycomb and batteries placed.

CAUTION
Hazardous items must be packed according to AFR 71-4/TM 38-250.



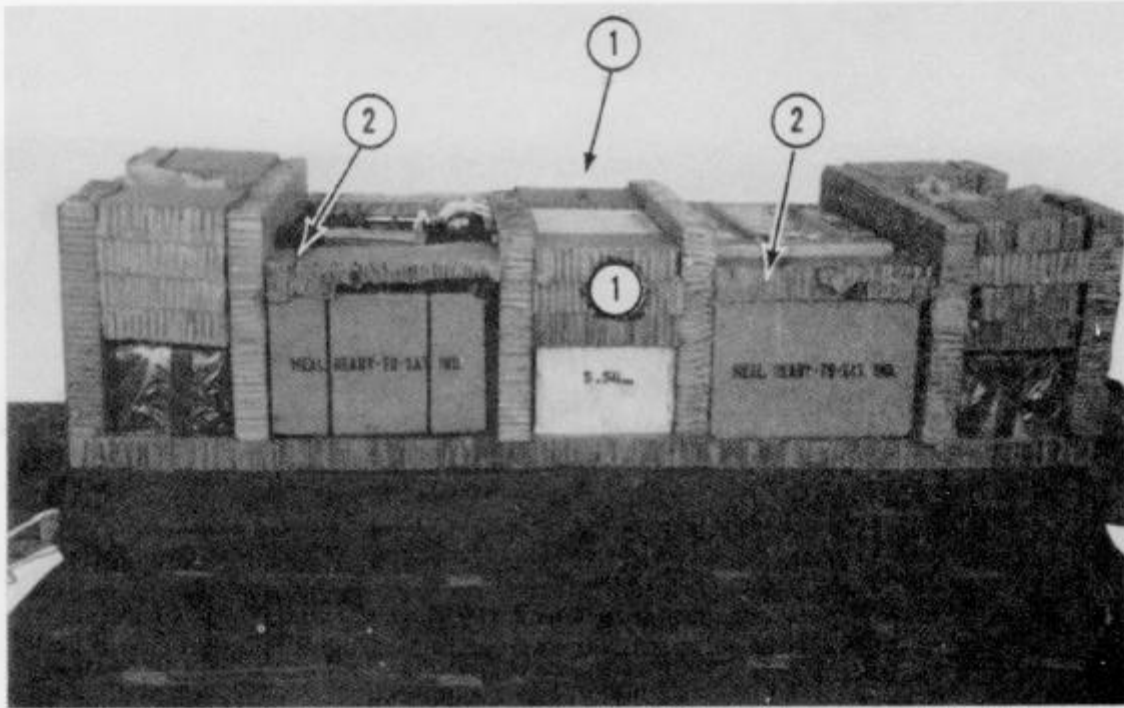
- ① Fill the two fuel cans, and pad them according to FM 10-500/TO 13C7-1-5. Place them between the batteries on the front of the load.
- ② Fill the two water cans, and wrap them with cellulose wadding. Place them between the batteries on the rear of the load.

Figure 3-18. Fuel cans and water cans placed.



- ① Place the ground rods and fire extinguisher on top of the generator. Secure them with 1/2-inch tubular nylon webbing.
- ② Place the fuel line under the generator (not shown).
- ③ Place four 12- by 12-inch pieces of honeycomb on top of each battery.
- ④ Place a piece of 12- by 21-inch honeycomb on each front and rear corner of the load.

Figure 3-19. Ground rods, fire extinguisher, fuel line, and honeycomb placed.



- ① Place three pieces of 11- by 13-inch honeycomb on top of the bottom ammunition boxes to each side of the top box.
- ② Place one piece of 8- by 21-inch honeycomb on top of each box of MREs.

Figure 3-20. Honeycomb placed.

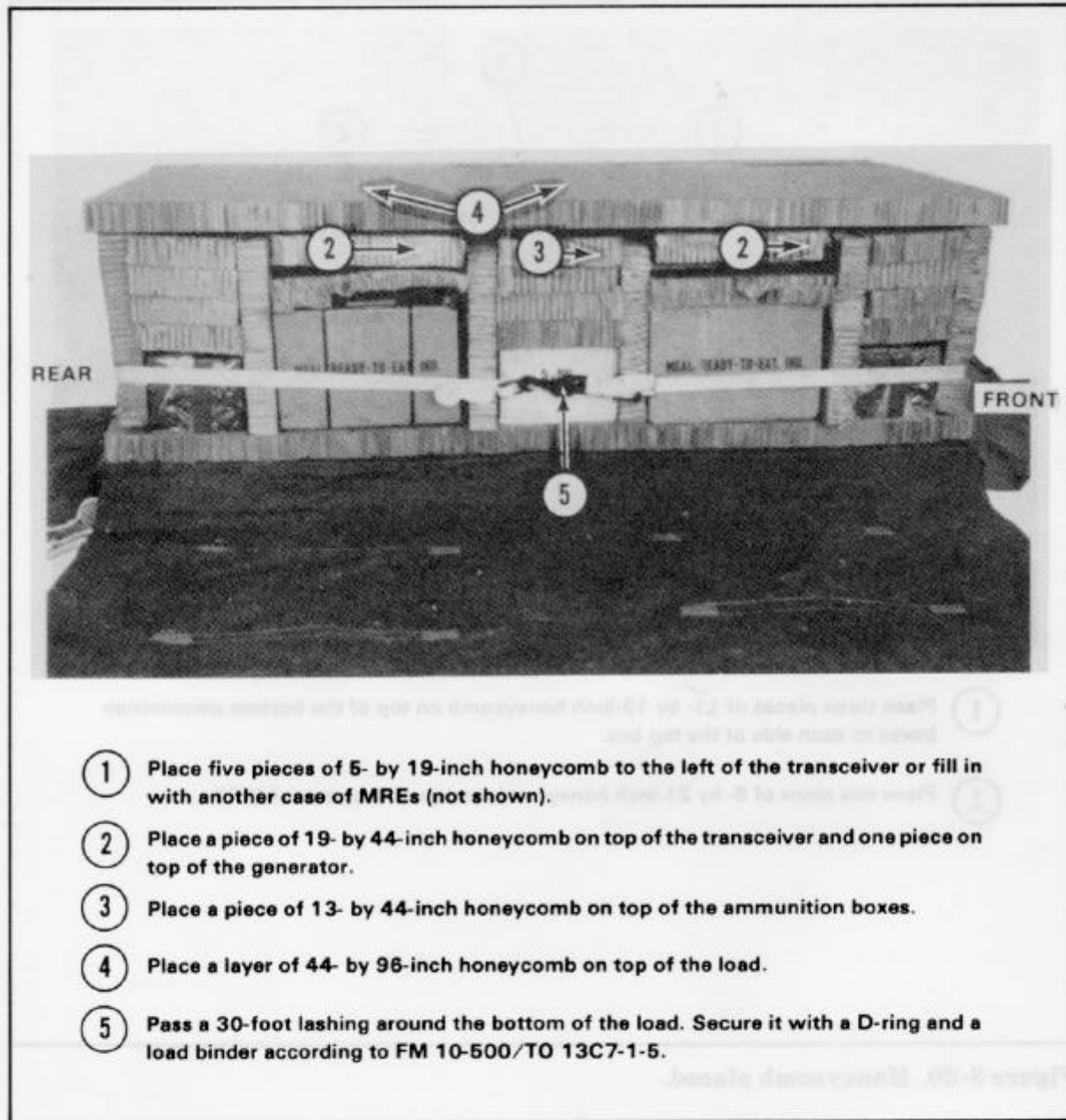
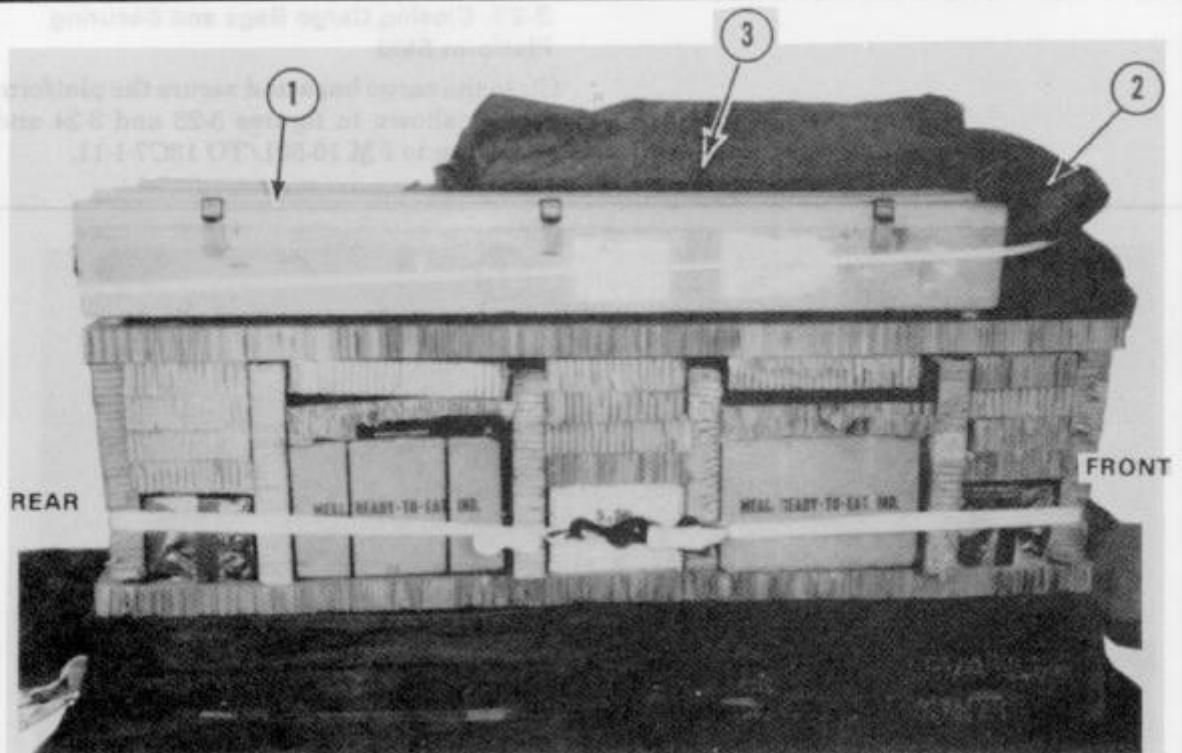


Figure 3-21. Honeycomb and lashing placed.

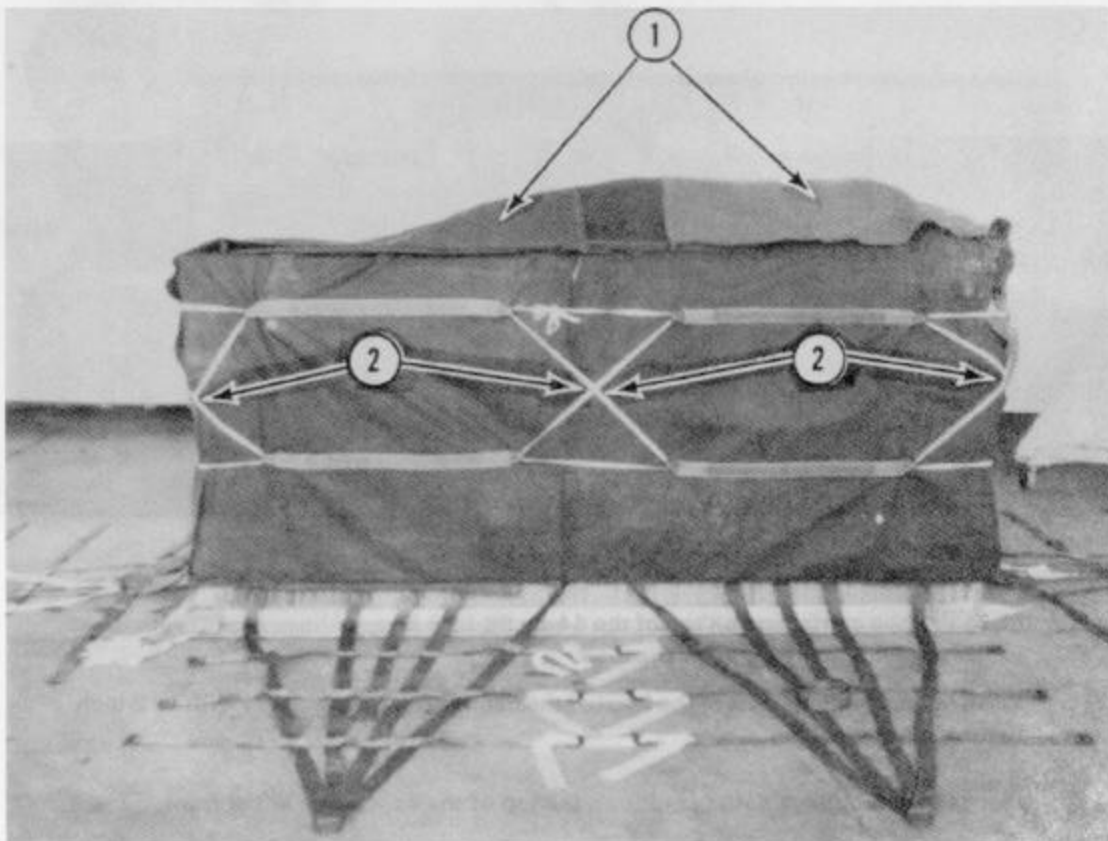


- ① Place the two containers on top of the 44-by 96-inch layer of honeycomb with their ends even with the rear end of the load.
- ② Place the camouflage nets at the front of the containers. Secure them with 1/2-inch tubular nylon webbing.
- ③ Place the camouflage netting poles on the top of the containers at the front.

Figure 3-22. Containers, camouflage nets, and camouflage poles placed.

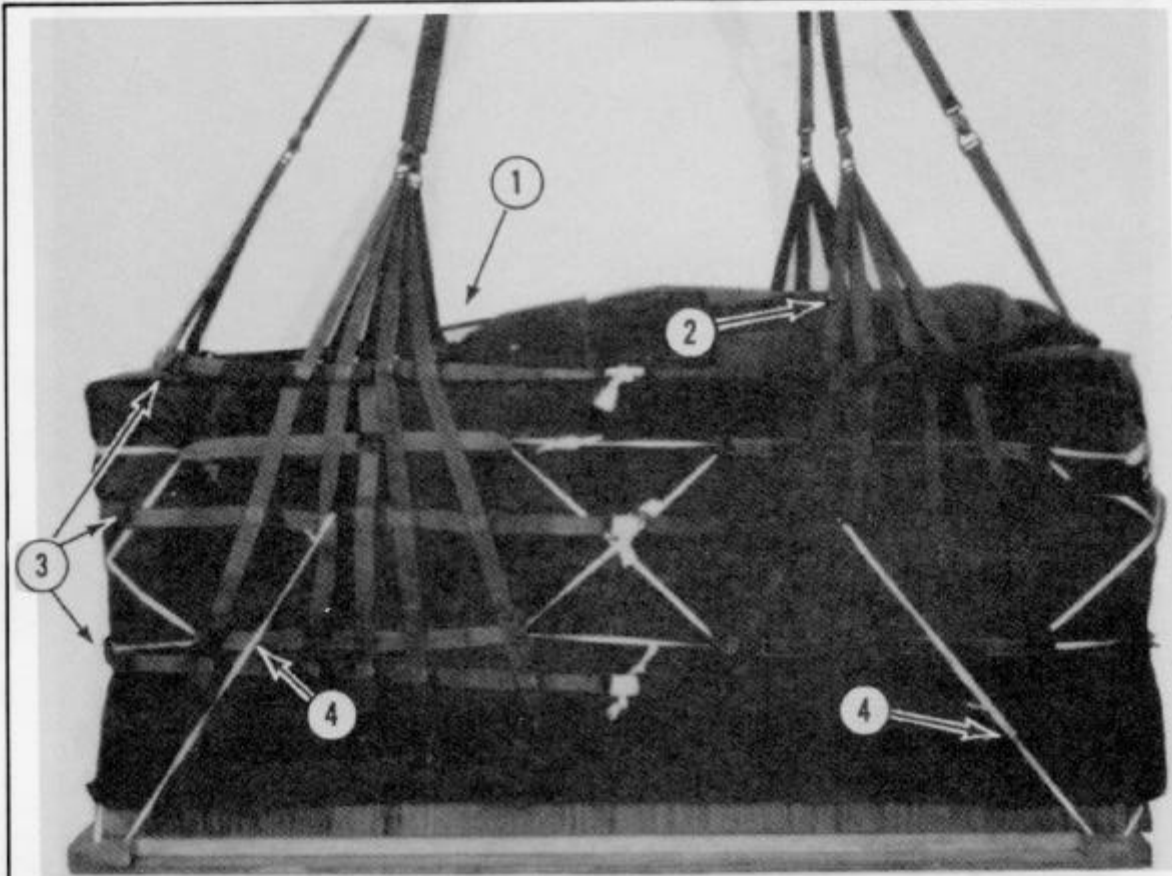
3-23. Closing Cargo Bags and Securing Platform Skid

Close the cargo bags and secure the platform skid as shown in figures 3-23 and 3-24 and according to FM 10-501/TO 13C7-1-11.



- ① Fold the side and end panels of the cargo bag covers over the top of the load, and fold under any excess cover.
- ② Use either the rope provided with the cargo bags or 1/2-inch tubular nylon webbing, and tie the covers with figure eight ties. Make the ties with bowknots, and tape the knots.

Figure 3-23. Side and end panels folded and secured.



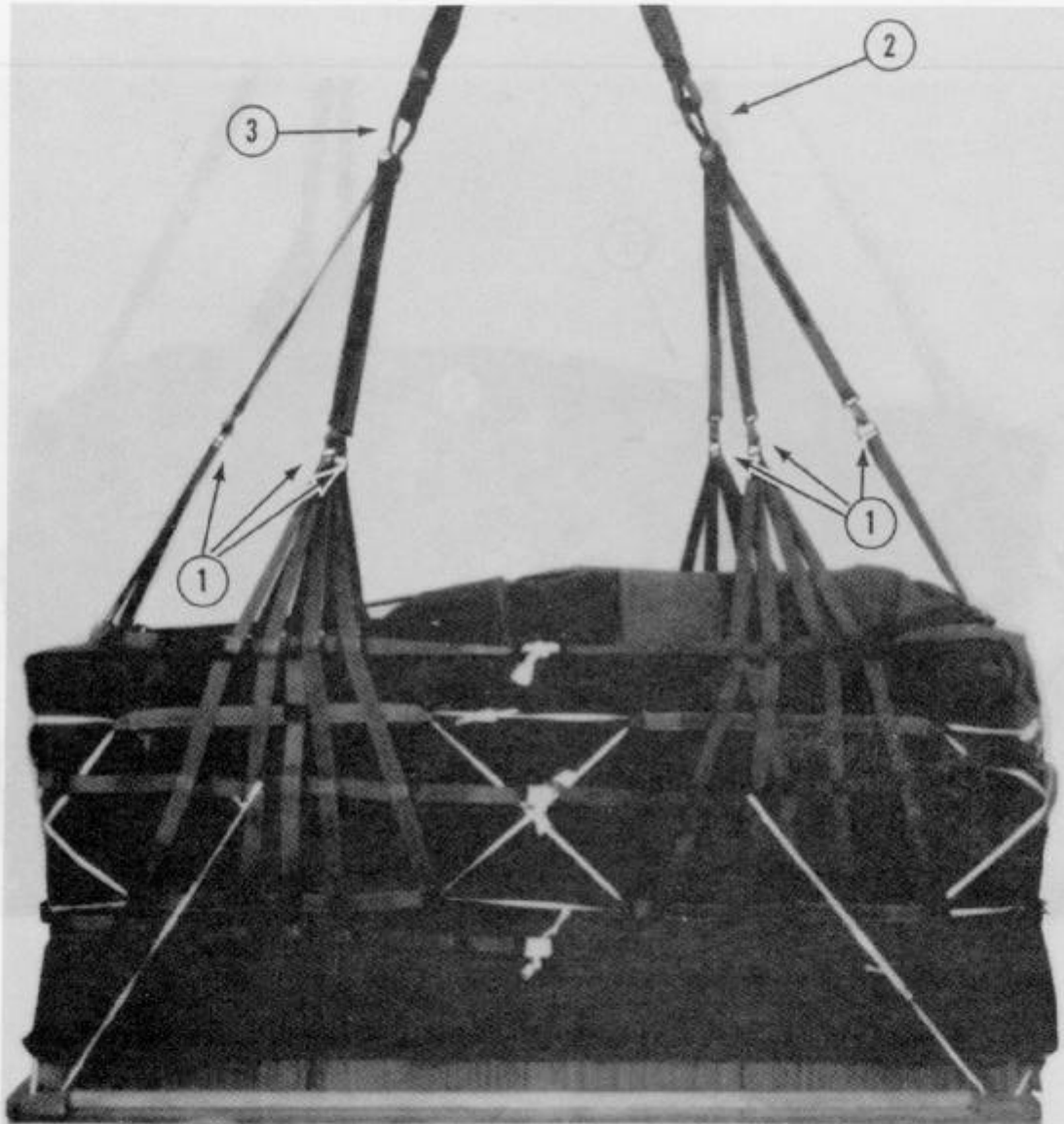
- ① Fasten the short tiedown straps over the load.
- ② Fasten the long tiedown strap of the left assembly to the friction adapter of the right assembly.
- ③ Fasten the lateral straps around the ends of the load.
- ④ Secure the skid platform to the sling assembly with the pre-positioned, 1/2-inch tubular nylon webbing.

Figure 3-24. Cargo bags closed.

3-24. Installing Suspension Slings

Attach six suspension webs and two 3-foot (3-loop), type X nylon slings to the A-22 cargo

bag sling assemblies as shown in figure 3-25 and according to FM 10-501/TO 13C7-1-11.



- ① Fit one suspension web connector snap to each of the six support web D-rings, and wrap tape around the slings.
- ② Bolt the front three suspension web D-rings to a 3-foot sling with a cargo suspension clevis.
- ③ Bolt the rear three suspension web D-rings to a 3-foot sling with a cargo suspension clevis.

Figure 3-25. Suspension slings installed.

3-25. Stowing Cargo Parachute

Prepare and stow the G-12D cargo parachute on the TDARS load as shown in figure 3-26 and according to FM 10-501/TO 13C7-1-11.

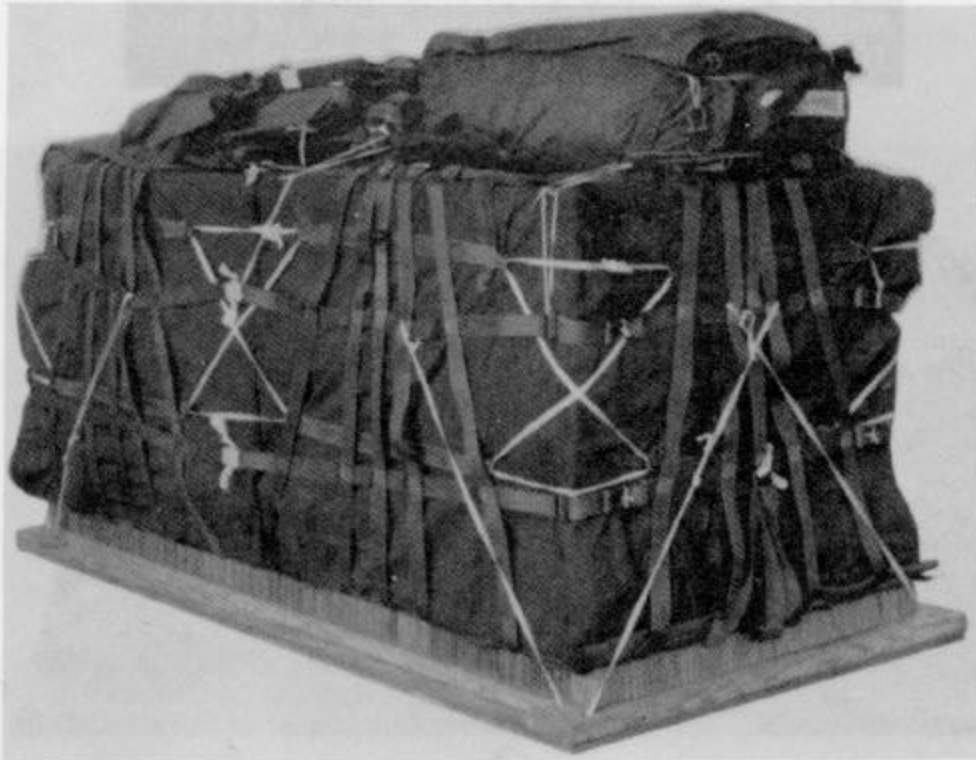
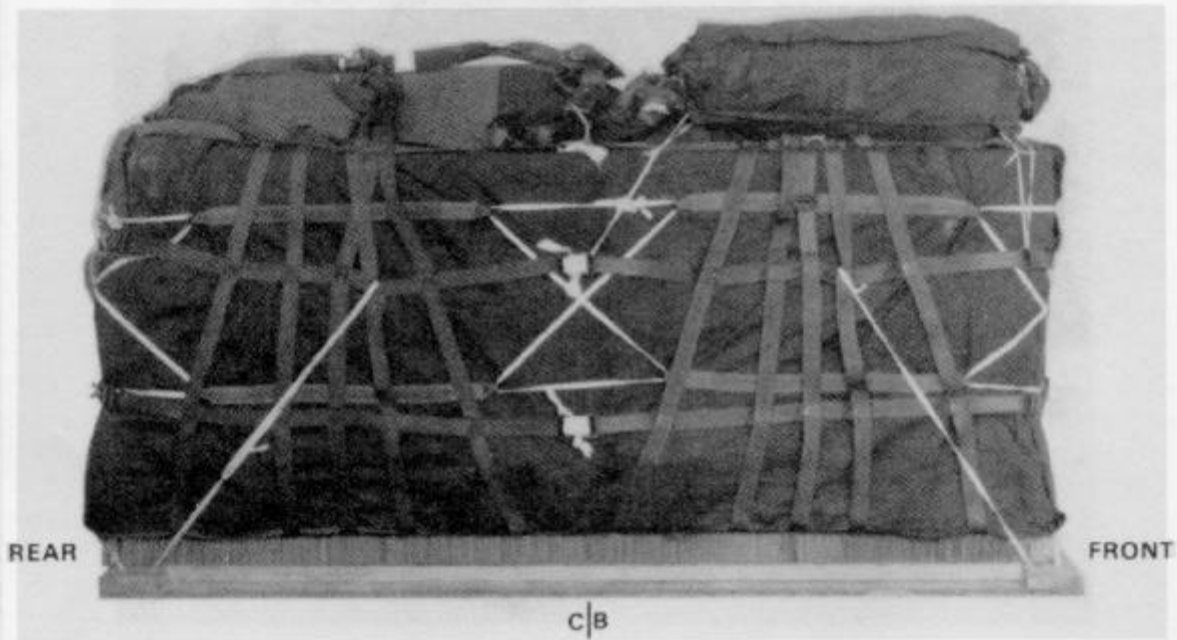


Figure 3-26. Cargo parachute stowed.

3-26. Marking Rigged Load

Use data shown in figure 3-27, and mark the rigged load according to FM 10-500/TO 13C7-1-5.

CAUTION
Make the final rigger inspection required by FM 10-500/TO 13C7-1-5 before the load leaves the rigging site.



RIGGED LOAD DATA

Weight	1,820 pounds
Height	54 inches
Width	48 inches
Length	96 inches
Center of Balance (from the front edge of the platform)	50 inches

Figure 3-27. Load rigged for low-velocity airdrop.

3-27. Equipment Required

The equipment required to rig this load is listed in Table 3-2.

Table 3-2. Equipment required for rigging TDARS in a double A-22 cargo bag for low-velocity airdrop

National Stock Number	Item	Quantity
1670-00-587-3421	Bag, cargo, A-22	2
4030-00-678-8562	Clevis assembly, suspension, cargo	3
4030-00-432-2516	Clevis, suspension, cargo	3
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
5510-00-220-6448	Lumber, 2- by 6-in: 48-in..... 85-in.....	2 2
5315-00-010-4657	Nail, steel wire, common, 6d.....	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3-by 36- by 96-in:	6 sheets
	5- by 19-in	(5)
	8- by 21-in	(2)
	11- by 13-in	(6)
	12- by 12-in	(16)
	12- by 21-in	(4)
	13- by 44-in	(1)
	16- by 39-in	(2)
	19- by 36-in	(2)
	19- by 44-in	(2)
	44- by 96-in	(1)
	46- by 96-in	(1)
	48- by 96-in	(3)
1670-00-893-2371	Parachute, cargo, G-12D	1
5530-00-128-4981	Plywood, 3/4- by 48- by 96-in	1 sheet
1670-00-753-3788	Sling, 3-ft (3-loop), type X.....	3
7510-00-266-5016	Tape, adhesive, 2-in	As required
8310-00-917-3945	Thread, ticket number 5, cotton.....	As required
1670-00-937-0271	Tie-down assembly, 15-ft, nylon	2
	Webbing:	
8305-00-268-2411	Cotton, 80-lb	As required
8305-00-082-5752	Nylon, tubular, 1/2-in	As required
8305-00-263-3591	Nylon, type VIII	As required

Section III

**RIGGING TDARS AND SIX STINGER MISSILES IN A
DOUBLE A-22 CARGO BAG**

3-28. Description of Load

The TDARS with six stinger missiles is rigged in a double A-22 cargo bag for low-velocity airdrop. The TDARS load components are a quadropod container, an antenna container, a transceiver container, a generator, five 5-gallon fuel cans, and six stinger missile containers. This load may be airdropped from C-130 or C-141 aircraft.

3-29. Building Skid Board

Build a skid board for a double A-22 cargo bag using a 3/4- by 48- by 96-inch piece of plywood as shown in FM 10-501/TO 13C7-1-11.

3-30. Preparing Skid Board

Prepare the skid board using a 8- by 96-inch and a 36- by 96-inch piece of honeycomb as shown in FM 10-501/TO 13C7-1-11.

3-31. Positioning A-22 Sling Assemblies

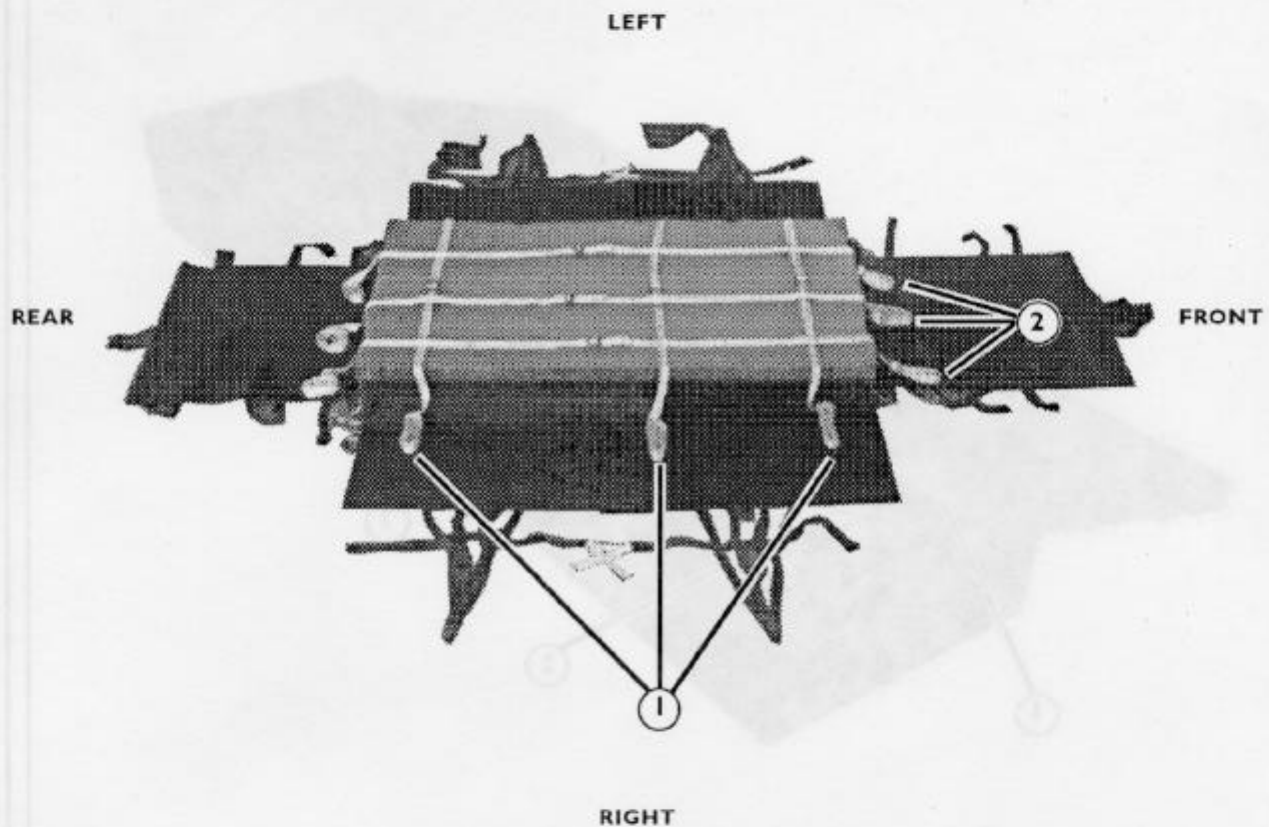
Position two A-22 cargo bag sling assemblies on the skid board as shown in FM 10-501/TO 13C7-1-11.

3-32. Positioning Covers and Honeycomb

Place the A-22 cargo bag covers and a 8- by 96-inch and a 36- by 96-inch piece of honeycomb on the skid board as shown in FM 10-501/TO 13C7-1-11.

3-33. Pre-positioning Tie-Down Lashings

Form six 30-foot tie-down lashings according to FM 10-500-2/TO 13C7-1-5 and place them on top of the honeycomb as shown in Figure 3-28.



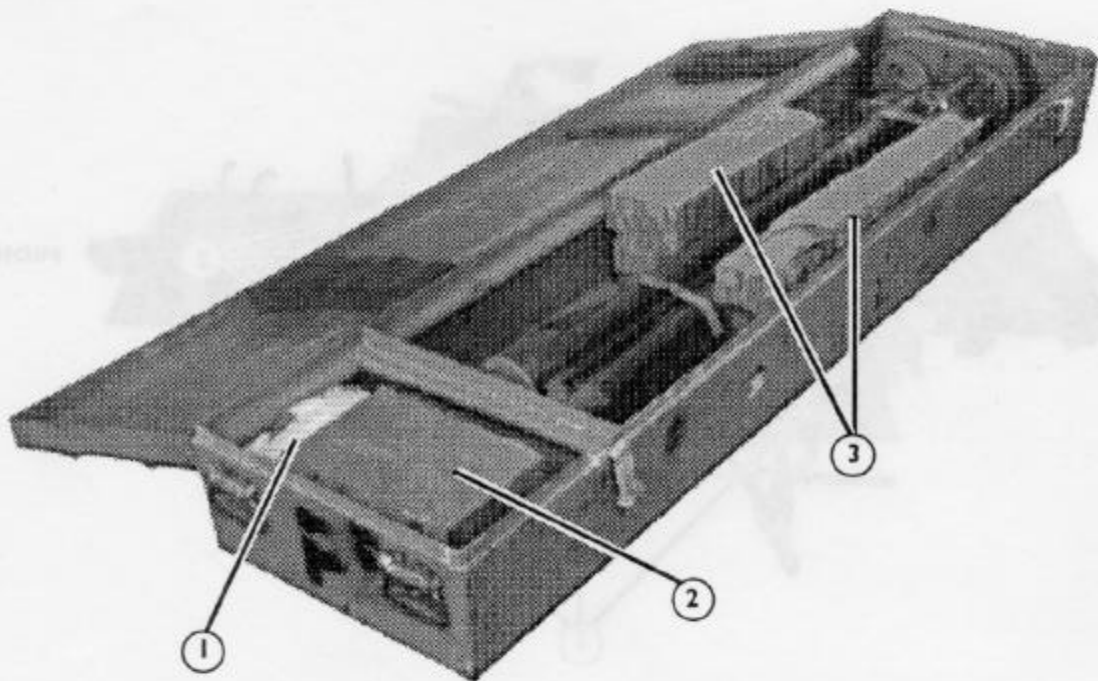
- ① Starting at the right front of the skid board, run three 30-foot tie-down lashings the width of the honeycomb at intervals of 11 inches, 18 inches, and 35 inches from the right side of the platform.
- ② Starting at the front of the skid board, run three 30-foot tie-down lashings the length of the honeycomb at intervals of 11 inches, 18 inches, and 85 inches from the front edge of the platform.

Figure 3-28. Pre-positioned tie-down lashings installed

3-34. Preparing TDARS Components

Prepare the TDARS components as shown below.

a. *Quadropod Container.* Prepare the items in the quadropod container as shown in Figure 3-29.



- ① Wrap the converter with cellulose wadding.
- ② Pad around the converter with honeycomb filler.
- ③ Pad around the quadropod and pedestal with honeycomb filler.
- ④ Close and latch the container lid (not shown).

Figure 3-29. Quadropod container items prepared

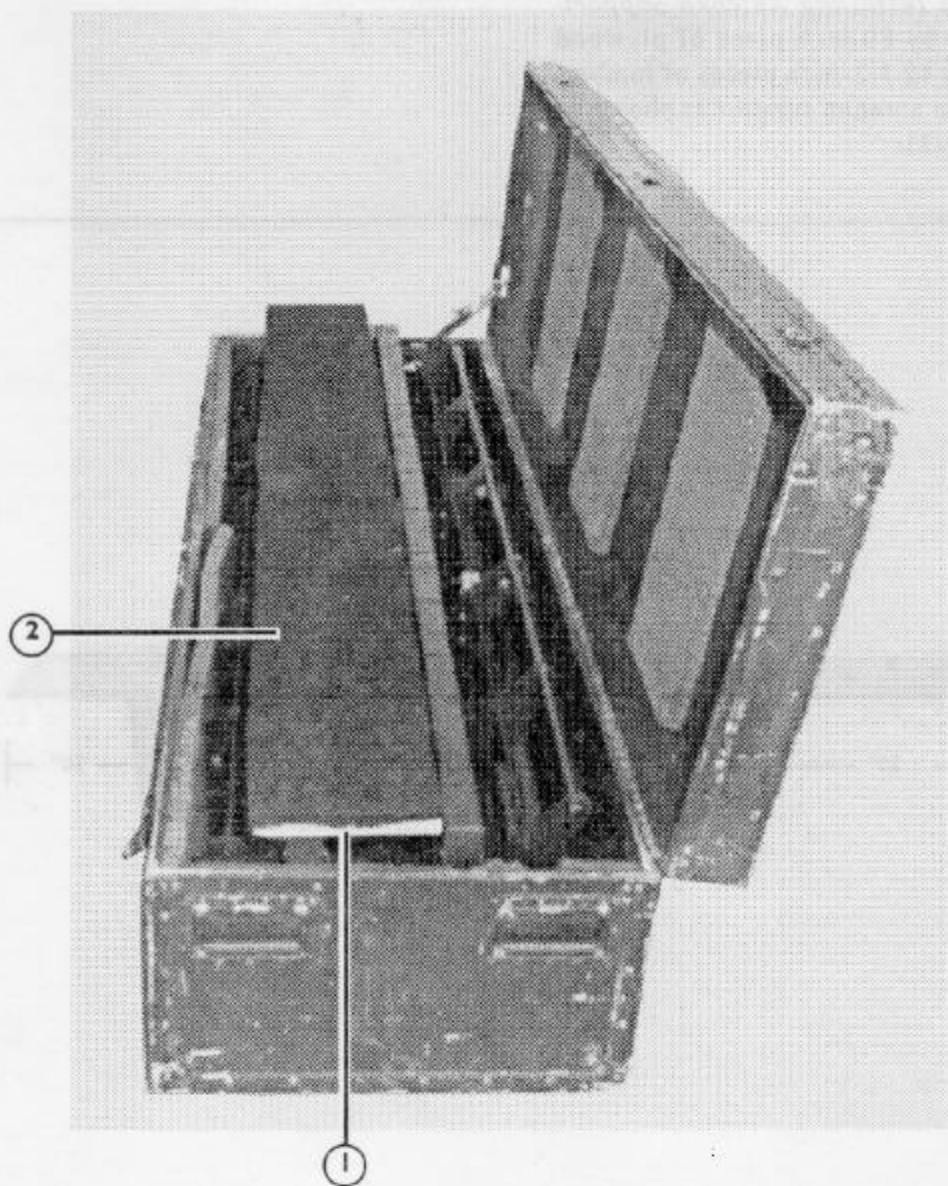
b. Building and Installing Antenna Support.

Using a 3/4- by 8- by 80-inch piece of plywood and four 2- by 4- by 12 1/2-inch pieces of lumber, build and install the antenna support as shown in Figures 3-30 and 3-31.



- ① Nail the four pieces of lumber to the center of the plywood at the intervals shown. Make sure the 4-inch side of the lumber is facing the side of the plywood piece.

Figure 3-30. Antenna support built

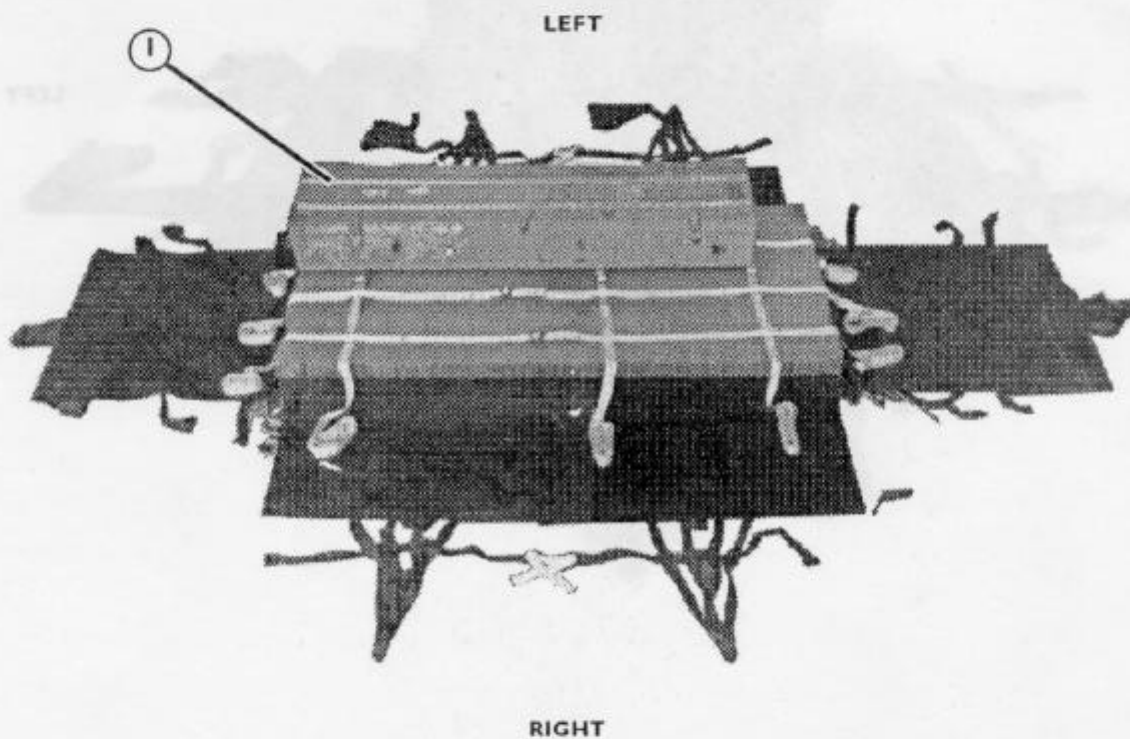


- ① Place the antenna support in the middle slot of the antenna container.
- ② Cut a piece of 1/2- by 8- by 80-inch felt and place it on top of the plywood.
- ③ Close and latch the antenna container lid (not shown).

Figure 3-31. Antenna support installed

3-35. Positioning Load

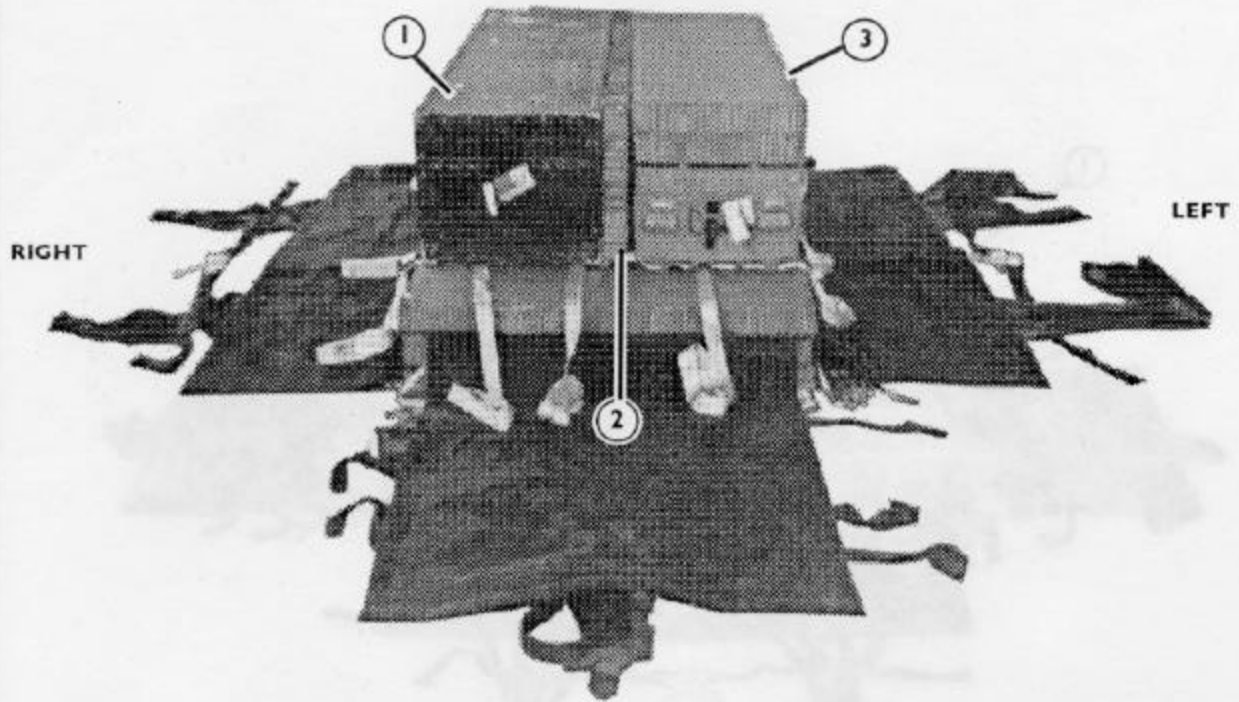
Place the items on the platform as shown in Figures 3-32 through 3-38.



- ① Place the quadropod container on the left side of the platform, flush with the rear edge of the platform.

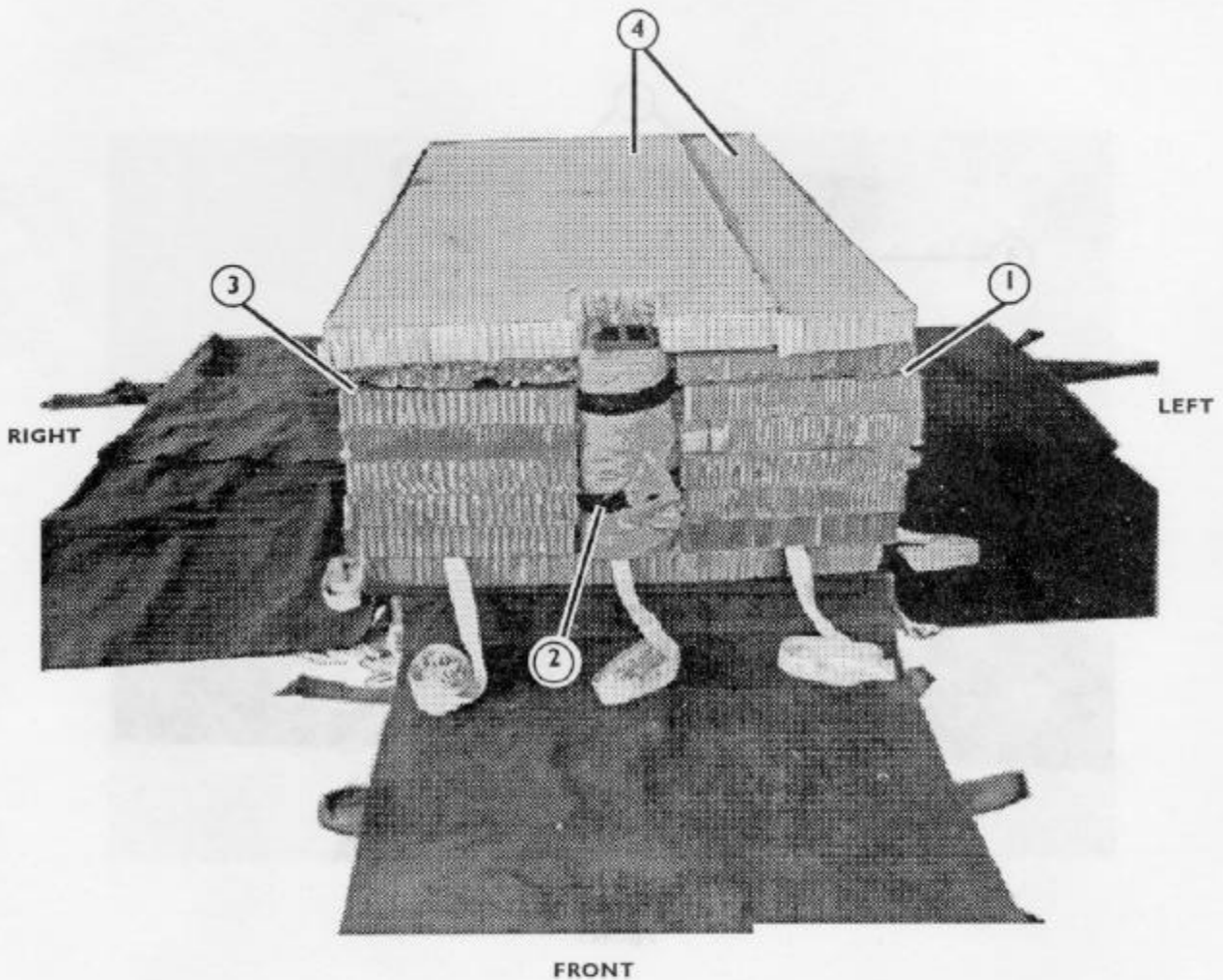
NOTE: Make sure the latches on the container are to the inside of the platform.

Figure 3-32. Quadropod container positioned on platform



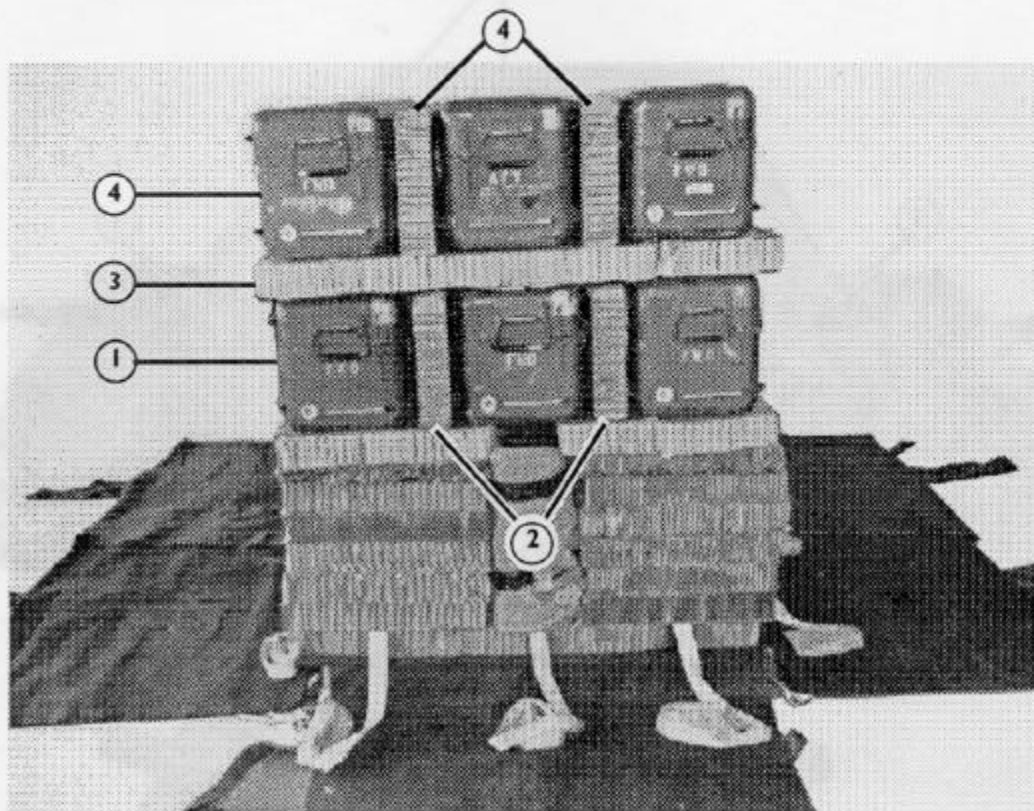
- ① Place the antenna container on the right side of the platform and flush with the rear edge of the platform.
NOTE: Make sure the latches on the container are to the inside of the platform.
- ② Place a 16- by 83 1/2-inch piece of honeycomb between the quadropod container and the antenna container.
- ③ Place two 20- by 83 1/2-inch pieces of honeycomb on top of the quadropod container.

Figure 3-33. Antenna container and honeycomb positioned on platform



- ① Place six 13- by 19-inch pieces of honeycomb on the left front edge of the platform. Crush the top pieces of honeycomb to a height of 2 inches.
NOTE: Make sure there is gasoline in the 5-gallon fuel can.
- ② Wrap a 5-gallon fuel can with cellulose wadding and tape. Place the can next to the honeycomb stack placed in step 1.
- ③ Repeat step 1, except place the stack on the right front edge of the platform.
- ④ Place a 36- by 96-inch and a 10 1/2- by 96-inch piece of honeycomb on top of the load. Make a cutout for the fuel can.

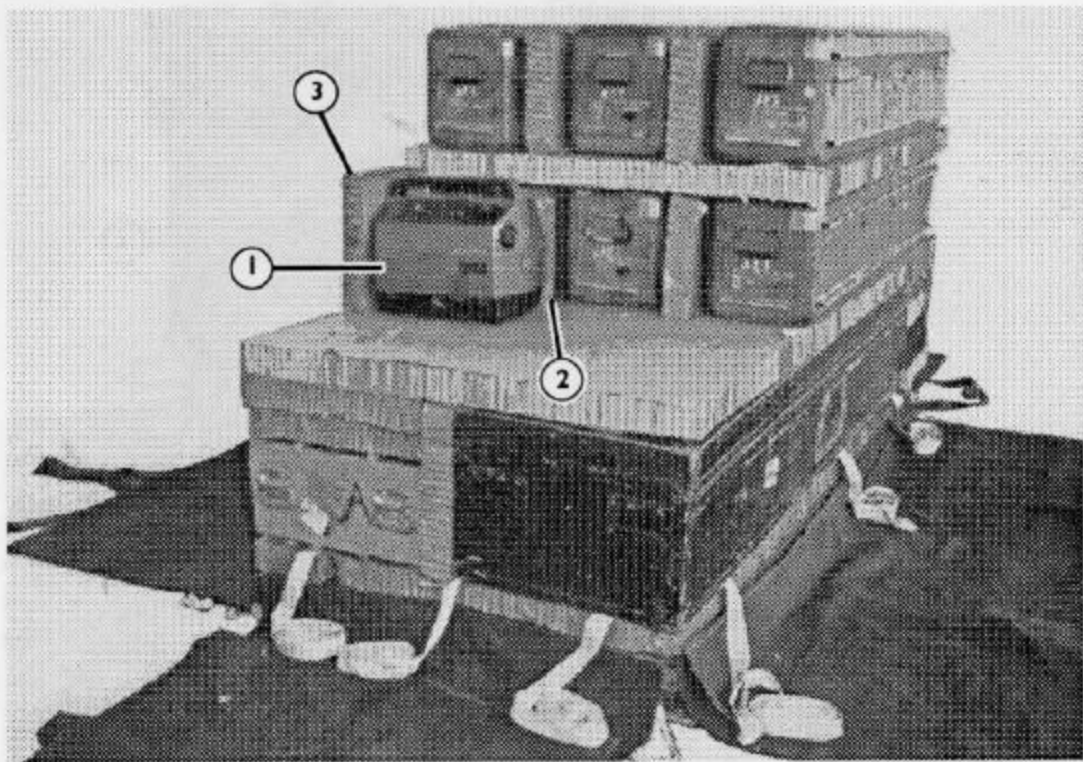
Figure 3-34. Honeycomb and fuel can positioned on platform



FRONT

- ① Place three stinger missile containers on top of the load, flush with the front edge.
- ② Place a 12- by 66-inch piece of honeycomb on each side of the middle container.
- ③ Place a 36- by 66-inch and a 10 1/2- by 66-inch piece of honeycomb on top of the stinger missile containers.
- ④ Repeat steps 1 and 2.

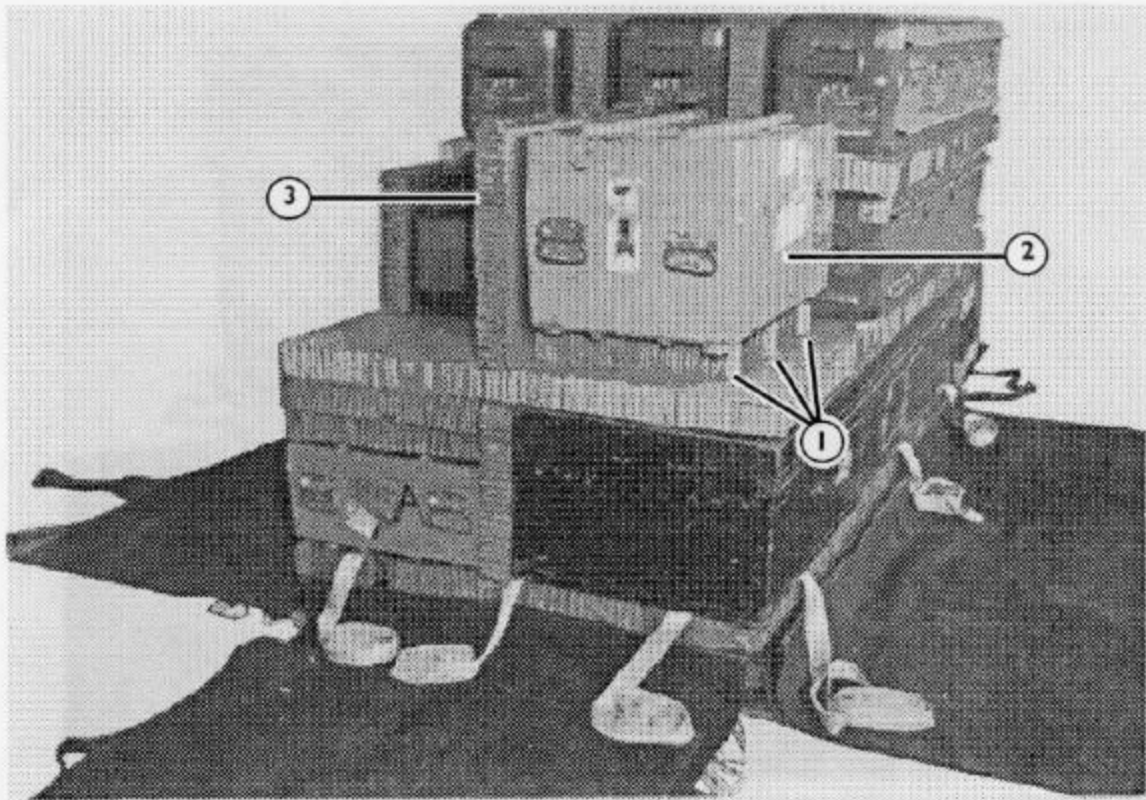
Figure 3-35. Stinger missile containers and honeycomb positioned on platform



NOTE: Make sure the generator has been drained.

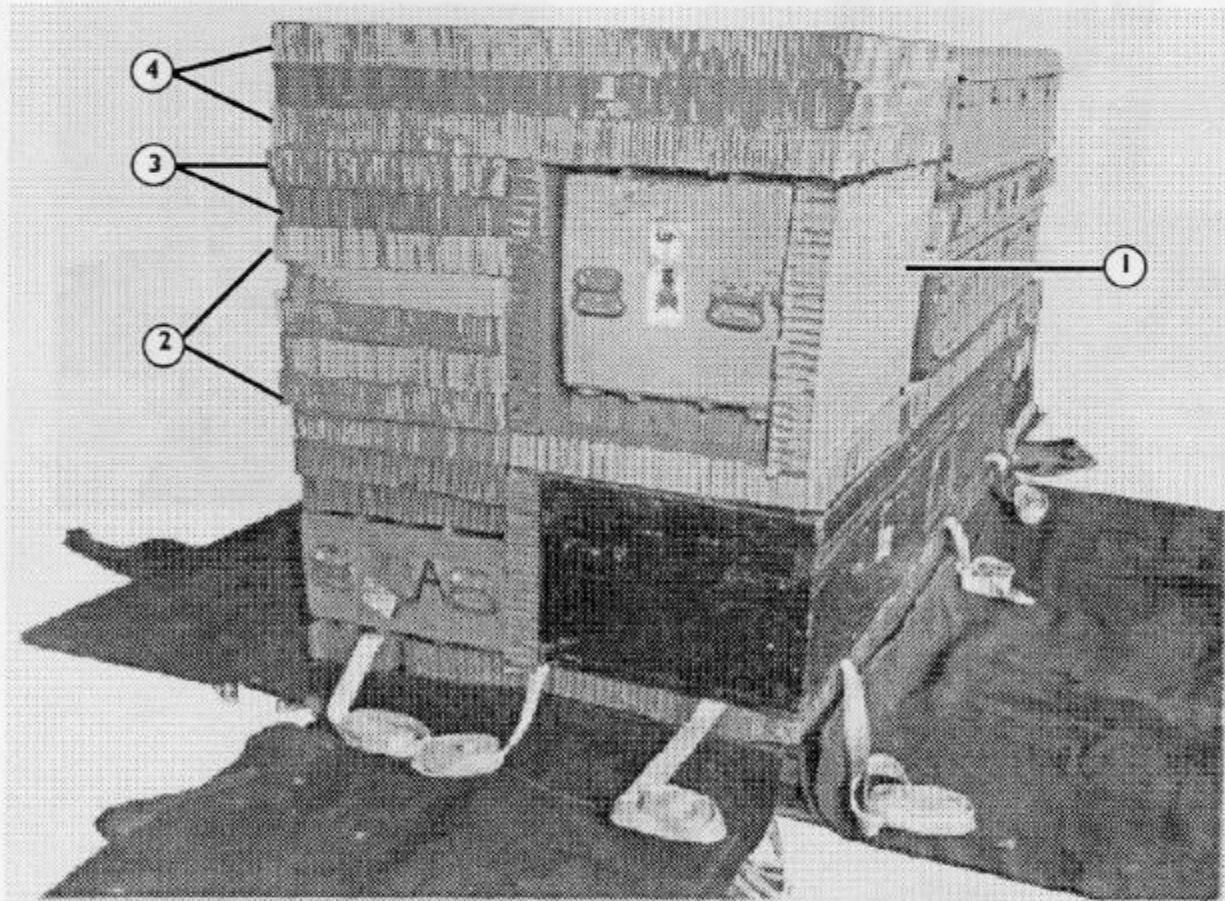
- ① Place the generator behind the stinger missile on the left side.
- ② Place an 11 1/2- by 15-inch piece of honeycomb between the generator and missile.
- ③ Place an 11 1/2- by 15-inch piece of honeycomb on the left side of the generator.

Figure 3-36. Generator and honeycomb positioned on platform



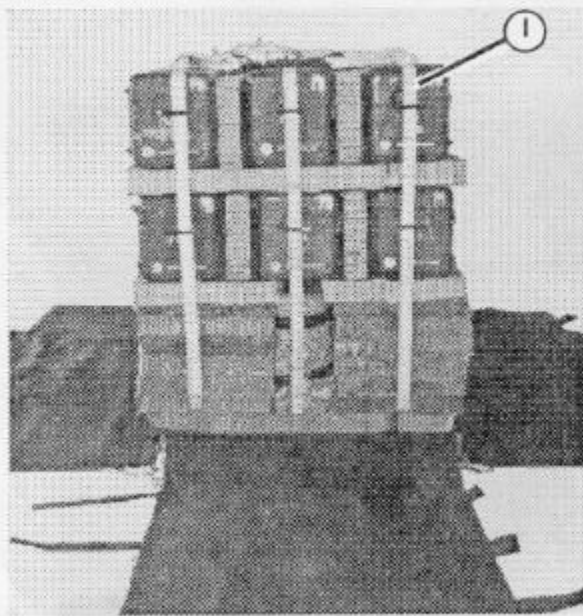
- NOTE: Make sure the generator has been checked.
- ① Evenly space 3- by 17-inch pieces of honeycomb behind the stinger missiles on the right side.
 - ② Place the transceiver on top of the honeycomb pieces placed in step 1.
 - ③ Place a 20- by 31-inch piece of honeycomb between the transceiver and the generator.

Figure 3-37. Transceiver and honeycomb positioned on platform

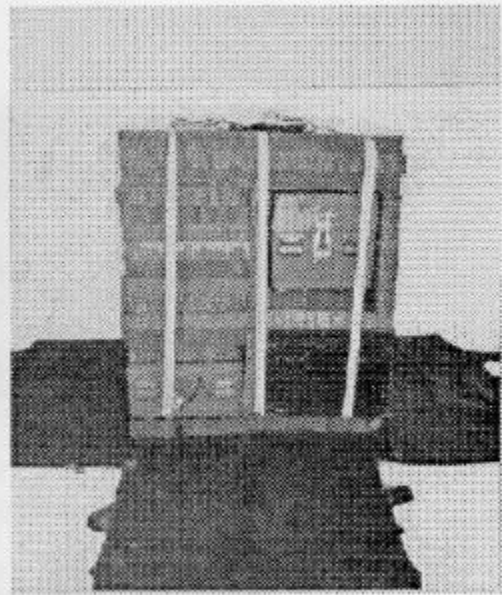


- ① Place a 21- by 31-inch piece of honeycomb on the right side of the transceiver.
- ② Place five 18- by 21-inch pieces of honeycomb against the rear of the generator.
- ③ Place two 21- by 30-inch pieces of honeycomb across the generator and on top of the honeycomb placed in step 2.
- ④ Place three 30- by 47-inch pieces of honeycomb on top of the load.

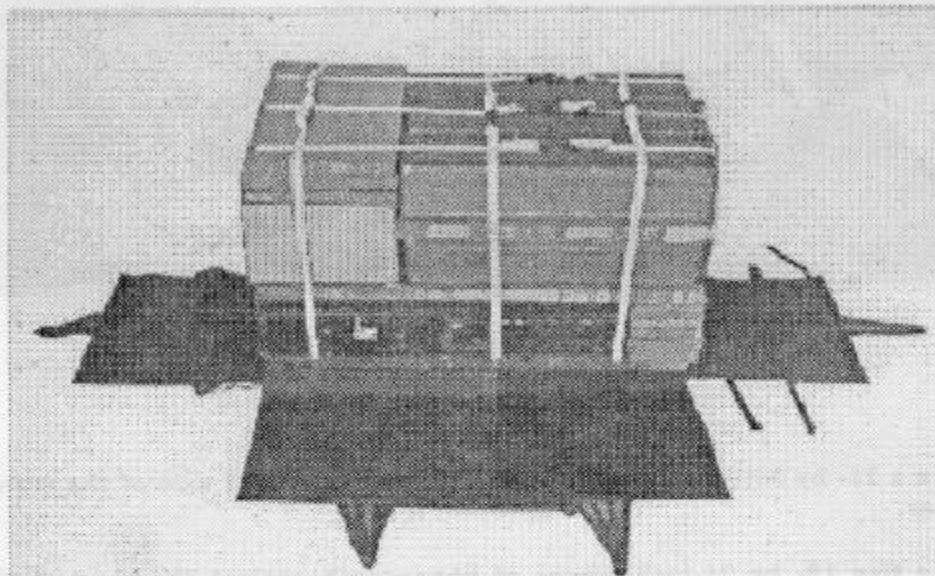
Figure 3-38. Honeycomb positioned on platform



FRONT



REAR



RIGHT

- ① Pass the pre-positioned lashings over the load and fasten each with two D-rings and a load binder. Make sure the lashings at the front are routed through the lifting handles of the stinger missile containers.

Figure 3-39. Lashings fastened

3-36. Closing Cargo Bags and Securing Platform

Close the bag covers, fasten the sling assemblies, and secure the cargo bags to the platform according to FM 10-501/TO 13C7-1-11.

3-37. Installing Suspension Slings

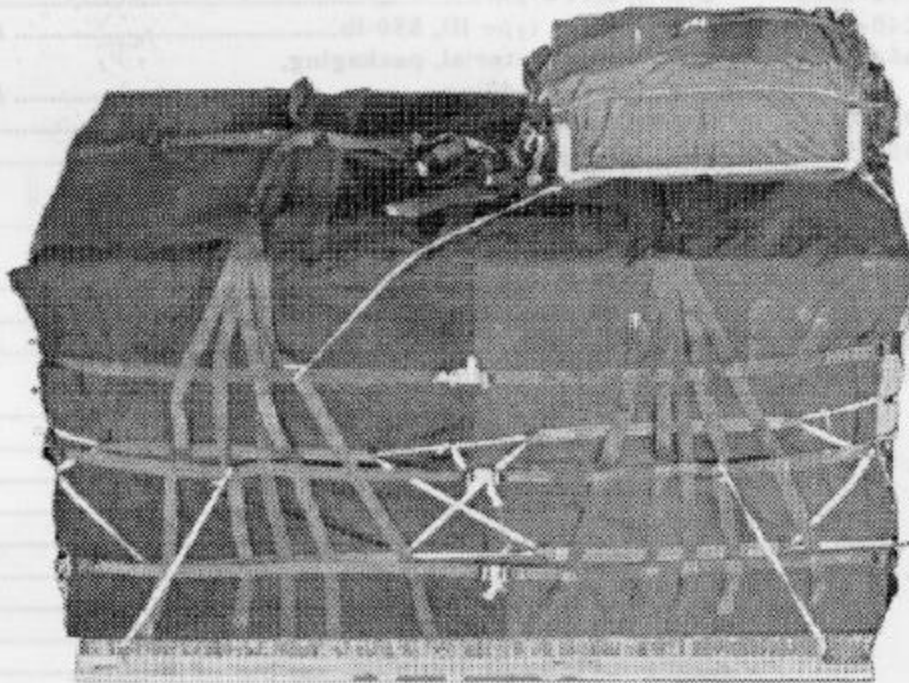
Install the suspension slings according to FM 10-501/TO 13C7-1-11.

3-38. Stowing Cargo Parachute

Stow a G-12D or G-12E cargo parachute according to FM 10-501/TO 13C7-1-11.

3-39. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 3-40. Complete DD Form 1387-2 according to AFR 71-4/TM 38-250 and securely attach it to the load.



RIGGED LOAD DATA

Weight (with parachute)	1,558 pounds
Height (with parachute)	75 inches
Width	48 inches
Length	96 inches

Figure 3-40. TDARS with stinger missiles rigged

3-40. Equipment Required

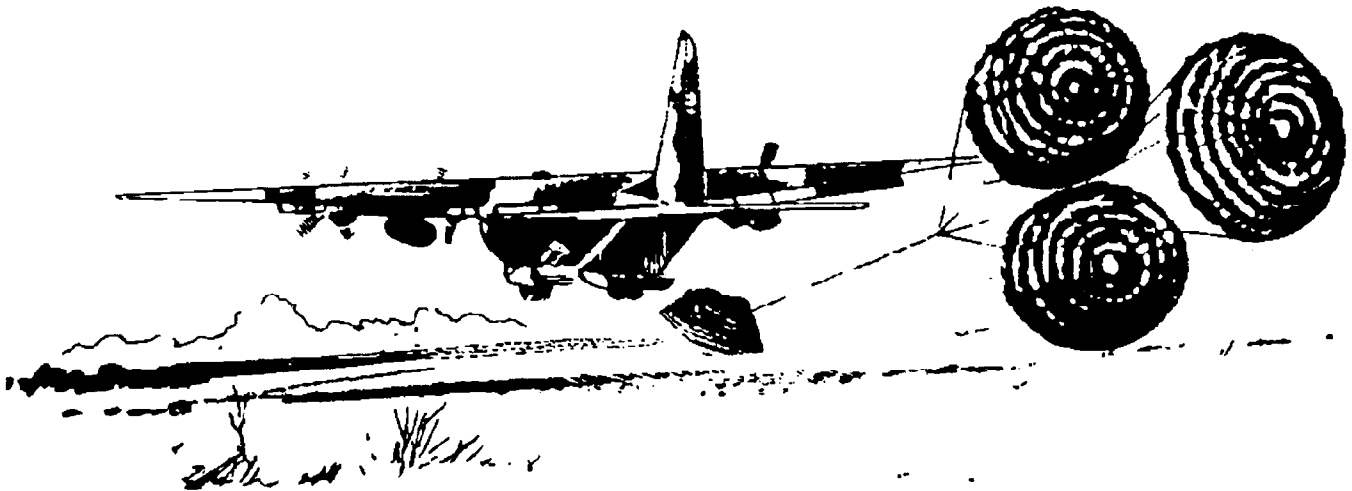
Use the equipment listed in Table 3-3 to rig this load.

Table 3-3. Equipment required for rigging TDARS and stinger missiles in a double A-22 cargo bag for low-velocity airdrop

National Stock Number	Item	Quantity
1670-00-587-3421	Bag, cargo, A-22	2
3990-00-937-0272	Binder, load, 10,000-lb.....	3
4030-00-678-8562	Clevis assembly, suspension, cargo	3
4030-00-432-2516	Clevis, screw-pin.....	13
4020-00-240-2146	Cord, nylon, type III, 550-lb.....	As required
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	(6)
8305-00-958-3685	Felt, 1/2- by 8- by 80-in	(1)
	Lumber:	
5510-00-220-6146	2- by 4- by 12 1/2-in	4
5510-00-220-6148	2- by 6-in:	
	48-in.....	2
	85-in.....	2
5315-00-010-4657	Nail, steel wire, common, 6d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:.....	2 sheets
	3- by 17-in	(3)
	8- by 96-in	(2)
	10 1/2- by 66-in	(2)
	10 1/2- by 96-in	(2)
	11 1/2- by 15-in	(2)
	12- by 66-in	(4)
	13- by 19-in	(6)
	16- by 83 1/2-in	(1)
	18- by 21-in	(5)
	20- by 31-in	(4)
	20- by 83 1/2-in	(2)
	21- by 30-in	(2)
	21- by 31-in	(1)
	30- by 47-in	(3)
	36- by 66-in	(2)
	36- by 96-in	(3)
	Parachute:	
1670-00-893-2371	G-12D or.....	1
1670-01-065-3755	G-12E (HAARS)	1

Table 3-3. Equipment required for rigging TDARS and stinger missiles in a double A-22 cargo bag for low-velocity airdrop

National Stock Number	Item	Quantity
5530-00-128-4981	Plywood:	
	3/4- by 48- by 96-in	(1)
	3/4- by 8- by 80-in	(1)
1670-01-753-3788	Sling, 3-ft (2-loop)	(2)
8305-00-074-5124	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-ft	12
	Webbing:	
8305-00-268-2411	Cotton, 80-lb	As required
8305-00-082-5752	Nylon, tubular, 1/2-in	As required
8305-00-263-3591	Nylon, type VIII	As required



CHAPTER 4 RIGGING TDARS IN THE M1025 OR M1026 ARMAMENT CARRIERS FOR LOW-VELOCITY AIRDROP

4-1. Description of Load

The TDARS is rigged as an accompanying load in the 1 1/4-ton utility truck (HMMWV), M1025 or M1026 Armament Carriers. The TDARS consists of a quadropod antenna, an antenna mast, a transceiver, a generator, two 5-gallon fuel cans, two 5-gallon water cans, a camouflage net, and poles. The TDARS weighs 735 pounds. One box of 105-mm ammunition, or its equivalent in weight, is added in order to meet the minimum weight requirements. The total weight of this accompanying load is 845 pounds. This load is rigged as shown in FM 10-517/TO 13C7-1-111, Chapter 3, Section I, except for the building and placing of the turret

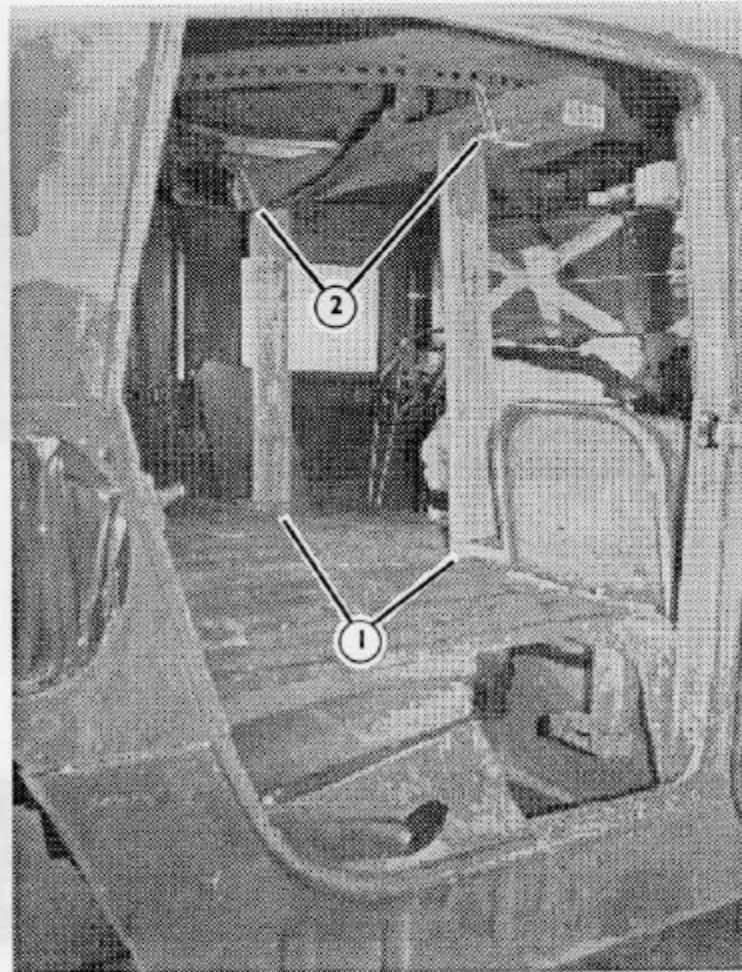
support and the accompanying load which is rigged as shown here.

4-2. Building and Placing Turret Support

Build and place the turret support as shown in Figure 4-1.

4-3. Stowing Accompanying Load

Stow the TDARS in the truck as shown in Figures 4-2 through 4-10. The TDARS load must meet the weight requirements for an accompanying load as shown in paragraph 3-5 of FM 10-517/TO 13C7-1-111.

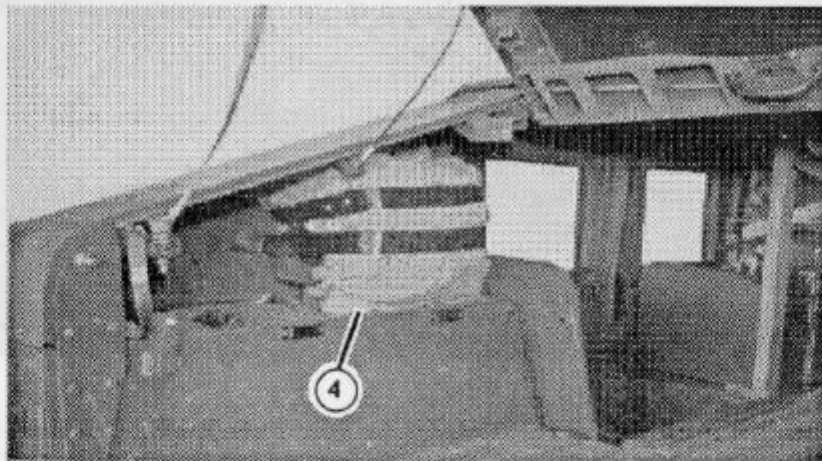
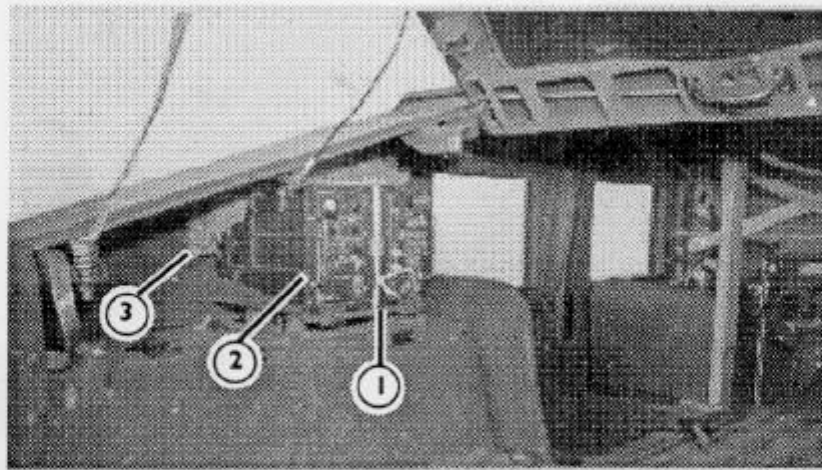


- ① Build the turret support as shown in Figure 3-2 of FM 10-517/TO 13C7-1-111, except replace the two pieces of 1- by 6- by 12-inch lumber with two pieces of 2- by 4- by 4-inch lumber.

NOTE: The 2- by 4- by 4-inch lumber should be nailed in place after positioning the support under the turret.

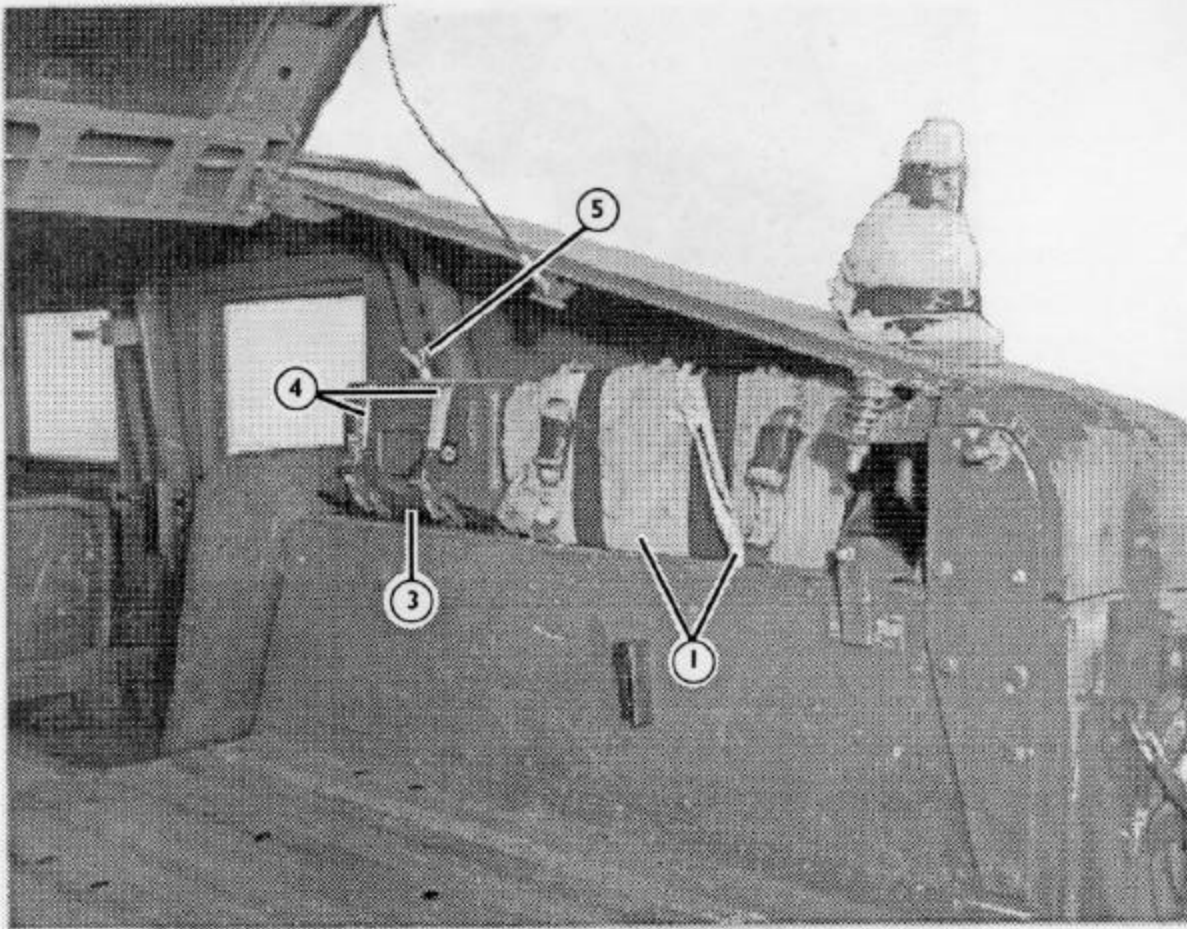
- ② Center the support under the turret with the front towards the passenger's compartment. Tie the support in place with two lengths of type III nylon cord.

Figure 4-1. Turret support built and placed



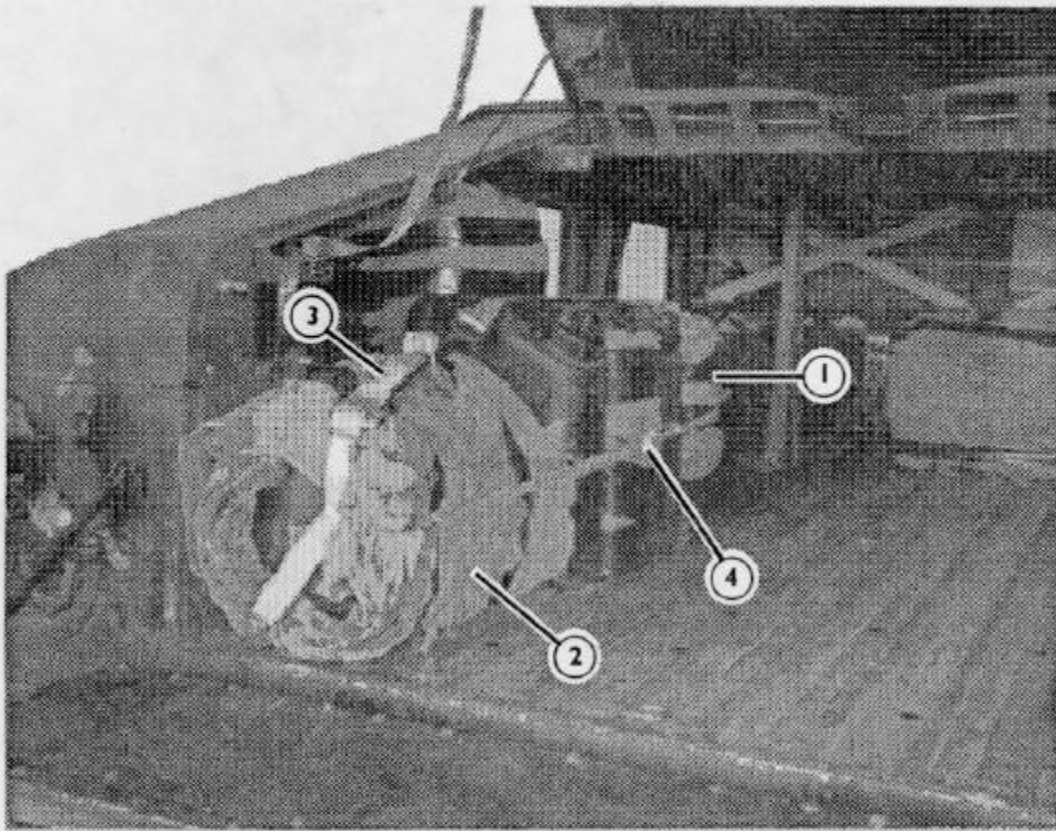
- ① Place a length of 1/2-inch tubular nylon webbing under the radio mount on the left rear wheel well.
- ② Place the transceiver in the radio mount and lock in place with the locking nuts. Safety the transceiver in place with the 1/2-inch tubular nylon webbing placed in step 1.
- ③ Place cellulose wadding between the rear of the transceiver and the side of the truck.
- ④ Pad the front of the transceiver with cellulose wadding and tape.

Figure 4-2. Transceiver stowed



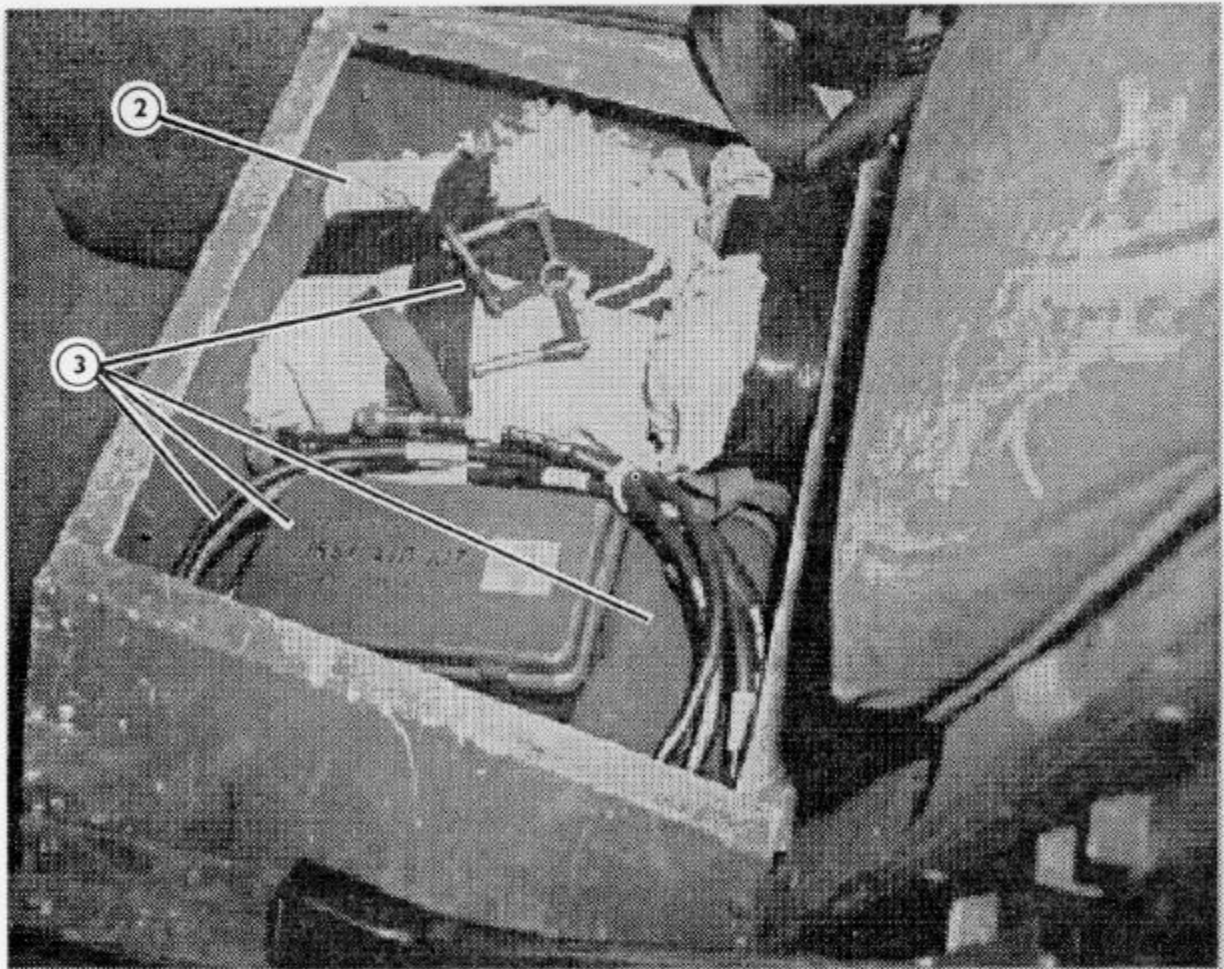
- ① Wrap the antenna pedestal with cellulose wadding and tape. Place the pedestal on the right rear wheel well. Secure the pedestal in place using the retainer straps, and safety it with a length of 1/2-inch tubular nylon webbing tied to the retainer strap support.
- ② Run a length of 1/2-inch tubular nylon webbing from front to rear under the display unit's support bracket (not shown).
- ③ Place two 12- by 12-inch pieces of felt on the support bracket.
- ④ Place the display unit on top of the felt and secure it in place with the retainer straps.
- ⑤ Safety the display unit in place with the 1/2-inch tubular nylon webbing positioned in step 2.

Figure 4-3. Antenna pedestal and display unit stowed



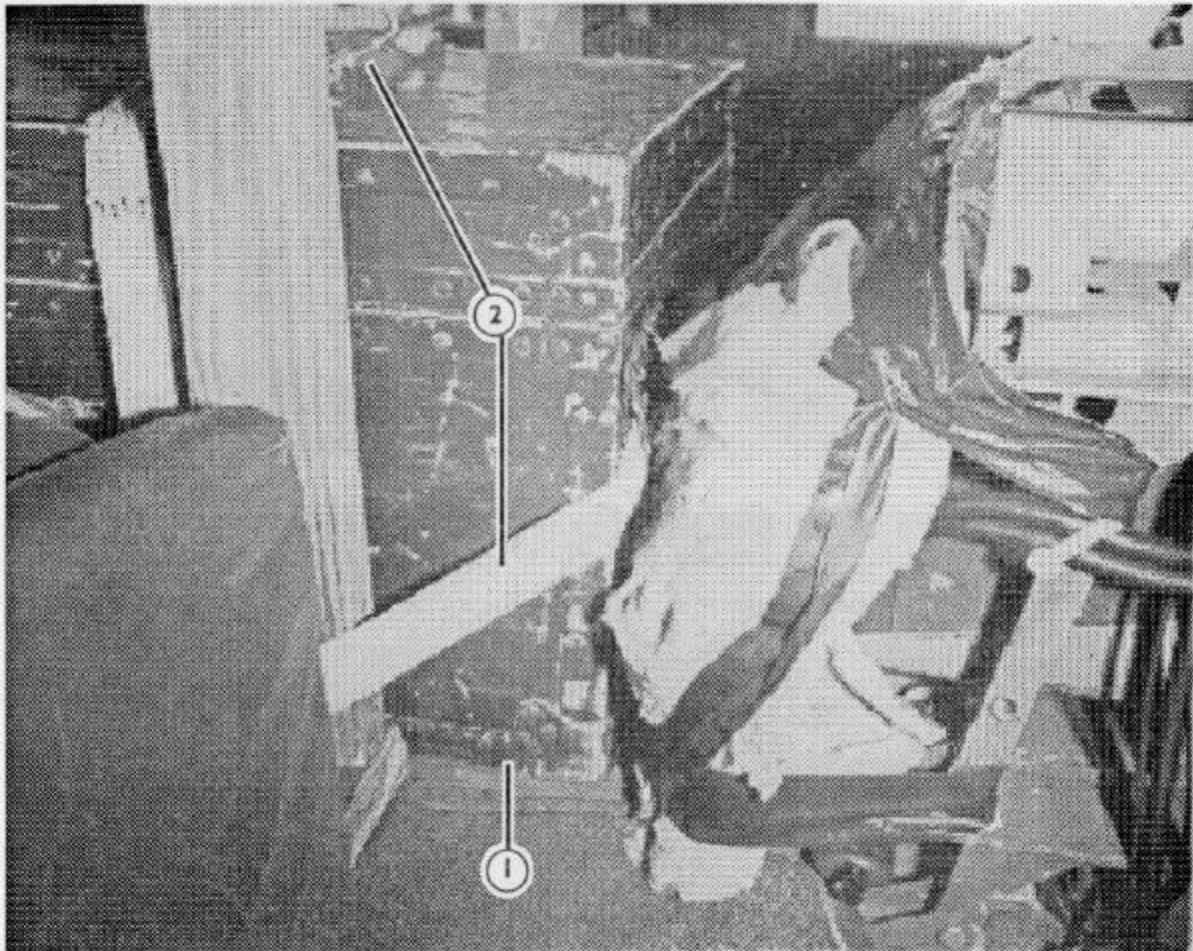
- ① **Wrap the sides and bottom of the two fuel cans with cellulose wadding and tape. Place the two fuel cans and the two water cans on the cargo bed next to the left wheel well. Make sure a water can is placed between the two fuel cans.**
- ② **Wrap the generator with cellulose wadding and tape. Place the generator next to the fuel and water cans.**
- ③ **Secure the cans in place using a 15-foot tie-down assembly. Pass the strap through the rear tie-down ring, through the handles of the cans, and through the center tie-down ring. Fasten the strap with a load binder and D-ring.**
- ④ **Secure the 15-foot tie-down strap in place using a length of 1/2-inch tubular nylon webbing. Tie the 1/2-inch tubular nylon webbing to the strap near the rear tie-down ring, pass it around the front of the cans, and tie it off to the strap near the center tie-down ring.**

Figure 4-4. Generator, fuel cans, and water cans stowed



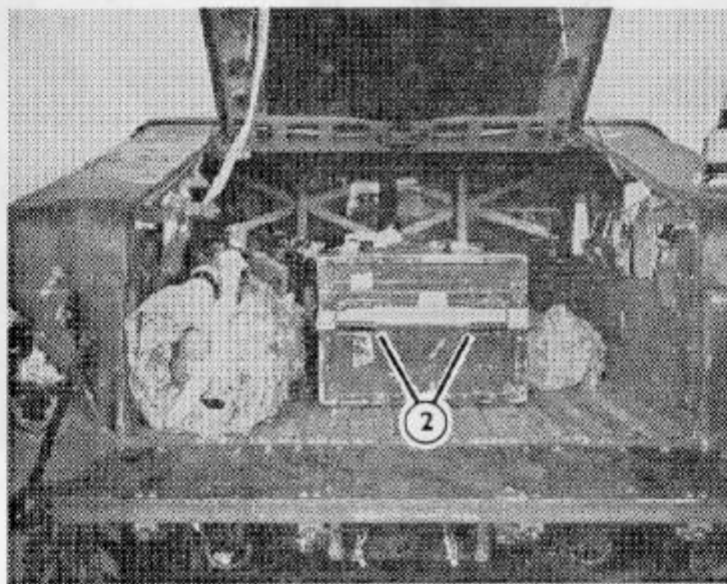
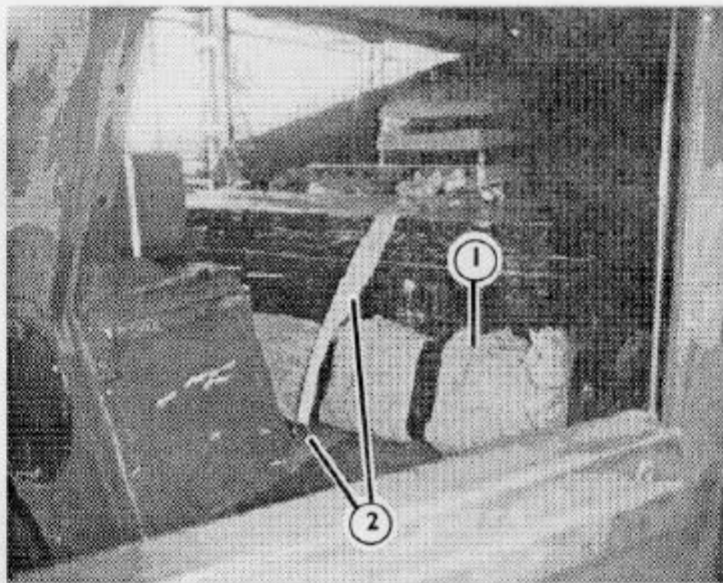
- ① Place the right rear seat back in the down position (not shown).
 - ② Wrap the antenna mast baseplate, power converter, and remote control with cellulose wadding and tape. Place these items in the compartment under the left rear seat cushion.
- NOTE:** The antenna mast baseplate cannot be seen in this photograph.
- ③ Place the power cables, OVM tools, first aid kit, and locking pins in the compartment.
 - ④ Fill the empty space of the compartment with cellulose wadding and replace the seat cushion (not shown).

Figure 4-5. Rear seat and various small items stowed



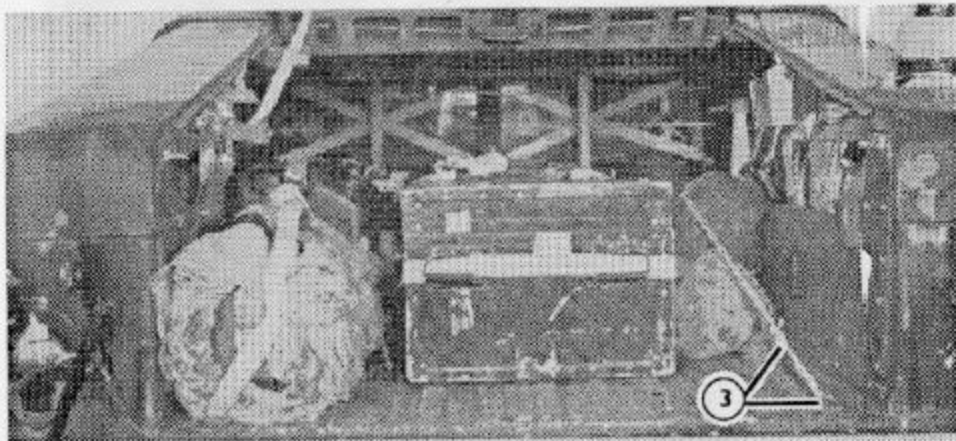
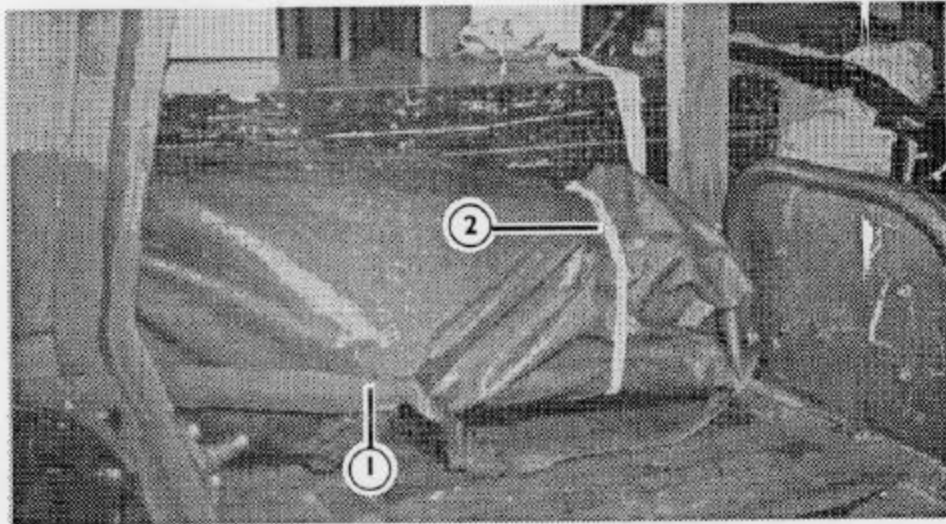
- ① Place the antenna container in the middle of the cargo bed with the forward end between the legs of the turret support.
- ② Pass a 15-foot tie-down lashing through the forward cargo tie-down rings and through the forward handles of the container. Fasten the lashing on top of the container using a D-ring and load binder.

Figure 4-6. Antenna container stowed



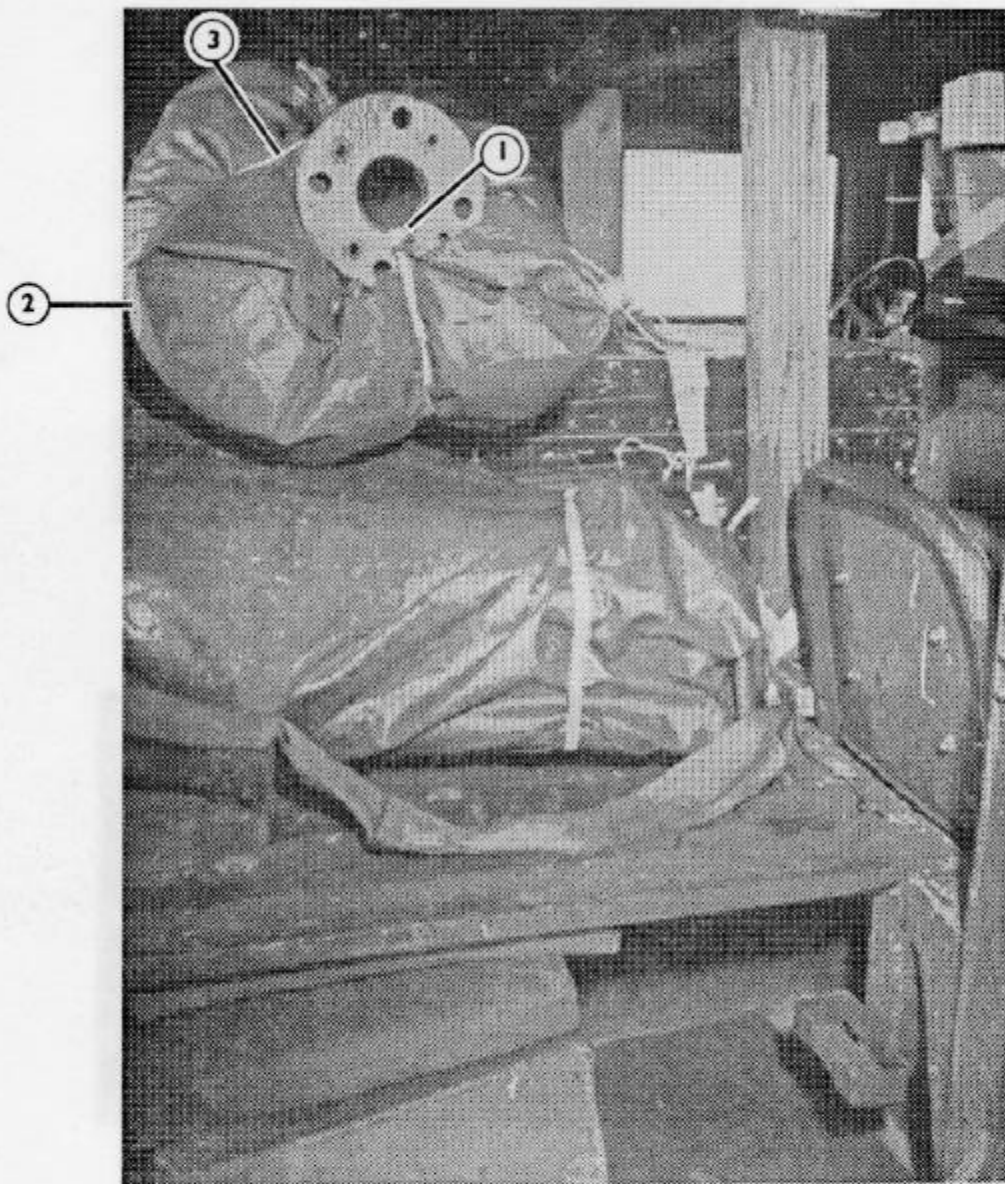
- ① **Wrap the quadropod with cellulose wadding and tape. Place the quadropod along the right side of the antenna container.**
- ② **Pass a 15-foot tie-down lashing through the center cargo tie-down rings and through the rear handles of the container. Fasten the tie-down lashing on top of the container using a D-ring and load binder.**

Figure 4-7. Quadropod stowed



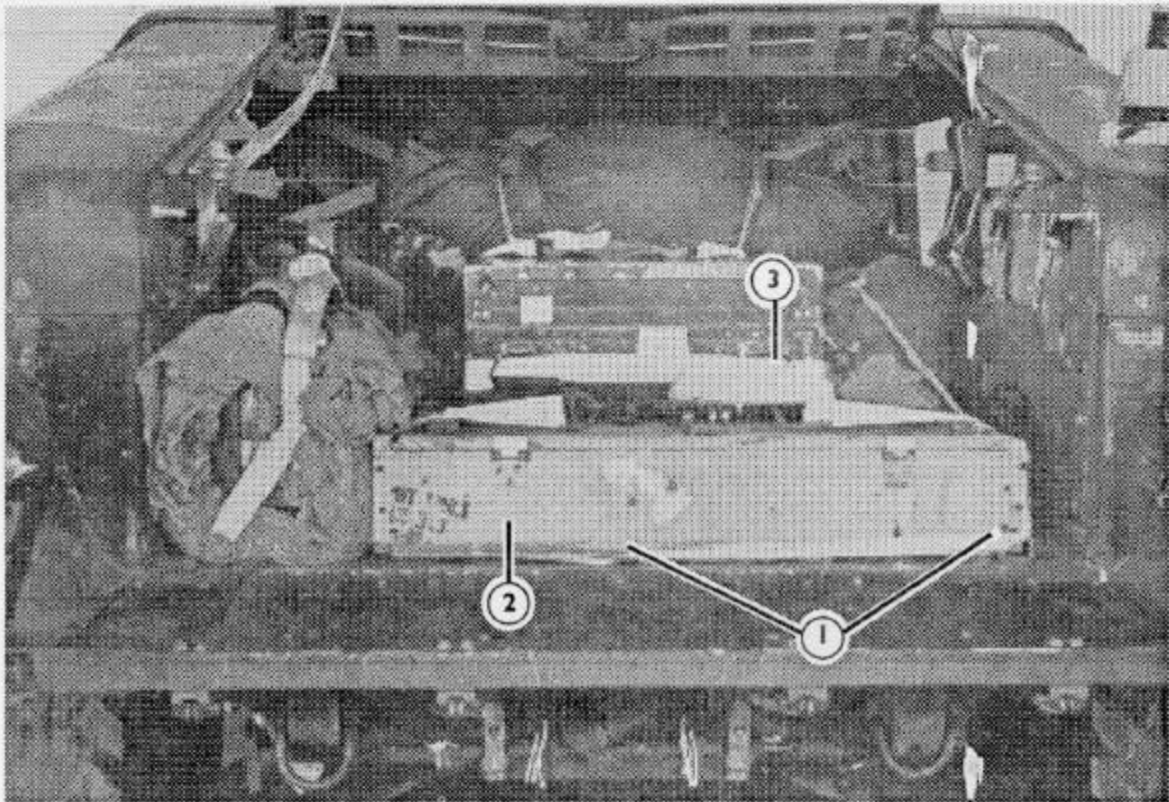
- ① Place the bag of camouflage poles on top of the quadropod.
- ② Using a length of 1/2-inch tubular nylon webbing, tie the forward end of the bag of poles to the quadropod.
- ③ Using a length of 1/2-inch tubular nylon webbing, tie the rear end of the bag of poles to the right rear cargo tie-down ring.

Figure 4-8. Camouflage poles stowed



- ① Using 1/2-inch tubular nylon webbing, tie the antenna mast to the camouflage net.
- ② Place the camouflage net with antenna mast on top of the antenna container.
- ③ Using type III nylon cord, tie the camouflage net to the 15-foot tie-down lashings that are holding the antenna container in place.

Figure 4-9. Antenna mast and camouflage net stowed



- ① Pass a 15-foot tie-down lashing through the rear center and rear right side tie-down rings.
- ② Place a box of 105-mm ammunition, or a box of similar size and weight, at the rear of the cargo bed.
- ③ Pass the pre-positioned tie-down lashing under the box of ammunition and through the handles of the box. Fasten the tie-down lashing on top of the box using a D-ring and load binder.
- ④ Close and latch the tailgate (not shown).

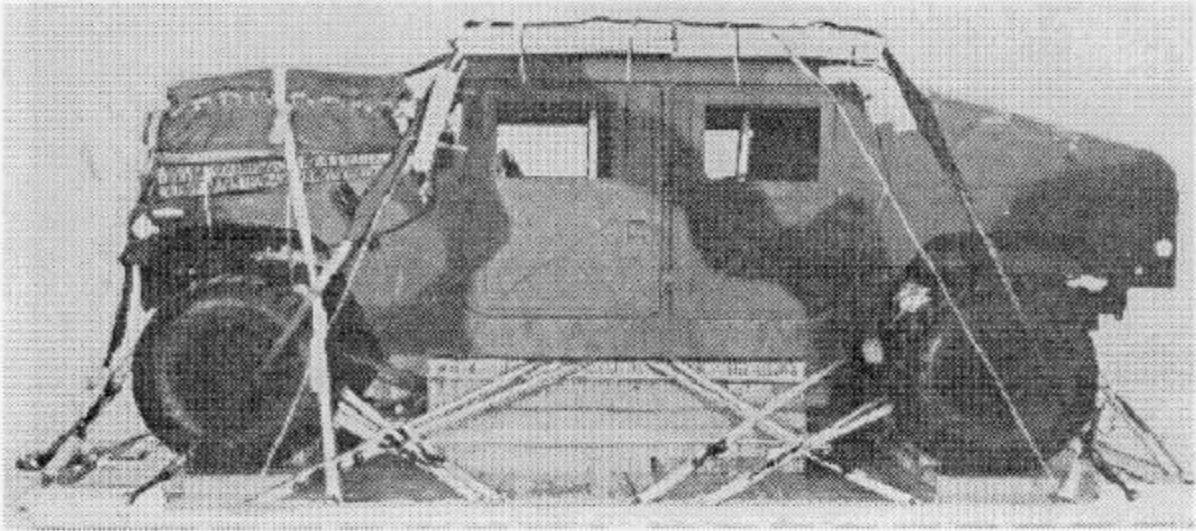
Figure 4-10. Ammunition box stowed

4-4. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 4-11. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the truck

fuel tank and the batteries have been prepared according to AFR 71-4/TM 38-250. If the load varies from that shown, the weight, height, CB, and parachute requirements must be recomputed.

CAUTION
 Make the final rigger inspection required by FM 10-500-2/TO 13C7-1-5 before the load leaves the rigging site.



CB

RIGGED LOAD DATA

Weight:	Load shown	9,650 pounds
	Maximum load allowed	10,500 pounds
Height	(with two G-11B parachutes)	91 inches
	(with three G-11A parachutes)	97 inches
Width	108 inches
Length	215 inches
Overhang:	Front	4 1/2 inches
	Rear	19 inches
CB	(from front edge of the platform)	93 inches

Figure 4-11. M1025 or M1026 armanent carrier with TDARS rigged for low-velocity airdrop

4-5. Equipment Required

Use the equipment listed in Table 3-1 of FM 10-517/TO 13C7-1-111, except for the additions or deletion shown in Table 4-1.

Table 4-1. Equipment required for rigging the M1025 or M1026 armanent carriers with TDARS for low-velocity airdrop

National Stock Number	Item	Quantity
5510-00-220-6080	Lumber: 1- by 6- by 12-in.....	2
5510-00-220-6146	Lumber: 2- by 4- by 4-in	2
1670-00-937-0271	Tie-down assembly, 15-ft.....	4

GLOSSARY

AC alternating current	lb pound
ACB attitude control bar	mm millimeter
AFB Air Force base	no number
AFR Air Force regulation	NSN national stock number
AFTO Air Force technical order	OVM operator vehicle maintenance
attn attention	PEFTC extraction force transfer coupling (platform)
CB center of balance	Qty quantity
d penny	rqr requirement
DA Department of the Army	SL/CS static line/connector strap
DC District of Columbia	TDARS technical defense alert radar system
DD Department of Defense	TM technical manual
FM field manual	TO technical order
ft foot/feet	TRADOC United States Army Training and Doctrine Command
gal gallon	TSEC telecommunications security
HMMWV high-mobility, multipurpose wheeled vehicle	US United States
HQ headquarters	VA Virginia
in inch	
LAPE low-altitude parachute extraction	

REFERENCES

These documents must be available to the intended users of this publication.

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FM 10-543/TO 13C7-2-1011

3 NOVEMBER 1983

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