

Section VI

RIGGING DOUBLE ZODIAC F470U BOATS

3-61. Description of Load

The description of the load rigged in this section is given below.

NOTE: A 40-HORSEPOWER ENGINE IS THE LARGEST THAT MAY BE USED ON THIS BOAT WHEN THE BOAT IS EQUIPPED WITH THE ACCORDION FLOOR. AN ENGINE AS LARGE AS 65-HORSEPOWER MAY BE USED ON A BOAT WITH A SOLID FLOOR.

a. Inflated Zodiac F470U Rubber Raiding Craft. This boat is rigged singly or in tandem on a 75- by 144-inch SOCEP with a G-12C, G-12D, or G-12E cargo parachute. Tandem loads require two parachutes. The boats weigh 250 pounds each. When inflated, each boat is 75 inches wide, 185 inches long, and 22 inches high. The boats shown are powered by 35-horsepower outboard engines that weigh 136 pounds each with one full

6-gallon fuel tank. Six paddles weighing a total of 24 pounds are part of each boat's equipment.

b. Accompanying Load. Accompanying loads weighing at least 650 pounds but no more than 1,170 pounds must be dropped with each boat.

3-62. Preparing Platform

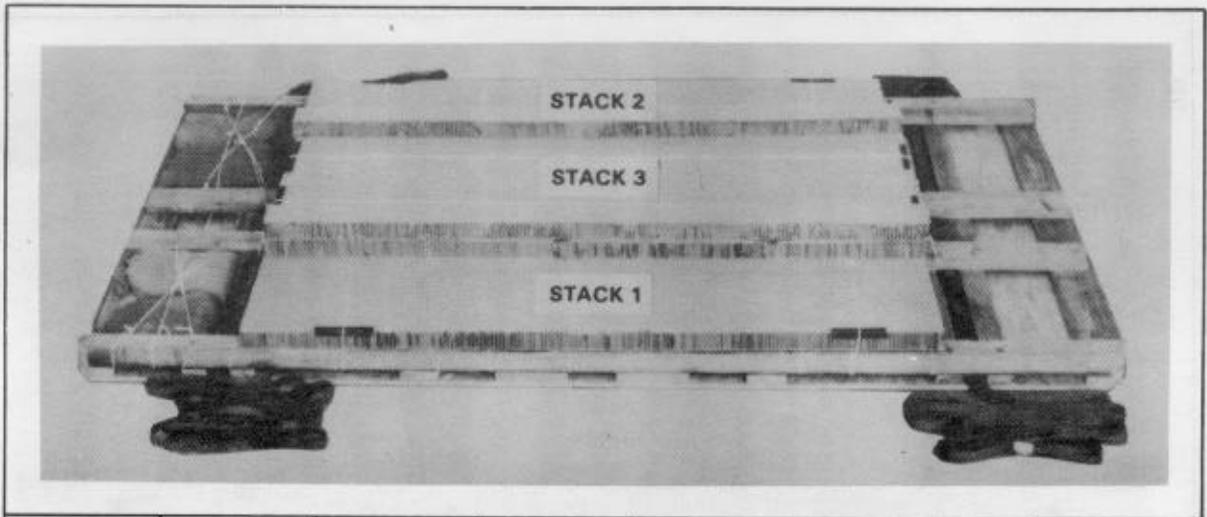
Build a new SOCEP, or inspect and repair a used platform, according to paragraph 3-2.

3-63. Installing Suspension Slings and Stowing Sandbags

Install four suspension slings on the platform according to paragraph 3-3. Stow sandbags on the platform according to paragraph 3-4.

3-64. Placing and Securing Honeycomb Stacks

Build, place, and secure the honeycomb stacks as shown in Figures 3-7, 3-55, and 3-56.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Instructions
1	1	36	96	Glue a 5- by 96-inch piece of honeycomb flush with each outside edge of the full sheet of honeycomb.
2	1	36	96	
3	1	36	96	
	2	5	96	

Figure 3-55. Honeycomb stacks for double Zodiac F470U boats prepared

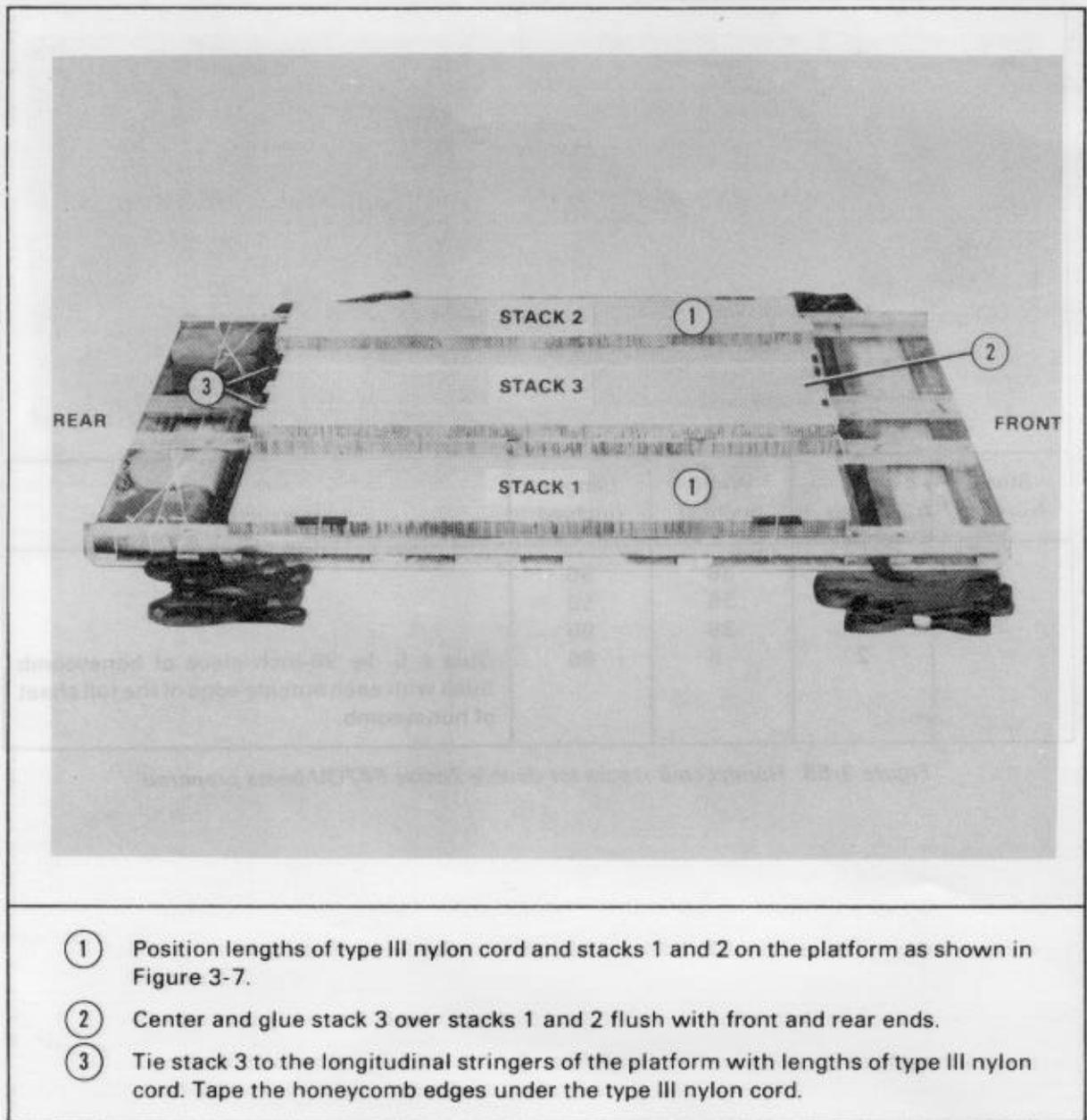


Figure 3-56. Honeycomb stacks for double Zodiac F470U boats placed and secured

3-65. Preparing Boats

Inflate the boats except for the keel. If the keel is inflated, let the air out. Prepare the boats as shown in Figures 3-57, 3-58, and 3-59.

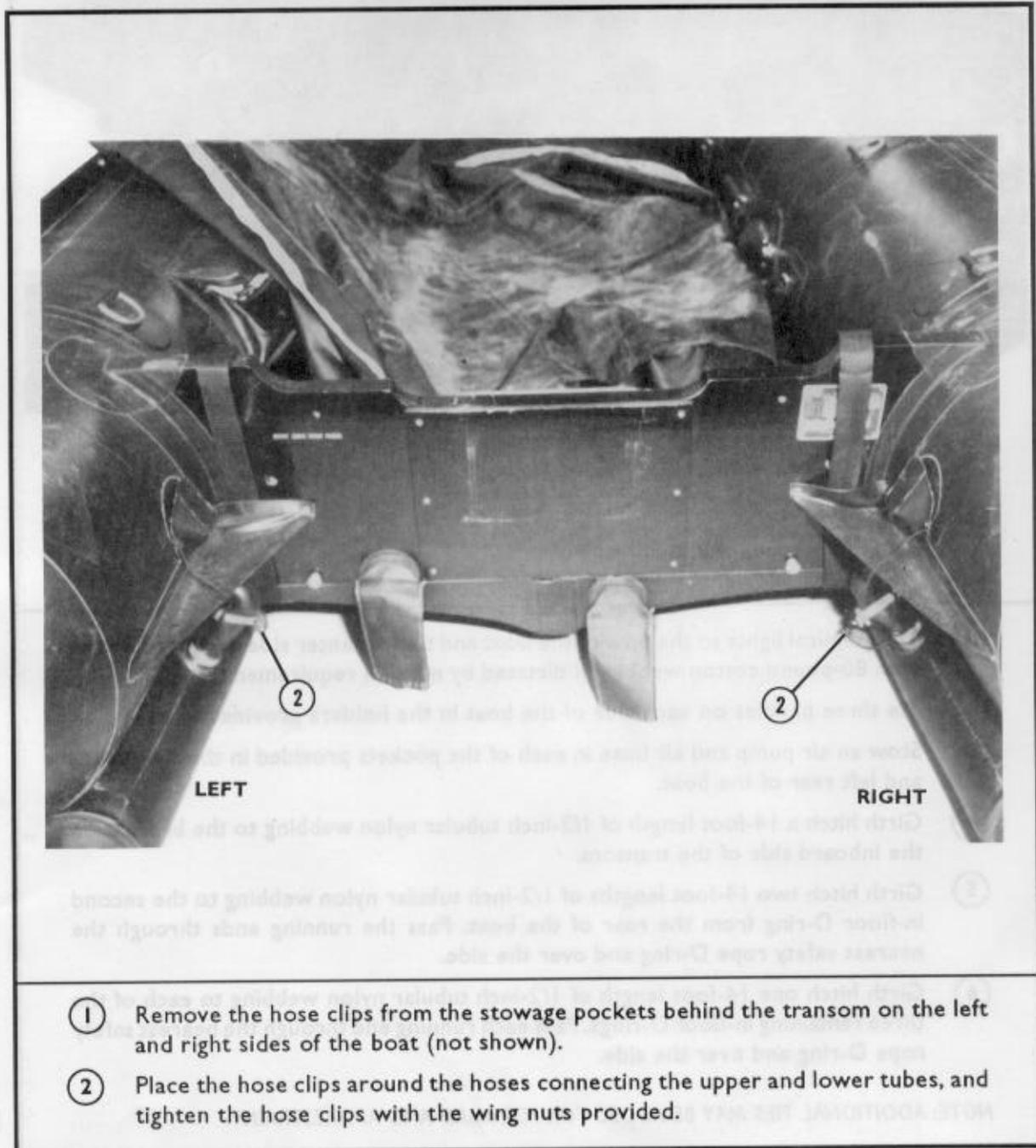
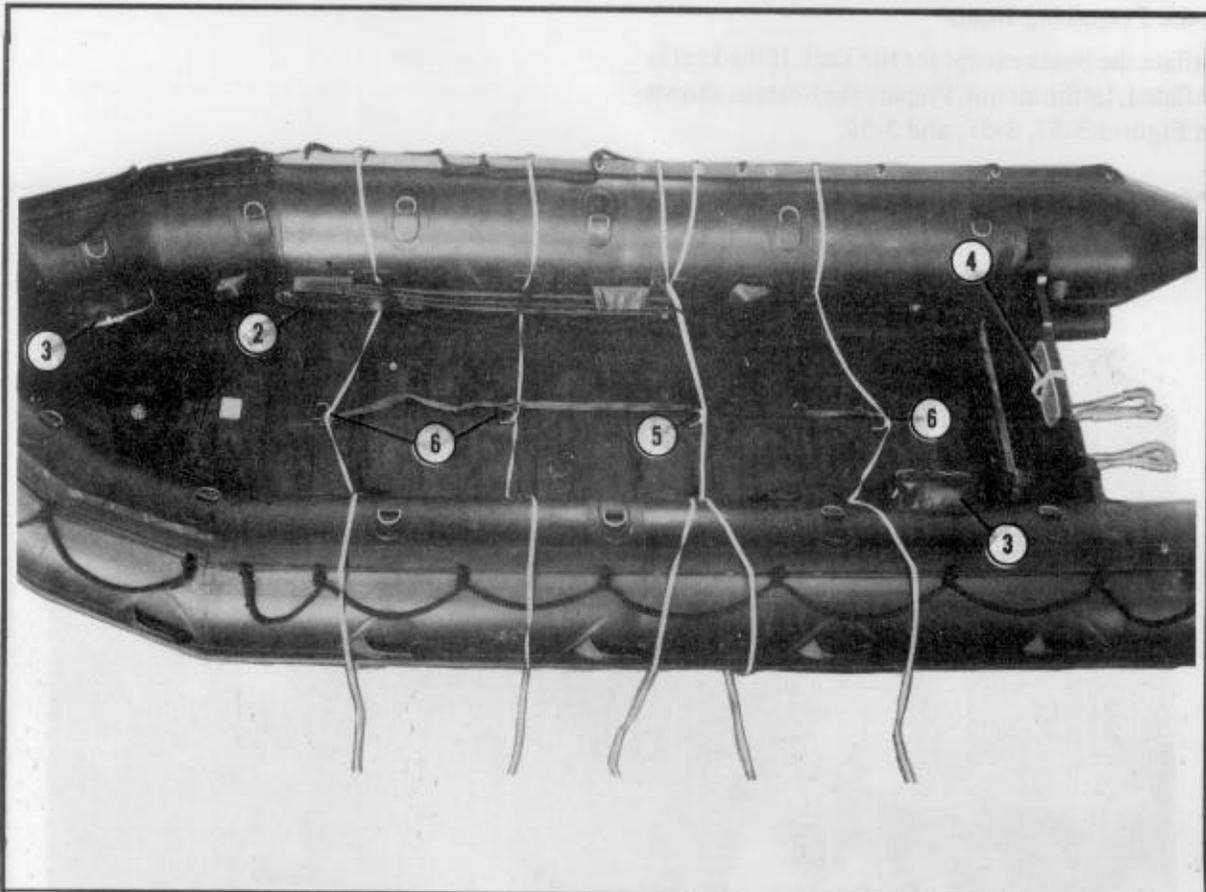


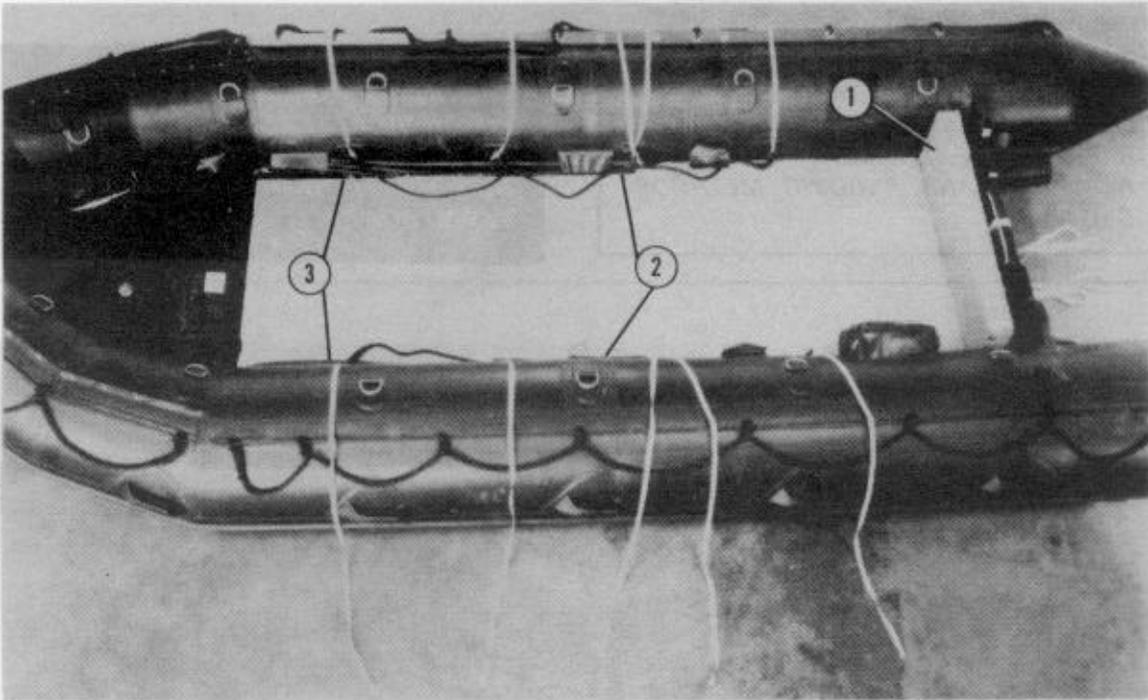
Figure 3-57. Hose clips installed



- ① Tie chemical lights to the bow of the boat and to the center side carrying handles with 80-pound cotton webbing if dictated by mission requirements (not shown).
- ② Tie three paddles on each side of the boat in the holders provided.
- ③ Stow an air pump and air hose in each of the pockets provided in the right front and left rear of the boat.
- ④ Girth hitch a 14-foot length of 1/2-inch tubular nylon webbing to the bracket on the inboard side of the transom.
- ⑤ Girth hitch two 14-foot lengths of 1/2-inch tubular nylon webbing to the second in-floor D-ring from the rear of the boat. Pass the running ends through the nearest safety rope D-ring and over the side.
- ⑥ Girth hitch one 14-foot length of 1/2-inch tubular nylon webbing to each of the three remaining in-floor D-rings. Pass each running end through the nearest safety rope D-ring and over the side.

NOTE: ADDITIONAL TIES MAY BE ADDED FOR FORWARD AND AFT RESTRAINT.

Figure 3-58. Paddles and pumps stowed and in-boat tiedowns installed



- ① Set a 13- by 36-inch piece of honeycomb against the transom.
- ② Make a 2- by 54-inch cutout on each side, starting from the same end, of a 36- by 96-inch piece of honeycomb.
- ③ Place the honeycomb in the floor of the boat with the cutouts against the paddles.

Figure 3-59. Honeycomb for engine and load stowage positioned

3-66. Positioning First Boat

Center the boat on the platform with the transom even with the front edge of the honeycomb.

3-67. Preparing and Stowing Accompanying Load

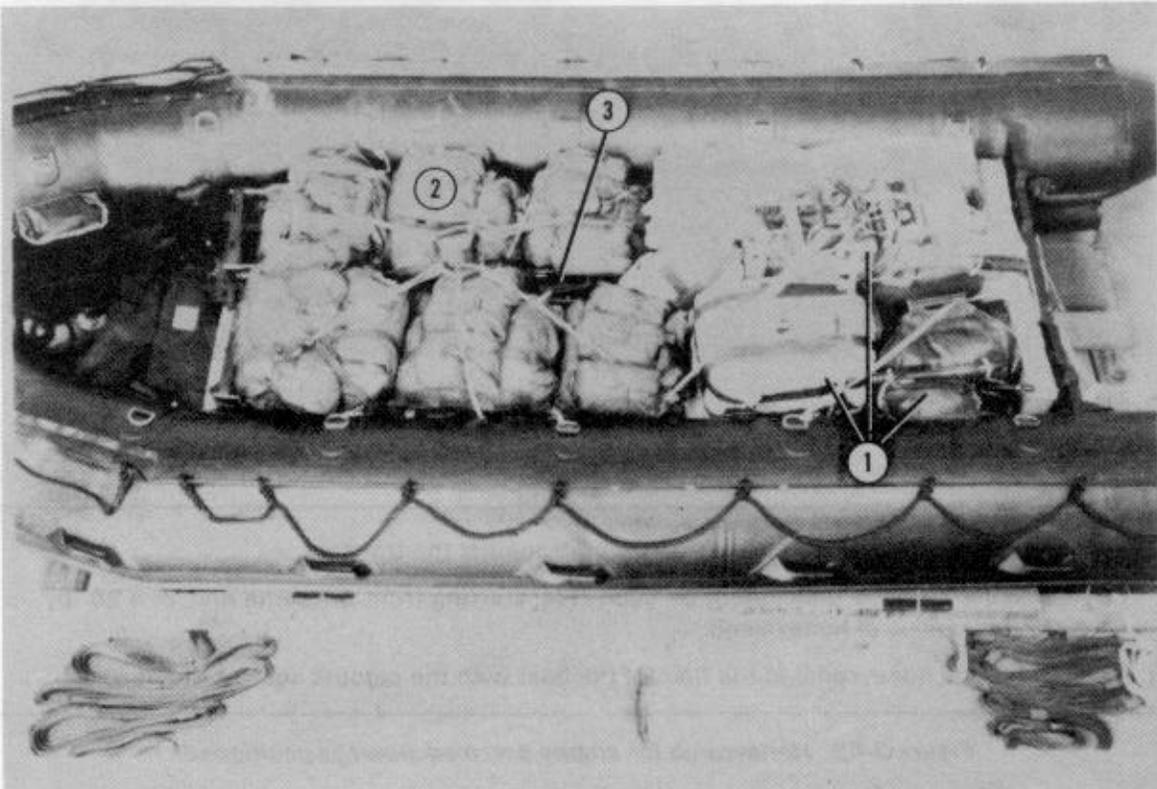
Prepare and stow the outboard engine, fuel tanks, and the rest of the load as described below.

a. Prepare the outboard engine and fuel tanks as shown in paragraph 3-9. Stow and restrain the engine, fuel tanks, and load as shown in Figure 3-60 and by adapting the procedures in Section I.

b. If only one Zodiac F470U boat is to be dropped on this platform, cover the load and finish rigging it according to Section I.

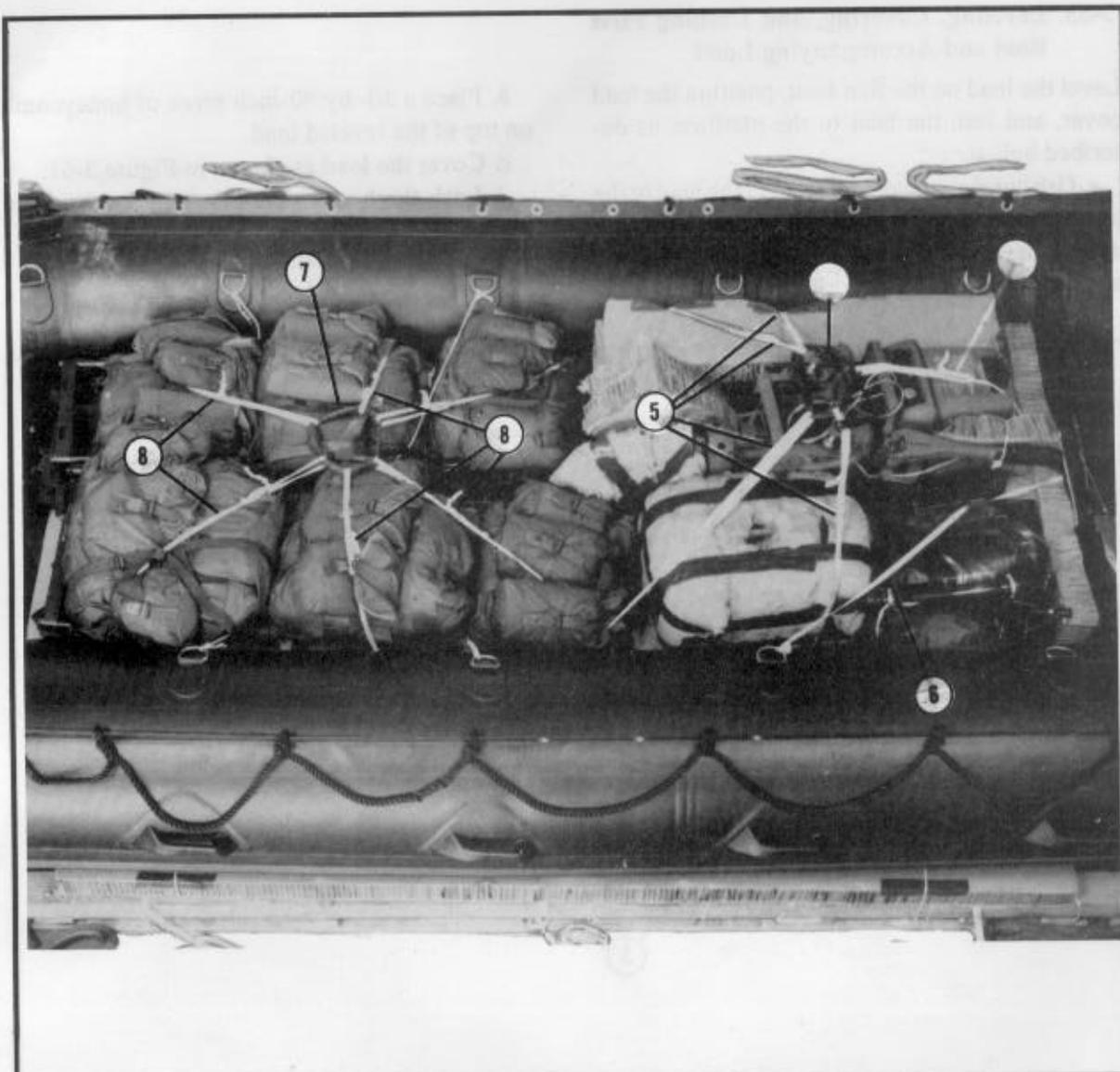
NOTE: UP TO FOUR METAL OR COLLAPSIBLE PLASTIC FUEL TANKS MAY BE RIGGED IN EACH BOAT USING THE RESTRAINT AND PADDING METHODS SHOWN.

CAUTION: AN ACCOMPANYING LOAD WEIGHING AT LEAST 640 POUNDS BUT NO MORE THAN 1,170 POUNDS MUST BE DROPPED WITH A SINGLE ZODIAC F470U BOAT.



- ① Stow the engine and fuel tanks as described in paragraph 3-9. Use the instructions that apply to the type of engine you have with your boats.
- ② Lay the rucksacks in the boat. Tie the frames together with type III nylon cord.
- ③ Place the weapons between the two rows of rucksacks. Tie them in place to convenient D-rings on the boat with two lengths of type III nylon cord.

Figure 3-60. Engine, fuel tanks, and load stowed and restrained



- ④ Lay a two-ply tiedown ring over the engine mounting bracket.
- ⑤ Pass one tie from each of the first two in-boat tiedowns on both sides of the boat and from the tiedowns on the transom through the ring. Tie each tie to a loop made in its standing end. Tie them to the ring as shown in Figure 3-21.
- ⑥ Bring the remaining ties on the transom through the handle on the plastic fuel tank. Tie it to the second D-ring on the right side of the boat.
- ⑦ Center a two-ply tiedown ring on the rucksacks.
- ⑧ Use the remaining in-boat ties to restrain the load as described in step 5 above.

Figure 3-60. Engine, fuel tanks, and load stowed and restrained (continued)

3-68. Leveling, Covering, and Lashing First Boat and Accompanying Load

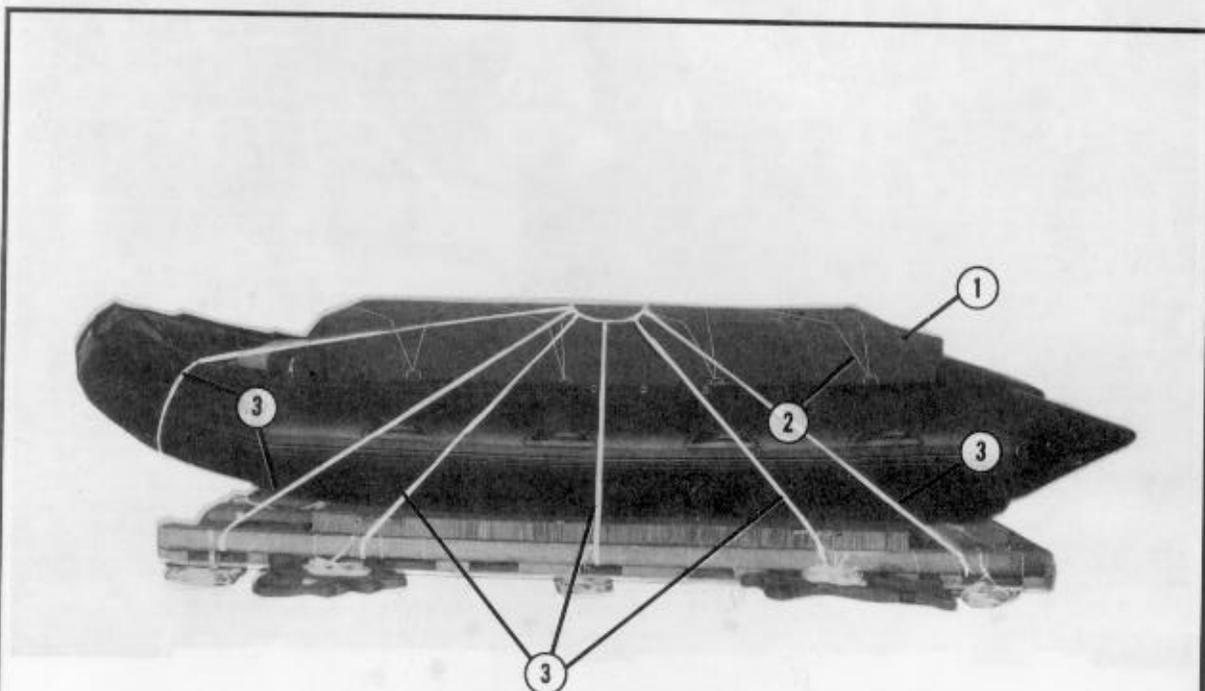
Level the load on the first boat, position the load cover, and lash the boat to the platform as described below.

a. Use honeycomb pieces to level the load to the top of the engine. If collapsible fuel tanks are used, fit honeycomb around them by standing the honeycomb on edge for support.

b. Place a 30- by 90-inch piece of honeycomb on top of the leveled load.

c. Cover the load as shown in Figure 3-61.

d. Lash the boat to the platform as shown in Figure 3-61.

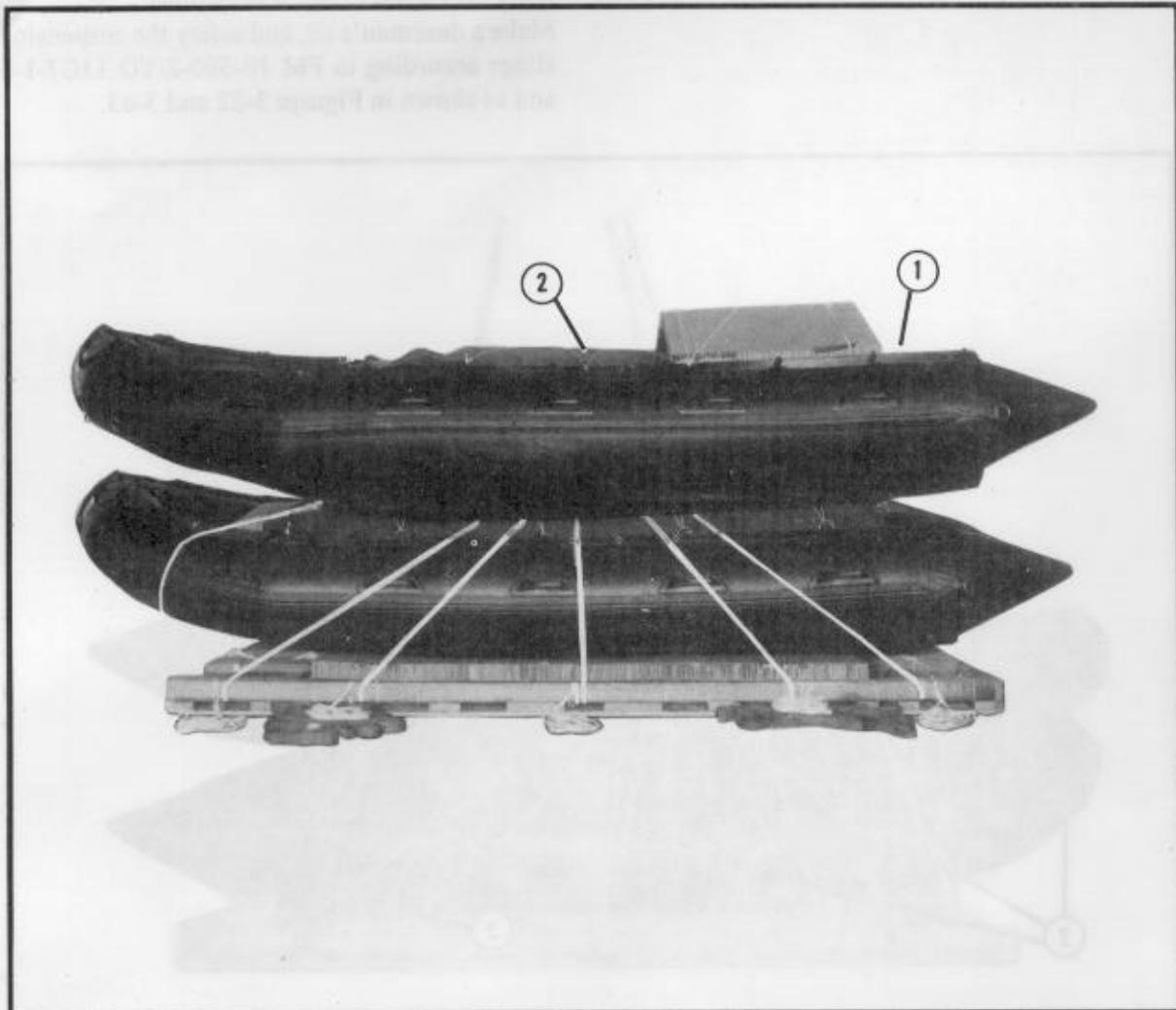


- ① Place a 5- by 10-foot piece of cotton duck cloth over the 30- by 90-inch piece of honeycomb.
- ② Tie the cloth in place with type III nylon cord using the D-rings on the sides of the boat.
- ③ Position the lashings and tie them to the tiedown ring as shown in Figures 3-20 and 3-21. Cut notches in the honeycomb to gain access to the platform tiedown holes.

Figure 3-61. Load cover tied in place and boat lashed to platform

3-69. Placing and Loading Second Boat

Prepare, place, load, and cover the second Zodiac F470U boat as shown in Figure 3-62.



- ① Inflate the second boat except for the keel (not shown). Prepare it according to directions in Figures 3-57 through 3-59. Center the second boat on top of the first boat. The transoms must be even with each other and the front edge of the platform.

NOTE: LOCAL SOP MAY ALLOW PLASTIC SHEETING BETWEEN BOATS TO AID IN DERIGGING.

- ② Prepare, stow, and cover the engine, fuel tanks, and load items according to the directions in Figures 3-60 and 3-61.

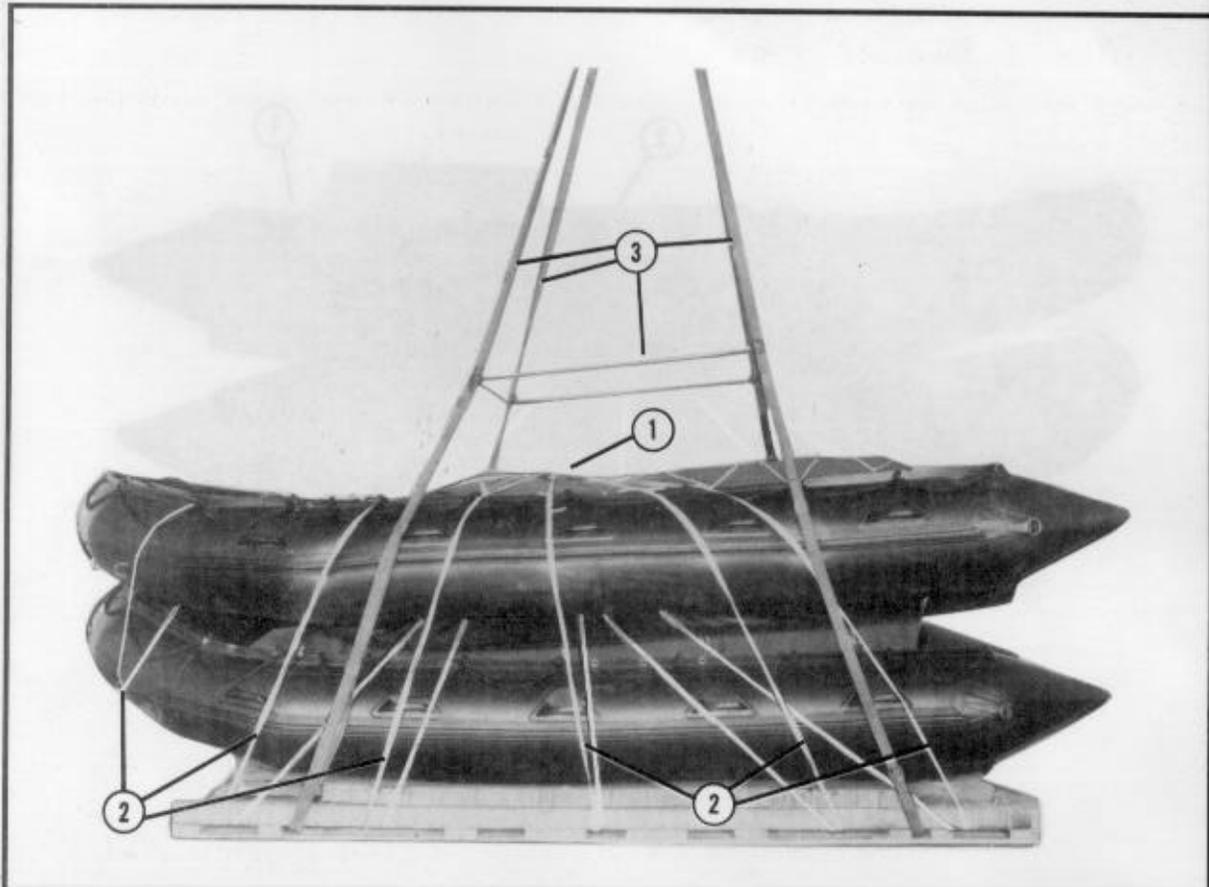
Figure 3-62. Second boat prepared, placed, and covered

3-70. Lashing Second Boat to Platform

Lash the second boat to the platform as shown in Figure 3-63.

3-71. Safeying Suspension Slings

Make a deadman's tie, and safety the suspension slings according to FM 10-500-2/TO 13C7-1-5 and as shown in Figures 3-22 and 3-63.



- ① Center the four-ply tiedown ring over the load cover of the second boat.
- ② Position the lashings and tie them to the tiedown ring as shown in Figures 3-20 and 3-21. Cut notches in the honeycomb to gain access to the platform tiedown holes.
- ③ Raise the suspension slings, and make the deadman's tie according to FM 10-500-2/TO 13C7-1-5.
- ④ Lower the slings, and tie them to the tiedown ring as shown in Figure 3-22.

Figure 3-63. Boats lashed and suspension slings safetied

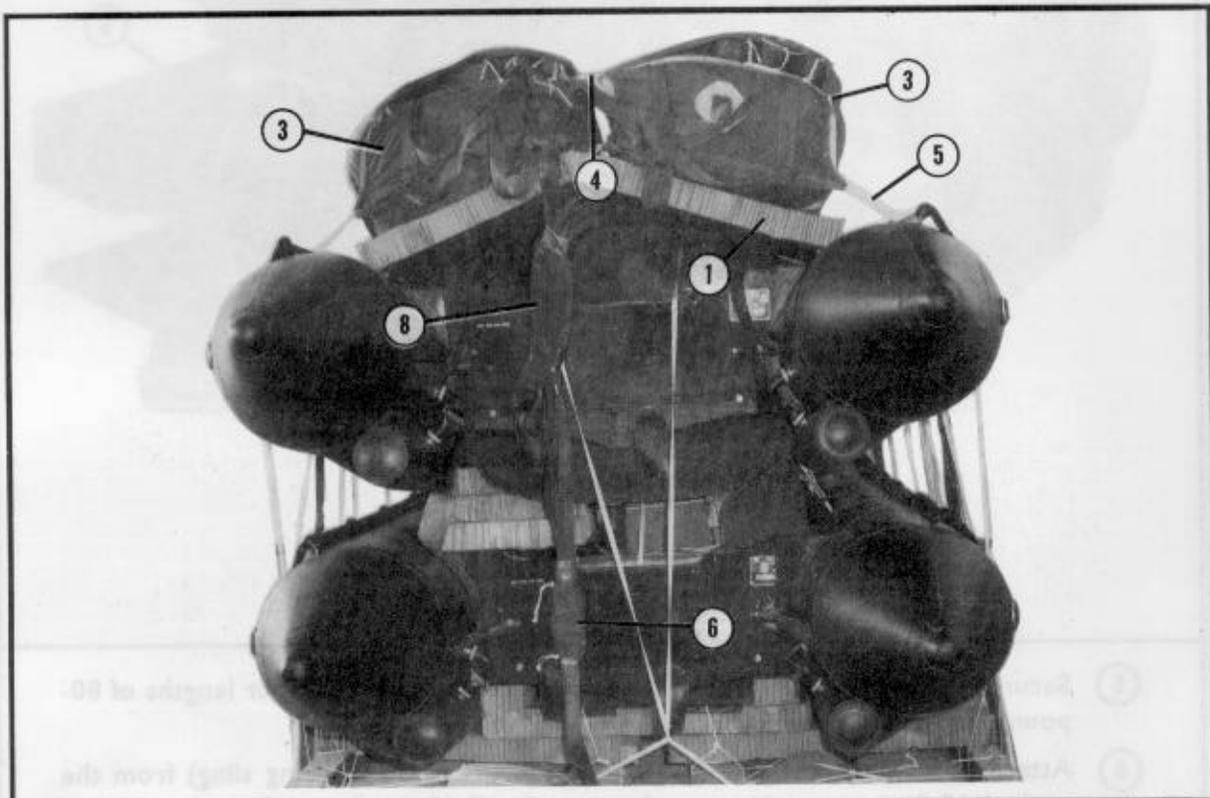
3-72. Stowing Parachutes

Stow parachutes as described below.

a. Lay a 36- by 55-inch piece of honeycomb across the load cover of the second boat as shown in Figure 3-64.

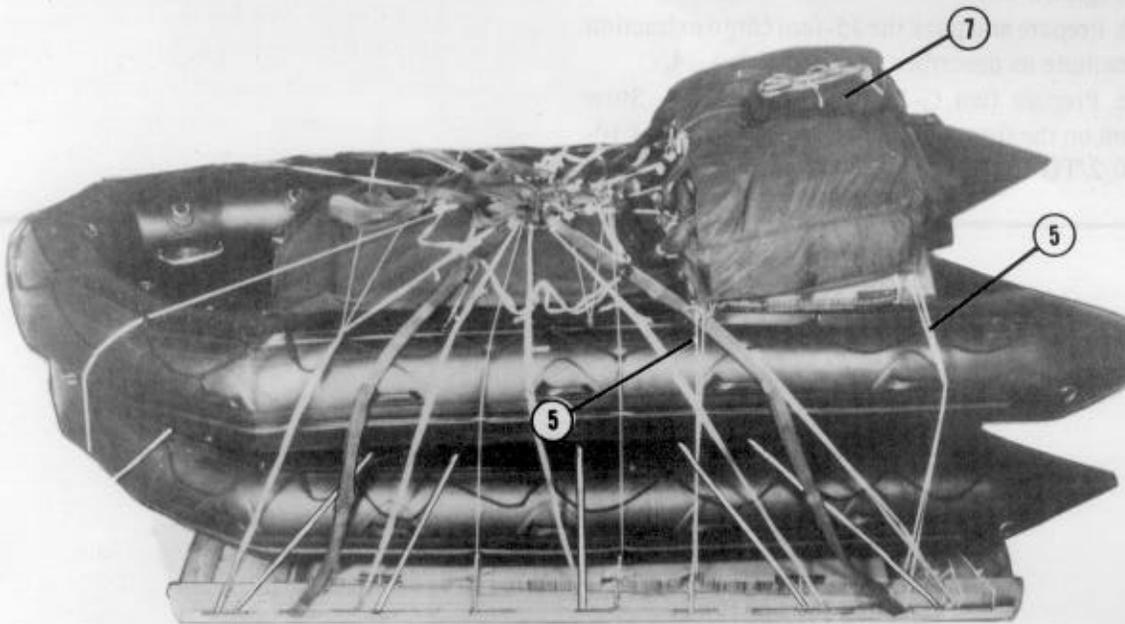
b. Prepare and pack the 15-foot cargo extraction parachute as described in paragraph 3-14.

c. Prepare two G-12 cargo parachutes. Stow them on the front of the load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 3-64.



- ① Lay a 36- by 55-inch piece of honeycomb across the load cover of the second boat. Let the honeycomb extend 1 inch past the transom.
- ② Bend the honeycomb over the load. Tape the edges of the honeycomb to prevent cutting (not shown). Tie the honeycomb down with type III nylon cord.
- ③ Set two G-12 cargo parachutes on the honeycomb with the riser extension compartment up and the bridle toward the front of the platform.
- ④ Cluster the parachutes together with single lengths of 80-pound cotton webbing.

Figure 3-64. Parachutes stowed



- ⑤ Secure the parachutes to convenient points on the load with four lengths of 80-pound cotton webbing.
- ⑥ Attach the deployment line (9-foot, type XXVI nylon webbing sling) from the packed 15-foot extraction parachute to the G-12 bridles with a type IV link assembly or a medium clevis. Cover the link or clevis with the appropriate cover.
- ⑦ Center the 15-foot cargo extraction parachute on top of the G-12 cargo parachutes. Safety it in place with ticket number 5 cotton thread.
- ⑧ S-fold the slack in the deployment line, and tape the folds. Secure the clustering clevis to the riser extension tiedown loops with a double length of 80-pound cotton webbing.
- ⑨ Remove the left secondary bag closing tie from both G-12 parachutes (not shown).

Figure 3-64. Parachutes stowed (continued)

3-73. Installing Parachute Release

Use either two 5,000-pound-capacity releases or one M-1 release on this load.

a. Prepare, install, and safety two 5,000-pound-capacity releases according to FM 10-500-2/TO 13C7-1-5.

b. Prepare, install, and safety the M-1 release according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 3-65.

NOTE: THE HYDRAULIC RELEASE IS AUTHORIZED FOR NAVY AND AIR FORCE USE.

3-74. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 3-66. If the accompanying load varies from the one shown, the weight, height, and CB must be recomputed.

3-75. Equipment Required

In addition to the items listed in Table 3-1, use one additional G-12 cargo parachute, four 36- by 96-inch pieces of honeycomb, two 5- by 96-inch pieces of honeycomb, two 30- by 90-inch pieces of honeycomb, and one 13- by 36-inch piece of honeycomb.

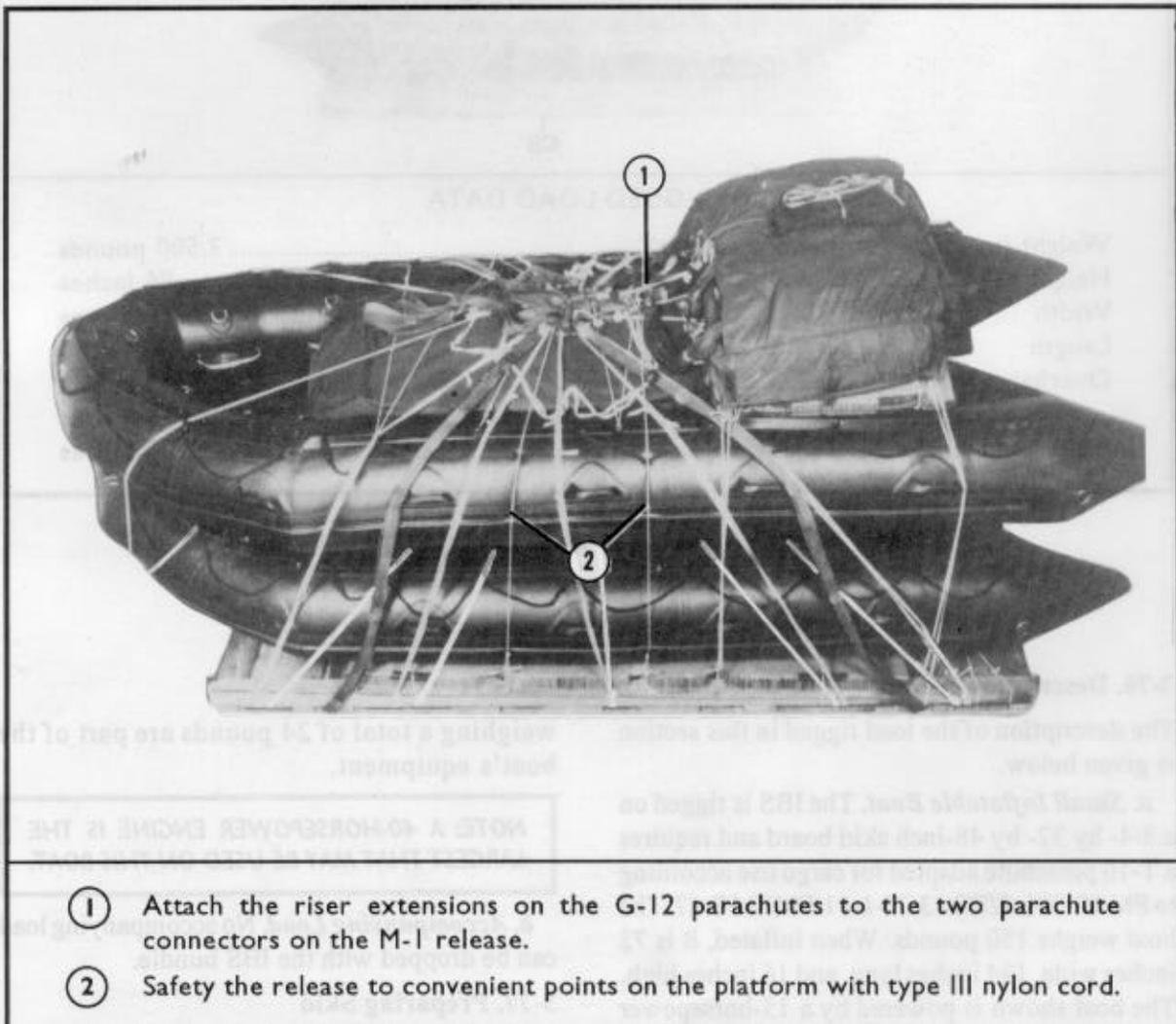
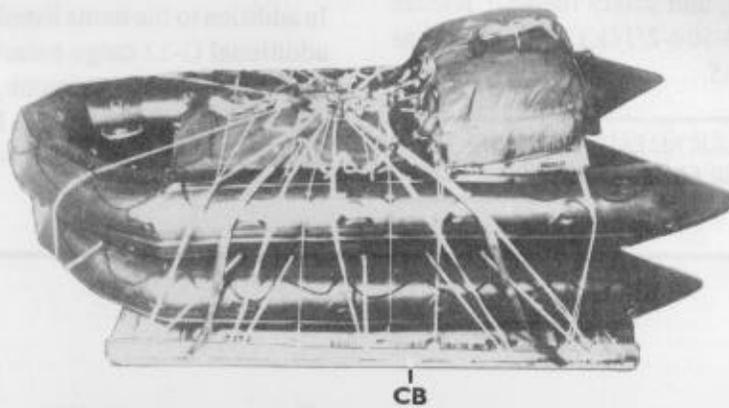


Figure 3-65. M-1 parachute release installed

CAUTION: MAKE THE FINAL RIGGER INSPECTION REQUIRED BY FM 10-500-2/ TO 13C7-1-5 BEFORE THE LOAD LEAVES THE RIGGING SITE.

NOTE: REMOVE THE PLASTIC AND TAPE FROM THE FUEL PUMP AND FILTER AND REATTACH THEM BEFORE USING THE MARS ENGINE. INFLATE THE KEEL BEFORE USING THE BOAT.



RIGGED LOAD DATA

Weight (maximum suspended weight)	3,500 pounds
Height	86 inches
Width	75 inches
Length	189 inches
Overhang: Front.....	16 inches
Rear	29 inches
CB (from front edge of platform)	60 inches

Figure 3-66. Double Zodiac F470U boats fully rigged