RESCUE BOAT SEA SCOOPA

International Patent Pending

Safety device for rescuing a Man Overboard (MOB)

Operating Instructions

5th June 2011

WARNING AND DISCLAIMER

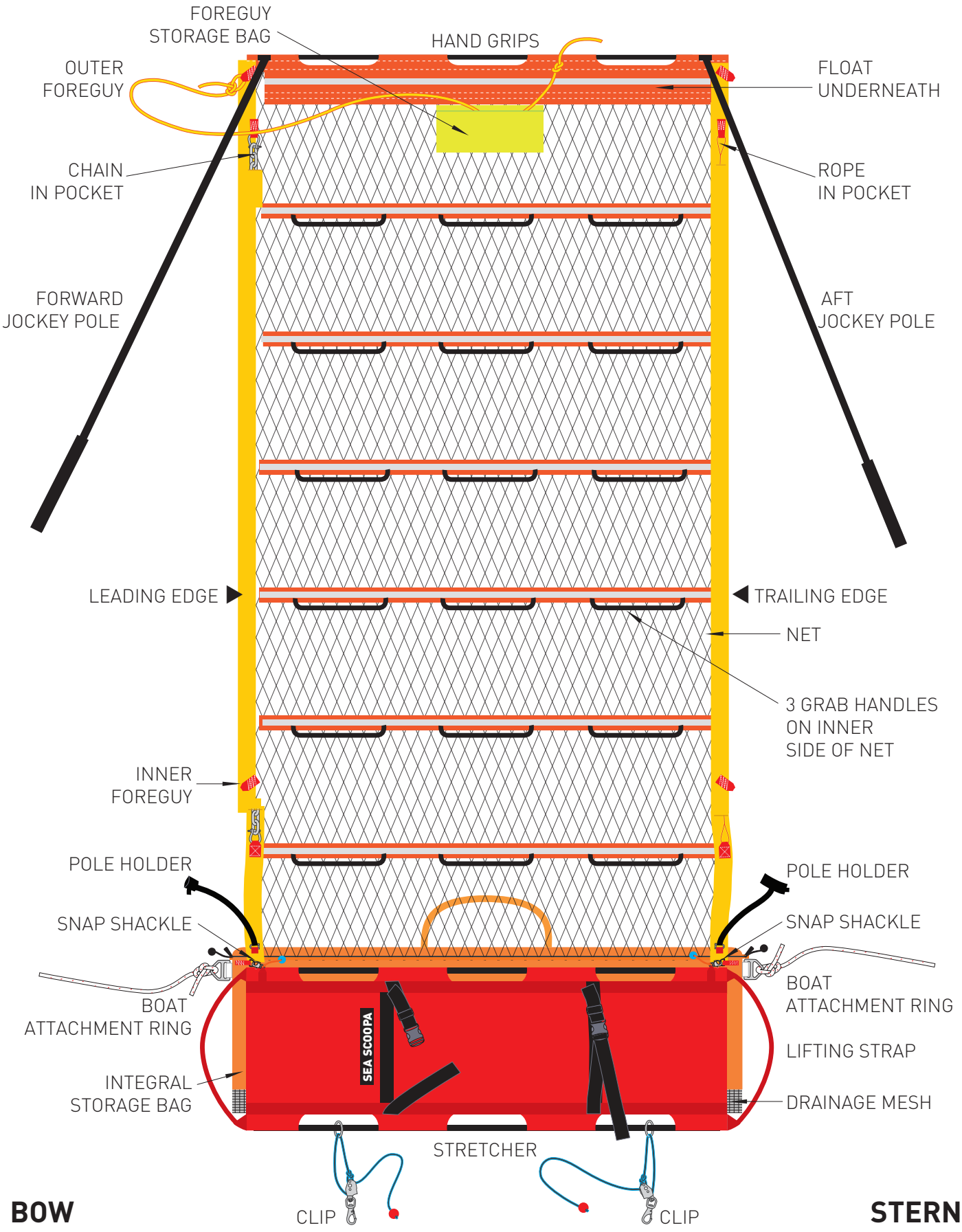
This device is a lifesaving AID. No guarantee is given or implied that it will retrieve a Man Overboard in all situations – especially in severe conditions of wind or wave where the degree of difficulty may be overwhelming.

PLEASE NOTE

1. BE AWARE REPEATED PRACTICE IS ESSENTIAL TO ATTAIN AND MAINTAIN PROFICIENCY, PARTICULARLY IN DIFFICULT CONDITIONS.

2. THIS DEVICE MUST BE PACKED, DEPLOYED AND USED IN AN ORDERLY AND STEREOTYPED SEQUENCE.

3. BEFORE YOU TRY IT “YOUR WAY” PLEASE TRY “OUR WAY” FIRST. READ THESE INSTRUCTIONS VERY CAREFULLY.


FOREGUY
STORAGE BAG
HAND GRIPS
OUTER
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FLOAT
UNDERNEATH
CHAIN
IN POCKET
ROPE
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FORWARD
JOCKEY POLE
AFT
JOCKEY POLE
LEADING EDGE
TRAILING EDGE
NET
3 GRAB HANDLES
ON INNER
SIDE OF NET
INNER
FOREGUY
POLE HOLDER
POLE HOLDER
SNAP SHACKLE
SNAP SHACKLE
BOAT
ATTACHMENT RING
BOAT
ATTACHMENT RING
SEA SCOOPA
LIFTING STRAP
INTEGRAL
STORAGE BAG
DRAINAGE MESH
STRETCHER
CLIP
CLIP
BOW
STERN

STEP ONE – PREPARATION

1. The Sea Scoopa should be mounted on the same side of the boat as the helm and engine controls so that the helmsman can do 3 things:

1. continuously sight the person in the water
2. steer the boat
3. be ready to put the engine into neutral.

Be aware that propeller injury is a major hazard with RIB rescues as the propeller is very close to the victim and it must be rotating to steer the boat. For this reason we agree with Surf Life Saving Australia and believe a propeller guard is MANDATORY for dedicated rescue RIBs.

2. The integral storage bag can be kept on the cockpit floor of the boat ready to be attached when a rescue is imminent or else left permanently attached. **(Fig.1)**

The device is set up in the factory for starboard side deployment and the bow end is labelled accordingly. (Fig. 1A)

Fig.1

Fig.1A

With **inflatables** the eyelets on the bag are secured to strong points on the inner side of the pneumatic tube. **(Fig.2)**

Fig.2

With **powerboats** the bag is tightly lashed to the INBOARD side of the gunwale especially if a handrail is present. **(Fig.3)** To further facilitate this an extra eyelet is positioned half way along the bag. **(Fig.4)**

Fig.3

Fig.4

It is imperative that the foot of the device be pulled very tight along the gunwale so there is no potential gap for a victim to fall through. **(Fig.5)**

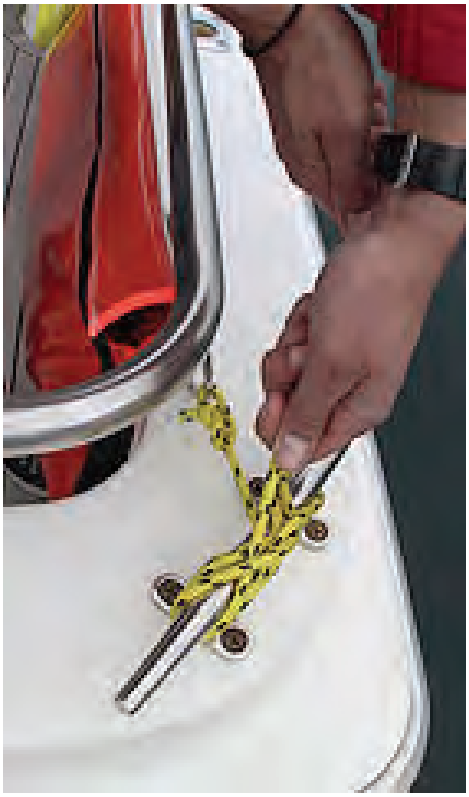


Fig.5

Fig.6

3. With small inflatables an inner foreguy can be attached to a loop on the leading edge of the device, where it passes over the buoyancy tube and is secured to the bow of the boat so that the apparatus is not swept backwards during scooping.

4. On larger inflatables or powerboats with moderate freeboard, an outer foreguy is attached to the loop at the forward end of the floating boom to hold the mouth of the scoop open at right angles to the vessel. The foreguy is then led from its yellow storage bag to a strong point towards the bow of the boat and preferably high up to keep it well above the head of the victim in the water. It should be permanently marked at this point to facilitate rapid deployment. **(Fig. 6)**

5. The rope in the aft pocket on the trailing edge must be pulled very tight. This keeps the trailing edge close to the surface of the water and prevents the netted victim being swept out of the scoop. As a rule of thumb it should be shortened by 50%.

STEP TWO – DEPLOYMENT

1. The bag is unzipped and the crisscrossed forward and aft jockey poles are unfolded ready for use. **(Fig.7)**

2. The net is not placed in the water until scooping is imminent as it will create drag and can affect steerage causing the vessel to veer up in the direction of the net. Depending on the steering characteristics of the vessel, the helmsman must make allowance for this.

3. In 2 handed crewing situations the less important aft jockey pole is held in position by placing it through a "surfers ankle strap" pole holder located at the base of the net thus allowing one crewman to manipulate the more important forward pole and scoop the victim whilst the helmsman steers the boat. **(Fig. 8)**

Fig.7

Fig.8

STEP THREE – SCOOPING

1. The pocket in the leading edge of the net is heavily weighted with 8 mm chain to ensure it sinks deeply in the water. The pocket in the trailing edge is held under tension by the adjustable rope to keep it close to the surface, thus creating a scoop. The scoop is held out at right angles to the boat with the jockey poles, the floating boom lies parallel to the side of the vessel to form the outer edge of the scoop for capturing the victim. If using the inner foreguy with a very small inflatable it is recommended that the forward crew member sits facing aft, as this makes it easier to hold the pole out and prevent it being swept aft during scooping. This problem does not occur when using the outer foreguy. **(Fig.9, Fig.10)**

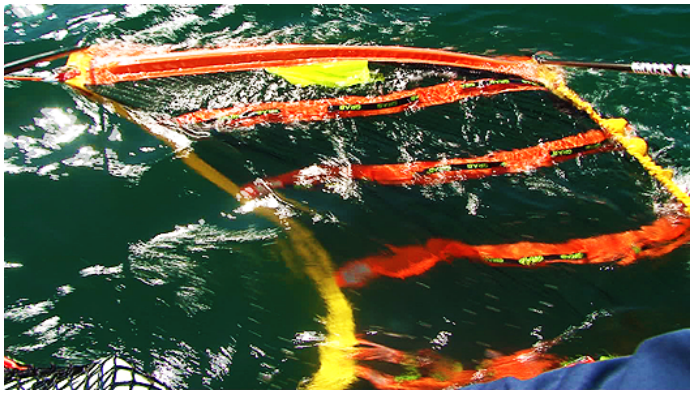


Fig.9

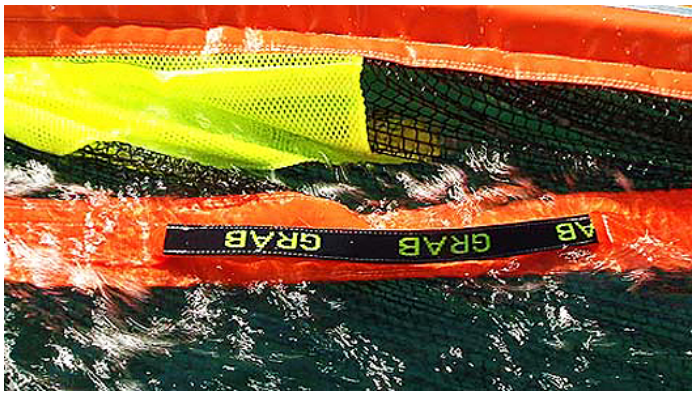
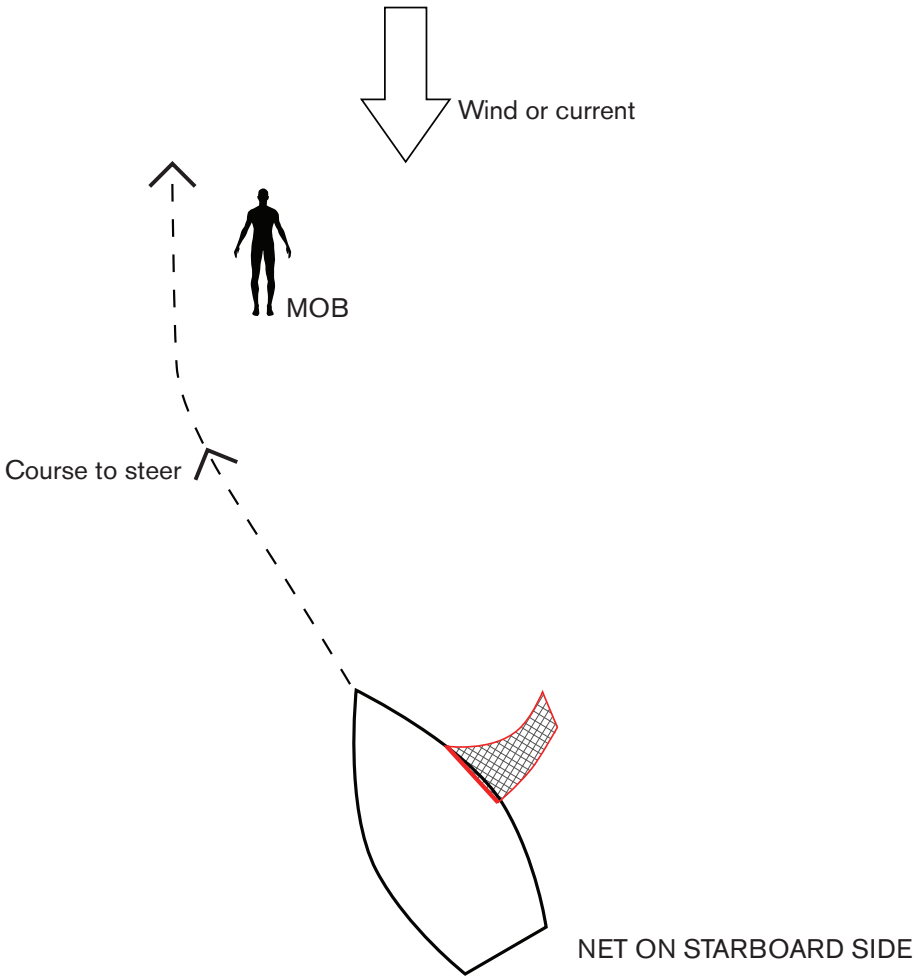


Fig.10

2. Always delegate the most competent helmsman to steer the vessel, as the victim must be captured squarely in the centre of the scoop. The final approach should be up into the wind or current, whichever is the greater, at an angle of approximately 30 degrees to the prevailing conditions and straighten up at the last moment. Remember to always keep the MOB in constant sight on the steering station side of the boat and DO NOT let them disappear out of sight under the bow as this will lead to failure of capture and possible injury from hull strike. Try not to steer too close as the victim may slip between the net and the hull.



3. The boat should approach slowly at a speed of 1- 2 knots, which will ensure steerage and manoeuvrability for optimal scooping. HIGHER SPEEDS will make it difficult to hold out the scoop and will also sweep the chain backwards thus decreasing the draught of the scoop. **(Fig.11)**

Fig.11

4. With **powerboats** the engine must always be put into neutral to prevent propeller injury.

With a **RIB** the outboard should be fitted with a propeller guard. Jet boats are free from propeller injury.

5. It is strongly recommended that the victim be scooped HEADFIRST as this allows the cleanest capture in the centre of the net. However, scooping can be done either feet first or side on. It may be necessary to give some manual or boathook assistance to enter the net, especially if the victim is not fully conscious. The aft jockey pole can be lifted at this time to help further close the scoop and ensure that the victim does not slip out of the aft end. **(Fig.12)**

6. In difficult conditions do not hesitate to use any ancillary aids such as a throw rope, lifebuoy, Lifesling or Sea Scoopa boathook to help drag the victim into the scoop. This can be done even if the boat is stationary in the water. **(Fig.13)**

Fig.12

Fig.13

When the rescue boat is stationary it is also possible to manoeuvre the victim sideways, over the floatation boom into the net. This is done by using both jockey poles to push the floatation boom down into the water and allowing the MOB to swim, be swept by the wind or current or dragged by the boathook sideways into the scoop.

STEP FOUR – PARBUCKLING (LIFTING)

1. Once netted, the crew simultaneously lift both the forward and aft jockey poles in an upward direction so that the victim is brought alongside the vessel. The poles are then dropped in the water to keep them out of the way, whilst holding onto the floating boom handles. **(Fig.14)**

2. The crew then pull on the 6 parallel sets of grab handles situated on the INSIDE of the body of the net. This lifting must be done sequentially and in a coordinated fashion so that the body is brought up evenly and log rolled aboard. This is important if the victim has suspected spinal injuries. During this process allow the excess net to fall into the water, together with the poles. To ensure even lifting we have found it is useful for the crewmen to shout out the numbers from 1 to 6 as each grab handle is lifted upwards. **(Fig.15)**

3. This process is surprisingly easy in a low freeboard RIB as the Parbuckling process confers a 2 to 1 mechanical advantage and furthermore the kinetic energy from the rolling of the body up the soft inclined plane of the buoyancy tube helps decrease the effort required. More effort will be required with rigid hulled powerboats boats that have a higher freeboard. **(Fig.16)**

4. If the MOB is conscious he should be instructed to fold his arms across his chest to facilitate the lifting process. Be aware that in the early stage of rolling the face can be submerged momentarily so the early part of lifting should be done as rapidly as possible.

Fig.14

Fig.15

Fig.16

STRETCHERING

The stretcher is essential for powerboats and large RIBs where the victim has to be lowered a considerable distance from the gunwale to the cockpit floor. **(Fig.17)**

The stretcher is firmly attached both fore and aft to the foot of the net by 2 snap shackles with blue knobs attached. **(Fig.18)**

Just prior to scooping, the stretcher is unrolled and each rescuer clips the small block and tackle on the free edge of the stretcher to the D ring on their safety harness to partially support the weight of the victim. **(Fig.19, Fig.20)**

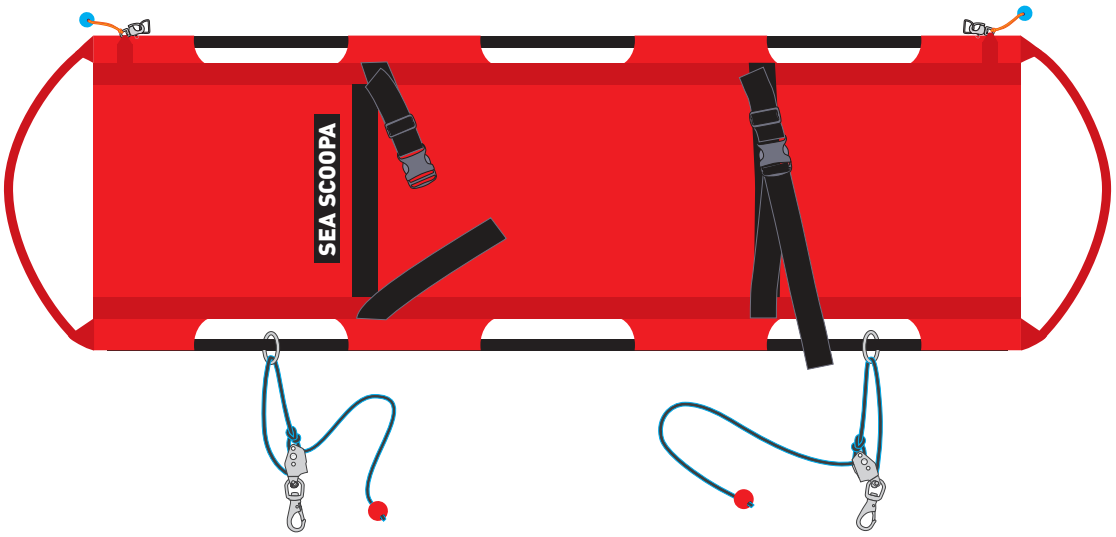
Fig.17

Fig.18

Fig.19

Fig.20

It is important to adjust the height of this side of the stretcher with the block and tackle so that both the inner and outer stretcher poles are an equal distance from the cockpit floor. This is important as this distance can vary both with the height of the gunwale and also the height of the rescuer.



When the victim reaches the gunwale both rescuers take a step backwards so the person can roll from the gunwale down into the stretcher. The net and poles have already been dropped overboard. The stretcher is detached from the net by both rescuers simultaneously firing the blue knob on the net snap shackle with the inner hand whilst holding the gunwale side of the stretcher lifting strap with the other. During this phase the rescuers must brace themselves to take the full weight of the victim. **(Fig.21)**

The victim is lowered to the cockpit floor by the rescuers dropping down on one knee whilst keeping their backs straight to avoid the risk of back injury. With very heavy victims several rescuers may be needed to handle the extra weight safely. **(Fig.22)**

Fig.21

Fig.22

The 2 black “seat belt” straps on the stretcher are clipped together and tensioned to ensure the victim is firmly secured to the stretcher for transportation. **(Fig.23)**

Fig.23

ABBREVIATED INSTRUCTIONS

The foregoing detailed instructions are for the initial set-up of the boat only and need to be streamlined for simplicity. For example-

1. **Place the bag along the inside of the gunwale and attach it tightly to strong points fore and aft.**

2. **Unzip the bag and attach the foreguy to the bow of the vessel.**

3. **Lift the jockey poles and net out onto the gunwale and clip the stretcher to both rescuers life jackets.**

4. **Approach at 1-2 knots with the propeller not turning.**

5. **Hold the net out with the forward jockey pole and scoop the victim preferably headfirst.**

6. **Lift the poles upwards and grasp the handles on the floating boom. Allow the poles and excess net to fall progressively into the water, whilst lifting the MOB horizontally upwards using the grab handles.**

7. **Roll the victim into the stretcher.**

8. **Fire the blue knobs on the snap shackles and lower the stretcher to the floor.**

REPACKING

Wash the apparatus thoroughly in fresh water to get rid of the salt and allow it to dry.

The stretcher is reattached to its anchor points with the snap shackles and dropped into the bottom of the bag. The outer hooks can be clipped onto the snap shackles to facilitate finding them during the course of a rescue.

The 2 jockey poles are turned inwards, parallel with the floating boom and the net is then progressively flaked into the bag working outwards towards the floating boom.

The bag is then zipped up.

DECONTAMINATION

On occasions the device can become contaminated with blood, body fluids or other tissues especially when retrieving dead bodies. In this situation the rescuers should wear approved personal protection gear including overalls such as the DuPont Tychem C and elbow length gloves.

Professor Dominic Dwyer and Dr Colin Macleod who are Australian experts in virology and infectious disease recommend the following steps to clean the device.

1. Physical cleaning by a period of immersion in the sea followed by water blasting and brushing to remove any residual material.

2. A detergent scrub should be used to facilitate this process however strong disinfectants and chemicals are not necessary and should NOT be used as they may adversely damage the net and other component materials.

3. The device should then be dried in the sun as the ultraviolet light has antimicrobial properties.

MAINTENANCE

After each rescue thoroughly inspect all components for wear and tear, paying close attention to the integrity of the netting, the stitching and also the attachment of the poles to the floating boom.

The zipper should be lubricated with Teflon based lubricant that does not interact with salt. Silicon products should not be used as they interact with salt and will jam the zipper.

REVERSING THE SIDE OF SEA SCOOPA DEPLOYMENT

The Sea Scoopa is set up for starboard side deployment at the factory. This is because the majority of rescue boats have the steering and engine controls on the starboard side.

It is a simple exercise to reverse this for port side deployment. The chain in the pocket on the leading edge must be swapped for the rope on the trailing edge. This is done by “mousing “ the chain and the rope with a length of cord, pulling them out and reinserting both on opposite sides.

The label on the end of the bag indicates which end must be directed towards the bow.

PRACTICE SESSIONS

A word of caution - always exercise great care if using a human volunteer, as the potential for a mishap such as being struck by the hull, propeller injury, entanglement in the device etc. is always present. Needless to say the volunteer should always wear a life jacket and also a wetsuit if the water is cold.

Manikins such as the Lifetec can be used to avoid these problems and are particularly useful when practising in stringent conditions. Of interest, in our exhaustive testing we have found human volunteers are easier to rescue than commercially available manikins.

It is strongly recommended that you obtain a clause in your Insurance Policy to cover MOB practice sessions. Most companies will supply this free of charge as it is in their interest to have the crew proficient in using this life saving equipment.

RESCUE BOAT SEA SCOOPA

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WARRANTY

The Sea Scoopa® comes complete with a 1 year Guarantee from date of purchase. Within this period we will repair, free of charge any defect in an appliance delivered to us, which has resulted from faults in materials or workmanship.

This Guarantee does not cover damage caused by failure to follow these Operating Instructions, improper use, or normal wear and tear.

The working life of the Seascoopa is difficult to assess at this early stage. It depends on such factors as frequency of use, degree of exposure to a harsh environment, misuse by uncaring personnel and the diligence of maintenance procedures. Providing the foregoing factors are favourable, we believe an average life span of 5 years might be expected in most situations.

IN CONCLUSION

We are in the business of saving lives and we know that the Sea Scoopa® will assist in this endeavour.

However the device MUST be used in accordance with the foregoing instructions for satisfactory and safe results.

The necessity for regular MOB drill to ensure proficiency cannot be over emphasised.

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