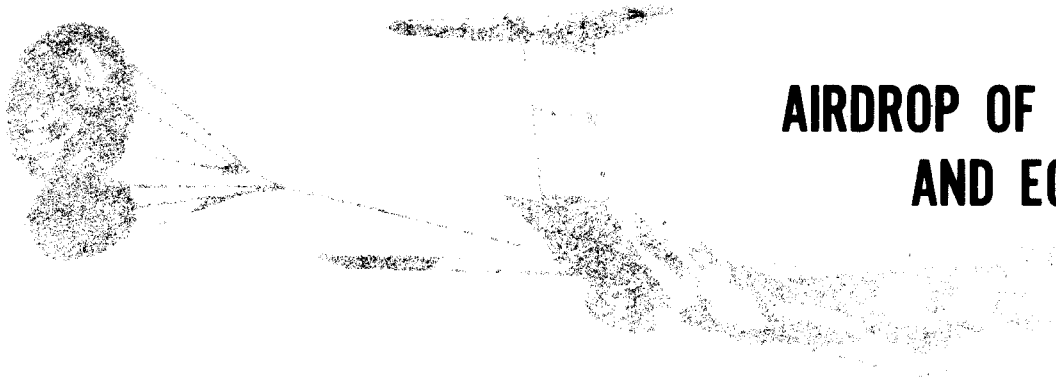
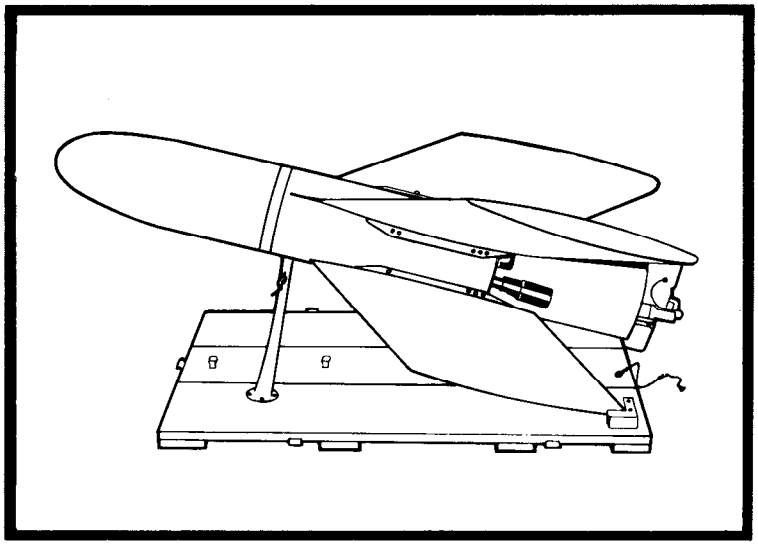
ARMY FM 10-586
AIR FORCE TO 13C7-22-11



AIRDROP OF SUPPLIES AND EQUIPMENT

RIGGING M-22 HELICOPTER ARMAMENT SUBSYSTEM GUIDED MISSILE LAUNCHER AND MISSILES





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REPLY TO
ATTENTION OF

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

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10-450-3
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10-548, c1
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10-552, c2
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10-567, c1
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10-575, c2
10-576, c1
10-577
10-579, c2
10-584
10-586
10-588
10-591, c1

FIELD MANUAL
No 10-586
TECHNICAL ORDER
No 13C7-22-11

DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
Washington, DC, 26 April 1984

AIRDROP OF SUPPLIES AND EQUIPMENT
RIGGING M-22 HELICOPTER ARMAMENT SUBSYSTEM GUIDED MISSILE LAUNCHER AND MISSILES

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*This manual supersedes TM 10-500-86/TO 13C7-22-11, 4 November 1965.

PREFACE

SCOPE

This manual tells and shows how to rig the SS-11 ground guidance components and one SS-11 antitank guided missile for airdrop as a door bundle, ramp bundle, or a wedge bundle from a C-130 aircraft. This manual also shows how to prepare and rig two SS-11 antitank guided missiles for airdrop in the container delivery system (CDS) mode from a C-130 aircraft. This manual is designed for use by all parachute riggers.

USER INFORMATION

The proponent of this publication is the US Army Quartermaster School. You are encouraged to report any errors or omissions and suggest ways for making this a better manual. Army personnel, send your comments on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to:

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CHAPTER 1
INTRODUCTION

1-1. Description of Items

The M-22 helicopter armament subsystem guided missile launcher and missiles consist of the following items:

a. SS-11 ground guidance components are
- battery
- battery tester
- binoculars and case
- cable container (2)
- circuit tester
- control stick reel
- control stick reel support
- control stick with box
- missile selection box
- signal generator
- table
- telephone (2)
- tripod

b. SS-11 antitank guided missile with container

1-2. Special Considerations

a. The loads covered in this manual include hazardous material as defined in AFR 71-4/TM 38-250. Hazardous material must be packaged, marked, and labeled as required by AFR 71-4/TM 38-250.

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

CHAPTER 2
RIGGING GROUND GUIDANCE COMPONENTS

2-1. Description of Load

The SS-11 ground guidance components are rigged in two loads using two A-7A cargo slings or two A-21 cargo bags. Each bag is rigged with one G-13 or one G-14 cargo parachute and other items of airdrop equipment.

2-2. Rigging Load 1

See figure 2-1 for the items to be rigged for load 1. Rig them as shown in figure 2-2.

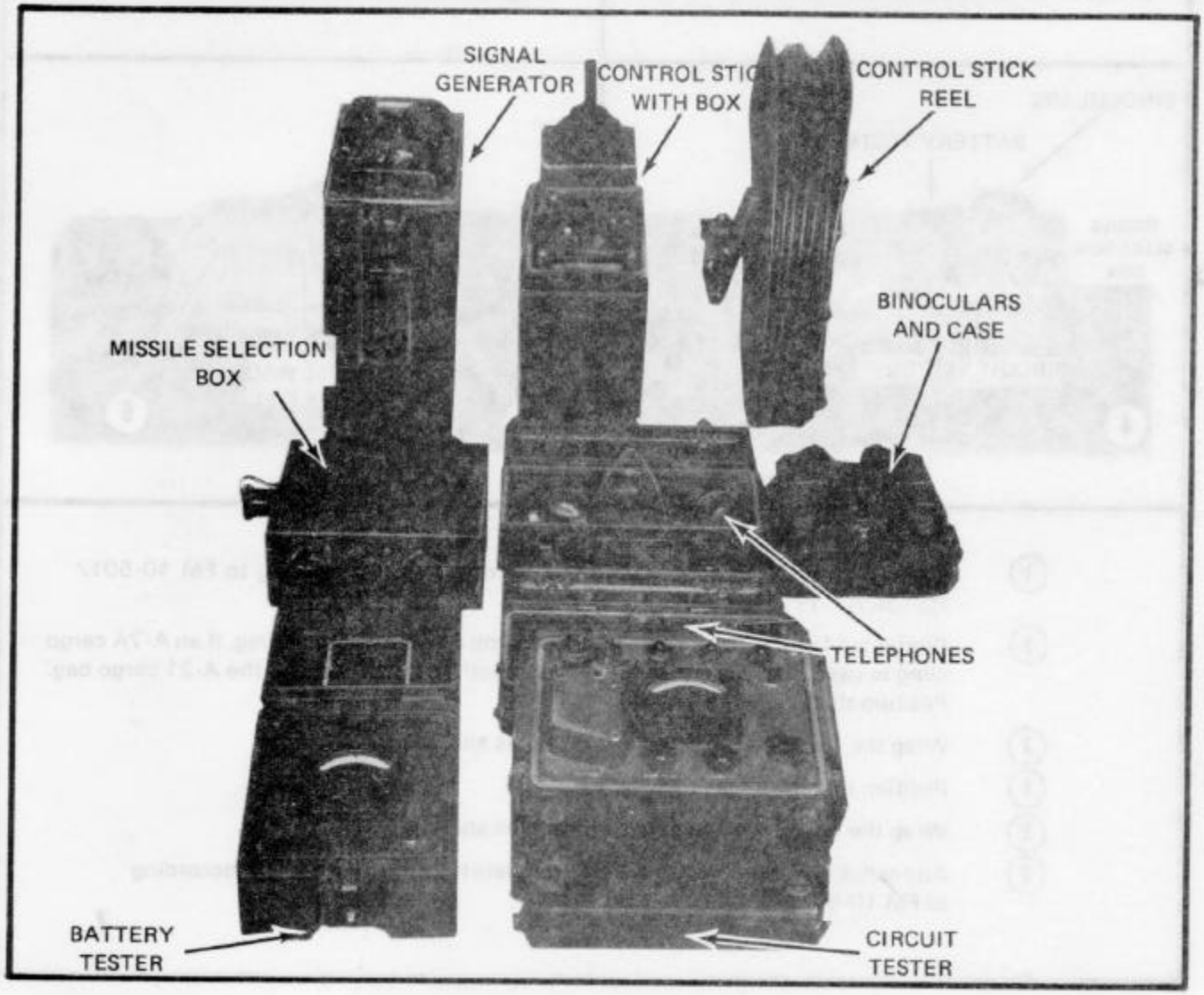
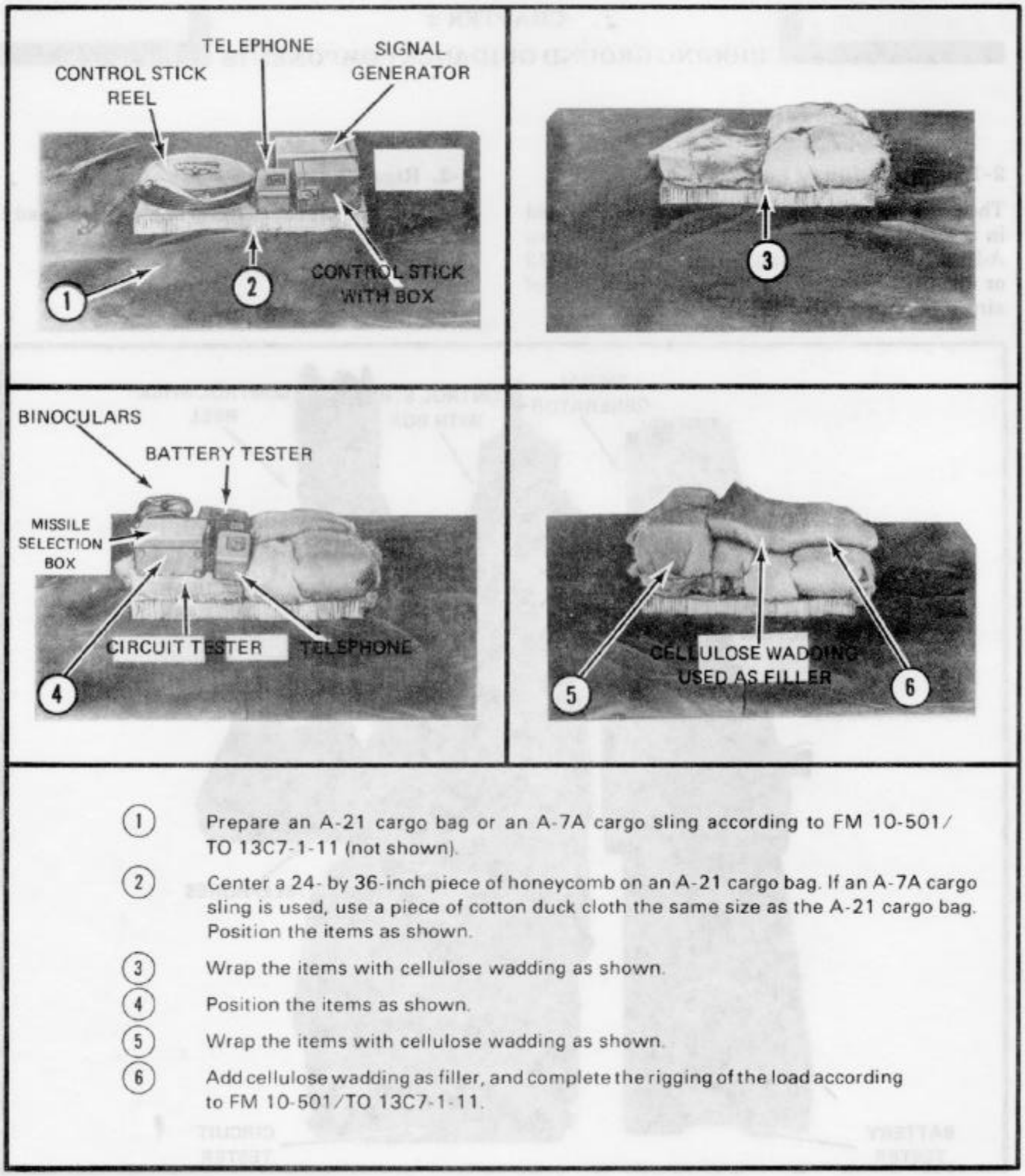


Figure 2-1. Components of load 1.



(1) Prepare an A-21 cargo bag or an A-7A cargo sling according to FM 10-501/TO 13C7-1-11 (not shown).

(2) Center a 24- by 36-inch piece of honeycomb on an A-21 cargo bag. If an A-7A cargo sling is used, use a piece of cotton duck cloth the same size as the A-21 cargo bag. Position the items as shown.

(3) Wrap the items with cellulose wadding as shown.

(4) Position the items as shown.

(5) Wrap the items with cellulose wadding as shown.

(6) Add cellulose wadding as filler, and complete the rigging of the load according to FM 10-501/TO 13C7-1-11.

Figure 2-2. Components of load 1 positioned.

2-3. Rigging Load 2

See figure 2-3 for the items to be rigged for load 2.
Rig them as shown in figure 2-4.

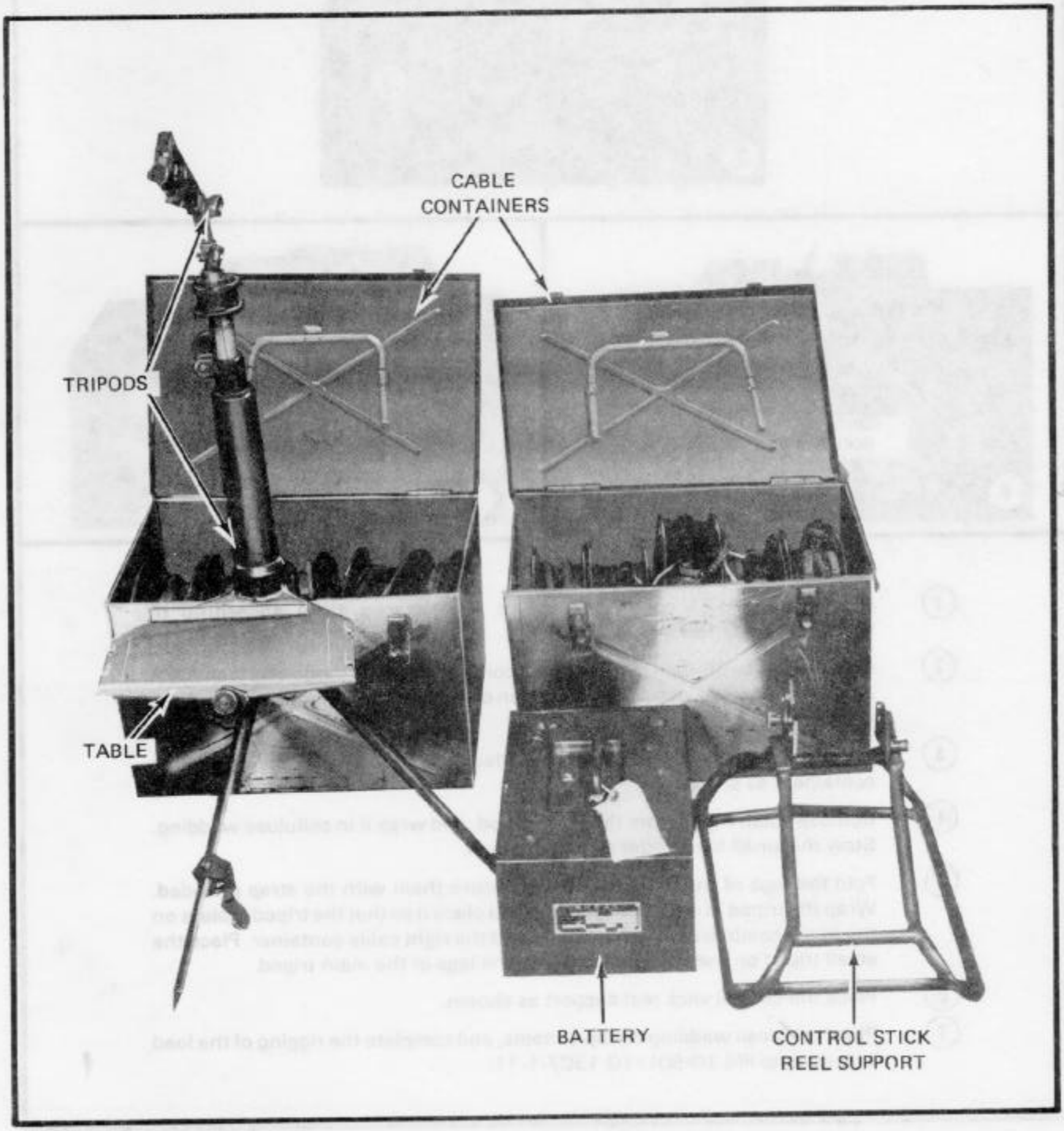
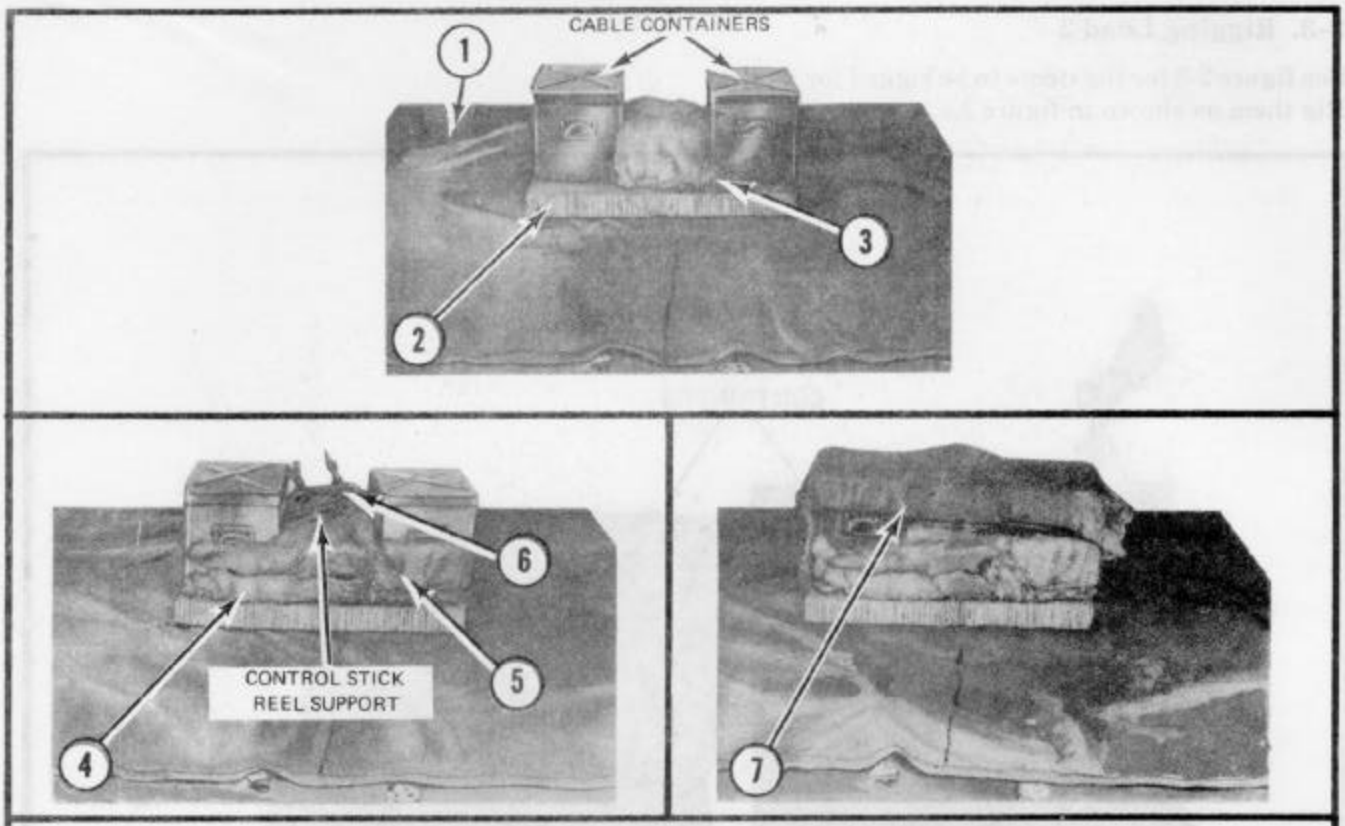


Figure 2-3. Components of load 2.



(1) Prepare an A-21 cargo bag or an A-7A cargo sling according to FM 10-501/TO 13C7-1-11.

(2) Center a 24- by 36-inch piece of honeycomb on the A-21 cargo bag. If an A-7A cargo sling is used, use a piece of cotton duck cloth the same size as the A-21 cargo bag.

(3) Wrap battery in cellulose wadding. Place the battery and the two cable containers as shown.

(4) Remove small tripod from the main tripod, and wrap it in cellulose wadding. Stow the small tripod after the main tripod.

(5) Fold the legs of the main tripod, and secure them with the strap provided. Wrap the tripod in cellulose wadding, and place it so that the tripod table is on the honeycomb between the battery and the right cable container. Place the small tripod on the honeycomb under the legs of the main tripod.

(6) Place the control stick reel support as shown.

(7) Place cellulose wadding on top of items, and complete the rigging of the load according to FM 10-501/TO 13C7-1-11.

Figure 2-4. Components of load 2 positioned.

2-4. Attaching Cargo Parachute

Attach one G-13 or one G-14 cargo parachute to each load according to FM 10-501/TO 13C7-1-11 and as shown in figure 2-5.

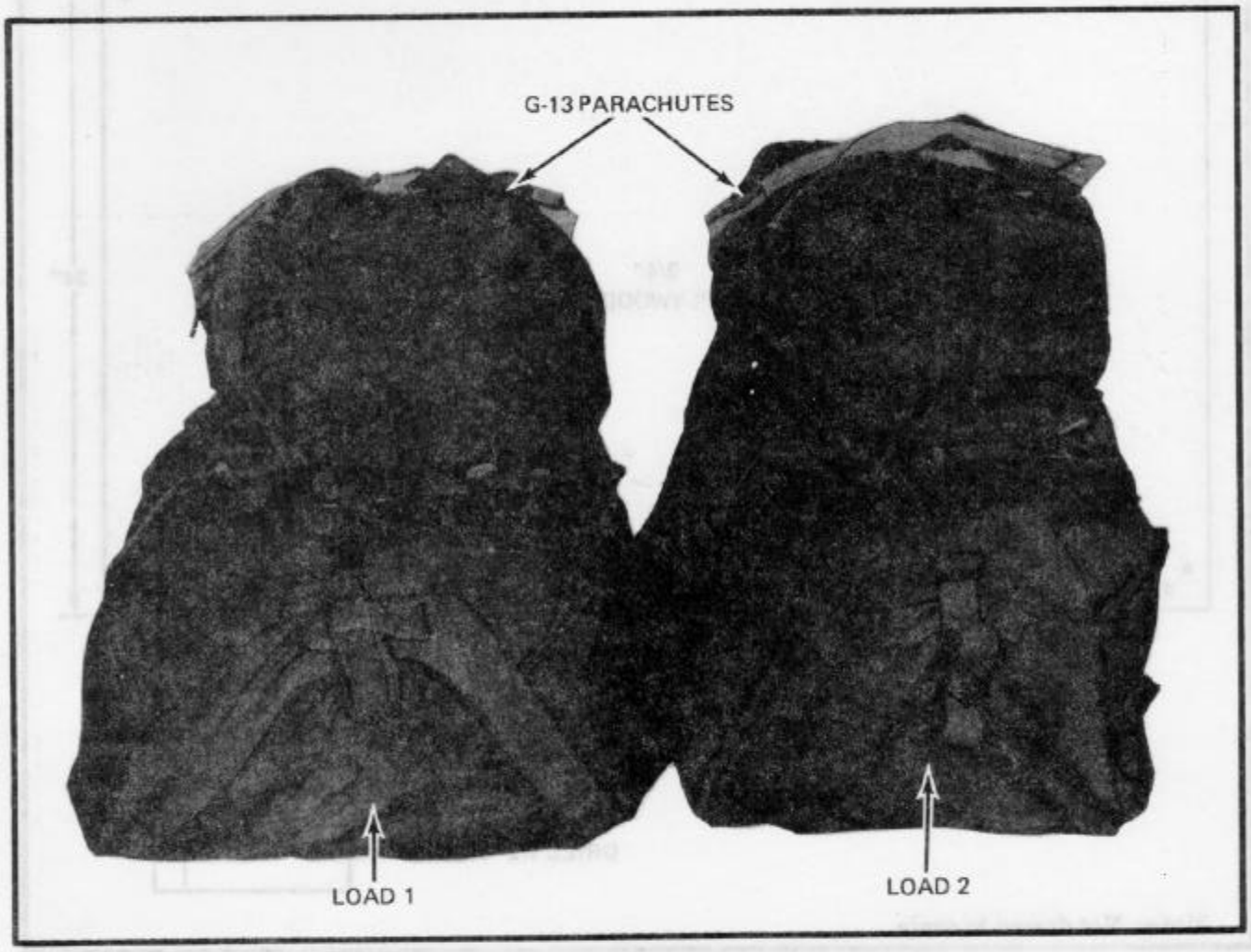


Figure 2-5. Loads 1 and 2 rigged for airdrop.

2-5. Preparing Ramp Bundles

When the loads are to be dropped as ramp bundles, prepare a 3/4- by 24- by 36-inch piece of plywood as shown in figure 2-6. Secure it to the bottom of each load with type III nylon cord as outlined in FM 10-501/TO 13C7-1-11.

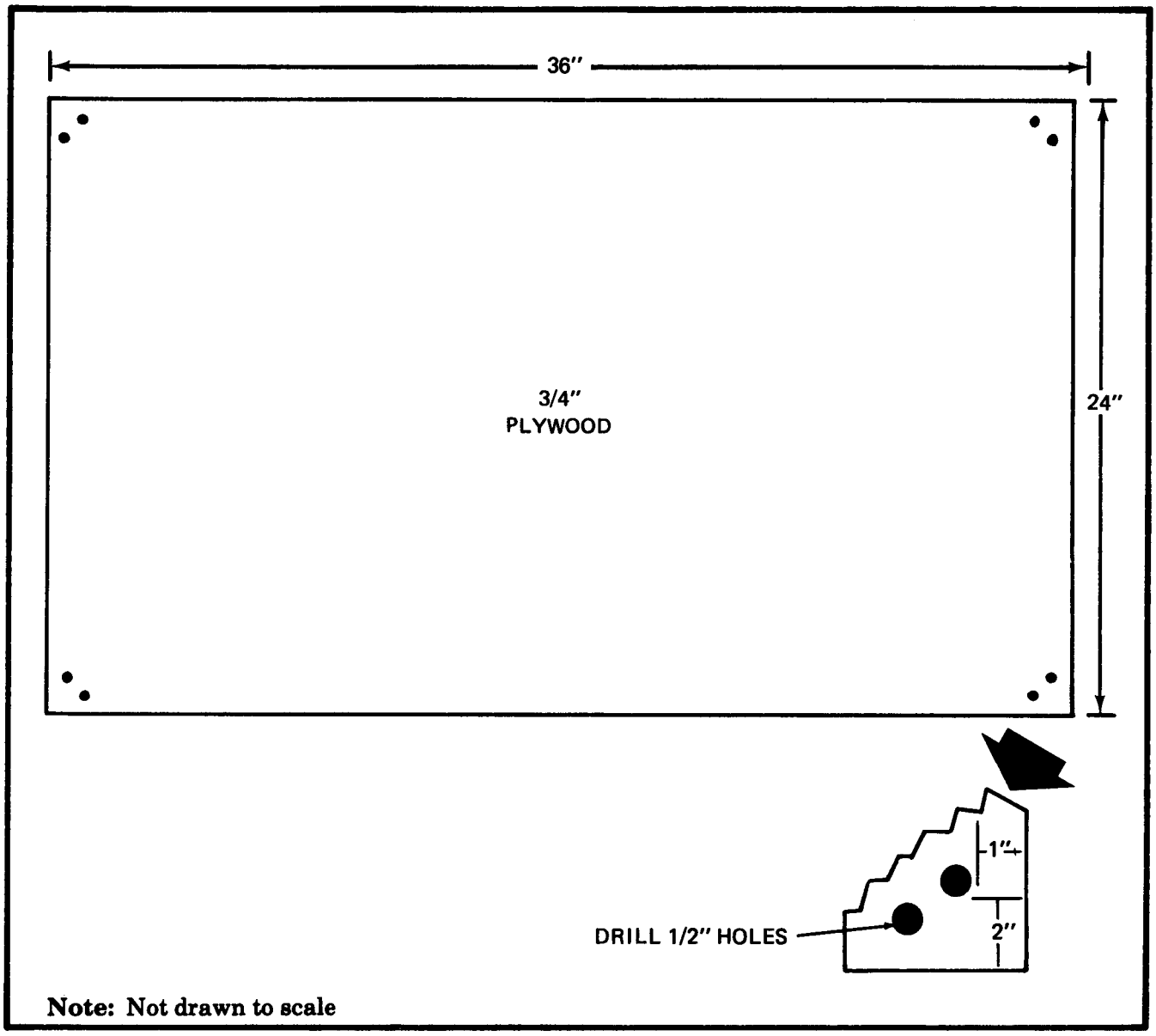


Figure 2-6. Details for construction of the skid board.

2-6. Equipment Required

The equipment required for rigging loads is listed in table 2-1.

Table 2-1. Equipment required for rigging SS-11 ground guidance components

National Stock Number	Item	Quantity	
		Load 1	Load 2
1670-00-242-9173	Bag, cargo, A-21 type (Sling, cargo, A-7A, NSN 1670-00-251-1153 with appropriate cotton duck cloth may be used.)	1	1
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required	As required
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required	As required
1670-00-753-3928	Pad, energy dissipating, honeycomb, 24- by 36-in	1	1
1670-00-984-3535	Parachute, cargo, G-13		
	or		
1670-00-999-2658	Parachute, cargo, G-14	1	1
7510-00-266-5016	Tape, adhesive, 2-in	As required	As required
	ITEM FOR FABRICATION		
5530-00-128-4981	*Plywood, 3/4- by 24- by 36-in	1	1

*Used only on ramp bundles

CHAPTER 3
RIGGING ANTITANK GUIDED MISSILE

3-1. Description of Load

One antitank guided missile (figure 3-1) can be rigged in an A-21 cargo bag or an A-7A cargo sling. The load is rigged with one G-13 or one G-14 cargo parachute and other items of airdrop equipment. Two SS-11 antitank guided missiles are rigged in an A-22 cargo bag and dropped in the CDS mode.

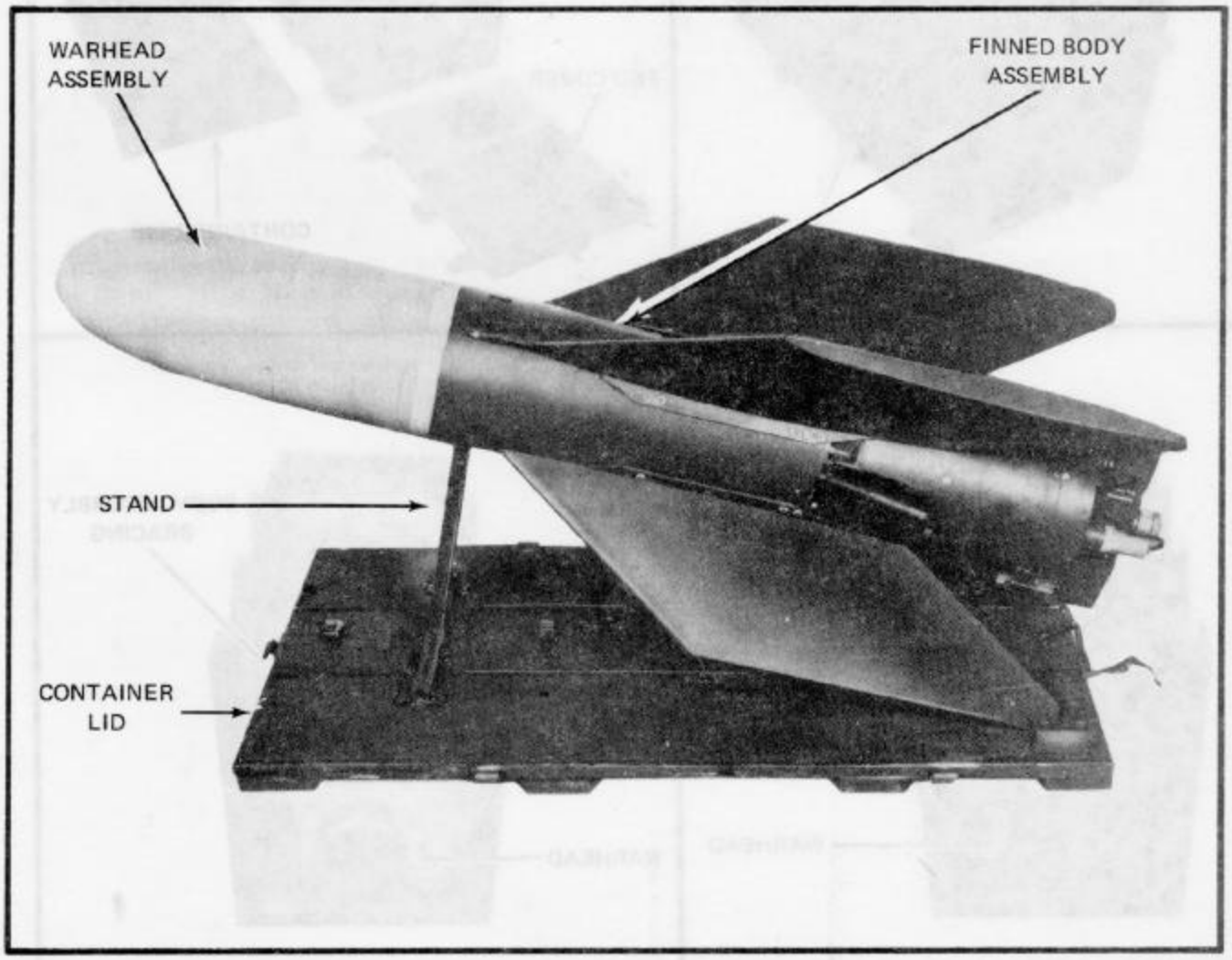


Figure 3-1. SS-11 antitank guided missile.

3-2. Preparing Missile

Remove the missile from the container as shown in figure 3-2. Rig the missile as shown in figure 3-3.

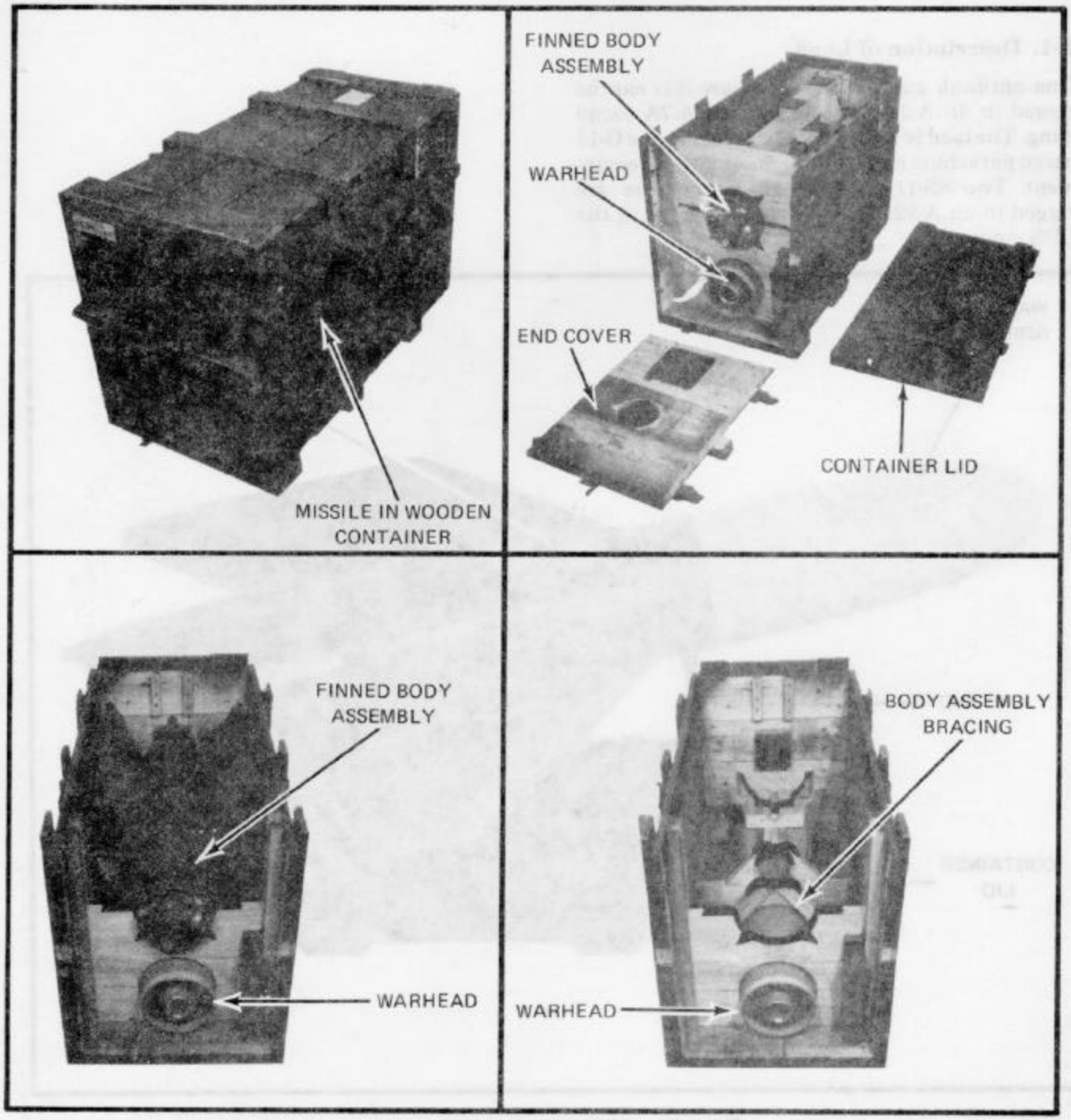
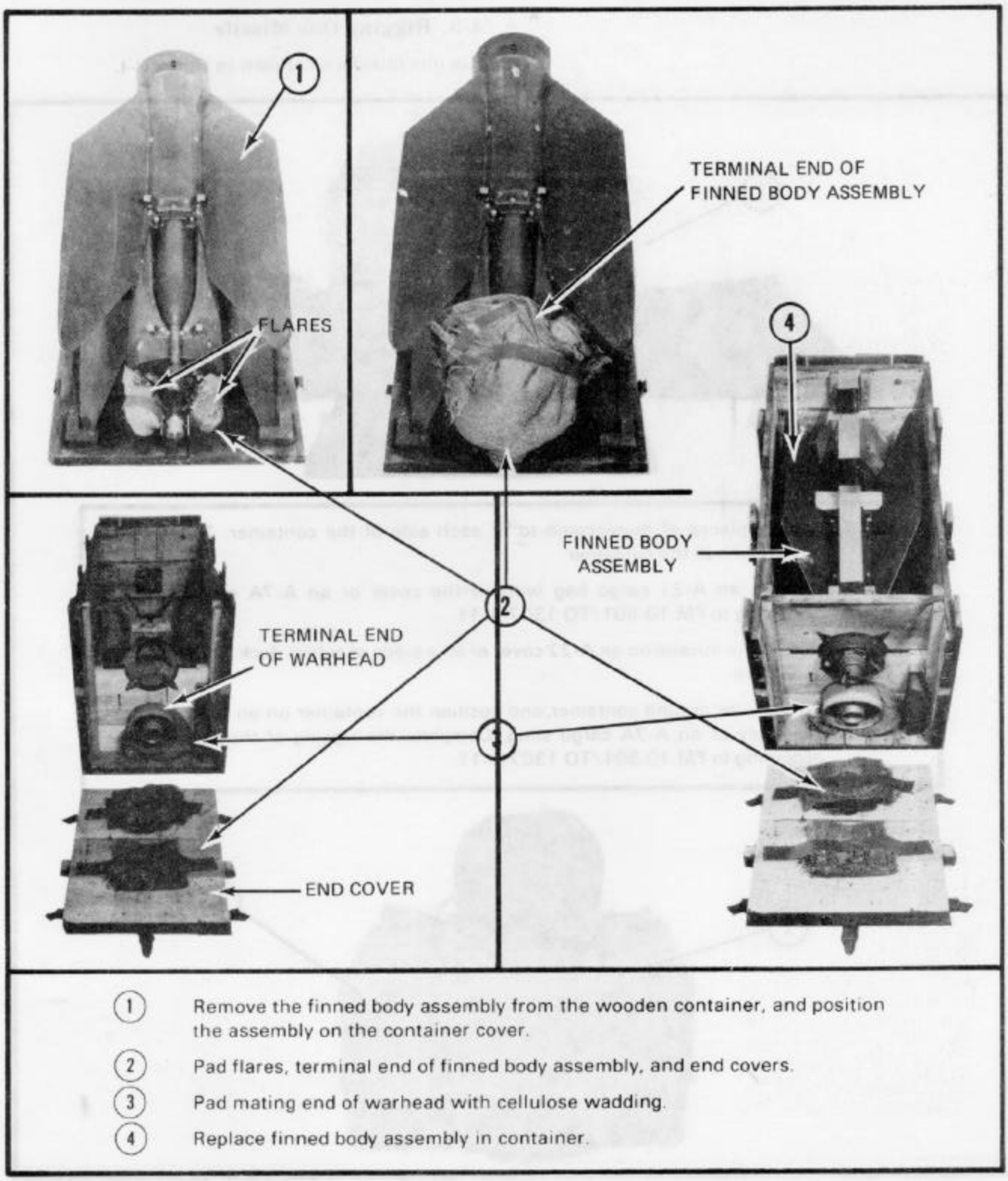


Figure 3-2. Removing finned body assembly from container.



(1) Remove the finned body assembly from the wooden container, and position the assembly on the container cover.

(2) Pad flares, terminal end of finned body assembly, and end covers.

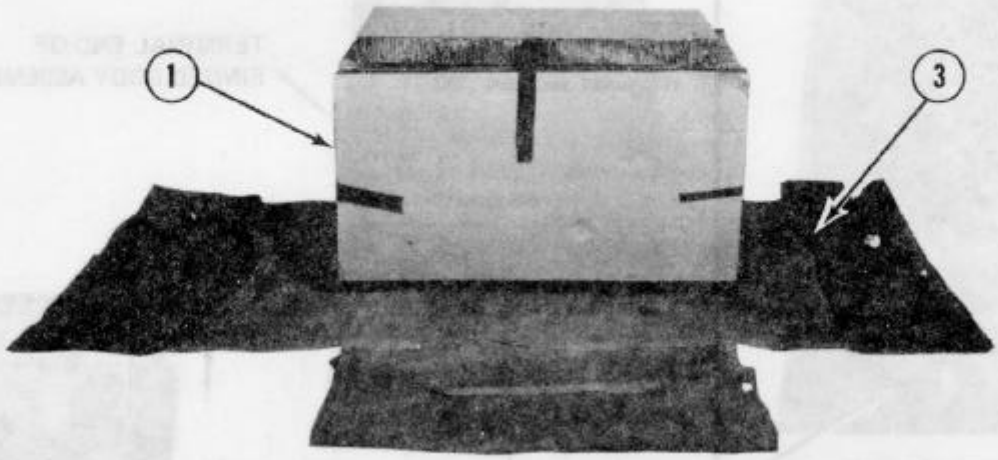
(3) Pad mating end of warhead with cellulose wadding.

(4) Replace finned body assembly in container.

Figure 3-3. Preparing missile.

3-3. Rigging One Missile

Rig one missile as shown in figure 3-4.



(1) Cut six pieces of honeycomb to fit each side of the container. Tape the honeycomb to the container.

(2) Prepare an A-21 cargo bag without the cover or an A-7A cargo sling according to FM 10-501/TO 13C7-1-11.

(3) Center the missile on an A-22 cover or on a piece of cotton duck cloth of the same size.

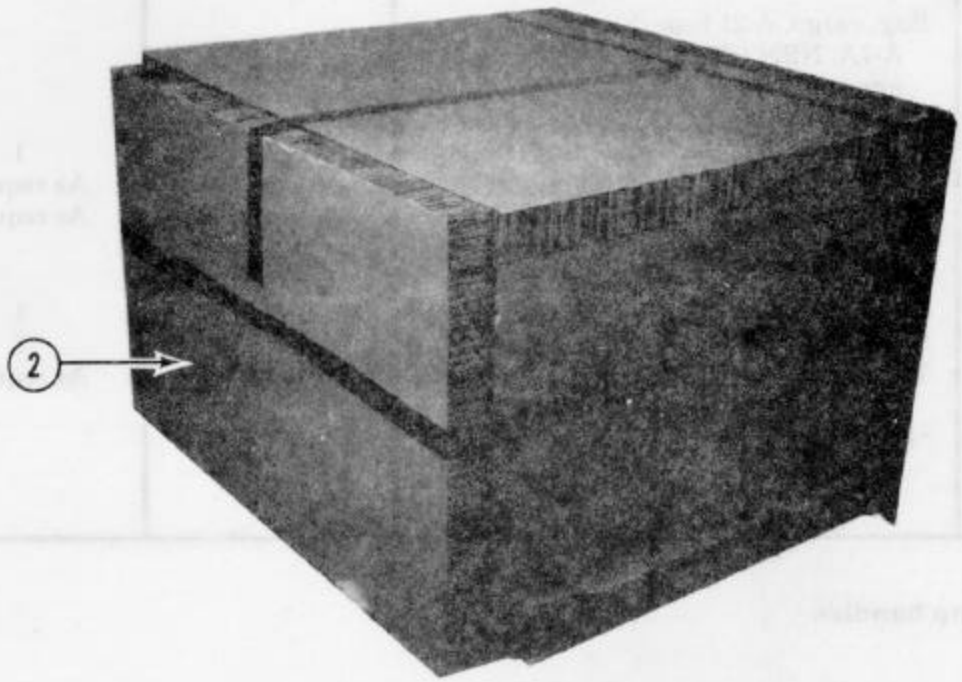
(4) Wrap cover around container, and position the container on an A-21 sling assembly or an A-7A cargo sling. Complete the rigging of the container according to FM 10-501/TO 13C7-1-11.



Figure 3-4. One missile rigged for airdrop.

3-4. Rigging Two Missiles

Rig two missiles as shown in figure 3-5.



1. Prepare two missiles as shown in figure 3-3.
2. Cut six pieces of honeycomb to fit each side of the two containers. Tape the honeycomb to the containers.
3. Center the containers on an A-22 cover.
4. Close the cover, and position containers on an A-22 cargo bag. Complete the rigging of the containers according to FM 10-501/TO 13C7-1-11.

Figure 3-5. Two missiles rigged for airdrop.

3-5. Attaching Cargo Parachute

Attach a G-13 cargo parachute to each load according to FM 10-501/TO 13C7-1-11.

3-6. Equipment Required

The equipment required for rigging these loads is listed in table 3-1.

Table 3-1. Equipment required for rigging antitank guided missile

National Stock Number	Item	Quantity	
		Load 1	Load 2
1670-00-242-9173	Bag, cargo, A-21 type (Sling, cargo, A-7A, NSN 1670-00-251-1153 with appropriate cotton duck cloth may be used.)	1	
1670-00-587-3421	Bag, cargo, A-22		1
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required	As required
1670-00-753-3928	Pad, energy dissipating, honeycomb	As required	As required
1670-00-984-3535	Parachute, cargo, G-13		
	or		
1670-00-999-2658	Parachute, cargo, G-14	1	1
1670-00-251-1153	Sling, cargo, A-7A		1
7510-00-266-5016	Tape, adhesive, 2-in	As required	As required
	ITEM FOR FABRICATION		
5530-00-128-4981	*Plywood, 3/4- by 24- by 36-in	2	

*Used only on ramp bundles

GLOSSARY

AFB	Air Force base
AFR	Air Force regulation
AFTO	Air Force technical order
ATTN	attention
CDS	container delivery system
DA	Department of the Army
FM	field manual
in	inch, inches
lb	pound
NSN	national stock number
TM	technical manual
TO	technical order
US	United States

REFERENCES

AFR 71-4/TM 38-250	Packaging and Materials Handling: Preparation of Hazardous Materials for Military Air Shipment
FM 10-501/TO 13C7-1-11	Airdrop of Supplies and Equipment: Rigging Containers

FM 10-586/TO 13C7-22-11

26 APRIL 1984

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

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