TULMAR
ENGINEERED FOR PROTECTION

6XL ARCTIC LIFE RAFT

Background

This product is currently being developed following an Arctic SAR incident in 2011. The goal of this development is to ensure equipment is suitable in the full range of environmental conditions across Canada that DND Search and Rescue (SAR) operate. Initially this development is targeted for the 6 person aviation life raft with later development to other various aviation life rafts that need to operate across a spectrum of environmental conditions.

Arctic Life Raft Advantages

The life raft system has been enhanced to provide benefits to survivors in either an Arctic or Marine environment. The system can be retrofitted to existing equipment thereby maintaining its qualified aircraft status. The improved canopy provides added security for survivors and reduced exposure to hypothermia. When deployed onto an ice floe the system is anchored to the ice and the life raft inflation is manually activated with nitrogen gas. An ice skirt is fitted to protect the buoyancy chamber from abrasion, chaffing and puncture from wind buffeting on the ice surface or submerged in ice pack conditions. With the canopy fully enclosed survivors are sheltered and in the event of the ice melting the raft remains inflated. Materials are being evaluated for insulation of the canopy to minimize survivor heat loss.

For regular Marine use, the life raft activates automatically on water contact. Individual survival equipment and provisions are readily available inside the life raft. To provide enhanced stability of the life raft, water pockets have been increased by 50% and larger automatically deployed sea anchors have been fitted.

6XL Arctic Life Raft

Features

- Retrofittable to current Airdrop Life Raft Systems (qualified on C130 and CF-115)
- Suitable for use on Ice/water or a mixture of both
- New nitrogen gassing system for low temperature operation
- New Mirada Operating head with manual mode for on-ice operation and automatic mode for on-water operation
- Inflatable floor designed to drain water away from survivors in wet clothing
- Fully secured insulated canopy (that may be zippered back 180 degrees for helicopter hoisting)
- Ice skirt fitted with chaffing patches to protect against abrasion and puncturing of buoyancy chamber
- Improved LED lighting (internally and externally)
- Individualized survival equipment and provisions
- Improved R & O cycle

TULMAR SAFETY SYSTEMS INC.
1123 Cameron Street, Hawkesbury, Ontario, K6A 2B8 I **T** 613-632-1282 I **F** 613-632-2030

TULMAR
ENGINEERED FOR PROTECTION

6XL ARCTIC LIFE RAFT

TECHNICAL DATA

Service capacity	6 person
Overboard capacity	9 person
Outside diameter, lower chamber	7 ft. 3 7/8 in.
Inside diameter, lower chamber	5ft. 6 3/8 in.
O/A height of raft	46 in.
Freeboard of buoyancy tubes	1 ft 7 1/4 in.
Volume of upper tube – 8.21 Ft^3	525 lb. buoyancy
Volume of lower tube – 12.35 Ft^3	803 lb. buoyancy
Displacement of main tubes only	1328 lb.
Maximum effective displacement	4478 lb.
Raft Weight	54 lb.
Packed valise size	14.5” x 26” x 9”
Operating Temperature Limit	-40^0C to 50^0C
Service Life Limit	Indefinite; except aluminum cylinder: 15 years.
Service Cycle - Life Raft Assembly	three (3) years
Service Cycle – Inflation Valve	seven (7) years
Service Cycle - Compressed Gas Cylinder	five (5) years
EPIRB Type	EPIRB Not Included

STANDARD EQUIPMENT

The following items of standard equipment are fitted to the life raft: Lifelines, Righting Strap, Footstep Ladder, Hauling-in-Line, Sea lights, Floating Knife, Rescue Line and Quoit, Anchorage Patches, Drogue and Line, Equipment Bag c/w Repair Kit, Leak Stoppers, Repair Clamps, Hand Pump, Sponge, Handbook.

SURVIVAL EQUIPMENT BAGS

Individual life raft survival equipment is stowed inside life raft to ensure easy access and can be customized to requirements. The survival equipment usually constitutes the following: First Aid Kit, Water Storage Bags, Edible Rations, Mirror/Signaling Device, Headgear, Socks, Blankets, Flashlight.

MAINTENANCE INTERVAL

The recommended period to overhaul varies upon the system being vacuum packed, the life raft container and storage conditions. If vacuum packed in a soft valise and generally well protected from the elements a period of 3 years is typical.

TULMAR SAFETY SYSTEMS INC.
1123 Cameron Street, Hawkesbury, Ontario, K6A 2B8 I **T** 613-632-1282 I **F** 613-632-2030