

GMDSS

Global Maritime Distress and Safety System



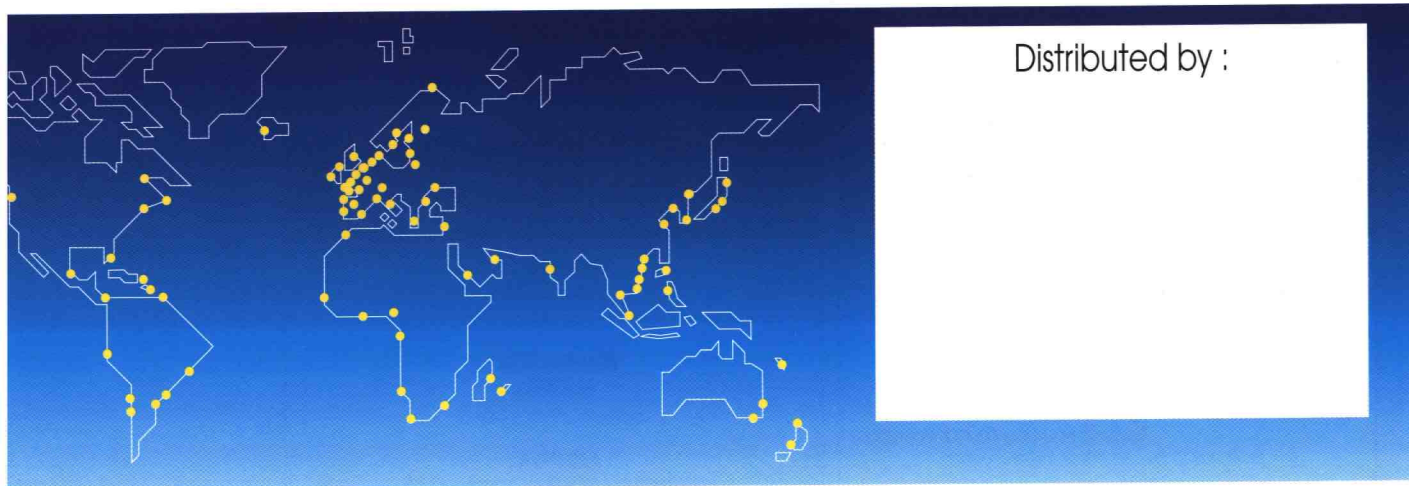
SERPE - IESM, World leader in COSPAS/SARSAT Epirbs, has completed its world renowned range of KANNAD 406 Epirbs with the RESCUER SART in order to fulfil GMDSS carriage requirements (Global Maritime Distress and Safety System).

SINCE FEBRUARY 1ST 1995 : All ships between 300 and 500 GRT must carry one SART.
All ships of 500 GRT and over must carry two Sarts.
All new buildings must fully comply with GMDSS requirements.

*Make sure you have your KANNAD Epirb and your RESCUER SART(s) on board.
In an emergency, the RESCUER SART, light and compact, is easily taken into a liferaft for easy and safe installation by the survivors.
Numerous national type approvals world wide for immediate carriage.*

SINCE FEBRUARY 1ST 1999 : All ships must fully comply with all GMDSS requirements.
Make sure you have your KANNAD Epirb and your RESCUER SART(s) before this deadline.

SERPE-IESM offers a world wide service and distribution network for your safety.



SERPE-IESM reserves the right to alter or modify any of the above specifications.



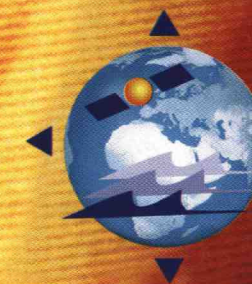
SERPE-IESM

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RESCUER

9 GHz SART



Martec
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RESCUER FOR YOUR SAFETY AT SEA



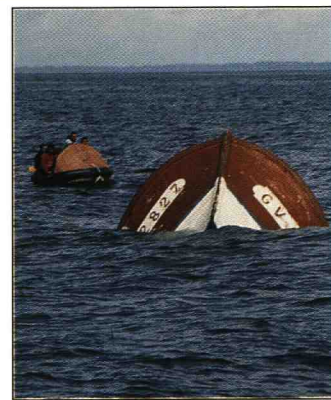
Liferaft fitted with RESCUER SART and KANNAD Epirb in operation after release from float free container



Loud beeping indicates to survivors that the 9 GHz transmission has been received by the radar of vessels and aircraft in the area.

OPERATING PRINCIPLE

The Search and Rescue Radar Transponder (SART) is a very simple 9 GHz receiver/transmitter which provides a position. The fundamental function of the SART is to indicate its position by producing range and bearing information on any 9 GHz radar screen (with no modification). The SART code displayed on the radar screen is a series of dots extending radially outwards from the location of the transponder. The series of dots represents a range of approximately 10 nautical miles. This indication is an internationally accepted signal for search and rescue operations. In addition, the SART gives confidence to survivors by giving a loud signal and visual indication of the approach of assistance. In operation, the SART responds automatically using a 9 GHz high-speed frequency sweeping signal with a pulse emission period of 100 μ s which is synchronous with any received scanning pulse. The SART response signal scans all frequencies in the 9 GHz radar band.



WHY YOU SHOULD CHOOSE THE RESCUER SART

IT OPERATES IN THE WATER

The RESCUER SART with a sea level range of 10 nautical miles exceeds IEC 1097-1 specifications which require a range of at least 5 nautical miles, with the antenna 1 meter above sea level. Sea trials have also shown that the signal is picked up 2 nautical miles away by a vessel when operating in the water. This added advantage means that RESCUER can be thrown into the water first, saving precious time, while waiting for the liferaft to deploy for fixing on the canopy.

EASY TO USE

In an emergency, the RESCUER SART is removed from its bracket and easily taken into a liferaft thanks to its small size and light weight for easy and safe installation by the survivors.

HIGH STABILITY

The velcro band supplied with the RESCUER SART enables safe and easy installation inside the liferaft canopy for better stability and good transmission in heavy seas. 2 adaptation kits are available on option :
 - The mounting plate in marinised rubber
 - The telescopic pole in fibreglass.

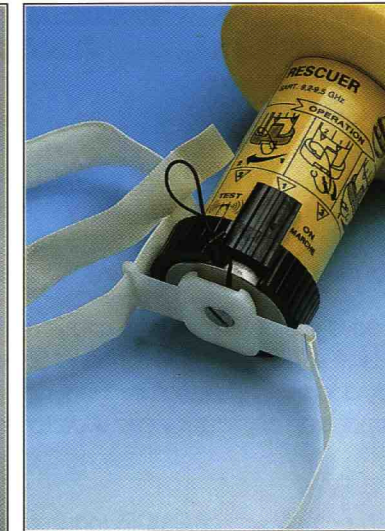
TYPE APPROVAL TO :

- IEC 1097-1
 - WHEELMARK CERTIFICATE
- NUMEROUS NATIONAL APPROVALS WORLD WIDS**

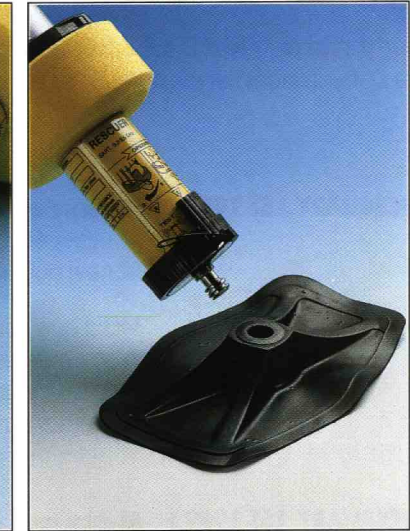
THE RESCUER SART



THE RESCUER SART



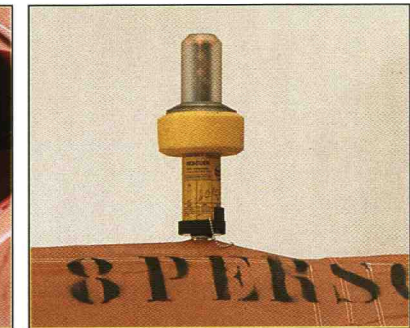
Standard installation with velcro band



Optional installation with rubber mounting plate



Safe and easy installation inside the canopy for good stability and optimum transmission.



Installation on top of the canopy with rubber mounting plate

GENERAL CHARACTERISTICS

Temperature range : -20° C + 55° C
 Storage temperature : -30° C + 65° C

BATTERIES :
 Operating life at -20° C : Up to 100 hours stand-by.
 8 hours continuous operation.
 Operating life at +55° C : Up to 100 hours stand by.
 Up to 15 hours continuous operation.
 Batteries to be replaced every 4 years

BODY :
 Made of polycarbonate and yellow coated aluminium with high resistance to shocks.

DIMENSIONS :
 Body diameter = 62 mm
 Flotation collar diameter = 140 mm
 Height = 300 mm

WEIGHT :
 940 Gr

MOUNTING BRACKET

TECHNICAL SPECIFICATIONS

FREQUENCY :
 9.2 - 9.5 GHz

POLARISATION :
 Horizontal

ANTENNA :
 Horizontal : omnidirectional < ± 2 dB
 Vertical : $\pm 12.5^\circ$

TRANSMITTER :
 Sweep rate
 Forward : 7.5 μ s nominal $\pm 1 \mu$ s
 Return : 0.4 μ s nominal $\pm 0.1 \mu$ s
 Radiated power : > 400 mw E.I.R.P.
 Response delay : < 0.5 μ s nominal

RECEIVER :
 Effective sensitivity : better than - 50 dB m
 Recovery time : less than 10 μ s