

## CHAPTER 4

# RIGGING STINGER WEAPON SYSTEMS AND MISSILES IN AN A-21 CARGO BAG FOR LOW-VELOCITY AIRDROP

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### 4-1. Description of Load

This load can be dropped in three different combinations: two Stinger weapon systems and two Stinger missiles; four Stinger weapon systems; or four Stinger missiles rigged in an A-21 cargo bag with either a G-13 or a G-14 cargo parachute. The weight of the load will vary slightly depending on the combination used. For the C-130 and the C-5 aircraft, the rigged load can be dropped only as a ramp bundle. For C-141 aircraft, the rigged load may be

dropped as a door bundle or a ramp bundle.

### 4-2. Preparing Skid and Honeycomb

Prepare a two-layer plywood skid with honeycomb cushioning as shown in Figures 4-1 and 4-2.

**NOTE:** If load is to be dropped from a C-141 aircraft as a door bundle, omit steps 2 and 3 of Figure 4-1, and step 2 of Figure 4-2.

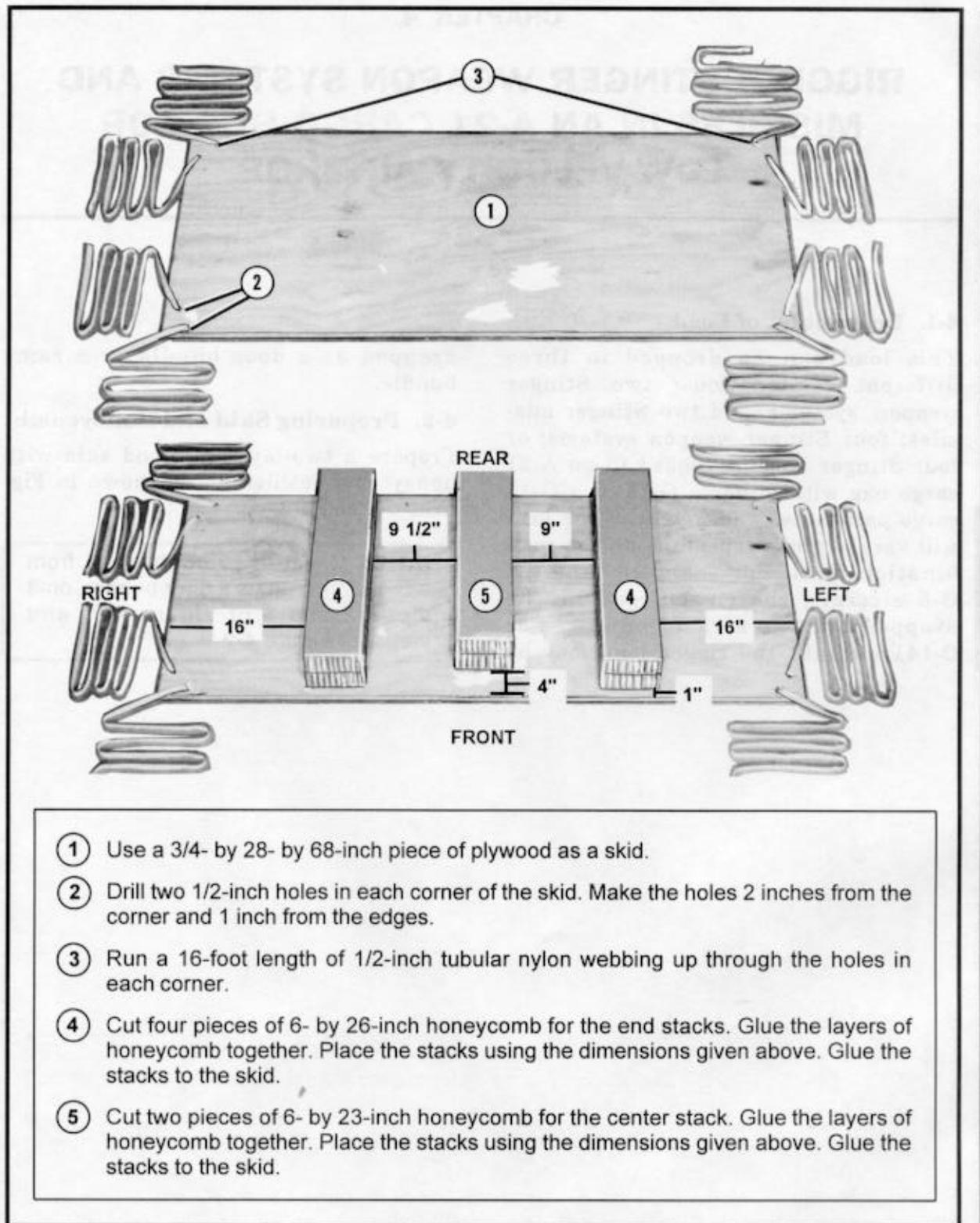
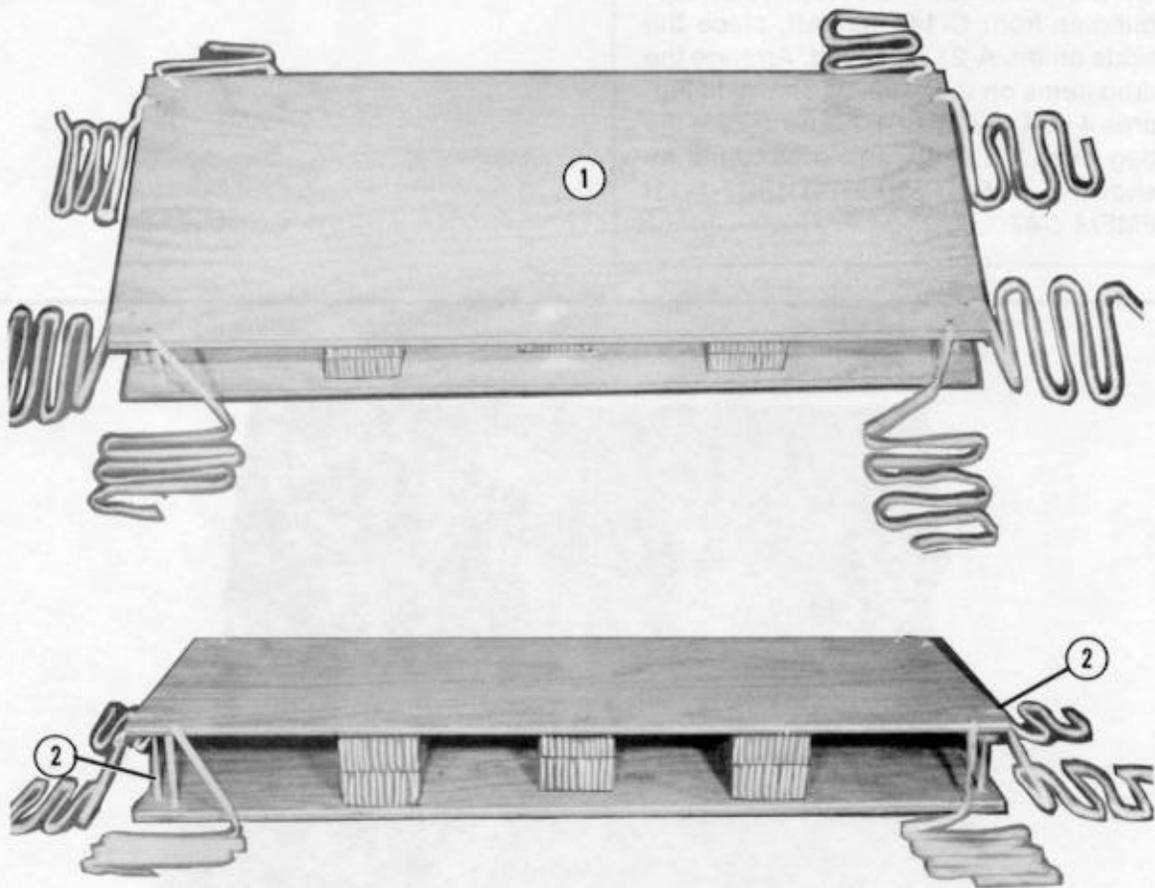


Figure 4-1. Bottom skid and honeycomb stacks prepared and placed



- ① Use a 3/4- by 28- by 68-inch piece of plywood as the top skid. Prepare the skid according to step 2 in Figure 4-1. Glue it to the honeycomb stacks.
- ② Run the webbing from the corner holes in the bottom skid up through the corresponding corner holes in the top skid.

*Figure 4-2. Top skid prepared and glued to honeycomb*

### 4-3. Rigging A-21 Cargo Bag

Follow the procedures in subparagraphs a, b, or c below, depending on the load configuration.

**NOTE:** For loads to be dropped as door bundles from C-141 aircraft, place the skids on the A-21 scuff pad. Arrange the drop items on the skids as shown in Figures 4-4, 4-5, 4-6, or 4-7, and secure the bag over the skids and drop items as shown in FM 10-500-3/TO 13C7-1-11/ FMFM 7-47.

**a. Two Weapon Systems and Two Missiles.** Position and secure two weapon systems and two missiles as shown in Figures 4-3 through 4-5.

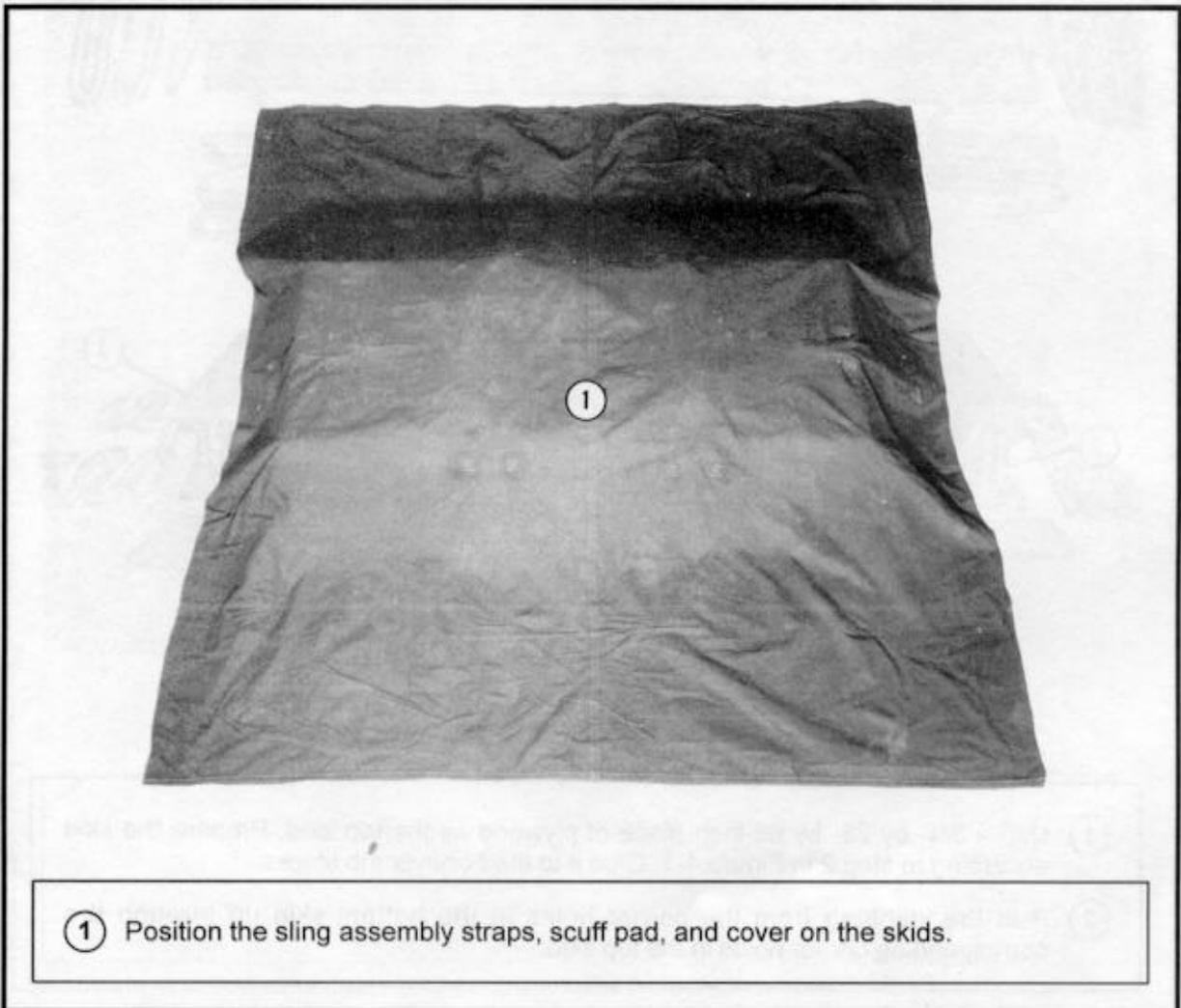
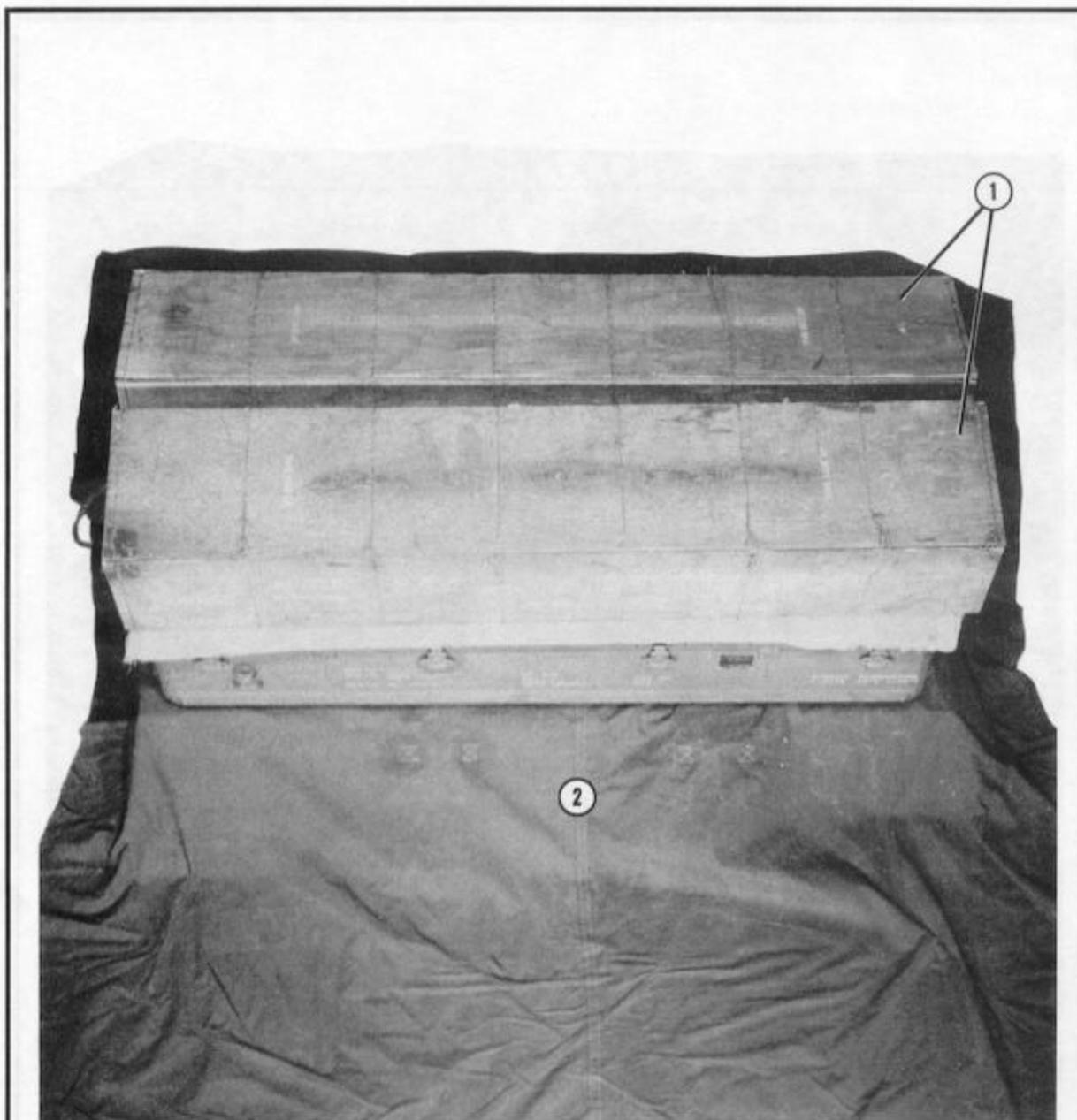


Figure 4-3. A-21 sling assembly and cover placed



- ① Center the weapon systems on the cover. Put two layers of cellulose wadding between the systems.
- ② Put two layers of cellulose wadding on top of the weapon systems (not shown).

*Figure 4-4. Two weapon systems placed on A-21 cargo bag*

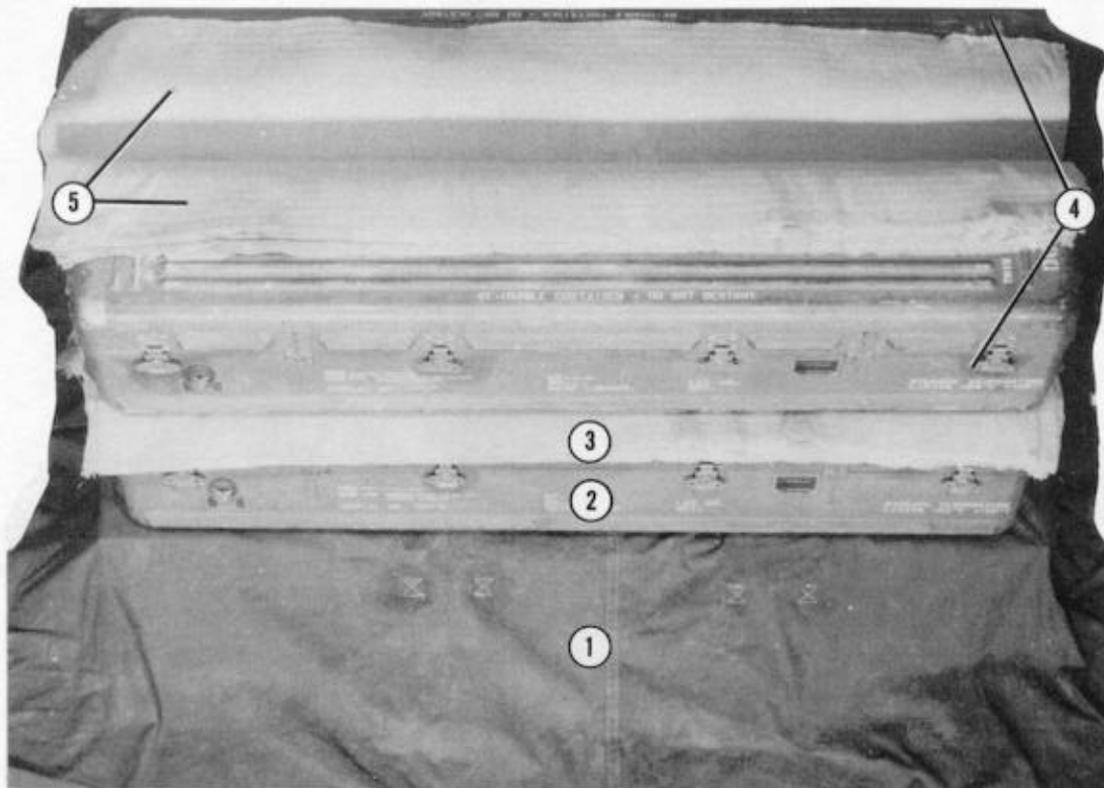


- ① Set two missiles on top of the cellulose wadding and the weapon systems.
- ② Close the A-21 cargo bag as outlined in FM 10-500-3/TO 13C7-1-11/FMFM 7-47.

*Figure 4-5. Two missiles placed on A-21 cargo bag cover*

**b. Four Weapon Systems.** Position and secure four weapon systems as shown in Figure 4-6.

**c. Four Missiles.** Position and secure four missiles as shown in Figure 4-7.



- ① Lay the A-21 cargo bag over the top skid.
- ② Center two weapon systems on the cover, and pad between the two systems with two layers of cellulose wadding as shown in Figure 4-4.
- ③ Put two layers of cellulose wadding on top of the weapon systems.
- ④ Align two more weapon systems on top of the first set of weapon systems.
- ⑤ Put two layers of cellulose wadding between the weapon systems in the top set as in step 2 above.
- ⑥ Close the A-21 cargo bag as outlined in FM 10-500-3/TO 13C7-1-11/FMFM 7-47 (not shown).

Figure 4-6. Four weapon systems placed on A-21 cargo bag cover

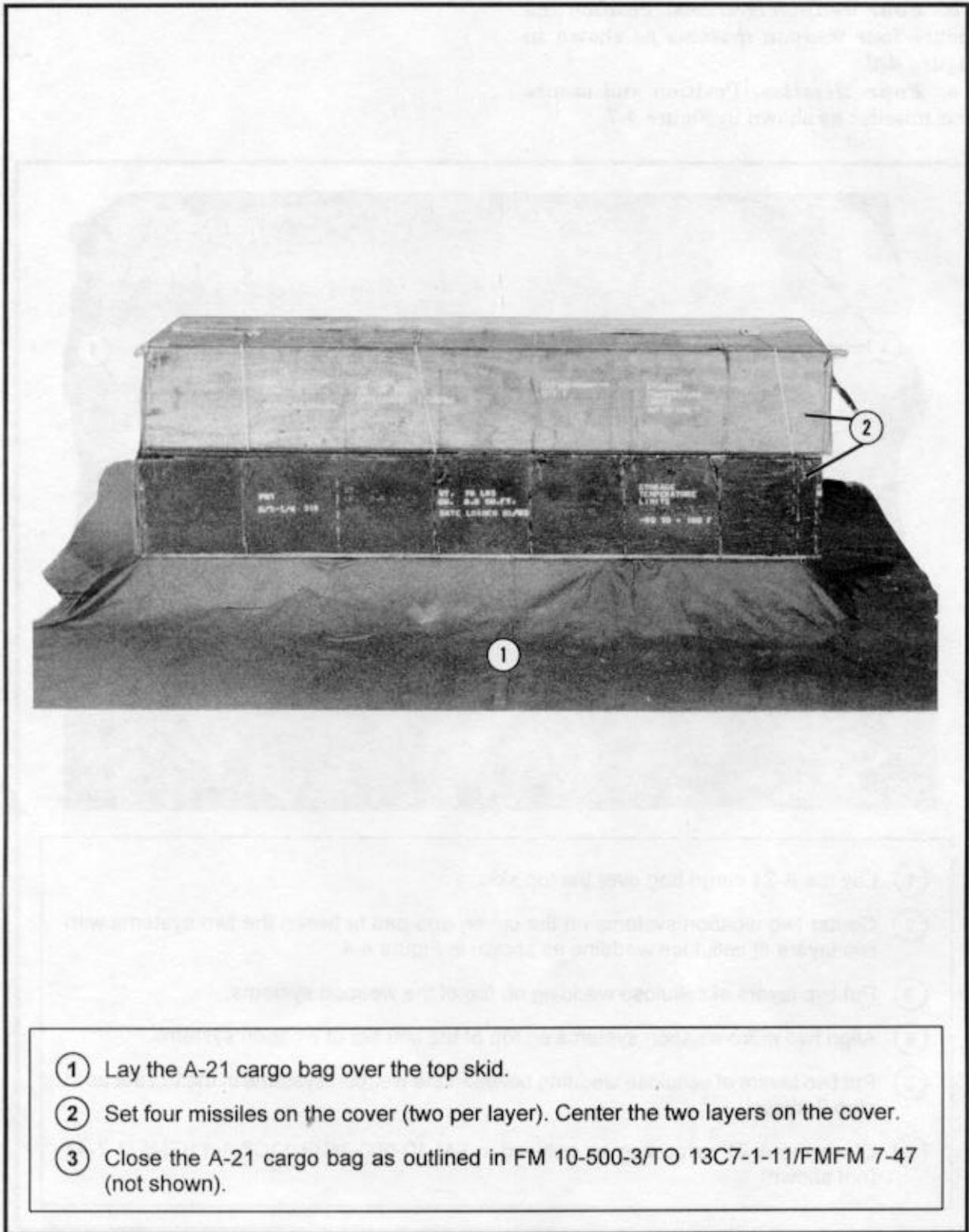


Figure 4-7. Four missiles placed on A-21 cargo bag cover

#### 4-4. Securing Load to Skid

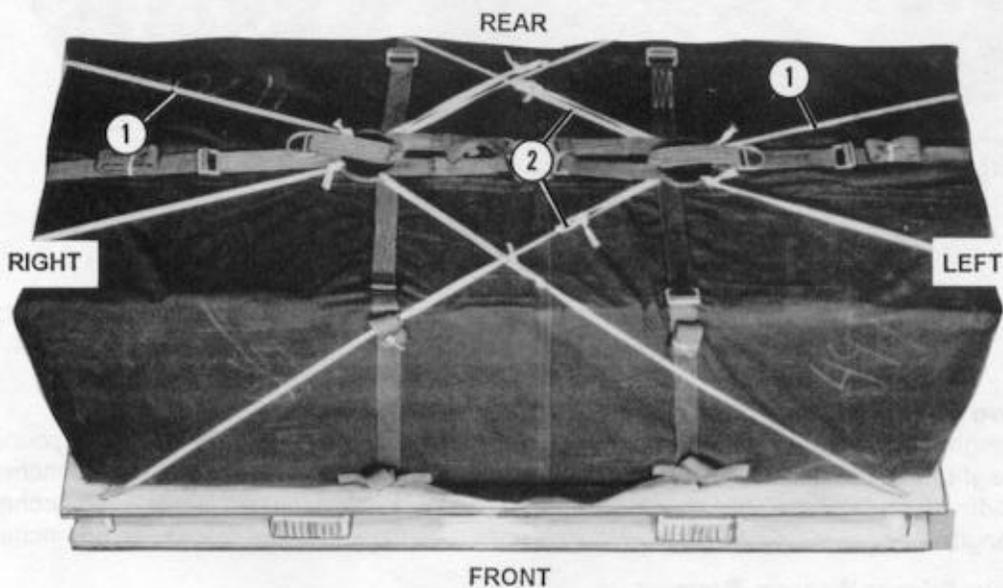
Secure the rigged A-21 cargo bag to the skid as shown in Figure 4-8.

#### 4-5. Attaching Cargo Parachute

Attach one G-13 or one G-14 cargo parachute to the A-21 cargo bag as outlined in FM 10-500-3/TO 13C7-1-11/FMFM 7-47.

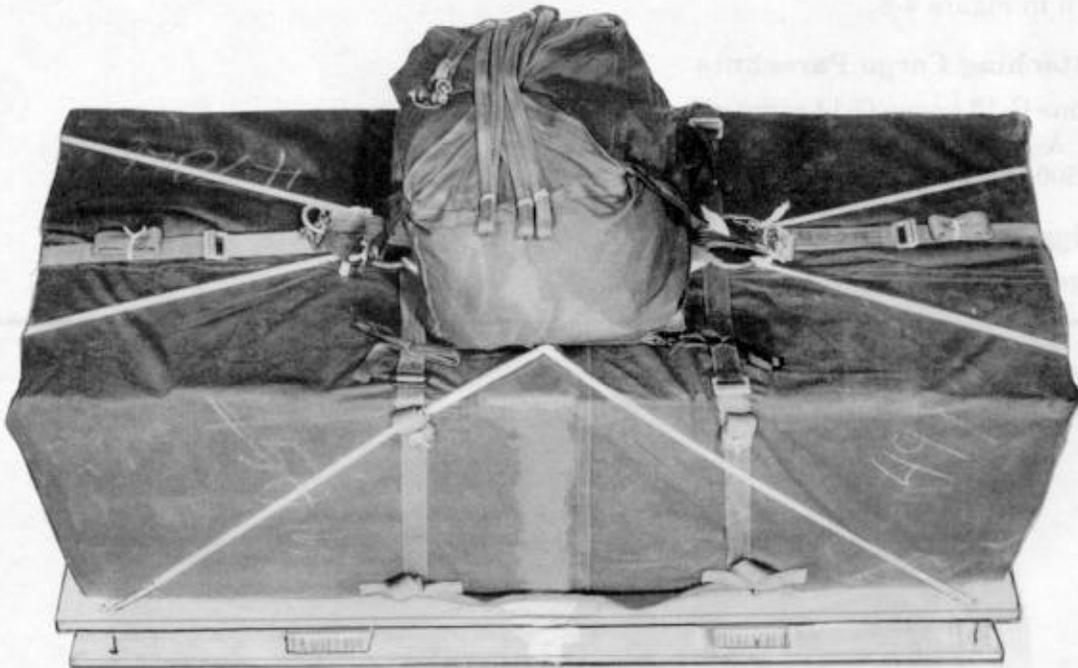
#### 4-6. Rigged Load Data

The rigged load data is given in Figure 4-9.



- ① Tie the left and right ends of the 1/2-inch tubular nylon webbing to the nearer O-ring.
- ② Cross the front and rear lengths of 1/2-inch tubular nylon webbing, and tie the ends to the opposite O-ring.

Figure 4-8. Rigged A-21 cargo bag secured to skid



**RIGGED LOAD DATA**

<b>A. Two Stinger Weapon Systems and Two Stinger Missiles</b>	
Weight .....	465 pounds
Height .....	47 inches
Width .....	28 inches
Length .....	68 inches
<b>B. Four Stinger Weapon Systems</b>	
Weight .....	500 pounds
Height .....	48 inches
Width .....	28 inches
Length .....	68 inches
<b>C. Four Stinger Missiles</b>	
Weight .....	435 pounds
Height .....	48 inches
Width .....	28 inches
Length .....	68 inches

*Figure 4-9. Rigged load data*

**4-7. Equipment Required**

The equipment required for rigging the Stinger weapon systems and missiles in an A-21 cargo bag is listed in table 4-1.

*Table 4-1. Equipment required for rigging Stinger weapon systems and missiles in an A-21 cargo bag for low-velocity airdrop.*

NATIONAL STOCK NUMBER	ITEM	QUANTITY
8040-00-273-8713	Adhesive, paste, 1-gal	As required
1670-00-242-9173	Bag, cargo, A-21	1
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb,	
	3- by 36- by 96-in:	2 sheets
	6- by 26-in	(6)
1670-00-984-3535	Parachute, cargo, G-13 or	1
1670-00-999-2658	Parachute, cargo, G-14	1
5530-00-128-4981	Plywood, 3/4-in:	2 sheets
	28- by 69-in	(2)