Annex A

Royal Ocean Racing Club Notice of Race 2011 - Morgan Cup Race details

MORGAN CUP RACE
2.1 Organised by the Royal Ocean Racing Club in association with the Royal Thames Yacht
Club, the Yacht Club de Cherbourg and the Royal Yacht Squadron
2.2 Friday 17th June
First Warning Signal: 1850 from the RYS Cowes, to the East
HW: Portsmouth 1319 4.70m
2.3 Divisions: IRC, IRC Two–Handed, Class40, Multihull
2.4 Entry: Entry opens on the 10th January 2011
2.5 *Closing Date*: Thursday 9th June 2011
2.6 Special Regulations: Offshore Special Regulations Category 3 with RORC prescriptions plus
Category 2 liferaft; see NoR 1.6.6
2.7 Stability and Safety Indices: see NoR 1.7
2.11 Course: Suitable course(s) finishing in Cherbourg will be designed to last between 24 and 36
hours. The Race Committee will design the course(s) in the light of prevailing weather
conditions.
2.13 Points Factor: 1.00, see NoR 1.12.2
2.14 Race Prizes and Trophies: Royal Thames Yacht Club Morgan Cup - BCT IRC; RTYC
Knightsbridge Cup – IRC 1; RTYC Queenborough Cup - IRC 2; RTYC Charles Ball Challenge
Cup - IRC 3; RTYC Warsash Cup – IRC 4; RTYC Colin Campbell Challenge Cup - Two-
Handed Class; RORC Salver – First Yacht Home; RORC Prizes – Multihull, Class40; RORC
Medallions.
2.15 Prizegiving: The Morgan Cup trophies will be presented at the Royal Thames Yacht Club
prizegiving dinner on Tuesday 8th November. RORC Medallions will be presented on Tuesday
21st June, 1930 at the Clubhouse, 20 St James's Place, London SW1. All crews welcome.
Notices to Competitors
(Notices are for information and do not rank as part of this Notice of Race)
Race Office
Start: Cowes Office: see Appendix 4
Finish: RORC Representative: c/o

Annex B

International Sailing Federation Category of Events definitions

SECTION 2 - APPLICATION & GENERAL REQUIREMENTS

		Category
2.01	**Categories of Events**	
	In many types of race, ranging from trans-oceanic sailed under adverse conditions to short-course day races sailed in protected waters, six categories are established, to provide for differences in the minimum standards of safety and accommodation required for such varying circumstances:	**
2.01.1	**Category 0**	
	Trans-oceanic races, including races which pass through areas in which air or sea temperatures are likely to be less than 5 degrees Celsius other than temporarily, where yachts must be completely self-sufficient for very extended periods of time, capable of withstanding heavy storms and prepared to meet serious emergencies without the expectation of outside assistance.	MoMu,0
2.01.2	**Category 1**	
	Races of long distance and well offshore, where yachts must be completely self-sufficient for extended periods of time, capable of withstanding heavy storms and prepared to meet serious emergencies without the expectation of outside assistance.	MoMu,1
2.01.3	**Category 2**	
	Races of extended duration along or not far removed from shorelines or in large unprotected bays or lakes, where a high degree of self-sufficiency is required of the yachts.	MoMu,2
2.01.4	**Category 3**	
	Races across open water, most of which is relatively protected or close to shorelines.	MoMu,3
2.01.5	**Category 4**	
	Short races, close to shore in relatively warm or protected waters normally held in daylight.	MoMu,4
2.01.6	**Category 5 - for inshore racing**	
	Please refer to Appendix J where Special Regulations for Category 5 are given in full. The symbol " ** " does not include Category 5.	

2.01.6 Category 6 - for inshore racing

Please refer to Appendix L where Special Regulations for Category 6 are given in full. The symbol " ** " does not include Category 6

Annex C

Morgan Cup Race course released on 17 June 2011

Morgan Cup Race
17th June 2011

Course

Course for all Classes

Mark No.	Mark Name	Approximate Position		Notes
1	Trinity House Buoy	50º 46'.31N	001º 17'.75W	Leave to Starboard
2	Snowden Buoy	50º 46'.25N	001º 17'.59W	Leave to Starboard
3	No Man's Land Fort	50º 44'.40N	001º 05'.70W	Leave to Starboard
4	Horse Sand Fort	50º 45'.01N	001º 04'.34W	Leave to Port
5	Owers Light Buoy	50º 38'.59N	000º 41'.09W	Round to Starboard
6	Cherbourg – western entrance Fort de l'Ouest			Round to Port
7	Central Fort and Finish			
	Approximate Distance 95 Nautical Miles			

RORC 17th June 2011

Annex D

Royal Ocean Racing Club ISAF Offshore Special Regulations
Checklist 2011 - Submission for *Lion* dated 19 May 2011

ROYAL OCEAN RACING CLUB
ISAF OFFSHORE SPECIAL REGULATIONS CHECKLIST 2011

PLEASE COMPLETE IN **BLOCK CAPITALS** REFERRING TO THE SPECIAL REGULATIONS

If you intend to race ***only*** in Category 4 races then do not complete this form.

Except where otherwise stated **ALL** RORC races require compliance with ISAF Offshore Special Regulations **AND** RORC prescriptions as printed in the RORC 2011 Notice of Race and at www.rorc.org

Most RORC races are Category 3 (plus a Category 2 liferaft); the Rolex Fastnet Race and Rolex Middle Sea Race are Category 2. The RORC Easter Challenge and IRC National Championship are Category 4 (plus VHF radio). Other exceptions may apply for events not entered direct with the RORC or with a separate Notice of Race.

Name of Yacht LION Sail No GBR9388R

Design or type Reflex 38 LOA in metres 11.5

Series Date..... Age Date ..... I am intending to race under the following categories 2 / 3 delete as appropriate

Name of person completing this form.....

Contact details for queries Tel: 07976 296958 E-mail.....

Signed ..... Person in Charge Date 19 May 2011

Under RORC Notice of Race 1.6.6.1 this Checklist shall be completed by the person in charge and returned to the RORC before a yacht may start in her first offshore RORC race of the season. Checklists issued by other organisations may be accepted if they are current, to the appropriate race category, comprehensive and based on the ISAF Offshore Special Regulations. **This form should be completed on board your yacht. Please keep a copy of the completed form on board to help you check your yacht during the season.**

This list is to assist the owner to check the yacht and her equipment for compliance with the Offshore Special Regulations. **It is not exhaustive and reference should be made to the complete Offshore Special Regulations; see Notice of Race Appendix 3 and the web site at www.rorc.org when completing this form.** There are mandatory RORC prescriptions in addition to the Offshore Special Regulations. In this Checklist and in the ISAF Offshore Special Regulations the use of masculine gender shall be taken to mean either gender. The words "shall" and "must" are mandatory, and the words "should" and "may" are permissive.

Items have been arranged in six parts:
A General, **B** Above Deck, **C** Below Deck, **D** Heavy Weather Sails, **E** Extra requirements for Category 2 Races (Rolex Fastnet Race and Rolex Middle Sea Race).

The numbers in left column refer to Offshore Special Regulations

If you require help with completing this form please contact the RORC
Telephone: +44 (0) 207 518 3131
***Email:* racing@rorc.org.uk**

PART A: GENERAL

The following extracts from Special Regulations are particularly important

1.02 The Safety of the yacht and her crew is the sole and inescapable responsibility of the Person in Charge who must do his best to ensure that the yacht is fully found, thoroughly seaworthy and manned by an experienced crew who have undergone appropriate training (Special Regs Section 6), and are physically fit to face bad weather. He must be satisfied as to the soundness of the hull, spars, rigging, sails and all gear. He must ensure that all safety equipment is properly maintained (SR 2.03.1) and stored and that the crew know where it is kept and how it is to be used.

1.02.3 The responsibility for a yacht's decision to participate in a race or to continue racing is hers alone. (RRS Fundamental Rule 4).

2.02 A yacht may be inspected at any time. If she does not comply with these Special Regulations her entry may be rejected, or she may be liable to disqualification or penalty.

2.03.1 All required equipment shall: function properly. Be regularly checked, cleaned & serviced. When not in use be stowed in conditions in which deterioration is minimised. Be readily accessible. Be of a type, size and capacity suitable and adequate for the intended use and size of the yacht.

Do you ask a new crewmember if he/she is fully fit? YES/NO
Do you have any crew with special medical problems? Please detail below. YES/NO

Do you know how to deal with any special medical problems (e.g. heart disease, asthma) that your crew has? YES/NO

PART B: ABOVE DECK

3.08.4 **Hatches:**
Does the companionway hatch have a catch that can be locked and unlocked from both above and below deck? YES/NO
Are the hatch boards tied to the boat whilst at sea to prevent their loss overboard? YES/NO

3.09.2 **Cockpits:**
Can all openings into the hull (e.g. locker lids) be strongly and rigidly secured? YES/NO

3.14 **Lifelines: (Please refer to OSR 3.14 for full details of permitted variations)**
Are all of your lifelines made of wire? Tensioning lashings shorter than 100mm are permitted. YES/NO
Notes: Dyneema/Spectra or webbing is not permitted.
Is the pulpit continuous without a gap or dip at the bow? YES/NO
If not does it comply with SR 3.14.3 (a)? YES/NO
Are your lifelines, pulpit, etc, continuous around the yacht at both levels? YES/NO
Are the supports for the lifelines a maximum of 2.20m (86.6"), apart including across the transom? YES/NO
Is every lifeline taut? YES/NO

4.04 **Jackstays (Categories 0, 1, 2 & 3):** *(recommended ALL categories)*. Owners should consider where crew members must unclip and how this can be kept to a minimum.
Do you have jackstays? YES/NO
When were they last checked/replaced? APR 11
Can a crew member clip on to a pad-eye or jackstay before coming on deck? YES/NO

3.27 **Navigation lights:**
What is your main set (masthead tricolour or bow and stern)?
What wattage are the bulbs? watts
What is your reserve set?
What wattage are the bulbs? (these should have the same minimum specification as the main set) watts
What is their alternative power source? Battery capacity Amp/hours

4.15 **Emergency Steering:**
Do you carry a spare tiller? YES/NO
When (approx) did you last try the spare/emergency tiller? 2010.
What method would you use to steer in the event of rudder loss? Pole
When did you last try this? 2010

4.16 **Standing rigging:**
What tools do you carry to sever the standing rigging in an emergency? Rod Gun
Has this device been tested by you? (e.g. on sample pieces of equal strength) YES/NO

4.25 **Cockpit Knife:**
Do you carry a strong, sharp knife, sheathed and securely restrained? YES/NO

4.22 **Lifebuoys:**

Are the lifebuoys and lifesling (if carried) marked with the yacht's name? YES/NO
Are all lifebuoys and lifeslings fitted with marine grade retro-reflective material? YES/NO
Does the lifebuoy have a drogue and self-igniting light? YES/NO
How many lifebuoys or lifeslings are within reach of the helmsman and ready for instant use? 3

PART C: BELOW DECK

2.03.2 **Heavy Equipment:**

Are you satisfied that heavy items are securely stowed to resist a 180° capsize? YES/NO

Equipment: Do you carry the following:

3.28.3 Shut-off valve between the fuel tank and the engine? YES/NO
An emergency VHF antenna? YES/NO
A waterproof hand-held VHF transceiver? YES/NO
4.07 A watertight self-contained high intensity searchlight? YES/NO
A high intensity searchlight powered by ship's batteries? YES/NO

3.12 Do you have a **keel-stepped mast?** YES/NO
If so, how is the heel restrained or secured? STRAP

3.23 **Bilge pumps and buckets:**

Are bilge pump handles secured against loss overboard? YES/NO
Can at least one pump be operated with cockpit lockers, hatches and companionways shut? YES/NO
Does the cockpit open aft to the sea? YES/NO

4.03 **Plugs:**

Do you carry a softwood plug **secured at or near** every through-hull opening? YES/NO

4.05 **Fire Extinguishers:**

How many 2kg dry powder fire extinguishers do you carry? + 3 × 1 kg. 1
Have you checked their condition? YES/NO

4.08 Do you carry a First Aid book that covers marine medical emergencies? YES/NO
What is the title?

6.05.3 Is at least one member of your crew familiar with First Aid procedures, hypothermia and relevant communications systems? (see 6.02.7, 6.03.3, 6.03.4) YES/NO

4.20 **Liferaft(s): *Note: valise packed rafts require annual servicing.* The RORC no longer requires copies of liferaft servicing certificates if the following information is completed.**

Liferaft Serial No: 80756 — No Persons — Hired/Owned
Canister / Valise Packed — Date of last Service: FEB 11
Make/Model: Lifeguard Forties — Date of next Service: FEB 12.
Specification: SOLAS / OSR App A part 1 (ORC) / OSR App A part 2 (ISAF) / ISO9650 Pack 2 (<24h)

Liferaft Serial No: LR 2108 41 A — No Persons — Hired/Owned
Canister / Valise Packed 557 — Date of last Service: MAR 11
Make/Model: OCEAN. — Date of next Service: MAR 11
Specification: SOLAS / OSR App A part 1 (ORC) / OSR App A part 2 (ISAF) / ISO9650 Pack 2 (<24h)

Liferaft Serial No: — No Persons — Hired/Owned
Canister / Valise Packed — Date of last Service:
Make/Model: — Date of next Service:
Specification: SOLAS / OSR App A part 1 (ORC) / OSR App A part 2 (ISAF) / ISO9650 Pack 2 (<24h)

4.23 **Flares:**

Number of SOLAS flares in date for the whole season

Red parachute 4
Red Hand 4
White Hand 4
Orange Smoke 2

Lifejackets and Harnesses:

5.01/2 Number of combined lifejackets and harnesses
Each with a light, crotch strap, name, whistle, retroflective tape? YES/NO

Note: Splashguards are highly recommended, feedback from crews is that they are highly desirable.

5.01 Number of lifejackets with at least 150N buoyancy to ISO 12402-3 (level 150) or equivalent.
Light, crotch strap, name, whistle, retroflective tape on each jacket? YES/NO

5.02 Number of safety harnesses (ISO 12401 or EN1095)
Harnesses and safety lines manufactured prior to Jan 2001 are not permitted.
Is each individual harness fitted with a crotch strap or thigh straps? YES/NO

PART D: HEAVY WEATHER SAILS

4.26.2 Are storm sails of a highly visible colour or do they have highly visible coloured patches? YES/NO

4.26.4 How can the storm and heavy weather jibs be
attached to a forestay (other than by luff groove)?
Do you carry a heavy weather jib? YES/NO
Do you carry a storm jib? YES/NO

Note: Both a storm and a heavy weather jib are required for Category 2 (either a storm jib or a heavy weather jib will satisfy the requirements for category 3).

4.26.4 **Trysail gear / Mainsail Reefing:**
Does your mainsail have reefing to reduce the luff by at least 40%? YES/NO
Do you have a trysail? (Not required for Category 3 if the mainsail can be reefed by 40%) YES/NO
Does it have the correct sail letters/numbers? YES/NO

PART E: EXTRA REQUIREMENTS FOR CATEGORY 2 Races

Rolex Fastnet Race & Rolex Middle Sea Race

3.03 **Certification of construction:**

Please supply if your boat is not on the list of standard design type boats found on the RORC website and:

- Your boat is over 12 metres LOA (39.4 feet) **and** has an age or series date* of January 1987 and after or
- Your boat is less than 12 metres LOA **and** has an age or series date* of January 1988 and after

*Age date specifies the date the build of the boat was completed. The series date is the date of completion of the first boat in the series. Typically the series date is earlier than the age date. The requirements for Hull Construction are based on the earlier of these two dates e.g. If your boat was built in 2003 but the series had been completed in 1984 you will not need a Hull Construction certificate.

3.23 **Second bilge pump:**
Does the yacht have at least two manual bilge pumps? (monohulls only) YES/NO

3.29.1(n) Do you carry an AIS Transponder? YES/NO

4.19 **406 MHz EPIRB:**
Do you carry a 406 MHz EPIRB? YES/NO
Is it registered in the yacht's name with the appropriate authority? YES/NO
What is the Hex ID (15 Characters)?

4.22.2 **Extra lifebuoy:**
Do you have an additional lifebuoy within reach of the helmsman, ready for use and equipped with a whistle, drogue, light and danbuoy? YES/NO
Does at least one lifebuoy contain permanent (e.g. foam) buoyancy? YES/NO
Is the lifebuoy marked with the yacht's name and retro-reflective material? YES/NO

6.05.2 Does at least 1 crew member hold a current Senior First Aid Certificate or equivalent? YES/NO
Have at least 30% of your crew received training to Section 6 of the Special Regulations since 1st January 2006? The **RORC requires copies of certificates.** YES/NO

Annex E

Lion's Safety Training Manual extract - topics for the Safety Brief

SAFETY BRIEF

Introductions
Outline of the programme and the day

Safety as a way of thinking. Prevention is better than cure.

Fire prevention
- Smoking Rules
- Gas use and precautions
- Gas bottle location
- Routine in the event of gas leakage

Action in case of fire
- Location of fire extinguishers and blankets
- Watertight doors
- Muster station on deck.

Personal safety gear
- Demonstration
- Where they are stowed
- All crew members to fit
- When to wear

Harnesses
- Where they are stowed
- When to wear
- Attaching points – jackstays

Action in case of a Man Overboard
- Life belts , Dan buoys , floating lines
- First Aid Kits
- Medical conditions pre-existing

Distress communication
- Areas to be covered: Flares, VHF, EPIRB

Living onboard
- No Shouting
- Tidiness / Cleanliness
- Seasickness
- No drugs under any circumstances
- Alcohol at the discretion of the skipper
- Sun Screen to be applied constantly

Tour of yacht / Areas to be covered

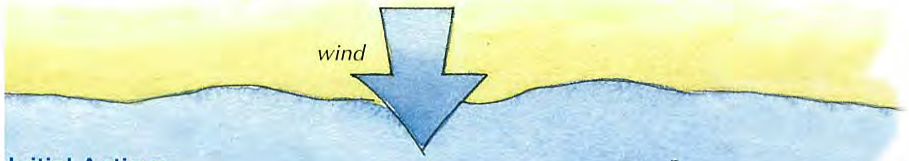
Below:
- Hatches
- Bilge Pumps
- Storage of Flares
- Fresh Water System
- Heads demonstration and rules
- Galley instruction
- Lighting

On deck:
- Winch / Clutch brief
- Life rafts

Annex F

Extract from RYA's Day Skipper Practical Notes - Man Overboard Procedures

The order of initial actions will depend on whether the MOB can be seen and whether the boat can turn straight away.



Initial Actions

Shout "Man overboard".

Spot the MOB.

Throw a danbuoy to give a datum.

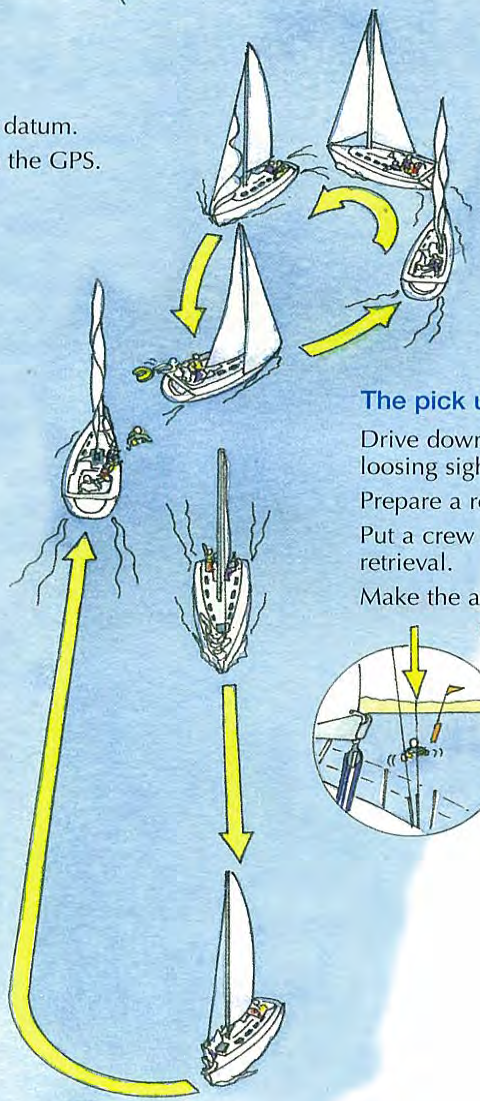
Press MOB Enter button on the GPS.

Sheet mainsail in hard.

Go hove-to or sail back towards to MOB.

Prepare a horseshoe or buoyancy.

A MOB is a Mayday or DSC Alert.



Secondary actions

Furl headsail.

Check for lines.

Start engine and return to casualty.

Give buoyancy.

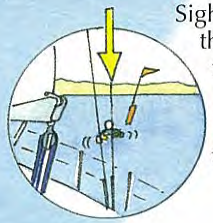
The pick up

Drive downwind while not loosing sight of the casualty.

Prepare a retrieval aid or lasso.

Put a crew in a harness to help retrieval.

Make the approach into wind.



Sight the MOB through the shrouds to keep them away from the bow.

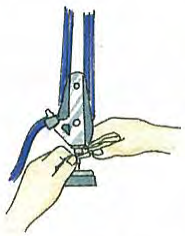
Pick MOB up on the leeward side.

GETTING THE MOB ON BOARD

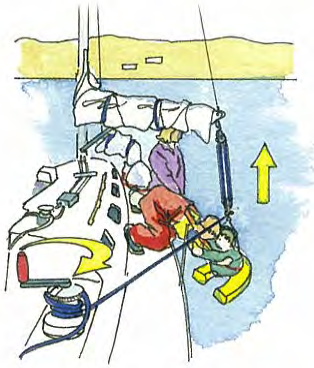
Getting a wet and fully clothed person aboard is not easy. Work out a method and discuss it with your crew so that they will know what to do.

A lasso maybe the easiest way to attach a line to a person in the water.

Muscles loose their strength very quickly in cold water - do not rely on any help from the MOB.



A halyard and two-speed winch or mainsheet will *provide a solution.*



In calm conditions a boarding ladder may be easiest.

The casualty will be cold, shocked, frightened and may have swallowed salt water.

Change casualty into dry clothes.

Radio for medical advice.

Keep them warm. If possible place them in a sleeping bag.

Head for the nearest port.

Monitor their condition.

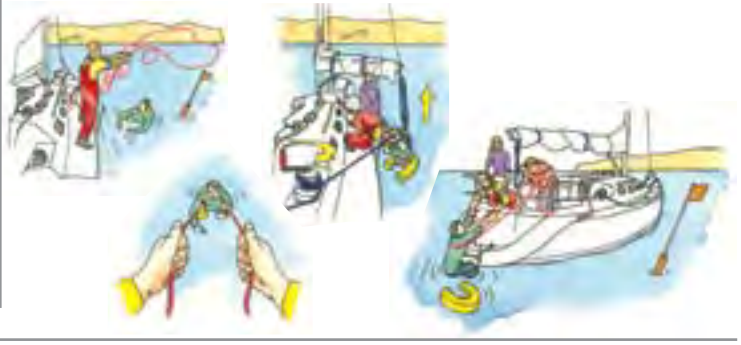
Extract from RYA's Autumn Edition of the instructors' magazine "Wavelength" - "What's the Point of MOB Drills?"

What's the point of MOB drills?

The underlying reason for Man Overboard (MOB) training is to recover a person from the water. This is stating the obvious, I know, but we must keep this in mind and make the drills as realistic as possible. It's more than just a boat handling exercise.

I'm not suggesting we put people in the water, launch liferafts or send real distress alerts – that would be really unpopular! But we should use MOB 'dummies' with a bit of weight to them. This makes a casual boat hook lift unworkable and forces us to use recovery techniques.

We all know the various methods: using boom and mainsheet, a halyard, using a sail to parbuckle the person onboard, and we should try as many of these techniques as possible. Attempting to winch a deadweight onboard using the mainsheet or a halyard will quickly demonstrate that the time to work out the problem is during practice, not when it's for real.



Can you really get a headsail under somebody to parbuckle them back onboard? How safe is using a stern ladder when in a seaway? Should the recovery method vary if the casualty is still clipped on to the boat?

Go that extra mile and show your students what happens after they get back to the MOB. How will they get a 12 stone person out of the water? Let them see what works and what doesn't during training, rather than having to work it out when it's happening for real. Also, don't forget to discuss the aftercare.

In our practical course notes we discuss many options, emphasising that there isn't one best way. The key is to make sure all onboard know the procedures for that particular boat.

Annex H

Extract from RYA's Sea Survival Handbook - Man Overboard Procedures

CHAPTER 7 : MOB

MOB actions to be taken by crew

1. Shout 'man overboard' to alert the crew.
2. Press the MOB button on the GPS.
3. Throw a life-buoy and dan buoy to the MOB. Mark the MOB with a buoyant smoke flare.
4. Allocate a crew member to point at the MOB in the water.
5. Send a DSC distress alert and a voice Mayday.
6. Keep pointing. Don't lose sight of the MOB.
7. On a sailing boat, the skipper will ask for the jib to be lowered or furled and the engine started.
8. If possible reassure the MOB by talking to them.
9. Prepare a throwing line.
10. The skipper will bring the boat alongside the MOB, with the boat pointing into wind and the propeller stopped.
11. Get a line around the MOB and get them aboard.

MOB search patterns

These search patterns are for a boat to follow when looking for a man overboard who has been lost from sight. Press the MOB button on the GPS receiver as soon as possible after the person falls overboard. This will record a geographical position and a bearing and distance to that point.

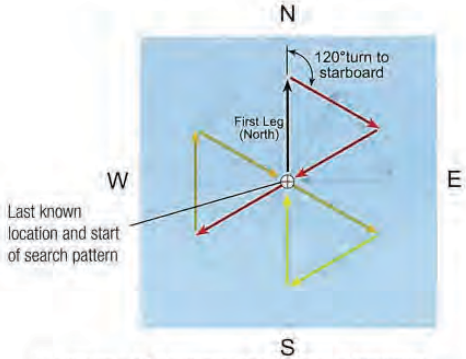
Press the DSC distress alert, choose 'MOB' from the menu options and send a voice Mayday. If short-handed, there may not be time to send a voice Mayday immediately. The MOB is unlikely to be at the recorded position but it will provide a datum for calculating where they will drift due to wind and current.

Sector search

A good datum is required. Sector search is good for searching small areas. Mark the datum point with a dan buoy, a life-buoy with drogue, a weighted fender or similar. The marker should be able to drift with the tide but not be blown by the wind.

Go North (000 degree) first (some prefer to go downdrift first but this can make the sums more complicated). When moving away from the marker, count out loud glancing at the marker. When the marker is visible for only 50% of the time, that is the distance that indicates the Expected Detection Range (EDR). Measure each leg by counting aloud. It is suggested that each leg is three times the EDR. At the end of each leg, turn 120 degrees to starboard and proceed for the same distance.

If the search is not successful after the first circuit, reorientate the search by 30 degrees to starboard.



All turns are 120° to starboard. On completion of first search pattern (coloured) rotate by 30° as shown by dotted line

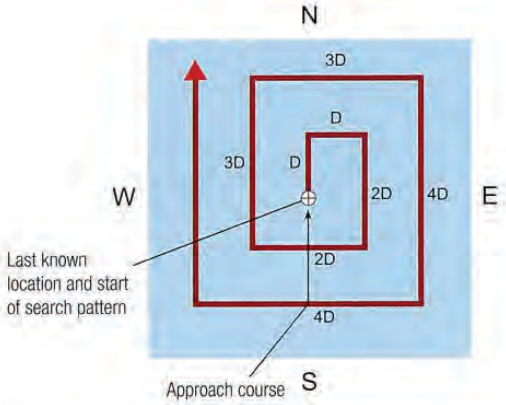
Sector Search

Expanding box search

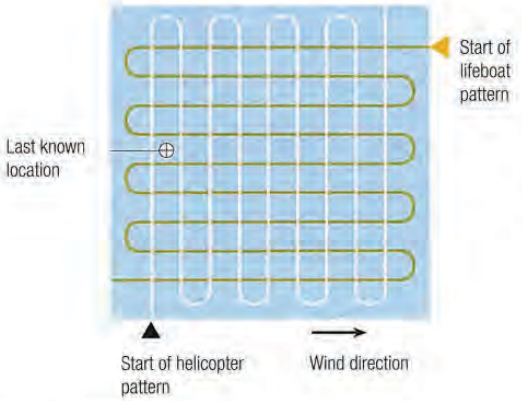
If the datum point is a little unreliable or a sector search has not proved successful, an expanding box search should be started.

Usually, the leg length is 75% of the EDR. If a sector search has been completed, this will be the third search of the area, in which case it is acceptable to use a leg length of 100% EDR.

For ease of use, it is suggested that the headings are North, East, South and West. Count aloud to measure the distance.



Expanding Box Search



SAR Search Pattern

SAR search pattern

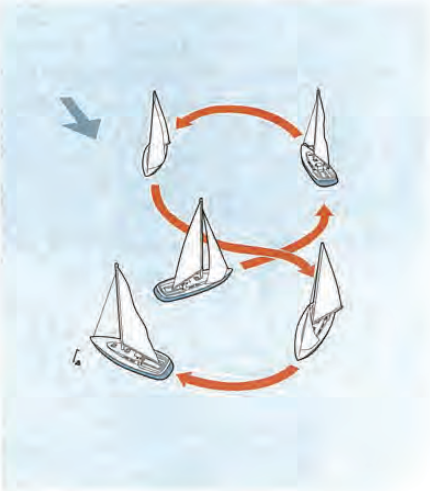
To search large areas where the position of the casualty is unknown, the Rescue Co-ordination Centre (RCC) will task the SAR units to undertake a parallel search pattern. If lifeboat and helicopter are both involved, their tracks are likely to be at 90 degrees to each other to increase the chances of detection.

Sailing yacht MOB manoeuvre

It will be quicker and safer to use the engine to return to the MOB. But if it won't start or the propeller is fouled, use the sails. Make sure the crew are practised in MOB recovery procedures.

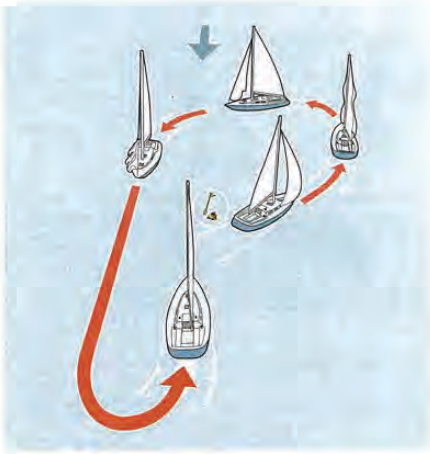
Under sail

1. Sheet in the mainsail and heave to to slow the boat. Pass buoyancy to the casualty and mark with a dan buoy. Instruct a crew member to point at the MOB. Retrieve any warps in the water and start the engine.
2. If the engine is not working turn onto beam/broad reach and sail away.
3. Sail about five to six boat-lengths from the MOB. Do not lose sight of MOB.
4. Tack. Aim the leeward side of yacht at the MOB or the marker. Let out the headsail and mainsail sheets. The mainsail should flap; if not, bear off downwind to change the angle of approach. Point the boat back at the MOB until the mainsail flaps.
5. The angle of approach should be a close reach so that the sails can be powered and depowered. Drop the headsail if there is sufficient power from the mainsail alone.
6. Fill and spill the mainsail and slowly approach the MOB. Pick up the MOB to leeward, aft of the mast.



Under power

1. Sheet in the mainsail and heave to to slow the boat. Pass buoyancy to the casualty and mark with a dan buoy. Instruct a crew member to point at the MOB. Retrieve any warps in the water and start the engine.
2. Furl or drop the headsail.
3. Make ready the throwing line.
4. Manoeuvre the boat downwind of the MOB, keeping the MOB in sight.
5. Approach the MOB into the wind so that the mainsail is depowered. Pick up the MOB on the leeward side, aft of the mast.



Powerboat MOB manoeuvre

The Williamson Turn is designed to turn the motorboat onto a reciprocal track.

1. Note the compass heading and add 60 degrees.
2. Turn to starboard on to the new course; note the amount of helm used.
3. When you reach the heading, turn the helm in the opposite direction at the same rate as before.
4. As you reach the reciprocal heading or you see your original track in the water, straighten the wheel.
5. Slow down and look for the MOB.

Approaching the MOB

In rough weather, it will be best to approach from downwind, keeping the bow into the wind, taking care not to run over the MOB.

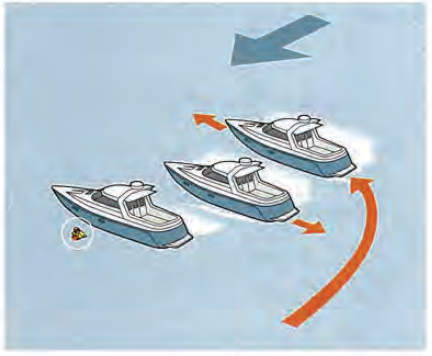
1. Pick the MOB up on the leeward side.
2. Stop engines when the MOB is alongside.
3. Use a throw line if unable to get close to a conscious MOB and pull them to the boat.

Note

If the helm position is on the starboard side, try to leave the MOB to starboard so that they can be seen more easily.

In acceptable conditions, position the boat across the wind, upwind of the MOB.

1. Keep the boat sideways-on to the wind and allow it to blow the boat towards the MOB.
2. Pick the MOB up on leeward side.
3. Stop the engines when the MOB is alongside.



MOB recovery methods

Lifting a person out of the water requires planning and practice. It is a difficult task, especially for short-handed crews.

It's essential to get the person out of the water as quickly as possible. In very calm conditions it may be possible to retrieve them using the bathing platform or the ladder at the transom. However, in rougher seas this will be a dangerous place to attempt to recover a MOB, as the casualty is likely to be drawn under the stern of the boat and injured.

How you go about the task will depend on how your boat is set up and how long the person has been in the water. Hypothermic casualties should be recovered in a horizontal position and handled with care.

It may be easiest and quickest to launch the liferaft, and for a crew member to enter the raft dry and pull the MOB into the raft. This method is not without risk and the raft will not be available should you need it later in the voyage. Lower either the lowest or both guardrail wires along the side of the boat to ease recovery.

> Crew dealing with MOB recovery should ensure that they are attached to the boat with a safety line. One MOB is enough.

Recovery methods for sailing yachts

Parbuckle

The Parbuckle is set on the side of the boat. The foot is fastened along the gunwale and the head attached either to a handybilly (block and tackle) that is attached to a halyard or to the halyard alone.

Lower the Parbuckle into the water and position the MOB.

Heave in on the handybilly – use a sheet winch for greater mechanical advantage.

The casualty will roll inside the parbuckle up and on to the sidedeck.

A small headsail can be used in place of a purpose-designed parbuckle. However, it will be more difficult to get the sail to sink sufficiently to position the MOB in it. Also there's a strong possibility that the MOB will slip out of the sail as they are being brought aboard.

MOB recovery raft

Proprietary MOB recovery rafts can also be lifted on board using a handybilly attached to the halyard or the boom lift.

Fastening to the top of the raft is easier than attaching to a MOB in the water. The rafts are easy to get into and minimise hydrostatic squeeze.

Boom lift

On yachts with booms not fitted with solid kickers, it may be possible to use the boom as a derrick. The yacht needs to be sufficiently large to withstand lifting a MOB on the boom.

The main sheet, attached with snap shackles at both ends, is reversed and freed from the deck fitting.

Slacken off the kicker and scandalise the boom to an angle of about 30 degrees from the horizontal. It may be necessary to back up the topping lift with the halyard.
Attach the bottom of the sheet either to the MOB's lifejacket or harness or to a rescue strop. Place the rescue strop around the MOB's chest.

Heave on the mainsheet or redirect the free end to a sheet winch and lift the MOB into the yacht.

A horizontal lift can be achieved by placing an additional safety lanyard or line behind the knees of the MOB.

Elevator method

Developed in the United States, the elevator method provides a quick way of helping a conscious MOB out of the water.

A line is attached to a forward cleat and led aft outside of the guard wires, fed through the headsail fairlead to the sheet winch. The MOB stands on the line as it is winched tight, thereby lifting the MOB up the side of the boat. In most cases a second line will need to be rigged over the side of the boat for the MOB to hold on to.

> Some motorboats may be able to adapt this method by rigging the line from a stern cleat, through the bow roller and on to the windlass.

Recovery method for motorboats

MOB recovery on a motorboat is more difficult than on sailing yachts due to the lack of rigging.

Many motor cruisers carry a small inflatable dinghy in davits or on snap davits attached to the transom bathing ladder. A quick method of MOB recovery is to lower the dinghy and recover the MOB into the dinghy. Make sure helping crew are attached to the boat.

If the MOB is too heavy to lift into the dinghy, one of the sponsons can be deflated and the MOB rolled into the dinghy.

Annex I

Appendix D to ISAF's Offshore Special Regulations
2010-2011 - Man Overboard - Quick Stop and the Life Sling

APPENDIX D

For information only
Quickstop and Lifesling

MAN OVERBOARD – QUICK STOP AND THE LIFE SLING (OR SEATTLE SLING)

When a crew member goes over the side recovery time is of the essence. In an effort to come up with a recovery system that is simple and lightning quick, the US Yacht Racing Union Safety at Sea Committee, the US Naval Academy Sailing Squadron, the Cruising Club of America Technical Committee and the Sailing Foundation of Seattle, Washington, joined forces to conduct extensive research and sea trials. The result of their collaboration is the "Quick-Stop" method of man-overboard recovery.

The hallmark of this method is the immediate reduction of boat speed by turning to windward and then manoeuvring slowly, remaining near the victim. In most cases, this is better than reaching off, then gybing or tacking and returning on a reciprocal course.

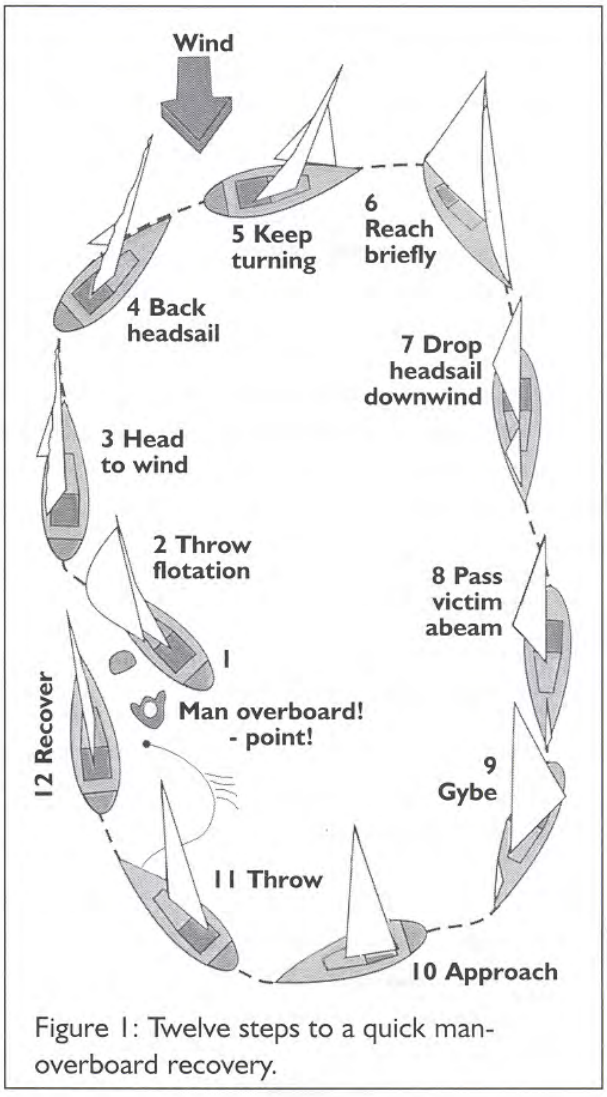


Figure 1: Twelve steps to a quick man-overboard recovery.

QUICK-STOP

1. Shout "man overboard" and detail a crew member to spot and point to **the victim's position** in the water. The spotter should not take his eyes off the victim (see Figure 1).

2. Provide immediate flotation. Throw buoyant objects such as cockpit cushions, life rings and so on. These objects may not only come to the aid of the victim, but will "litter the water" where he went overboard and help your spotter to keep him in view. Deployment of the pole and flag (dan buoy) requires too much time. The pole is saved to "put on top" of the victim in case the initial manoeuvre is unsuccessful.

3. Bring boat head-to-wind and beyond (see Figure 1).

4. Allow headsail to back and further slow the boat.

5. Keep turning with headsail backed until wind is abaft the beam.
6. Head on beam-to-broad reach course for two or three lengths then go nearly dead downwind.
7. Drop the headsail while keeping the mainsail centred (or nearly so). The jib sheets are not slacked, even during the dousing manoeuvre, to keep them inside the lifelines.
8. Hold the downward course until victim is abaft the beam.
9. Gybe.
10. Approach the victim on a course of **approximately** 45 degrees to 60 degrees off the wind.
11. Establish contact with the victim with heaving line or other device. The Naval Academy uses a “throwing sock” containing
75 feet of light floating line and a bag that can be thrown into the wind because the line is kept inside the bag and trails out as it sails to the victim.
12. Effect recovery over the windward side.

Quickstop Under Spinnaker
The same procedure is used to accommodate a spinnaker.
Follow the preceding instructions. As the boat comes head-to-wind and the pole is eased to the head stay, the spinnaker halyard is lowered and the sail is gathered on the fore deck. The turn is continued through the tack and the approach phase commences.

Quickstop in Yawls & Ketches
Experiment with your mizzen sail. During sea trials, it was found best to drop the mizzen as soon as possible during the early phases of Quick-Stop.

Quickstop Using Engine
Use of the engine is not essential, although it’s advisable to have it running in neutral, during Quick-Stop in case it is needed in the final approach. Check first for trailing lines!

SHORTHANDED CREWS

When there are only two people sailing together and a man-overboard accident occurs, the remaining crew member may have difficulty in handling the recovery alone. If the victim has sustained injuries, getting him back aboard may be almost impossible. The Quick-Stop method is simple to effect by a singlehander, with only one alteration to the procedure: the addition of the "Lifesling", a floating horsecollar device that doubles as a hoisting sling. The Lifesling is attached to the boat by a length of floating line three or four times the boat's length.

When a crew member falls overboard the scenario should proceed as follows:

1. A cushion or other flotation is thrown while the boat is brought IMMEDIATELY head-to-wind, slowed and stopped.

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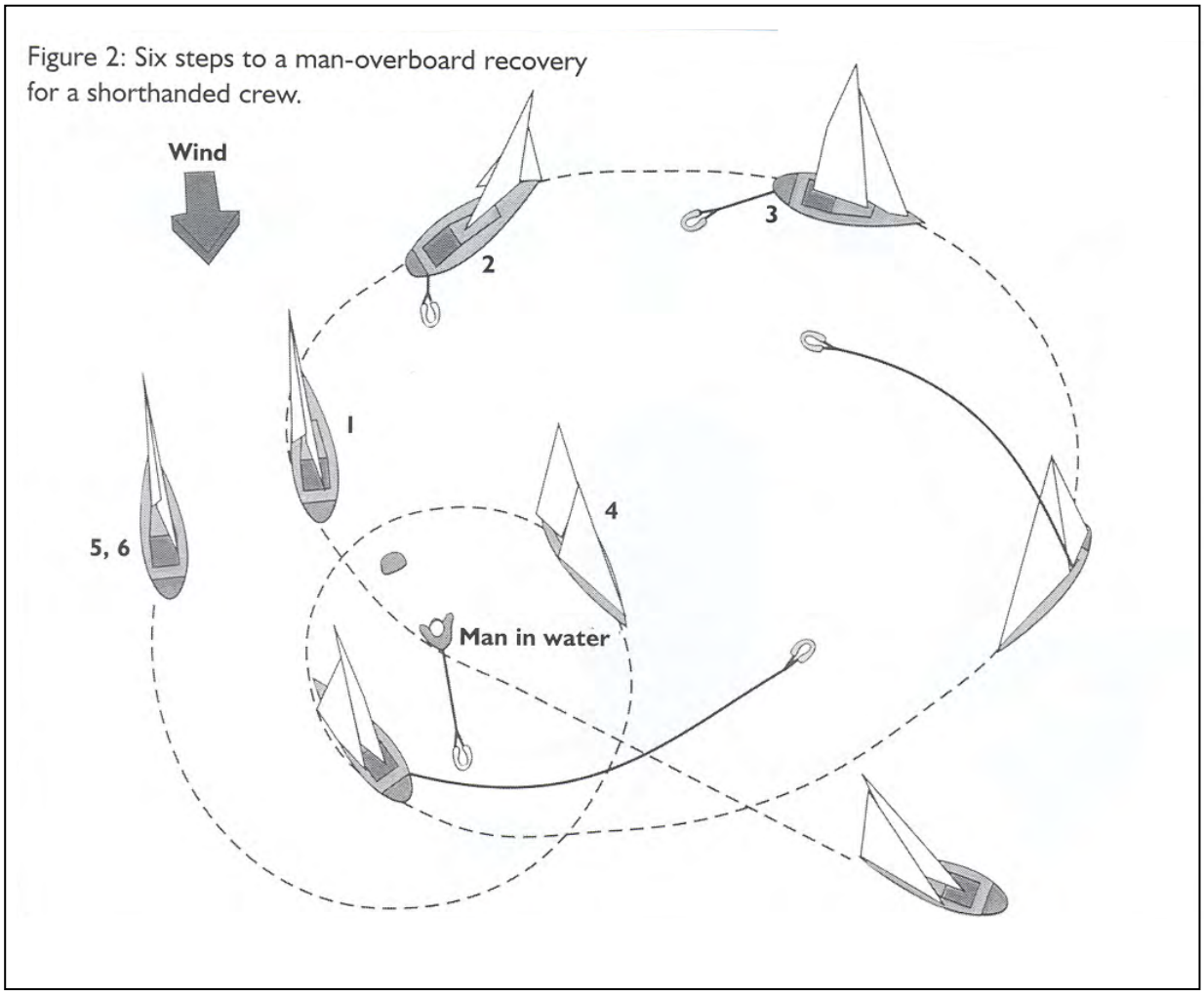
Figure 2: Six steps to a man-overboard recovery for a shorthanded crew.



2. The Lifesling is deployed by opening the bag on the stern pulpit and dropping the sling into the water. It will trail astern and draw out the line.

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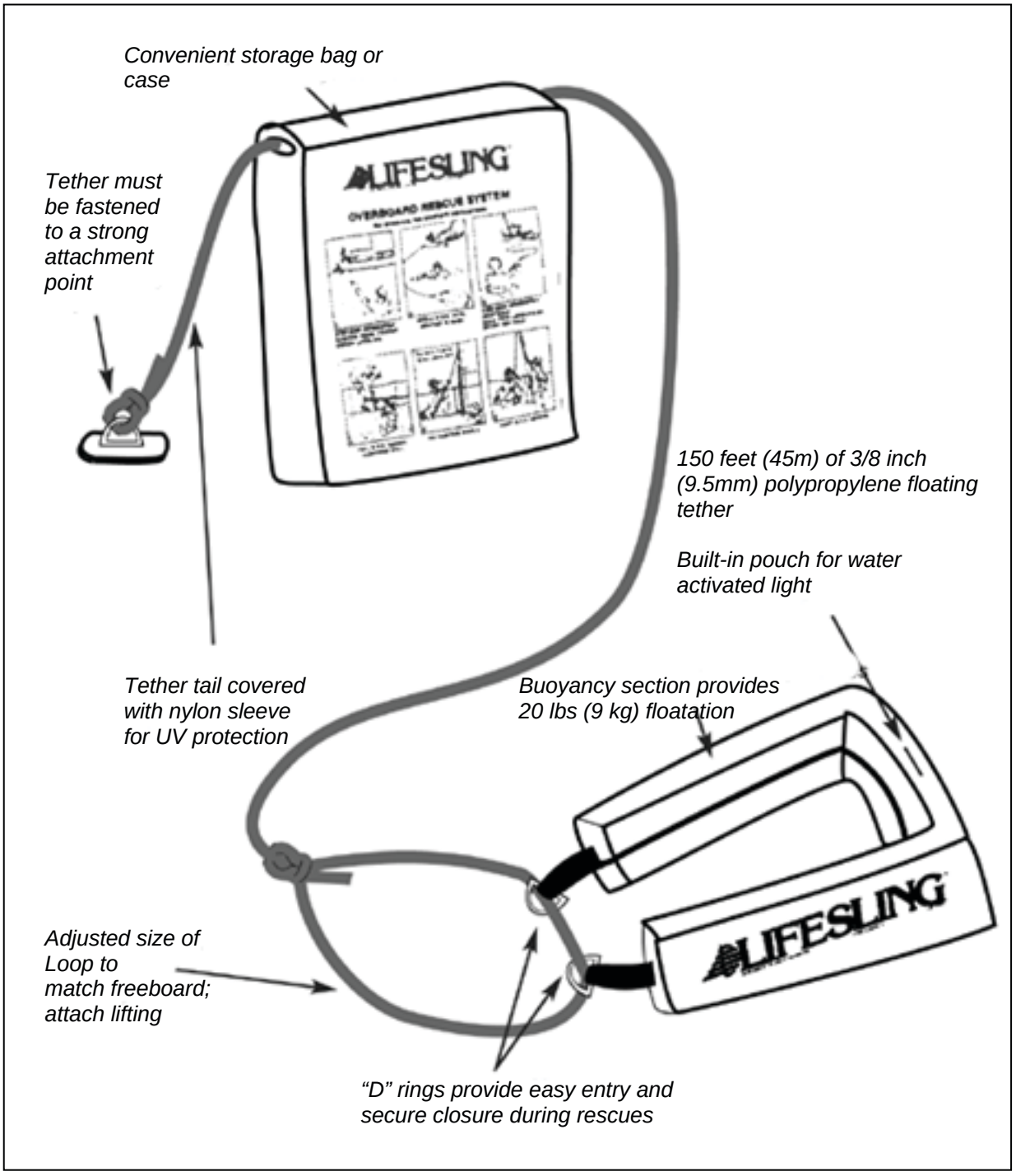
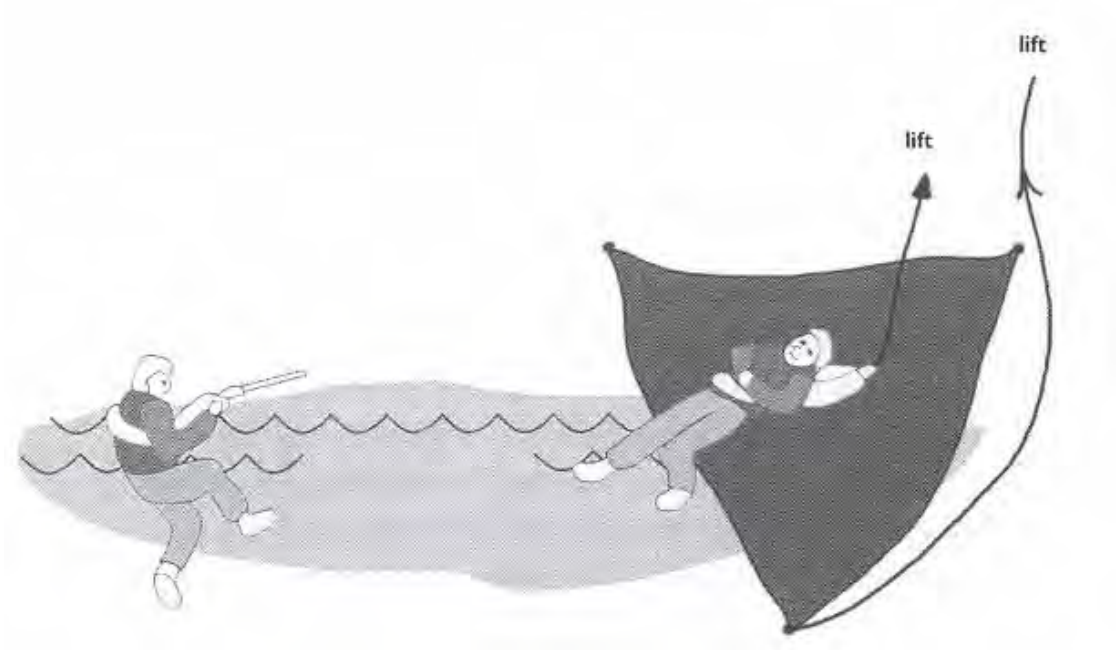


3. Once deployed, the boat is sailed in a wide circle around the victim with the line and sling trailing. The jib is allowed to back from head-to-wind, increasing the rate of turn.

4. Contact is established with the victim by the line and sling being drawn inward by the boat's circling motion. The victim places the sling over his head and under his arms.
5. Upon contact, the boat is put head-to-wind again, the headsail is dropped to the deck and the main is doused.
6. As the boat drifts slowly backward, the crew begins pulling the sling and the victim to the boat. If necessary, a cockpit winch can be used to assist in this phase, which should continue until the victim is alongside and pulled up tightly until he is suspended in the sling (so that he will not drop out). But see following page for advice on a horizontal lift, which is preferable when there's a choice.

PARBUCKLE DEVICE

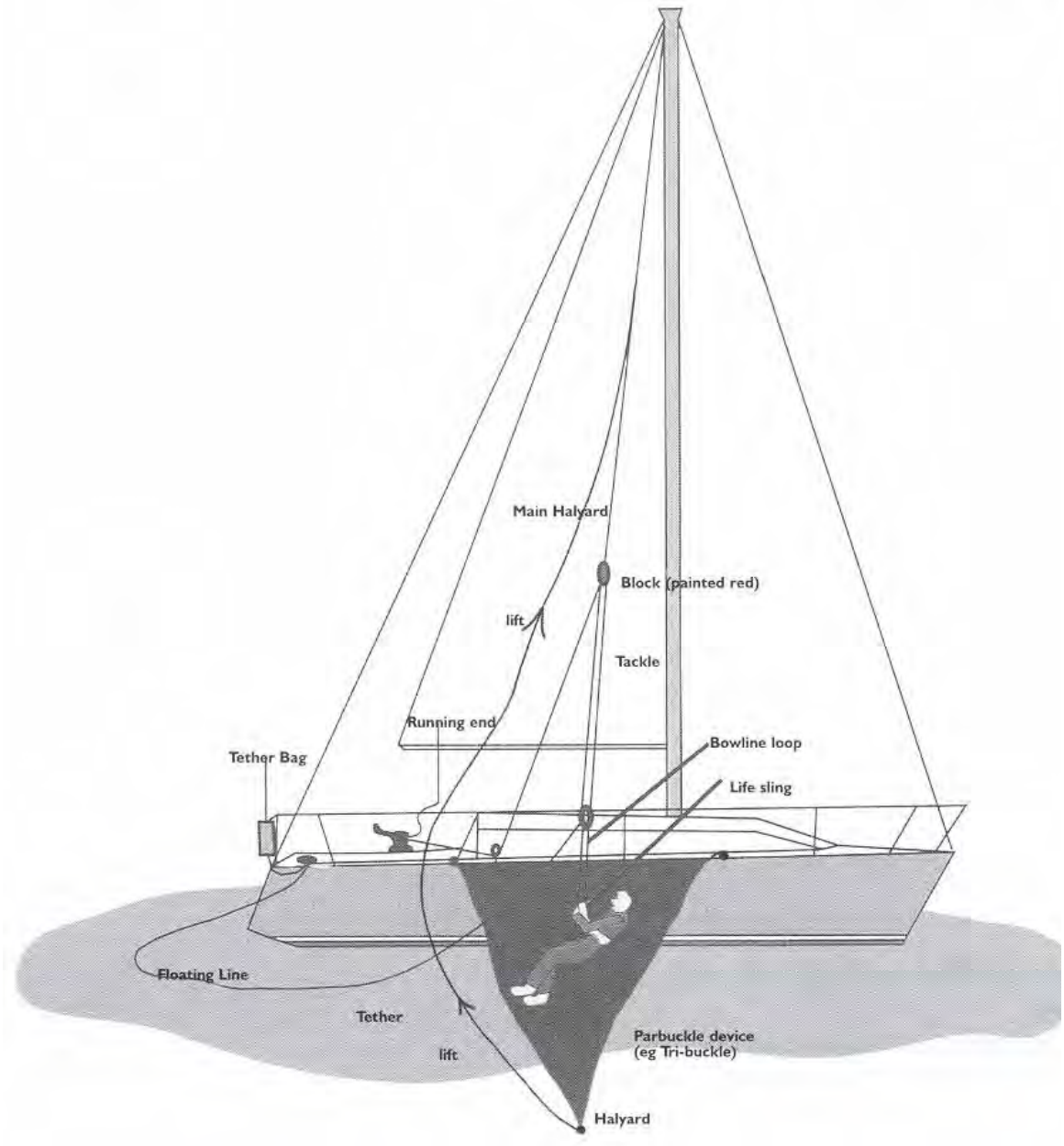
This is an alternative to the hoisting rig. A patent version is known as the Tri-buckle. Another version is rectangular, like a climbing net. The net, or triangle of strong porous material, is clipped to the toe rail, the triangle top or net extremity clipped to a halyard extension. The casualty is manoevred or dragged alongside into the triangle or net then rolled onto the deck by hoisting the halyard.
Hypothermic aftershock may be minimised by this method which keeps the casualty essentially horizontal.



THE HOISTING RIG

Note: Since the hoisting rig was developed, more evidence has emphasised the value in keeping a victim horizontal particularly after long or hypothermic immersion. A parbuckle or horizontal lift is highly desirable (see below).

1. With the floating tether line, haul the victim alongside, preferably on the windward side, from amidships to the quarter, wherever there are available cleats and winches.
2. Pull up on the tether line (with winch assistance, if necessary) to get the victim's head and shoulders out of the water and cleat it. The victim is now safe.
3. Attach a three-or four-part tackle to the main halyard, haul it up to a predetermined point, about 10 feet above the deck or high enough so that the victim can be hoisted up and over the lifelines. Cleat off the halyard.
4. Attach the lower end of the tackle to the (previously sized) loop in the tether line that passes through the D-rings of the sling.
5. Reeve the running end of the tackle through a sheet block or snatch block on deck and put it on a cockpit winch. Hoist the victim aboard by winching it on the running end of the tackle.



Annex J

Appendix G to OSR 2010-2011 - Session 6 - Man Overboard Prevention and Recovery of ISAF's Model Training Course - Offshore Personal Survival

Session 6 Man overboard prevention and recovery

6.1 Prevention

.1 lifelines to be maintained in accordance with Special Regulations

.2 harness to be clipped on at night and in rough weather (see C5.1.1)

.3 drawback of plain harness hooks

.4 harness crotch straps prevent “slip-out”

.5 use the sea toilet in bad weather not the stern

.6 encourage the use of shorter safety line and in particular lines with mid-line clips as being most adaptable (highlighting issues with being towed in the water at speed while in a harness and how a shorter line (less than 1m) both aids recovery and reduces potential risk particularly on high performance boats)

6.2 Recovery

.1 well-drilled routine (see Special Regulations Appendix D)

.2 “Mayday” on radio is valid if necessary

.3 quickly accessible hoisting rig

.4 value of horizontal lift and retention of horizontal position

.5 procedure and team ready to re-clothe, re-warm and check recovered person for injury, advising shore if necessary

.6 use of whistle, SOLAS-type lifejacket light, strobe light.

Appendix B3 to *Lion*'s Safety Training Manual - Man Overboard

B3 : Man overboard

- Prevention is better than cure in all emergencies.

- **It must be remembered that if you go overboard at night or in bad weather, there is a significant probability that you will not be found.**

  STAY CLIPPED ON!

- Carry out MOB drills regularly.

If someone goes overboard, follow this standard procedure:

- If the person is still attached to vessel, stop engines and recover them using lifeline / harness or other recovery device;
- Throw lifebuoy immediately;
- Raise the alarm by shouting 'MAN OVERBOARD'

Instruct two crew members to watch the casualty and point continuously in their direction;

- Press the 'MOB' and then 'ENTER' buttons on the GPS and start the engine;
- Start recovery manoeuvre;
- In darkness use searchlight to illuminate search area;
- Send MAYDAY call on the VHF;
- Assume in temperate climate zones that the casualty will be suffering from hypothermia and prepare for this.

If sailing, it is often better to use the engine:

- 'Heave to' by coming up to wind and tack, leaving the headsail backed and hauling mainsheet in as close as possible;
- at the same time, start the engine (checking that no lines are over the side);
- drop the headsail, motor to leeward of the casualty and approach head to wind;
- finally, approach casualty with yacht to windward to allow recovery without the need for propeller use.

If sailing, with engine not available, the manoeuvring can be carried out as follows:

- 'Heave to' by coming up to wind and tack, leaving the headsail backed and hauling mainsheet in as close as possible;
- Prepare and organize yourself for recovery of casualty;
- Put boat on apparent beam reach;
- Allow yourself sea room to manoeuvre;
- Tack and sail on opposite beam reach;
- Casualty should be now on weather bow;
- Approach casualty on close reach, easing the sheets in the final stages. Leeway will increase as you slow down;
- Recover the casualty on lee side of the yacht.

If the event of losing contact with casualty please refer to the search patterns that are enclosed as part of this pack.

Annex L

ISAF's OSR - amendments to sub-sections 5.01.1 b, 5.02.5 b, 5.02.6 and 1.02.1

RORC proposals to change the OSR were given consideration by ISAF in November 2011 arising from which:-

a) OSR 5.01.1 b

The following has been deleted:-
Crotch straps or thigh straps together with related fittings and fixtures should be strong enough to lift the wearer from the water.

The following has been added:-
Note: The function of lifejacket crotch/thigh straps is to hold the buoyancy element down. A crew member before a race should adjust a lifejacket to fit then retain that lifejacket for the duration of the race. Correct adjustment is fundamental to the lifejacket functioning correctly.

b) OSR 5.02.5 b

The following has been to deleted:-
Crotch straps or thigh straps together with related fittings and fixtures should be strong enough to lift the wearer from the water.

Note: Before the end of 03/10 ISAF will publish recommended minimum breaking strains which for equipment purchased on or after 01/11 will be mandatory. Effective January 2011, a harness shall be fitted with crotch or thigh straps.

c) OSR 5.02.6
The underlined words have been added:-
*Warning – a **safety line and** safety harness are not designed to tow a person in the water and it is important that **the shortest safety line length possible be used with** a harness to minimise or eliminate the risk of a person's torso becoming immersed in water outside the boat, **especially when working on the foredeck. 1m safety lines or the midpoint snaphook on a 2m line should be used for this purpose.** The diligent use of a properly adjusted safety harness **and the shortest safety line practicable** is regarded as by far the most effective way of preventing man overboard incidents.*

d) OSR 1.02.1
The underlined words have been added:-
The safety of a yacht and her crew is the sole and inescapable responsibility of the Person in Charge who must do his best to ensure that the yacht is fully found, thoroughly seaworthy and manned by an experienced crew who have undergone appropriate training and are physically fit to face bad weather. He must be satisfied as to the soundness of hull, spars, rigging, sails and all gear. He must ensure that all safety equipment is properly maintained and stowed and that the crew know where it is kept and how it is to be used. **He shall also nominate a person to take over the responsibilities of the Person in Charge in the event of his incapacitation.**