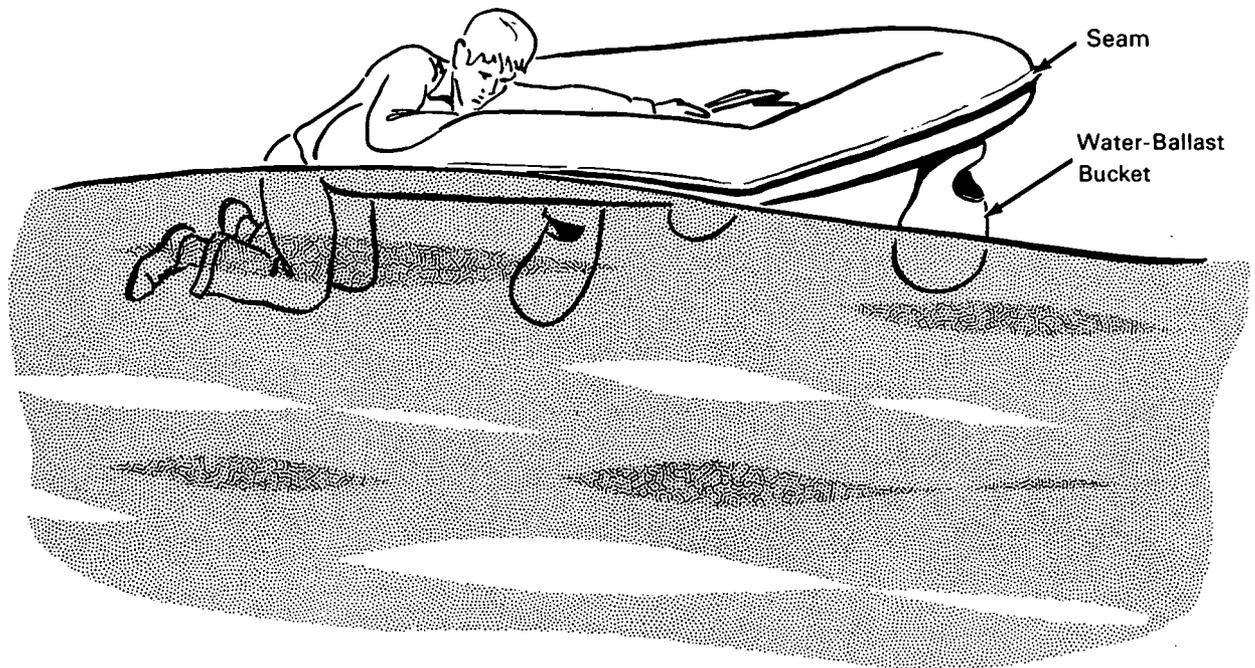


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This NASA Tech Brief is issued by the Technology Utilization Division to acquaint industry with the technical content of an innovation derived from the NASA space program.

New Inflatable Liferaft Is Nontippable



The problem: An improved inflatable liferaft for emergency use on the sea was required for Project Mercury. It was desired that the raft be lighter, more compact in packaged and inflated forms, more stable, and easier to manufacture than earlier models.

The solution: A raft of simplified construction employing lightweight materials and underwater ballast buckets as stabilizers.

How it's done: The fabric for the raft is cut to pattern and assembled on the flat using only one seam. The method of fabrication employed is relatively simple and inexpensive, provides a very strong seam, and permits compact packaging. Three water-ballast

buckets on the bottom of the raft render it nontippable, even with a man standing on its edge. The raft is inflated with carbon dioxide contained in a stainless steel cylinder which is packed with the raft.

Notes:

1. The small package size and light weight of this improved liferaft should make it desirable as part of the survival equipment on over-water aircraft and surface ships.
2. The design and construction of the raft are described in NASA Technical Note D-1083, *Development of Inflatable Components of Personal*

(continued overleaf)

Equipment for Astronaut Body Instrumentation and Survival at Sea.

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