Current as at 01st December 2009
Version 1 A

SHIPBORNE RETRIEVAL STRAP

Specifically designed for the requirements of the Royal Australian Navy

SOS-5430 Large

NSN: 1670 66-158-4004

SOS-5432 Standard

NSN: 1670 66-158-4003

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General Description

The S.O.S Marine Ship-borne Personnel Retrieval Strap comes in two (2) sizes standard and large, it has been designed to assist in the rescue of personnel from the sea and used in the recovery of personnel from confined spaces. The retrieval strap is also used in the transfer of personnel at sea between ships. The retrieval strap is not to be used for aviation purposes under any circumstances.

The strap consists of a central padded comfort section encased in a durable, High-visibility Polyester outer cover.

A webbing lift strap passes through the centre section and each arm of the strap ends in a stainless steel ‘D’ ring.

A grab handle has been sewn around the foam filled comforter and is only to be used to assist retrieval in or onto ship.

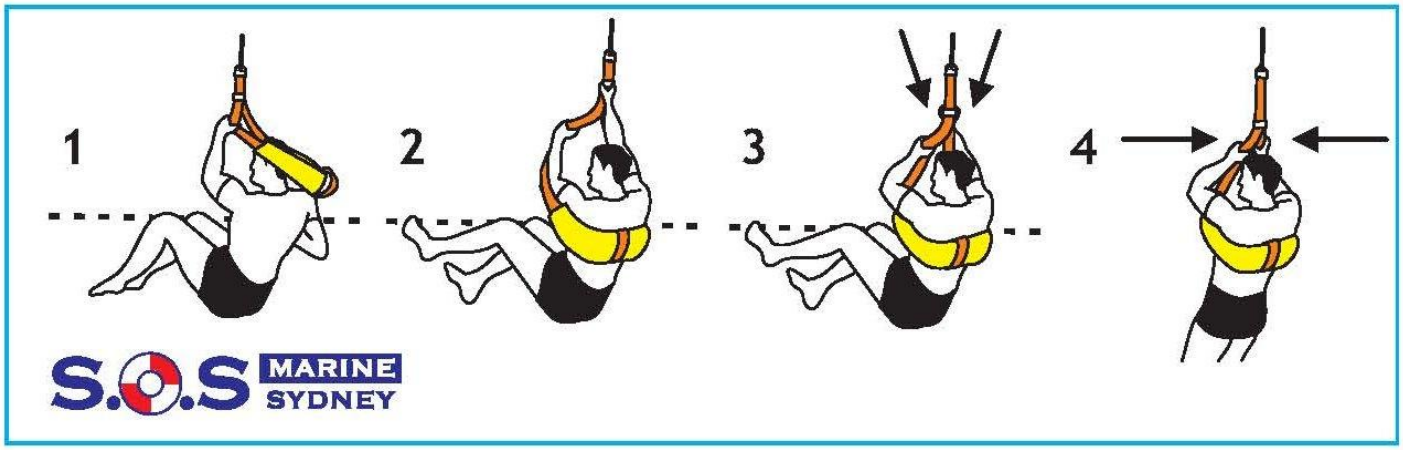
SOLAS grade reflective tape has been extensively used on the outside of the foam-padded comforter for easy identification and detection at night.

Personnel must be trained in the proper and safe use of this item.

OPERATOR INSTRUCTIONS.

1.0 DONNING: Train yourself in the use of this Device.

It is *vital* the Retrieval Strap is correctly adjusted to fit the user.



1.0.1 Place the retrieval strap around the back and upper chest of the wearer's body.

1.0.2 Make shore that the retrieval strap is under the wearer's arm-pits before adjusting.

1.0.3 Move the adjusting collar as close to the wear's body as possible.

1.0.4 The wearer can then be lifted via the winching system.

1.1 SAFETY REQUIREMENTS.

NOTE: It is imperative that the winching hook is placed through BOTH D-RINGS when lifting.

1.1.1 The safe working load (SWL) for the Rescue Strap is 272 kgs.

1.1.2 Capable of lifting personnel of various sizes.

1.1.3 Capable of lifting personnel wearing additional foul weather clothing (ie Immersion Suits, Boarding Party Vests) and fully inflatable lifejackets.

1.1.4 Grab handle has been sewn around the foam outer polyester cover and is only to be used to assist in retrieval. (It is not to be used as a lifting point)

1.2 INSPECTION SERVICE.

Inspection of Personnel Retrieval Strap for signs of wear and abrasions:

1.2.1 Check webbing and stitching and attachment points for damage, deterioration or contamination by oil's lubricants or other contaminating substances, isolate for repair any SRS that shows these symptoms.

1.2.2 Inspect all metal fittings for signs of Damage, Cracking, Distortion and Corrosion, isolate for repair any SRS that shows these symptoms.

1.2.3 Inspect all stencil markings and labels that the lettering is clear and legible, isolate for repair any SRS that shows these symptoms.

1.2.4 Check the date of expiry on the strap is in-service and that it will not be out of date before the next service.

1.3 APPLICABLE DOCUMENTS.

The following documents are applicable to this design specification:

1.3.1 Australian Standard AS/NZS 1891.1: 1995 Industrial fall-arrest systems and devices - Safety belts and harnesses.

1.3.2 Australian Standard AS/NZS ISO 9001: 2008 Quality System -- Model for Quality Assurance in Design, Development, Production, Installation and Servicing.

1.3.3 RTA Test report: TR2009/789 Certification of the HRS with the Australian Technical Standard Order ATSO-C1003 Clause 2(ii) (Static test requirements of Appendix E of AS/NZS 1891-1:1995 Amendment No.4.
For Retrieval Strap Appendix E -15KN static test.

1.3.4 Drawing number 260210 issue (1)

1.4 Testing.

1.4.1 Certification via a test certificate for proof load test of 272 kg / 600 lbs has been conducted for each item prior to the outer cover being fitted.

1.4.2 Following each proof load test and prior to assembly of SRS, an inspection of All stitching on load bearing webbing is to be conducted to ensure no damage has occurred.

1.5 General Construction.

Each Shipborne Retrieval Strap shall be permanently and legibly marked with the following information:

1.5.1 Manufacturer's name, trade name or trademark.

1.5.2 A unique serial number.

1.5.3 The safe operating load.

1.5.4 Month and year of manufacture.

1.5.5 Month and year by which the item must be removed from service.

1.5.6 Operating instructions shall be detailed on the strap.

1.5.7 Four Hypalon grip pads on outer cover.

1.5.8 Unaffected by prolonged immersion in saltwater.

1.5.9 Closed cell plastic foam, made from a blend of PVC and Nitrite rubber.

Large SOS-5430

1.6 TECHNICAL SPECIFICATION SOS-5430.

Length – Flat	2380mm
Width – Flat	140mm
Weight	1.2 kg
Colour	High Visibility Yellow with Neon Orange Webbing
Manufactured to;	AS/NZS 1891.1:1995.
'D' Rings	Bright Finish Stainless Steel, meets or exceeds 15 kN in breaking strength AS/NZS 1891.1:1995. Amendment No4 Appendix E
Adjuster	A4019, 44mm x 1.5 Polyester with abrasion resistant lining, meets or exceeds 5 kN in breaking strength AS/NZS 1891.1:1995. Sect 3.3.3.
Webbing	A4019, 44mm x 1.5 Polyester, meets or exceeds 15 kN in breaking strength AS/NZS 1891.1:1995. Sect 4.2.2.
Webbing Resistance to Light	Retains min 70%, 12 kN, strength IAW AS/NZS 1891.1:1995. Sect 4.2.3.
Outer Cover	1000 denier High-Tenacity, air textured filament polyester with polyurethane coating.
Sewing Thread	Serafil 10, continuous filament, high-tenacity, polyester, tensile strength 19,000 cN

Standard SOS-5432

1.7 TECHNICAL SPECIFICATION SOS-5432.

Length – Flat	2060mm
Width – Flat	140mm
Weight	1.1 kg
Colour	High Visibility Yellow with Neon Yellow Webbing
Manufactured to;	AS/NZS 1891.1:1995.
'D'-Rings	Bright Finish Stainless Steel, meets or exceeds 15 kN in breaking strength AS/NZS 1891.1:1995. Amendment No4 Appendix E
Adjuster	A4019, 44mm x 1.5 Polyester with abrasion resistant lining meets or exceeds 5 kN in breaking strength AS/NZS 1891.1:1995. Sect 3.3.3.
Webbing	A4019, 44mm x 1.5 Polyester, meets or exceeds 15 kN in breaking strength AS/NZS 1891.1:1995. Sect 4.2.2.
Webbing Resistance to Light	Retains min 70%, 12 kN, strength IAW AS/NZS 1891.1:1995. Sect 4.2.3.
Outer Cover	1000 denier High-Tenacity, air textured filament polyester with polyurethane coating.
Sewing Thread	Serafil 10, continuous filament, high-tenacity, polyester, tensile strength 19,000 cN

1.8 SERVICING.

1.8.1 The ship-borne personnel retrieval strap has a life of eight (8) years with in-service life of six (6) years from the date of manufacture.

1.8.2 The SRS should be serviced a minimum of once every three (3) years, returned to SOS Marine or its agent for complete and authorised repair and service.

1.8.3 Date service window to be updated on each three (3) yearly service.

NOTE: It is recommended that SRS that are continuously in use are to be inspected from initial issue and checked for serviceability every six (6) months.

The point of contact for service bookings is Ron Smith. Email: ron@sosmarine.com.au

1.9 CLEANING AFTER IMMERSION IN SALT WATER.

NOTE: Hand Wash (ONLY) 

1.9.1 After immersion in salt water the SRS assembly must be rinsed in fresh water.

1.9.2 Do not use Chlorine bleaches or washing detergents.

1.9.3 When cleaning oil and stains should be removed by washing with acid-free liquid laundry detergent and rinsed thoroughly in fresh water.

1.9.4 Allow to dry naturally. (Keep out of direct sunlight and close contact with radiators or radiant heat sources)

NOTE: Under no circumstances should you try to repair the SRS yourself, if you are in any doubt regarding the serviceability of your SRS, it should be returned to SOS Marine or its agent for a complete authorised repair and service.

DO NOT

CAUTION

DO NOT wash in washing machine or spin or tumble dry.
DO NOT use other than recommended solvents or cleaning agents

NOTE: When SRS assembly is completely dry it must be subjected to the full maintenance procedure.

1.10 STORAGE.

1.10.1 Store the SRS in a dry, well ventilated area. It must not be subjected to extremes of temperatures, do not expose to bright sunlight for extended periods when not in use.

1.10.2 It should not be stored in compressed or cramped conditions which may cause damage or deterioration.

1.10.3 It is crucial that the SRS is hung vertically or lay flat at all times when not in use in order to protect the internal components.

1.10.4 If the storage conditions are met, the SRS can remain in storage between maintenance periods.

Manufacturing for the future.