

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.

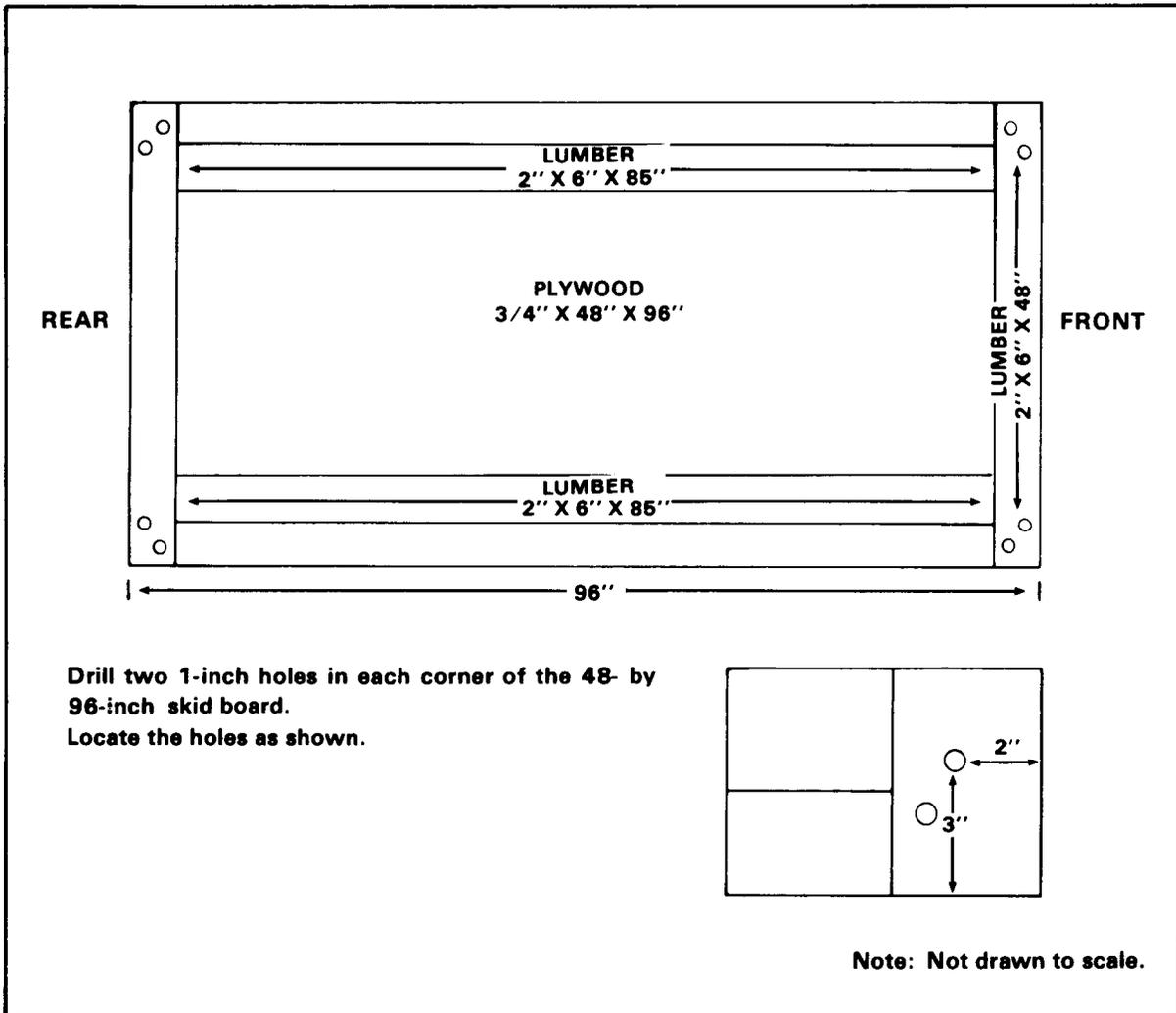


Figure 3-8. Construction details for skid board.

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.

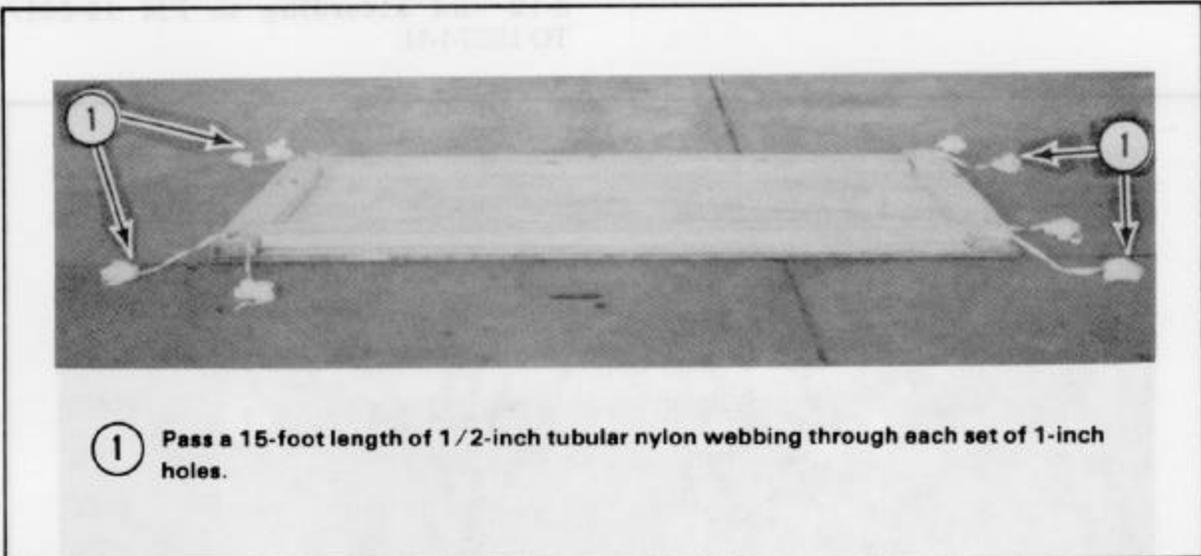


Figure 3-9. Skid board prepared.

**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.

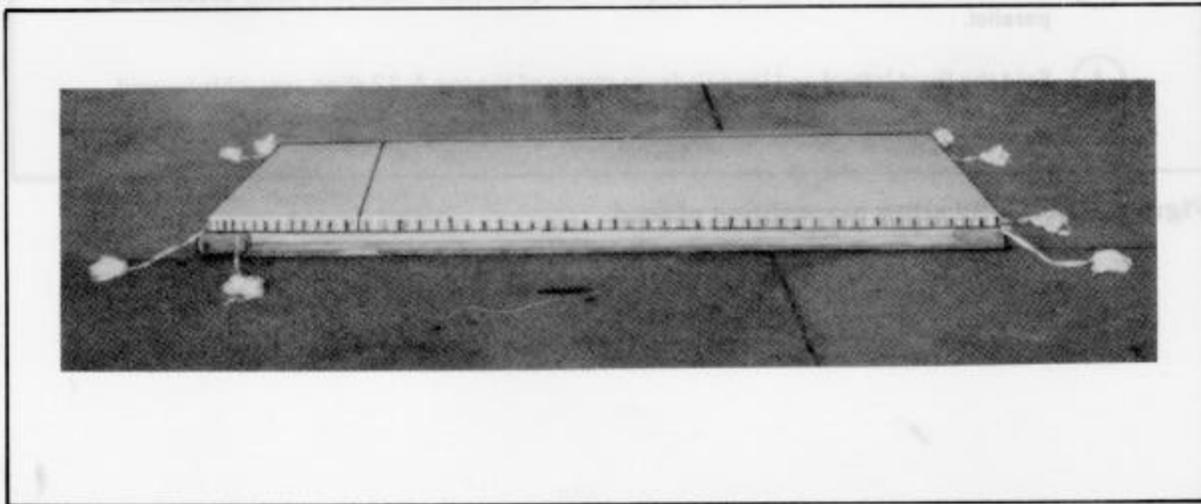
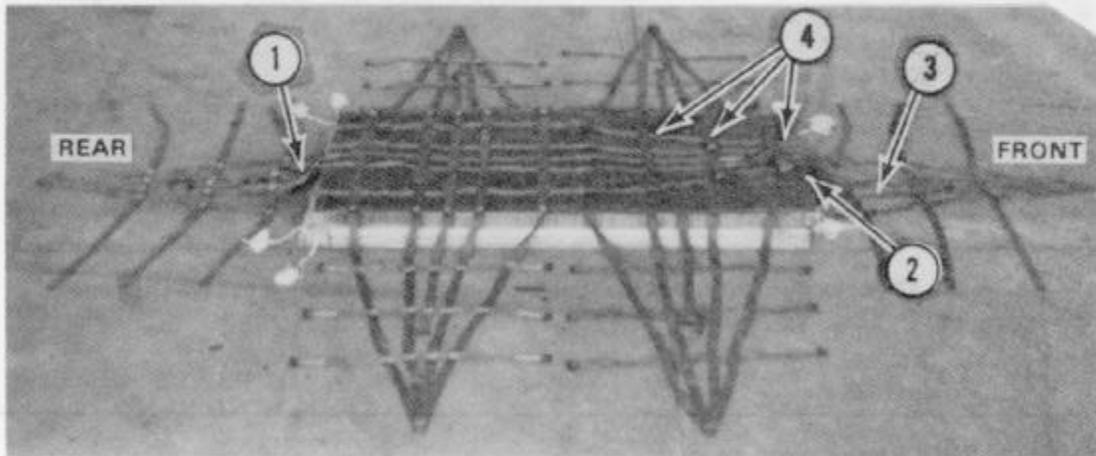


Figure 3-10. Honeycomb placed.

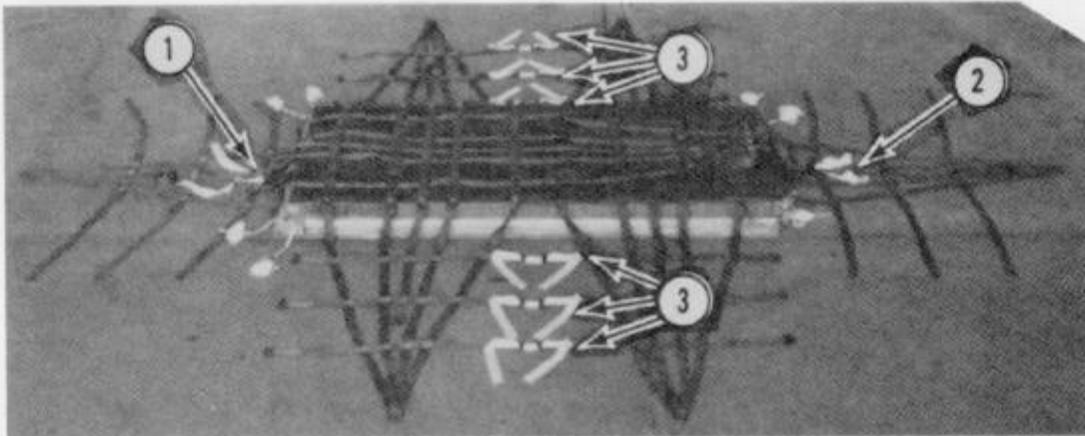
### 3-20. Positioning and Connecting Two A-22 Sling Assemblies

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.



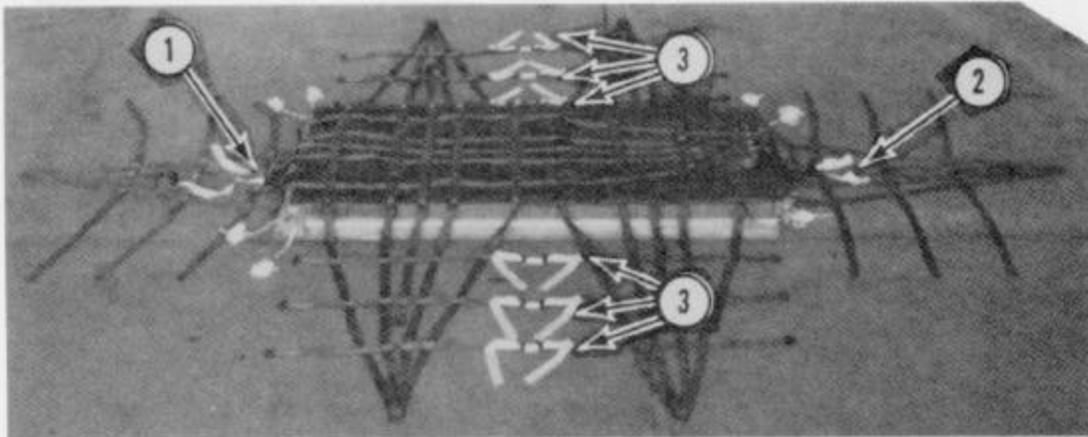
- ① Place the bottom A-22 sling assembly on the front end of the platform with the support web D-ring placed over the rear end of the platform.
- ② Fold the rear lateral and long straps inward on top of the sling assembly.
- ③ Place the top A-22 sling assembly on the rear of the platform with the support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

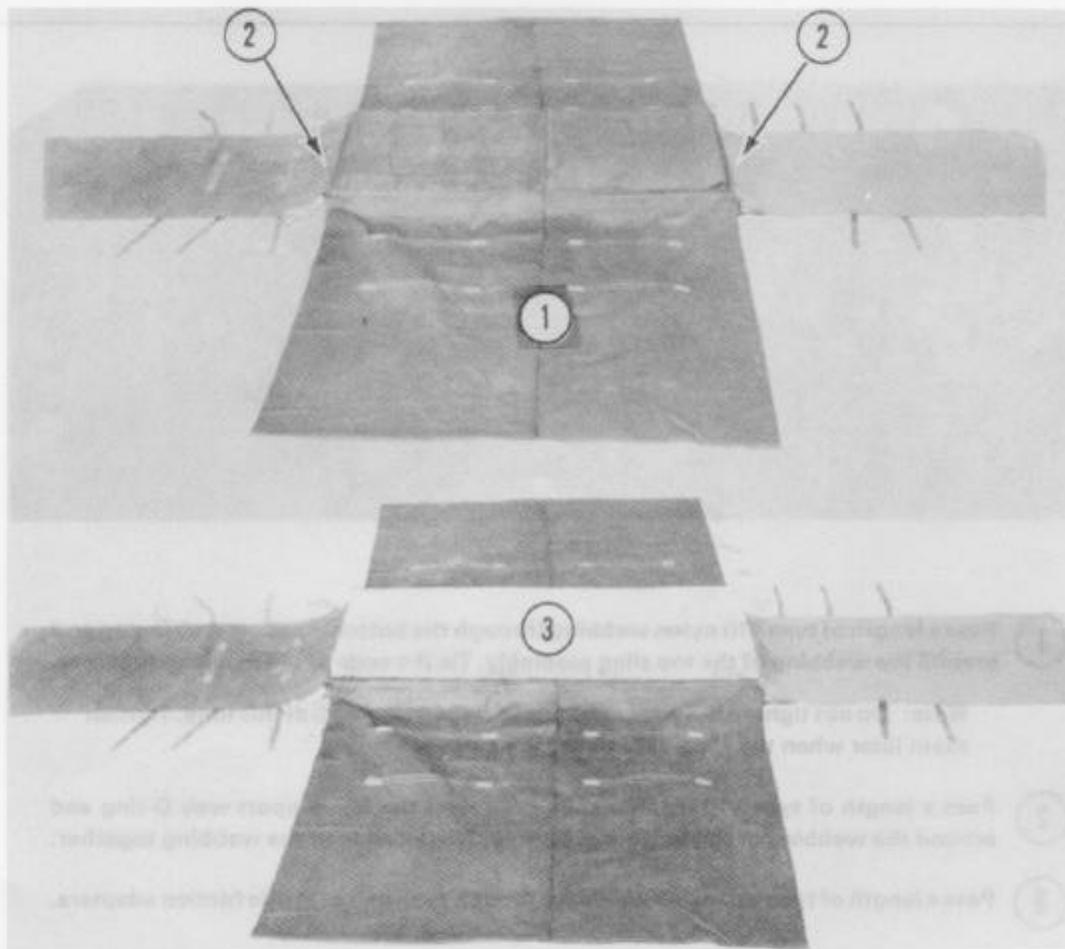
**Note:** Do not tighten the webbing ends in steps 1, 2, and 3 at this time. Tighten them later when the sling assemblies are closed.

- 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.

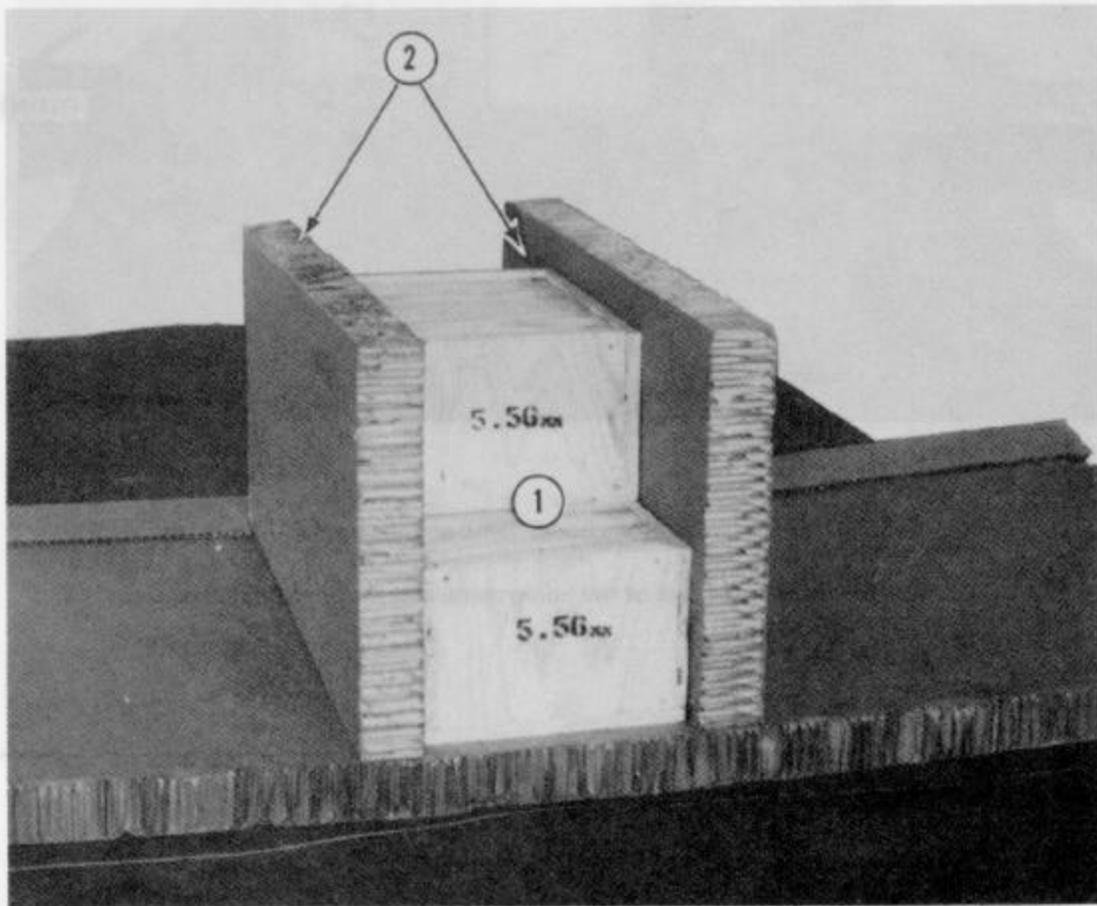


- ① Place two A-22 cargo bag covers on the platform.
- ② Fold the front end flap toward the center of the platform so that the fold is even with the front of the platform. Fold the rear end flap toward the center of the platform so that the fold is even with the rear of the platform.
- ③ Place a 48-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

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

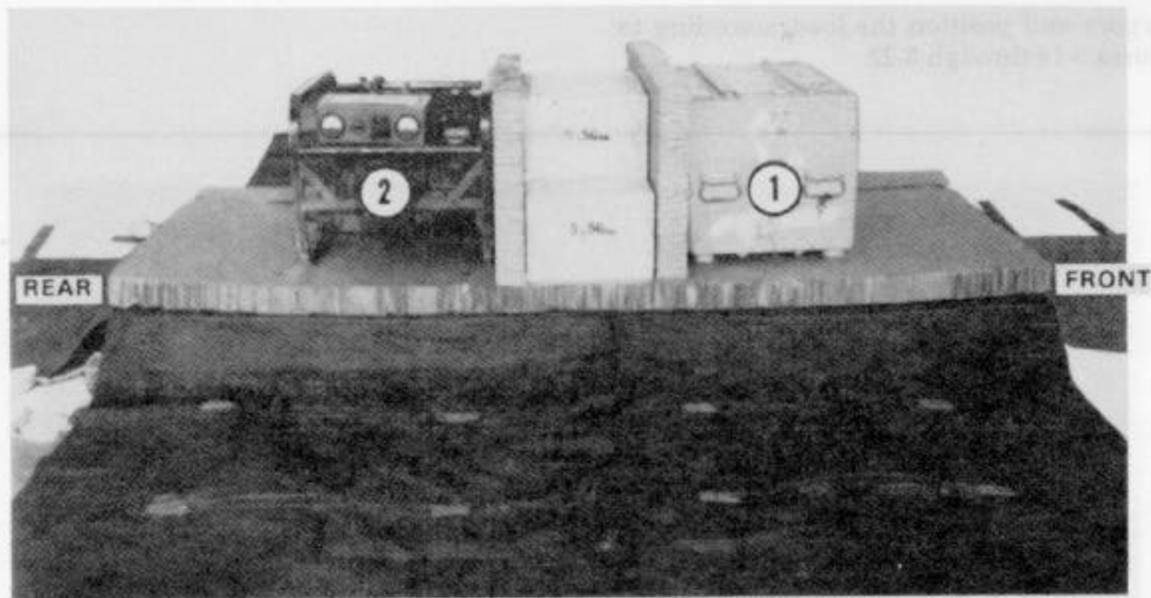
**3-22. Preparing and Positioning Load**

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



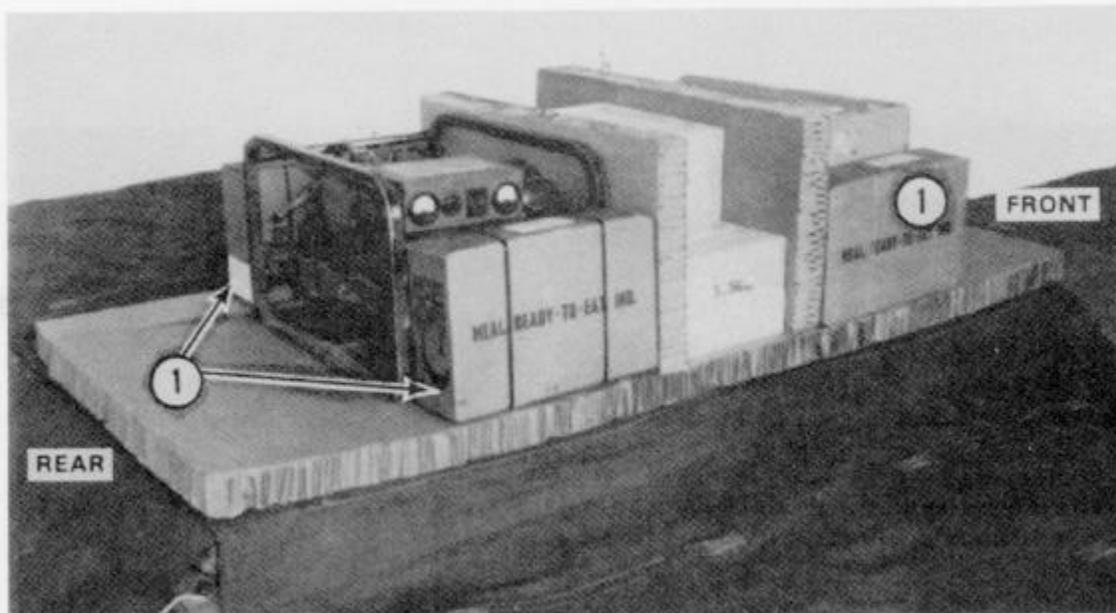
- ① Place two ammunition boxes side by side in the center of the honeycomb. Center another ammunition box on top of the other two ammunition boxes.
- ② Place a piece of 19- by 36-inch honeycomb at the front and rear of the ammunition boxes.

**Figure 3-14. Ammunition boxes positioned.**



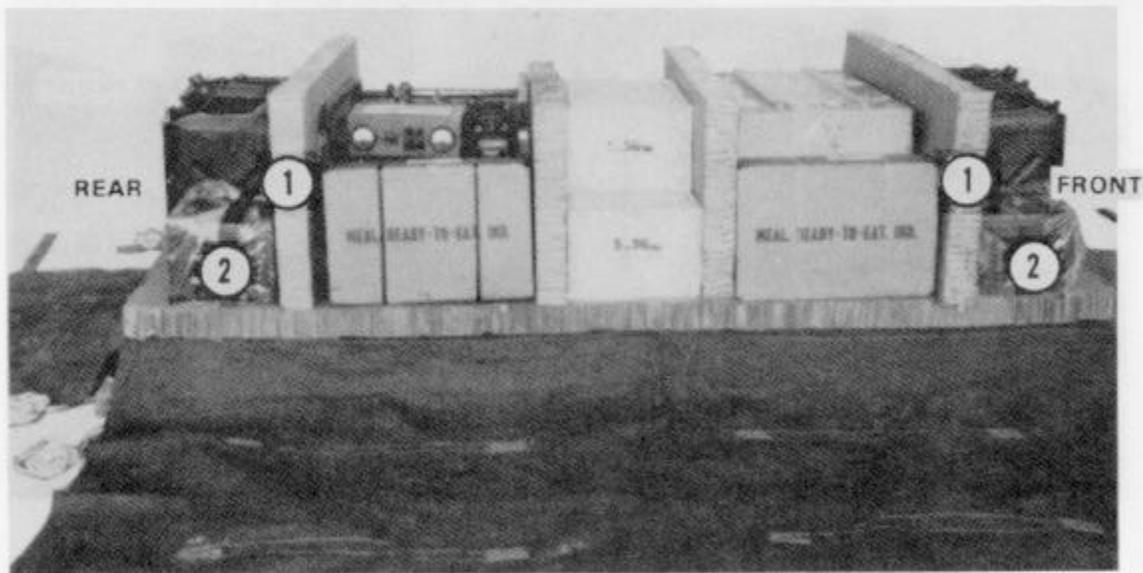
- ① Center the transceiver in front of the honeycomb and the ammunition boxes.
- ② Center the generator to the rear of the honeycomb and the ammunition boxes.

**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.

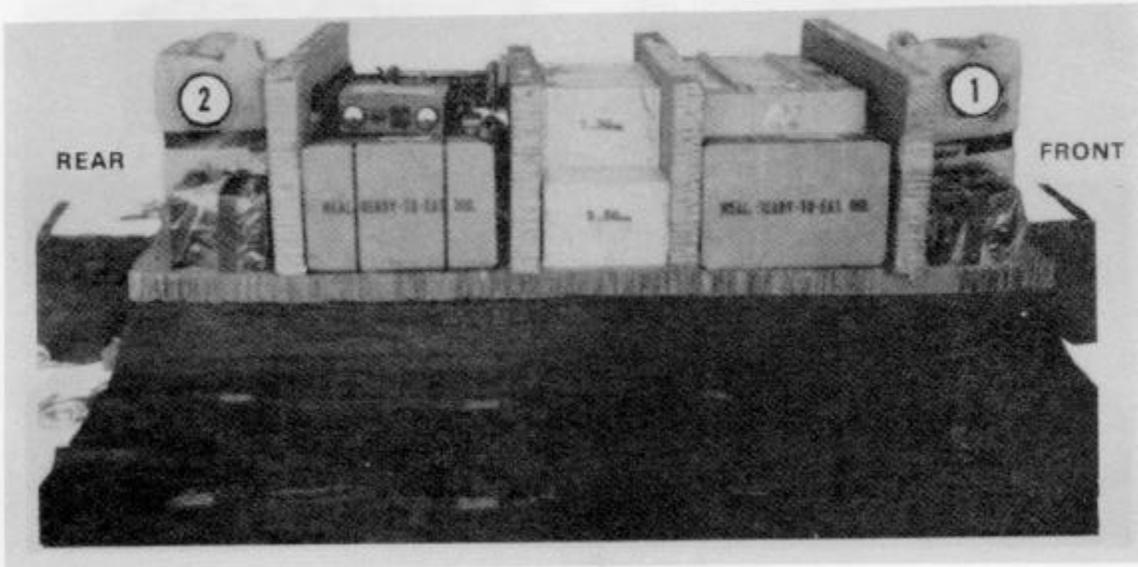
Figure 3-16. MREs placed.



- 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.

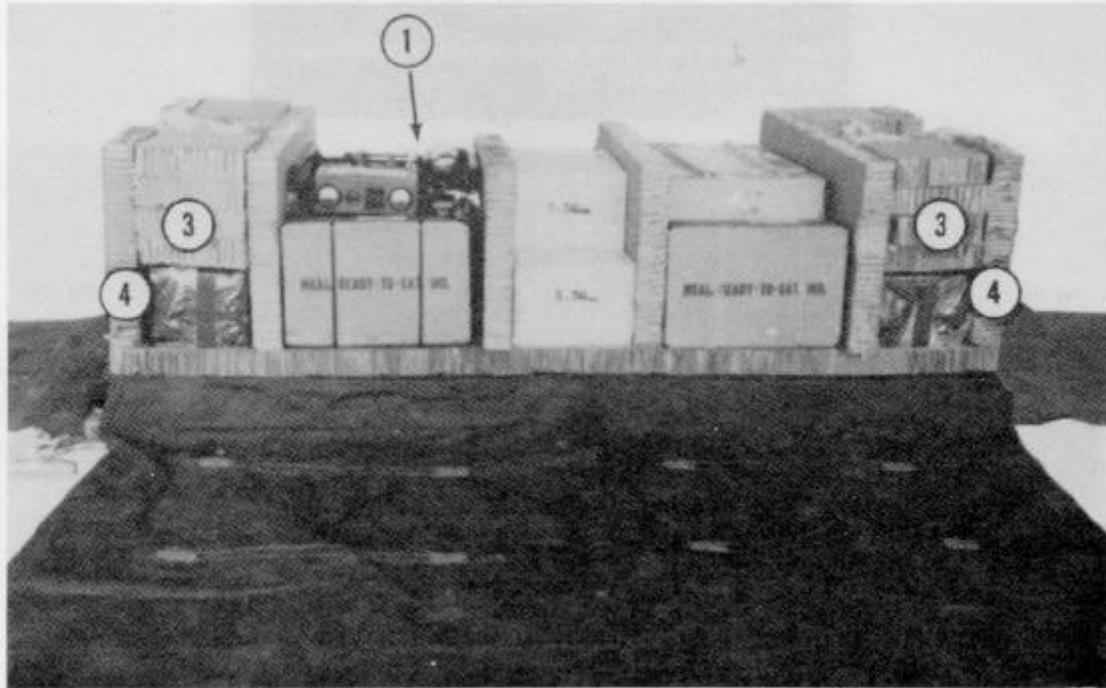
Figure 3-17. Honeycomb and batteries placed.

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



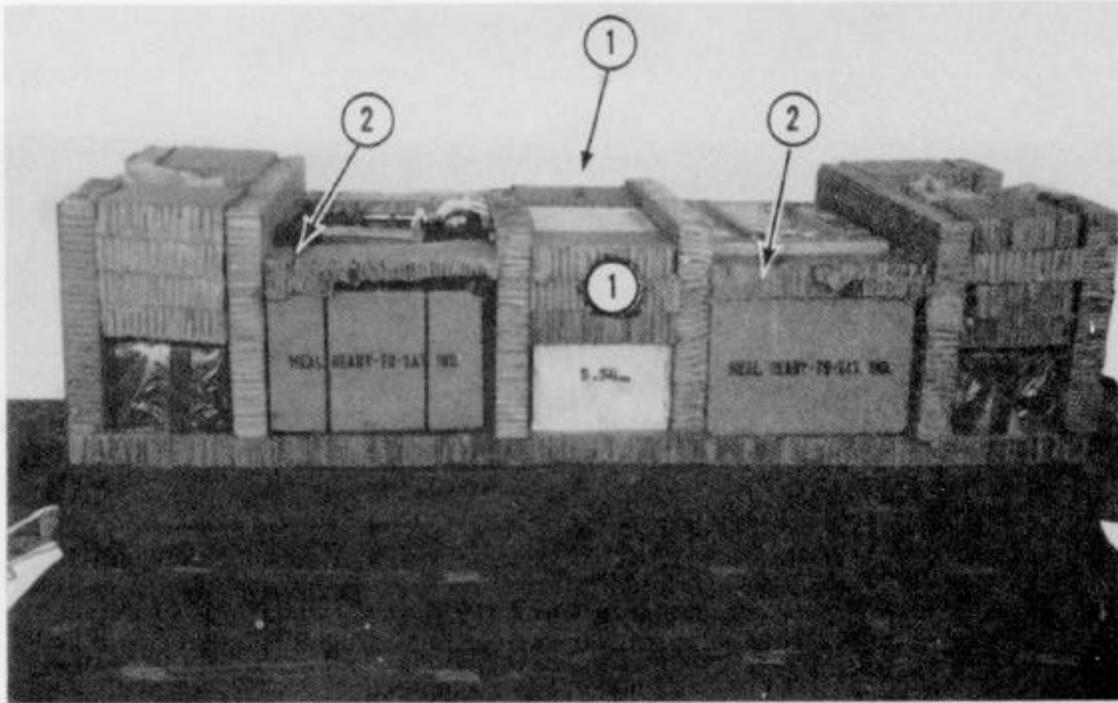
- ① Fill the two fuel cans, and pad them according to FM 10-500/TO 13C7-1-5. Place them between the batteries on the front of the load.
- ② Fill the two water cans, and wrap them with cellulose wadding. Place them between the batteries on the rear of the load.

**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.**

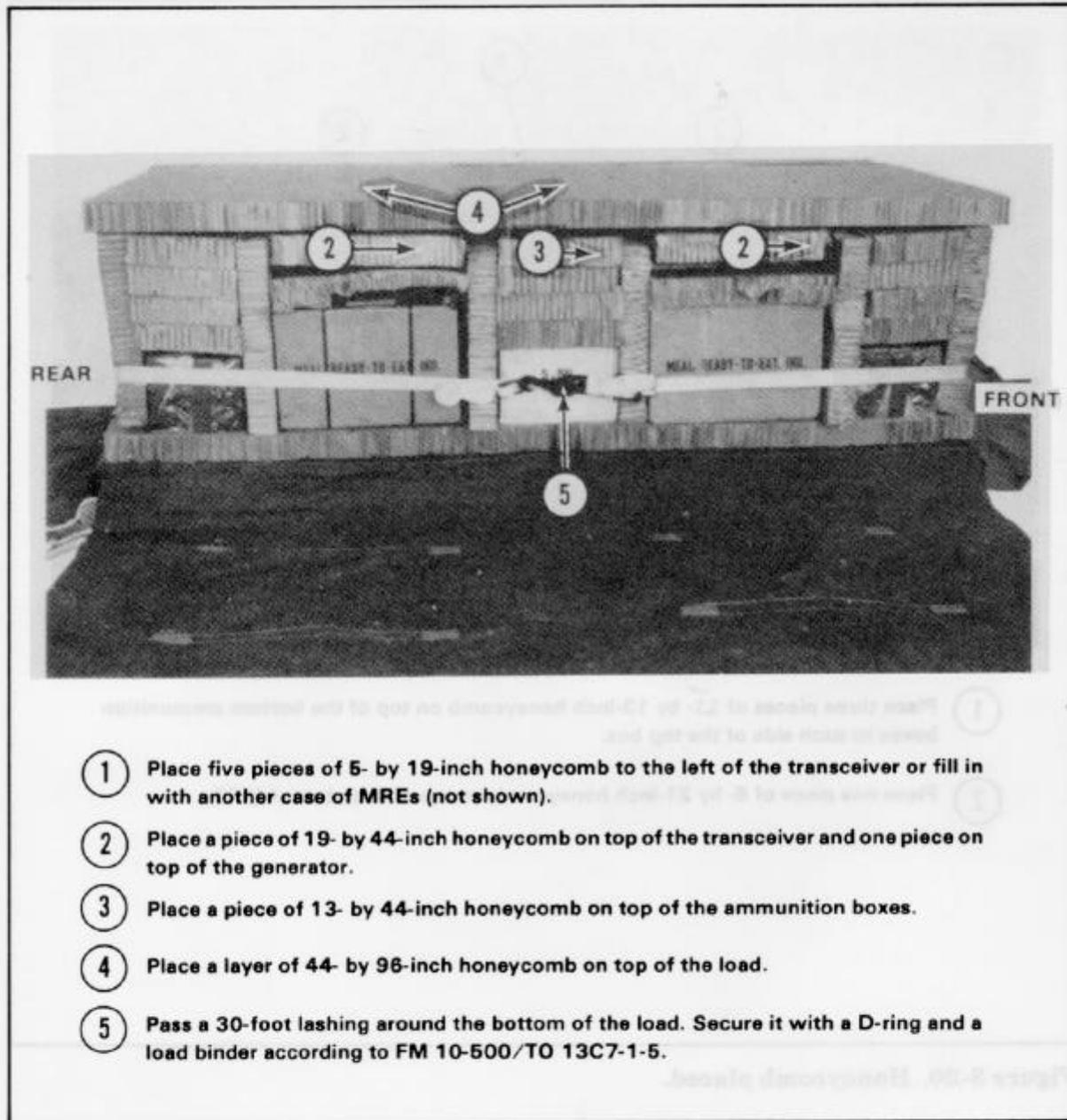
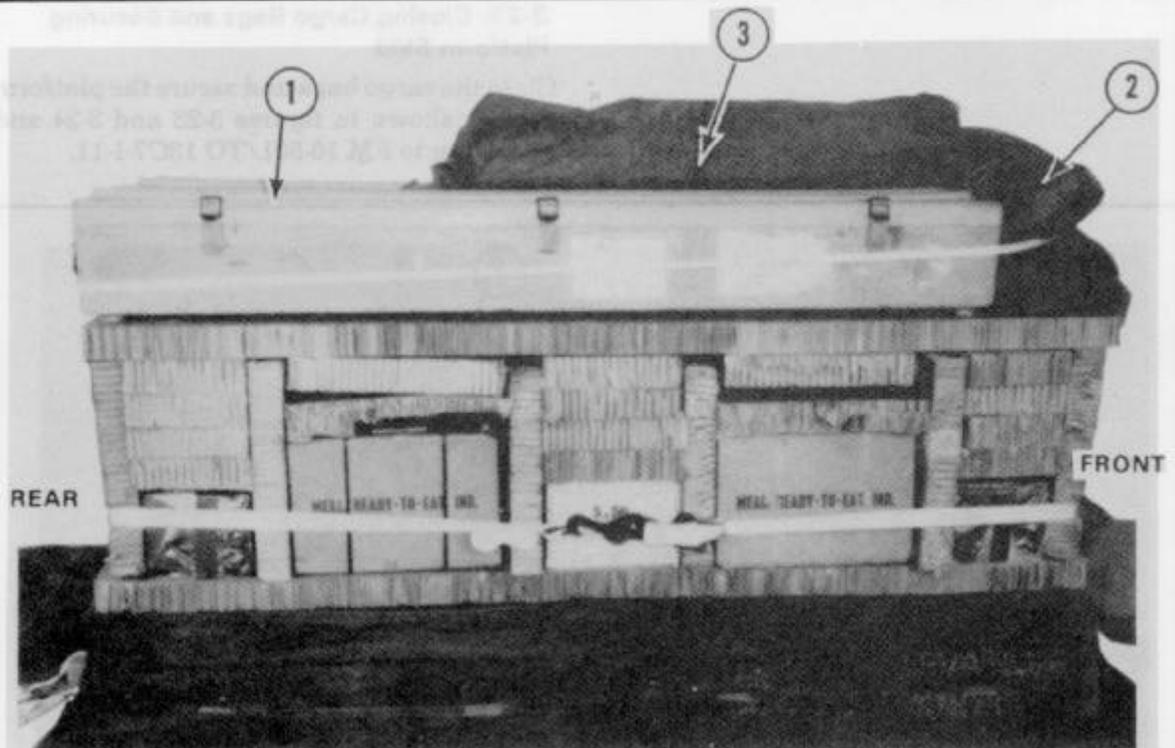


Figure 3-21. Honeycomb and lashing placed.

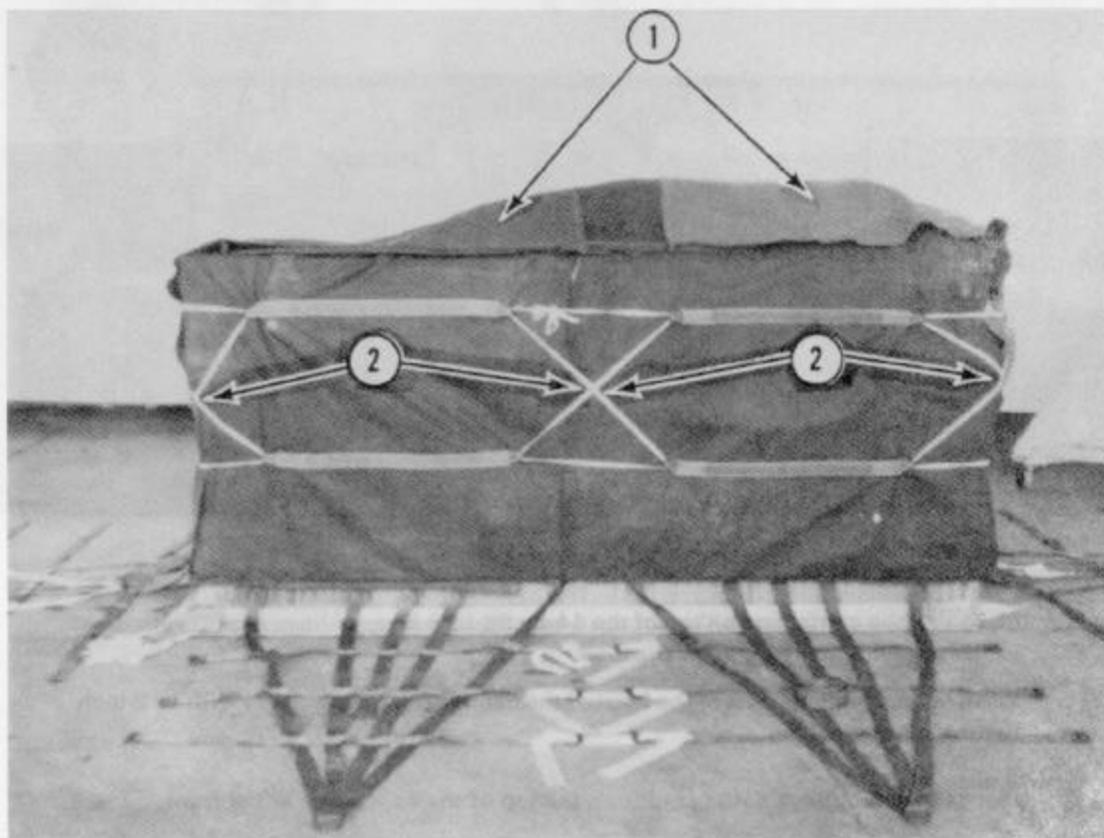


- ① Place the two containers on top of the 44-by 96-inch layer of honeycomb with their ends even with the rear end of the load.
- ② Place the camouflage nets at the front of the containers. Secure them with 1/2-inch tubular nylon webbing.
- ③ Place the camouflage netting poles on the top of the containers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

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

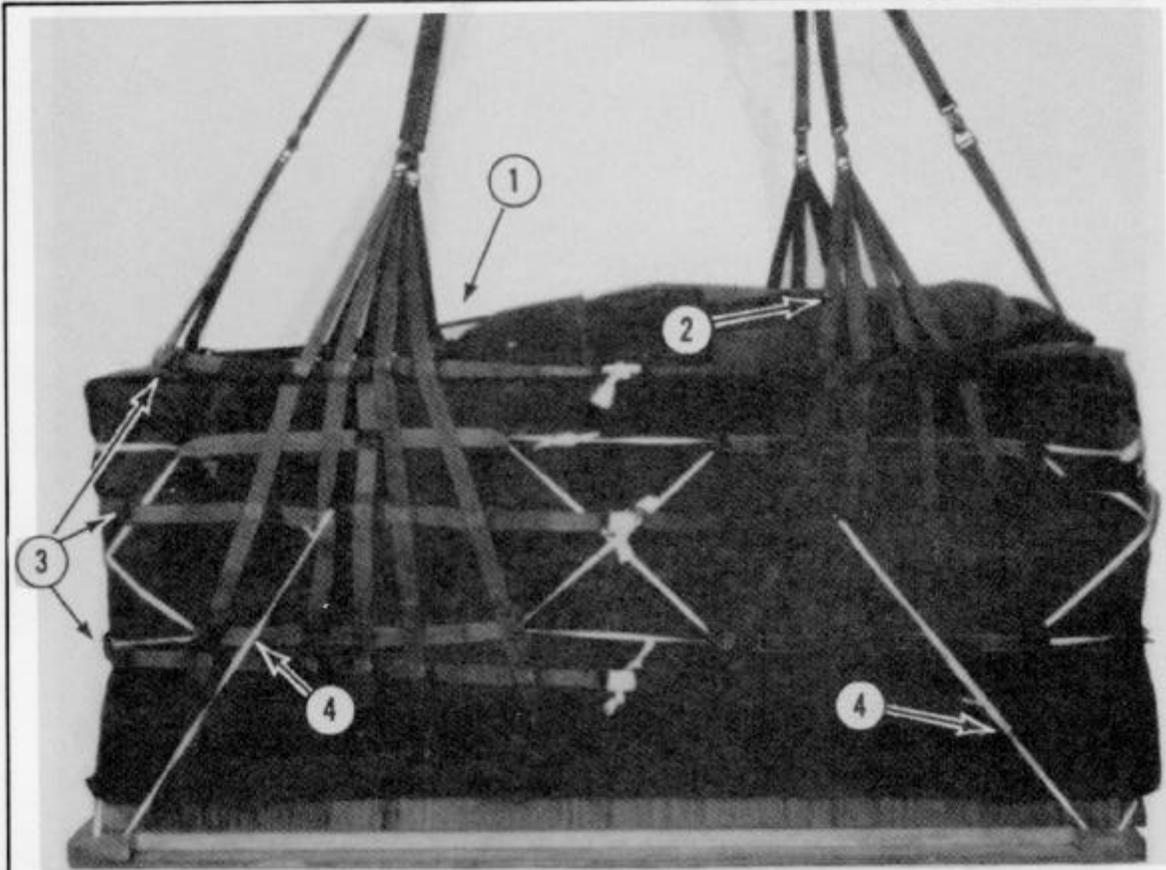
### 3-23. Closing Cargo Bags and Securing Platform Skid

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.



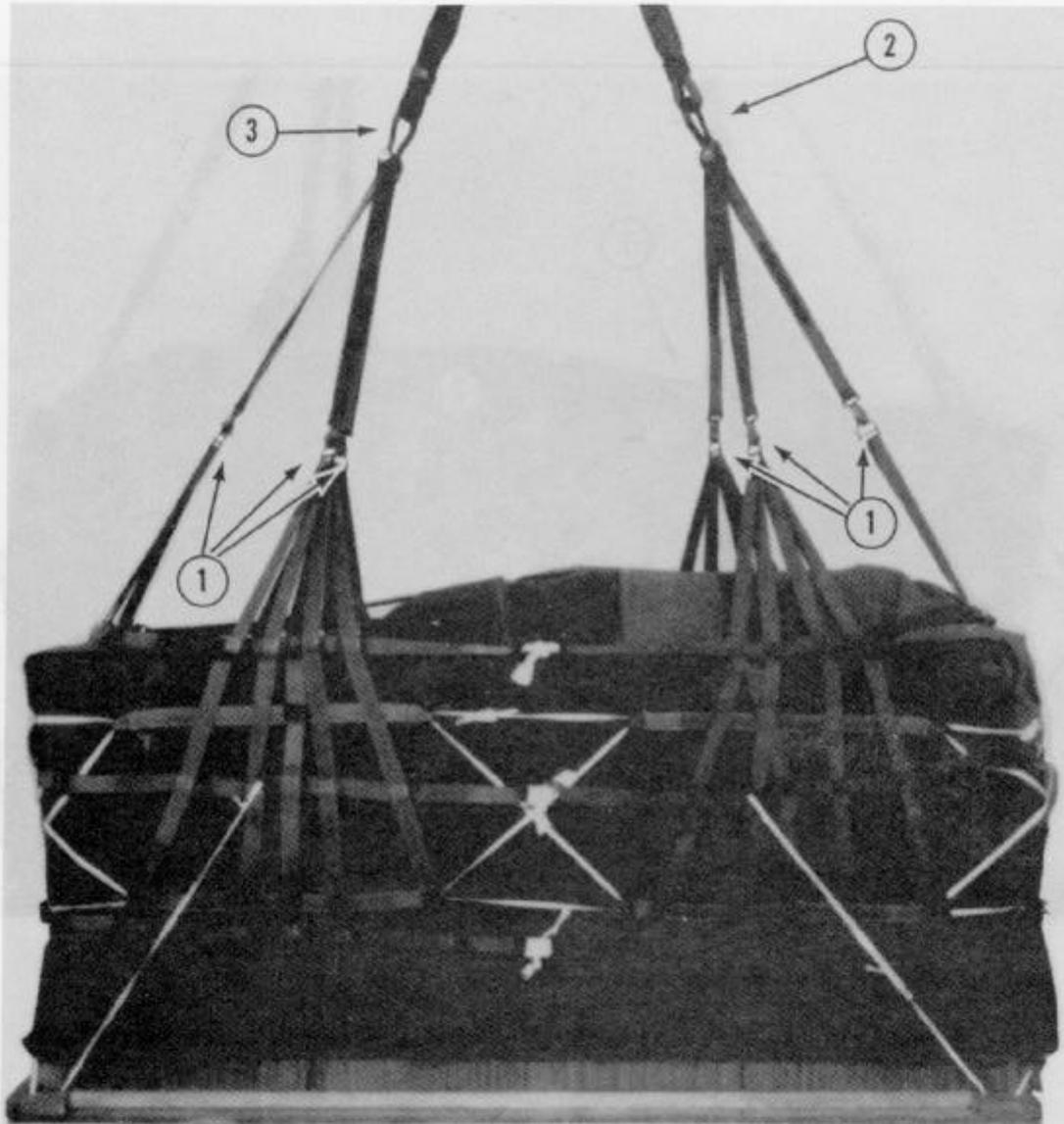
- ① Fasten the short tiedown straps over the load.
- ② Fasten the long tiedown strap of the left assembly to the friction adapter of the right assembly.
- ③ Fasten the lateral straps around the ends of the load.
- ④ Secure the skid platform to the sling assembly with the pre-positioned, 1/2-inch tubular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

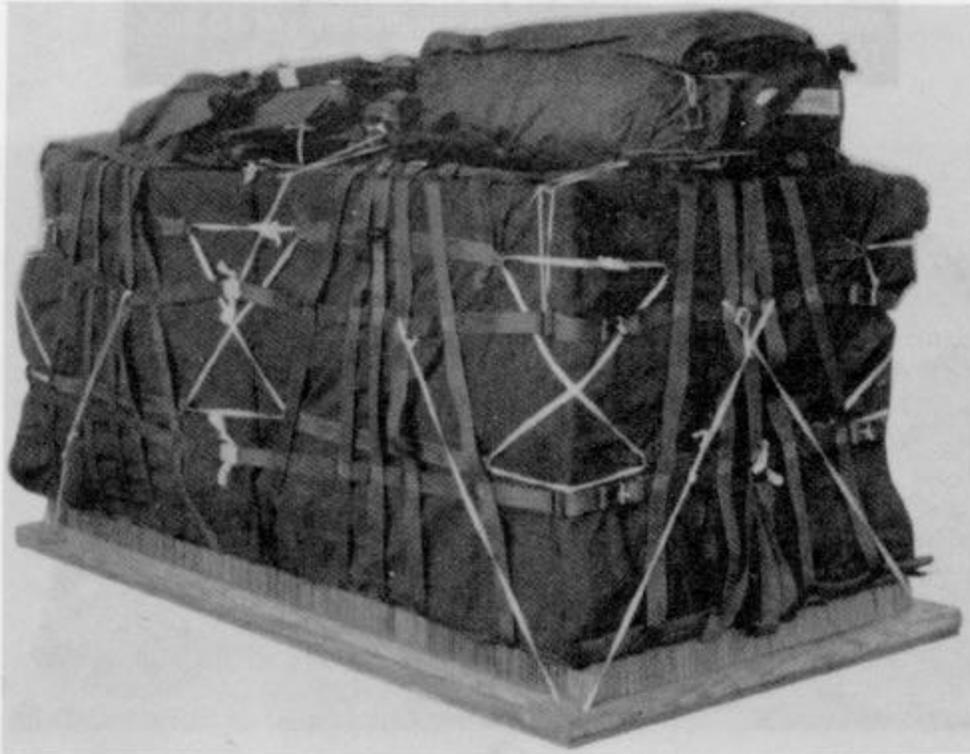


- ① Fit one suspension web connector snap to each of the six support web D-rings, and wrap tape around the slings.
- ② Bolt the front three suspension web D-rings to a 3-foot sling with a cargo suspension clevis.
- ③ Bolt the rear three suspension web D-rings to a 3-foot sling with a cargo suspension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



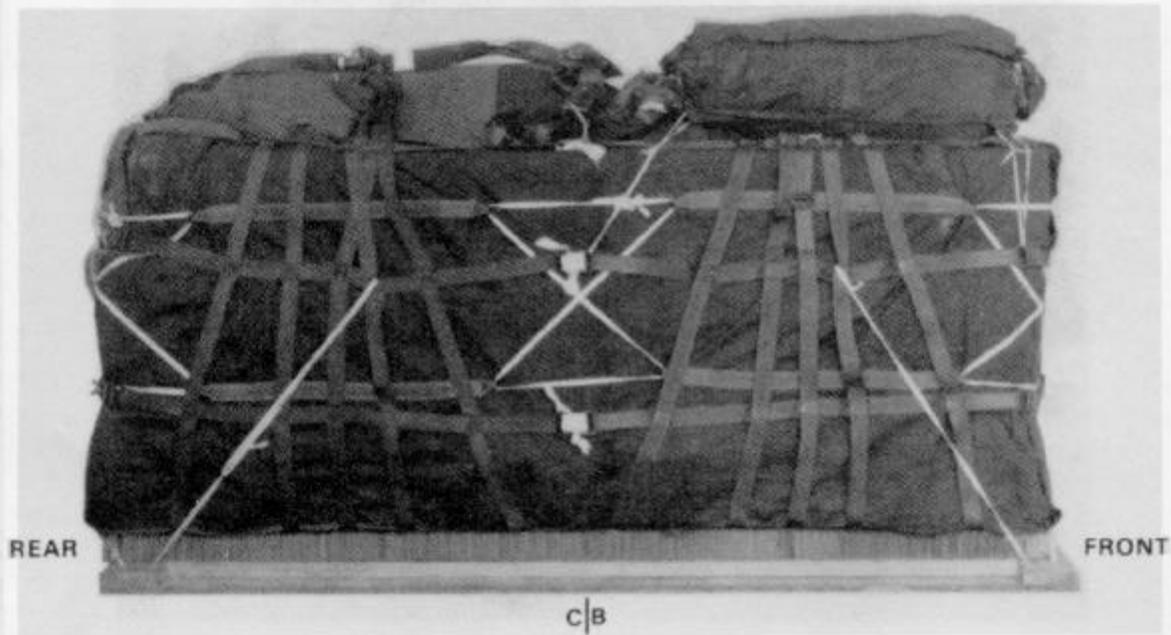
**Figure 3-26. Cargo parachute stowed.**

**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**

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

**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 .....	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: .....	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