

## Chapter 2

# Rigging TOW Weapon Systems and Missiles in A-22 Cargo Bags

### SECTION I- RIGGING TOW WEAPON SYSTEM AND MISSILES IN AN A-22 CARGO BAG FOR LOW-VELOCITY AIRDROP

#### DESCRIPTION OF LOAD

2-1. The TOW weapon system consists of the launcher, launch tube, and power pack. It can be rigged with eight missiles in an A-22 cargo bag for low-velocity airdrop. The load requires one G-12E or three G-14 cargo parachutes.

#### RIGGING A-22 CARGO BAG

2-2. Rig the TOW weapon system and eight missiles in the A-22 cargo bag as described below.

- a. Prepare the skid board as shown in Figures 2-1 and 2-2.
- b. Lay out the A-22 cargo bag as shown in Figure 2-3.
- c. Pack the TOW weapon system and missiles as shown in Figures 2-4 through 2-7.

#### ATTACHING CARGO PARACHUTES

2-3. Prepare and install one G-12E cargo parachute or three G-14 cargo parachutes to the A-22 cargo bag according to FM 10-500-3/TO 13C7-1-11, and as shown in Figure 2-8.

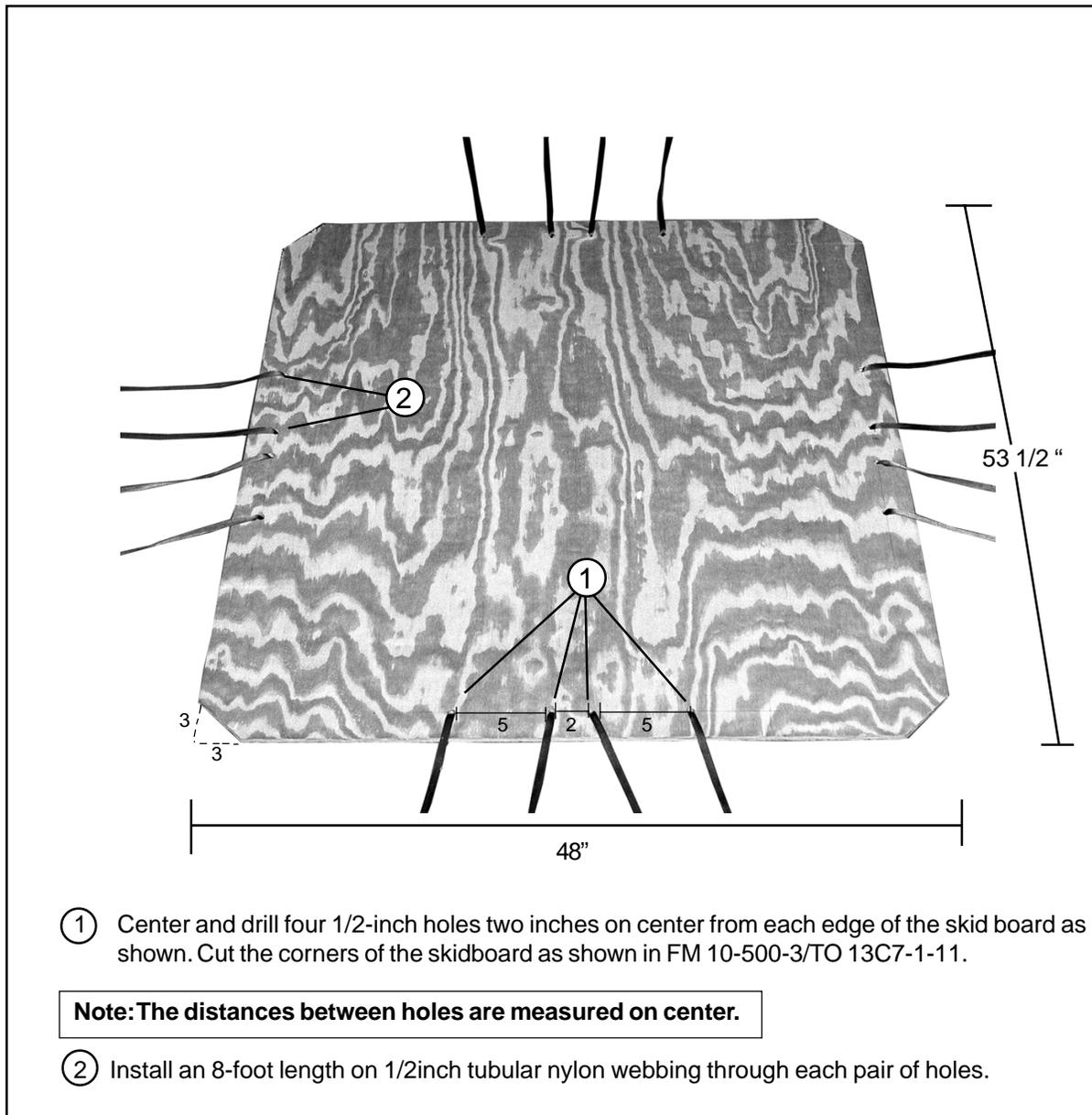
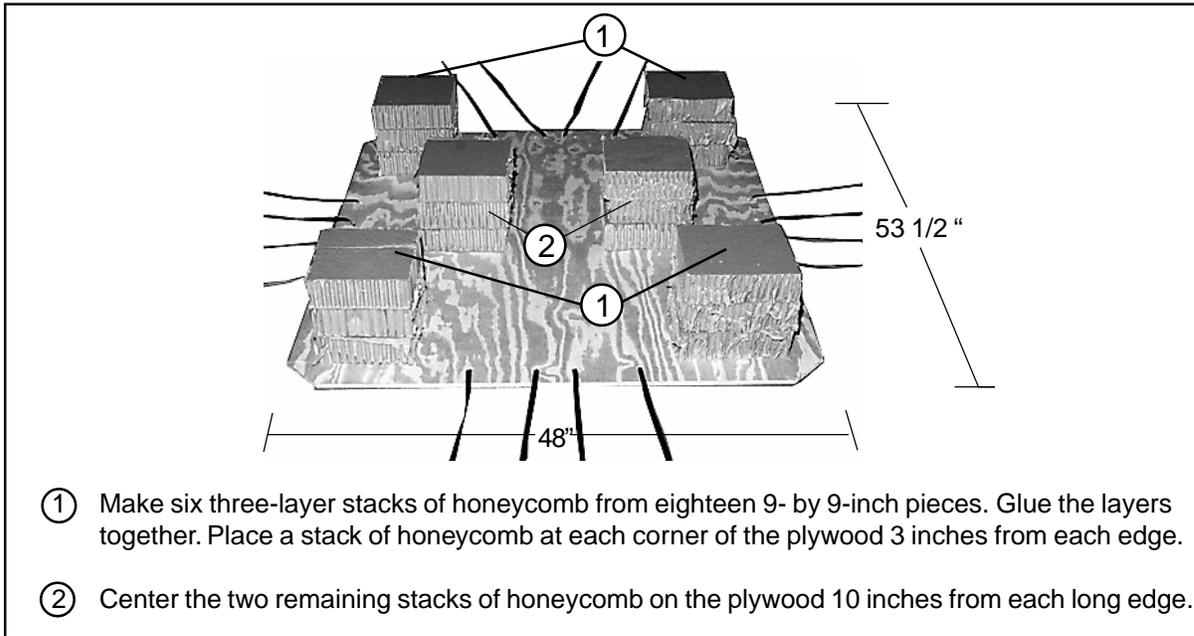
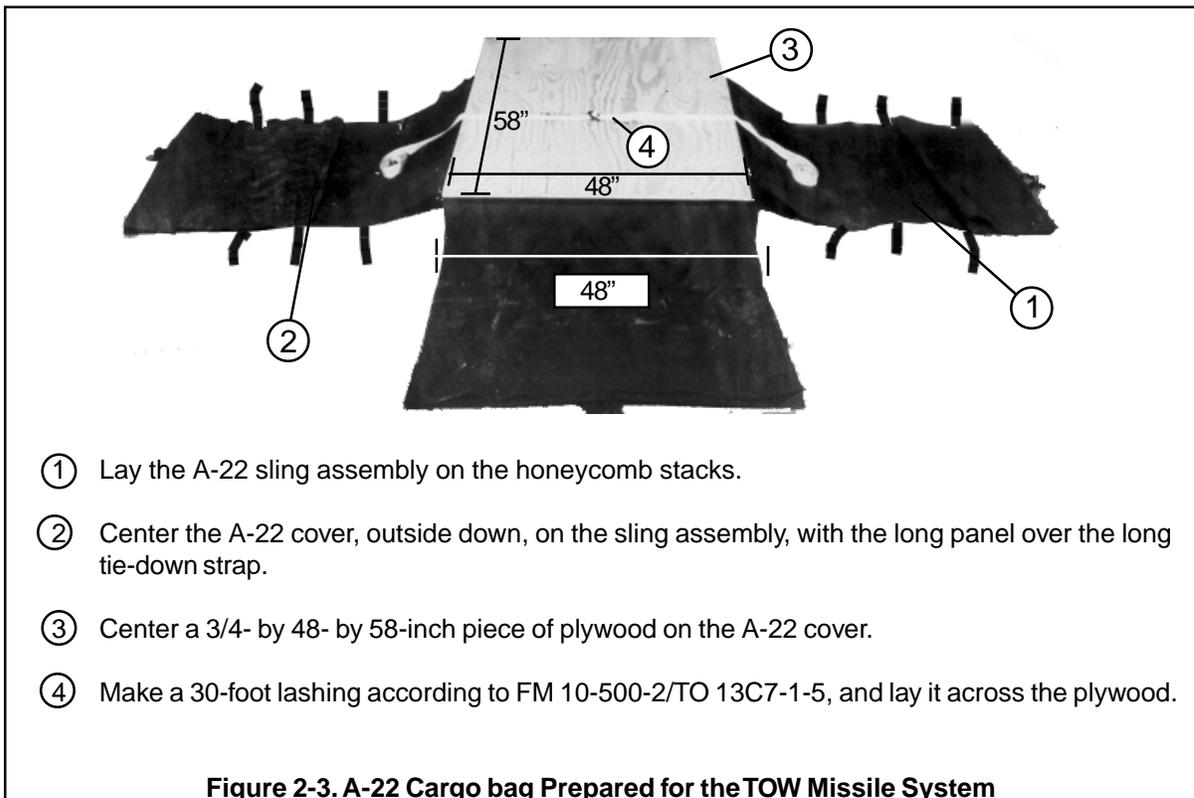


Figure 2-1. Skid Prepared



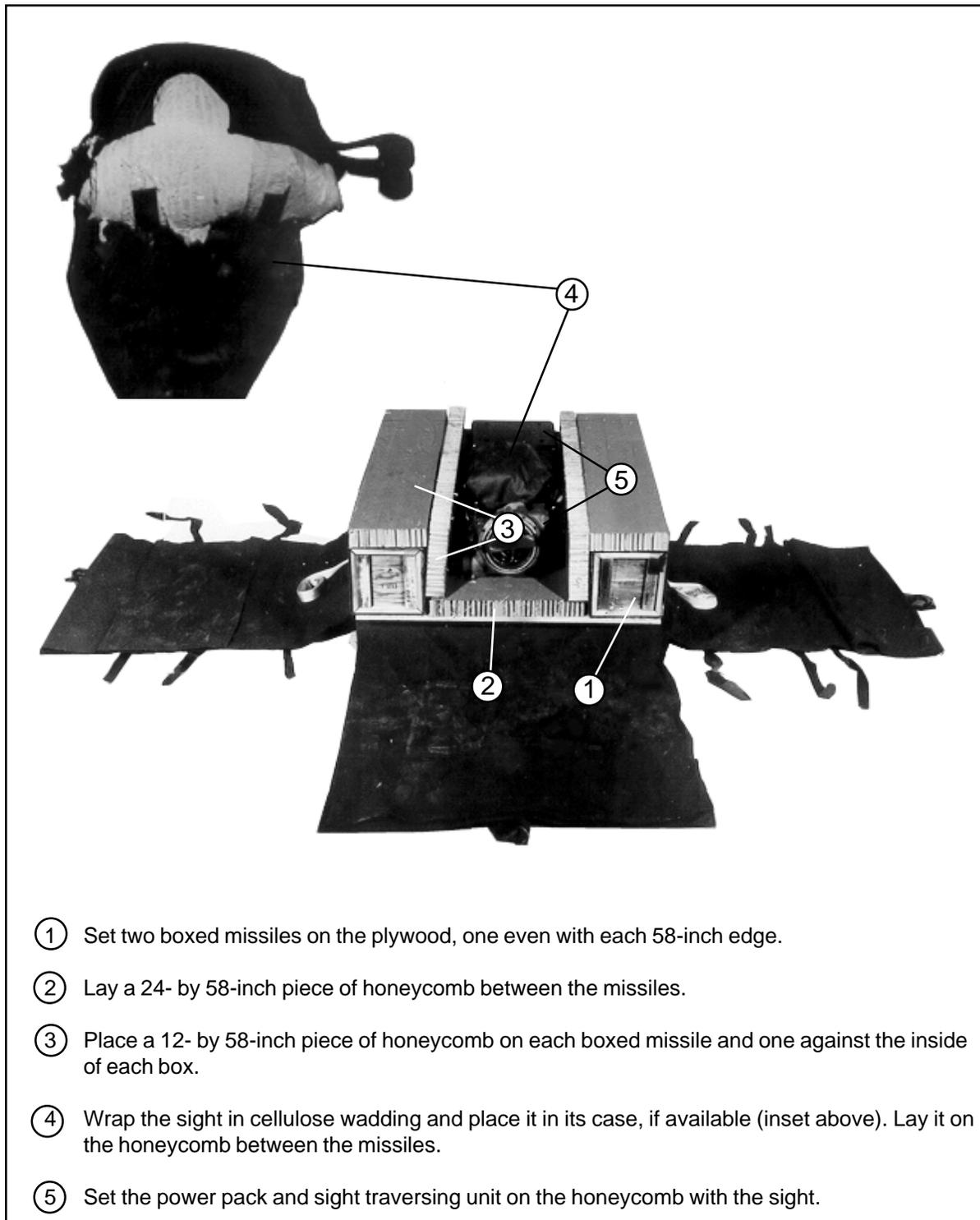
- ① Make six three-layer stacks of honeycomb from eighteen 9- by 9-inch pieces. Glue the layers together. Place a stack of honeycomb at each corner of the plywood 3 inches from each edge.
- ② Center the two remaining stacks of honeycomb on the plywood 10 inches from each long edge.

**Figure 2-2. Honeycomb Positioned on the Skid**

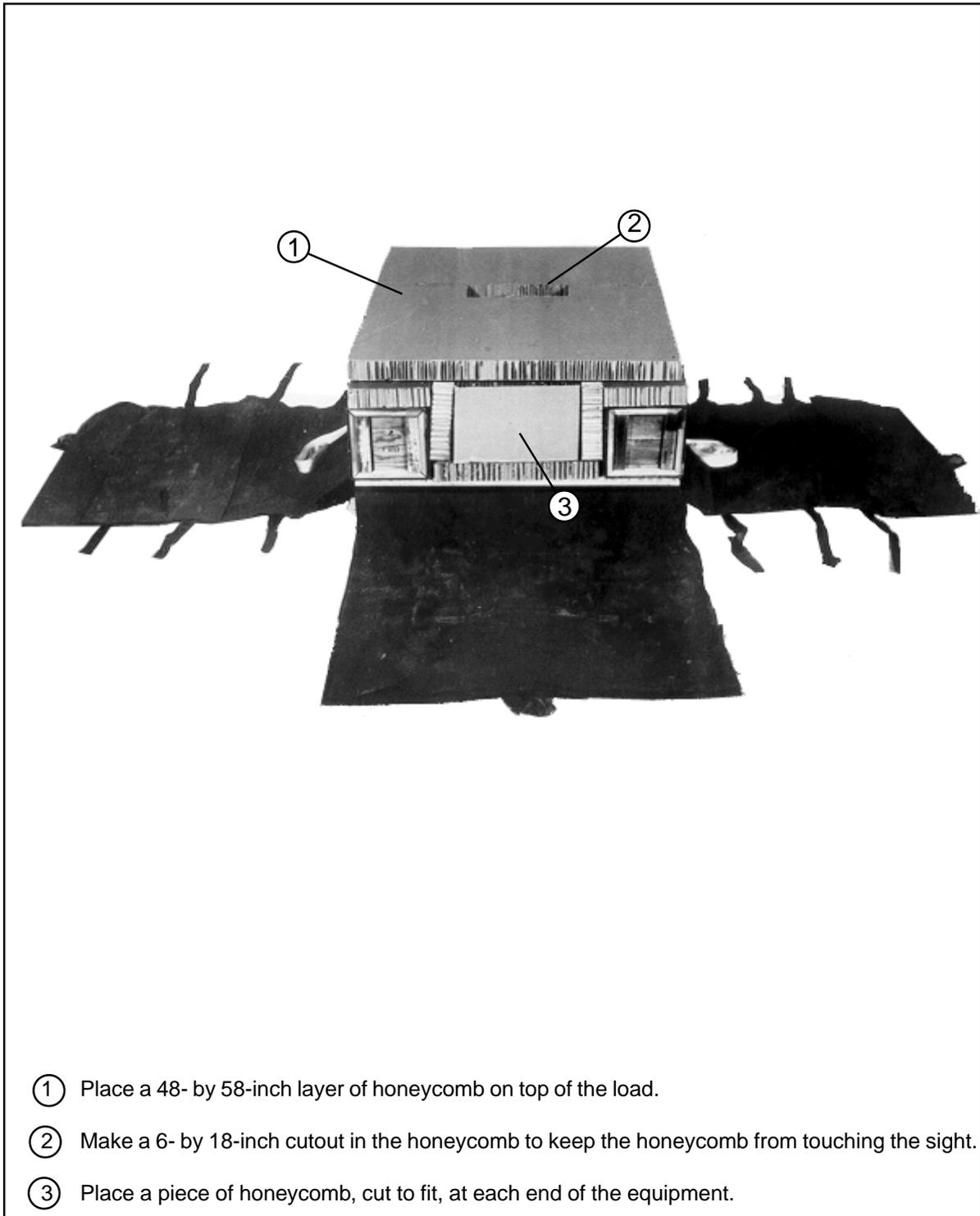


- ① Lay the A-22 sling assembly on the honeycomb stacks.
- ② Center the A-22 cover, outside down, on the sling assembly, with the long panel over the long tie-down strap.
- ③ Center a 3/4- by 48- by 58-inch piece of plywood on the A-22 cover.
- ④ Make a 30-foot lashing according to FM 10-500-2/TO 13C7-1-5, and lay it across the plywood.

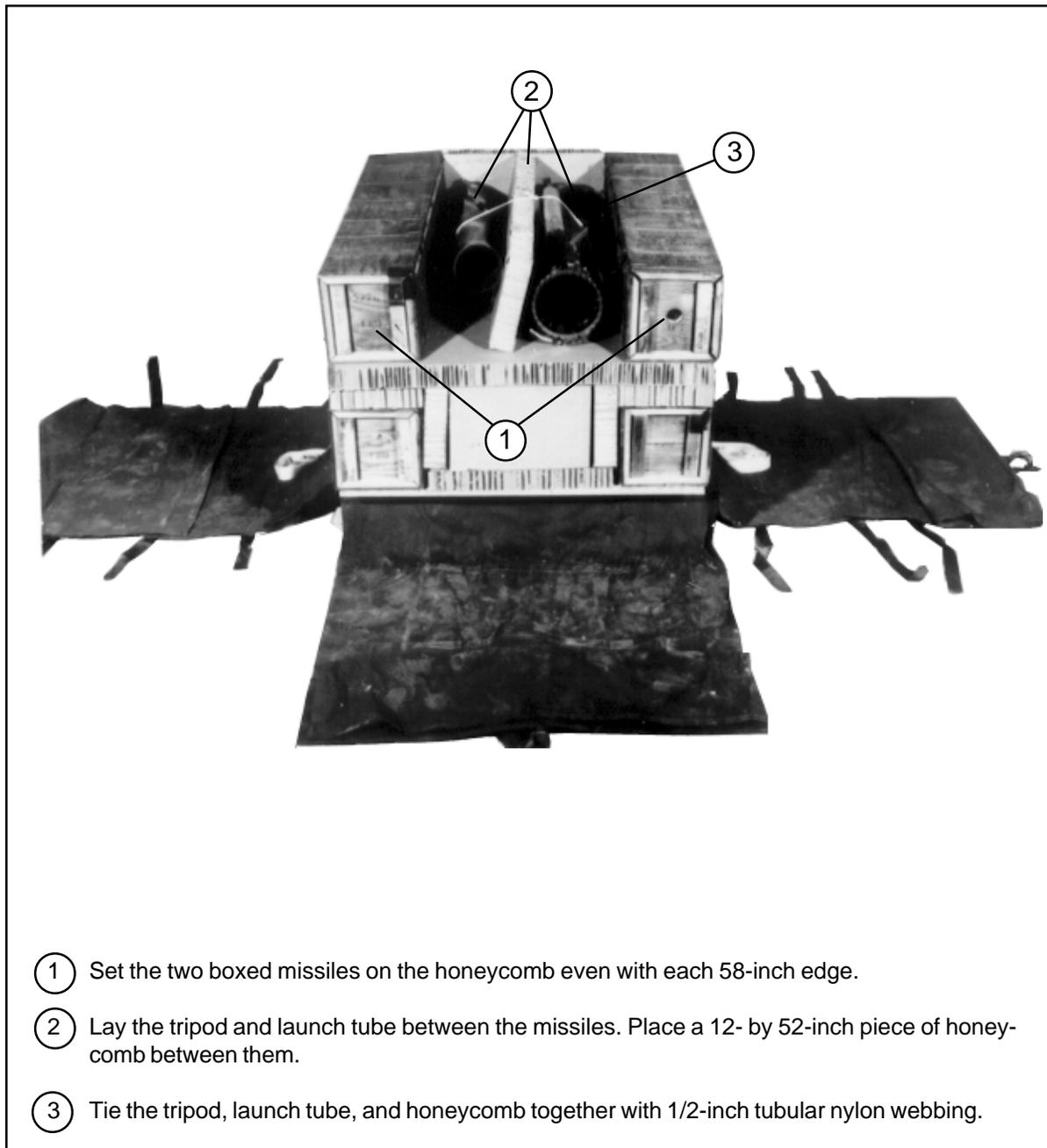
**Figure 2-3. A-22 Cargo bag Prepared for the TOW Missile System**



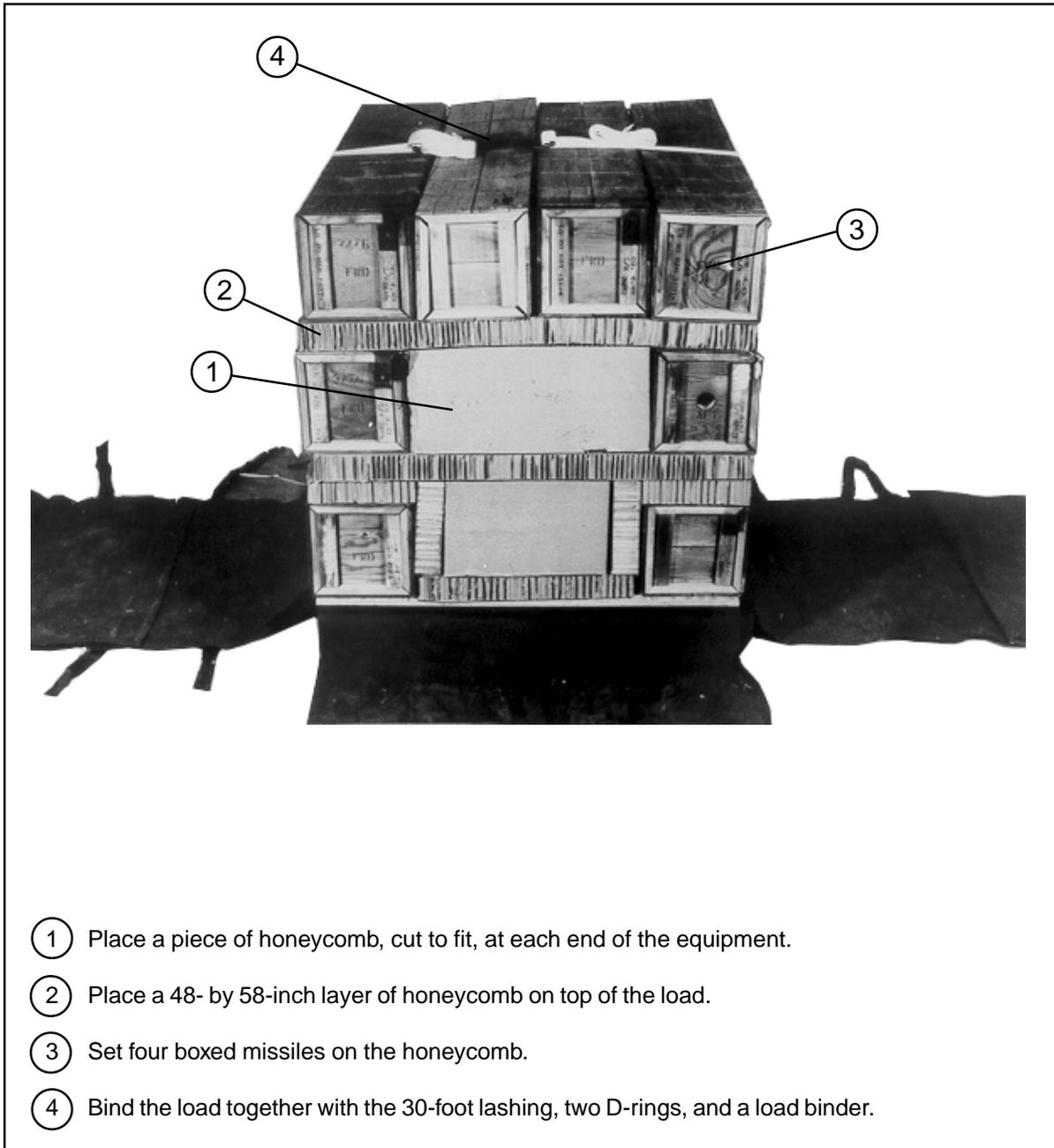
**Figure 2-4. Missiles, Sight Traversing Unit, Sight, and Power Pack Stowed**



**Figure 2-5. Honeycomb Placed on Top of the Load**



**Figure 2-6. Missiles, Tripod, and Launch Tube Stowed**



**Figure 2-7. Load Completed and Bound Together**



- ① Bring the A-22 cover up over the load, and fold excess material under as necessary.
- ② Pass the A-22 tie-down straps up over the load. Fasten and tighten the straps.
- ③ Lace each corner of the cover through the lacing loops with type III nylon cord to form a figure eight.
- ④ Fasten the lateral straps together around the A-22 cover. Pass the upper lateral straps around the top of the corners.
- ⑤ Attach the suspension webs to the D-rings of the support webs with the open side of the snaps facing inward. Tape the snaps to the D-rings.
- ⑥ Adjust all straps to make the sling assembly fit snugly. Pull the suspension webs to their full height. Adjust the upper lateral straps to prevent binding the upper part of the support web. Fold all excess straps and tie the folds with type I, 1/4-inch cotton webbing.
- ⑦ Make the skidboard ties according to FM 10-500-3/TO 13C7-1-11.
- ⑧ Prepare, attach, and safety one G-12E cargo parachute (with a 68-inch pilot parachute), or three G-14 cargo parachutes to the load according to FM 10-500-3/TO 13C7-1-11.

**Figure 2-8. A-22 Cargo Bag Secured and Parachutes Installed**

## MARKING THE RIGGED LOAD

2-4. Mark the rigged load as described in Chapter 1, FM 10-500-3/TO 13C7-1-11, using the data given in Figure 2-9. Complete the Shipper's Declaration for Dangerous Goods.

**CAUTION**  
 Make the final inspection required by Chapter 1, FM 10-500-3/TO 13C7-1-11 before the load leaves the rigging site.



RIGGED LOAD DATA

Weight.....	1,217 pounds
Width.....	48 inches
Height.....	72 inches
Length.....	58 inches

**Figure 2-9. TOW Weapon System and Missiles Rigged in an A-22 Cargo Bag for Low-velocity Airdrop**

**EQUIPMENT REQUIRED**

2-5. The equipment required to rig this load is listed in Table 2-1.

**Table 2-1. Equipment Required to Rig the TOW Weapon Sysytem and Eight Missiles in A-22 Cargo Bag**

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
1670-00-587-3421	Bag, cargo, aerial delivery, A-22	1
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb	3 sheets
1670-01-065-3751	Parachute, cargo, 64-ft diam, G-12E <u>or</u>	1
1670-00-999-2658	Parachute, cargo, G-14	3
1670-00-216-7297	Parachute, pilot, 68-in diam	1
5530-00-914-5118	Plywood, 1-in thick 48- by 53 1/2-in 48- by 58-in	1
7510-00-266-5016	Tape, adhesive, 2-in	As required
8310-00-917-3945	Thread, cotton, ticket number 8/7 (ticket nr 5)	As required
1670-00-937-0271	Tie-down assembly, 15-ft	2
8305-00-268-2411	Webbing, type I, cotton, 1/4-in	As required
8305-00-082-5752	Webbing, nylon, tubular, 1/2-in	As required