

January 1966

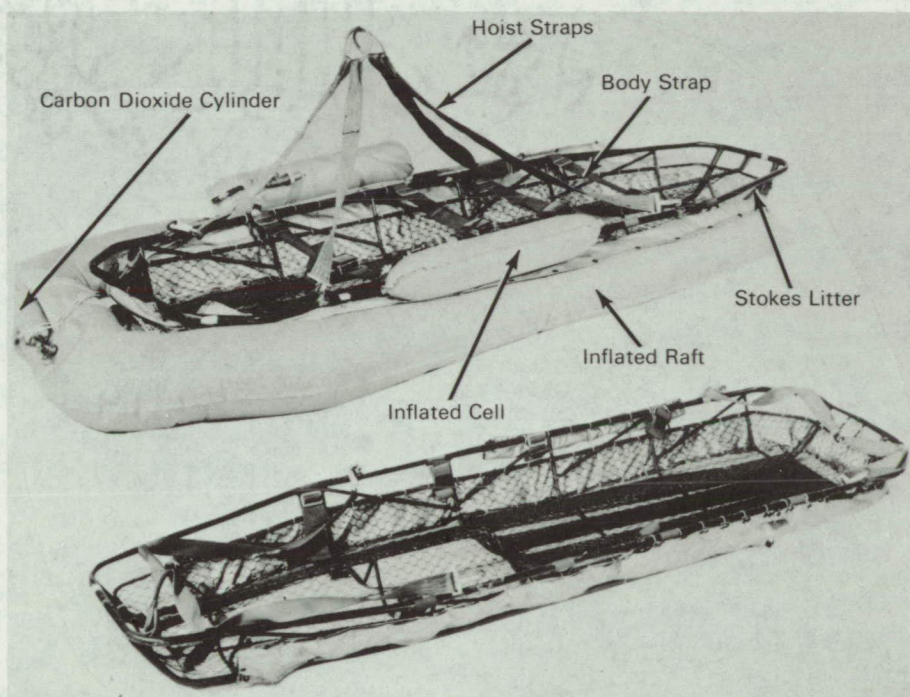
Brief 66-10019

NASA TECH BRIEF



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Buoyant Stokes Litter Assembly Used for Sea Rescue Operations



The problem:

To design a flotation assembly for rescuing an injured person from the sea. The assembly, to be manipulated by rescue workers, will be used to support a person whose bodily injuries require that he be kept immobilized during transportation to a first aid station.

The solution:

An assembly consisting of a standard Stokes litter fastened to inflatable flotation units.

How it's done:

Two inflatable cells made of a polyamide-coated neoprene material, which is resistant to abrasion and

puncture, are tied to the top supporting bars of the Stokes litter approximately 12 inches from the head section. The main flotation raft is fabricated in the shape of a U-tube having a cross-sectional diameter of 8 inches at the head and tapering to 6 inches at the foot end. Flap-type envelopes of a heavier polyamide-coated neoprene than that used for the head cells and the main flotation raft are fabricated with snap fasteners on the bottom. The envelopes are laced with a polyamide cord to the litter frame so as to cover the deflated flotation cells and raft during stowage. The inner surfaces of the raft are laced to the inner and upper portion of the envelope flaps. Upon inflation

(continued overleaf)

of the flotation cells and raft with pressurized carbon dioxide released from small cylinders, the flaps automatically open.

Seat-belt straps with a quick-release buckle are used to hold the injured person in a snug, prone position in the litter. Prior to use, the straps are kept folded by means of elastic webbing. Four hoist straps are connected to the litter frame by means of breakaway cord.

Note:

Inquiries concerning this invention may be directed to:

Technology Utilization Officer
Manned Spacecraft Center
P.O. Box 1537
Houston, Texas, 77001
Reference: B66-10019

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code AGP, Washington, D.C., 20546.

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