



CIVIL DEFENCE

STANDARD OPERATING PROCEDURES (SOP's)

BOATS

Working Draft – May 2008

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CIVIL DEFENCE BOAT STANDARD OPERATIONAL PROCEDURES (SOP's)

This Memorandum supersedes Circular 8/94

Section 1 – Regulations

(Throughout this document He refers to He or She)

1.1 Introduction

Civil Defence operates and maintains a fleet of small craft. The uses include training, safety cover, recovery and other water based activities. Though specifically not provided for rescue purposes, Civil Defence boats, will respond to provide backup to the Emergency Services – Garda Water Unit, RNLI, Coastguard or any craft as obliged to do under International Convention.

The craft referred to in these SOP's are semi-rigid or inflatable type boats between 4 - 8 metres in length, powered by out-board engines, capable of being trailer-transported for launching off slipway or suitable shoreline.

As the Standard Operating Procedures in this document cannot cover all possible scenarios it must be clear to everyone concerned that a coxswain should not be constrained by anything contained in these SOP's whenever he is acting in the best interest of his crew, his boat, his passengers and persons in need. He should, at all times, use these SOP'S combined with his experience, judgement and training to decide on the best course of action.

1.2 Function

Civil Defence boats are deployed at Local Authority premises under the responsibility of the Civil Defence Officer (CDO) to undertake the following functions:

i. **Safety:**

Providing a water-borne safety facility to inshore/inland waterways, estuarial and coastal sites of high activity and of commensurate high risk potential. The objective is to provide safety advice and to attempt to ensure timely action to prevent accidents.

ii. **Transport:**

- a. The transport of equipment and personnel to the location of an incident as quickly as possible, while complying with the road traffic act.
- b. Transport during pollution and environmental protection response.

iii. **Rescue:**

- a. To provide a rescue facility in the absence of, or complimentary to designated water rescue services. This rescue capability exists as an additional function for Civil Defence boats and units which will be called out in this role when and if considered necessary in the interests of saving life
- b. To provide water based search and recovery response along the coastline/shoreline where a land-based search would be difficult or time consuming.

1.3 Authority to Launch

- i. The CDO will appoint a competent person (See appendix 8), the Coxswain, in charge of a boat prior to launch.
- ii. The CDO, his Deputy or, in their absence, a competent volunteer appointed by the CDO must authorise launching. It is this person's decision, following consultation with the appointed coxswain, whether or not to initiate a launch.
- iii. The CDO will ensure that the coxswain he appoints is competent and has completed the required Civil Defence approved course in the craft and is familiar with these S.O.P.s. All other crew must hold a Minimum of National Powerboat Certificate and be familiar with these SOP's.
- iv. The Coxswain will be responsible for the boat and for the safety of all personnel on board, regardless of seniority. He also decides if the conditions are favourable to launch. He is to ensure boat discipline at all times.

1.4 Limitations

When planning, Civil Defence Boats should adhere to the $\frac{1}{3}$ rule with regard to fuel – $\frac{1}{3}$ for passage to site, $\frac{1}{3}$ on site and $\frac{1}{3}$ for return journey, additionally spare fuel should be carried in an appropriate container.

Civil Defence boats are limited by the following conditions:

- **Sea Conditions:** Wave height will determine whether or not a boat will launch. Wave height is more relevant than wind force as the wind force results in a marked difference between offshore and inland waters. The wave height is from the trough to crest of wave. ***In a situation where following a launch the conditions deteriorate to the stated limits - the exercise should be terminated and the boat returned to safe harbour.***

The following limitations apply:

- Craft less than 5 meters – 1 meter wave height or greater – **Do not launch**
- Craft 5 meters or over – 2 meter wave height or greater – **Do not launch**

The boats may only operate in sheltered waters* **not exceeding 5 nautical miles from safe harbour**. These conditions may be extended in exceptional circumstances when the Civil Defence boat is escorted by another agencies boat.

* **Sheltered Waters** the areas covered will include sheltered bays, estuaries, inland waters, inshore waters where there is adequate shelter. In some areas of exposed coasts, a vessel may actually be Inshore rather than in sheltered waters as soon as it leaves the harbour

1.5 Pre-Launch Checks

Before launching the Coxswain will ensure that the following are carried out:

- i. He is in possession of the latest weather forecast and outlook
- ii. Where possible the Risk Assessment for the launch site is available for assessment and update
- iii. Crew are briefed on task, weather and their individual duties
- iv. All crewmembers to be wearing appropriate Personal Protective Equipment (PPE) as defined in Appendix 2.
- v. Minimum crew is three – **a qualified Coxswain and two crew**
- vi. Only Civil Defence members or rescued persons may be carried, if during a SAR or Recovery Operation it is necessary to have other specialist people (other than normal crew) on board, the Coxswain will brief them and take sole responsibility for these people.

Extra specialist people could include:

- Gardai
- Doctors
- Race/Regatta Stewards
- RNLI
- Coast Guard
- Fire brigade
- Harbour police
- Harbour Pilots
- Instructors
- Sub-Aqua divers and/or Snorkel divers
- Paramedic/Emergency Medical Technician (EMT)
- Local people with specific knowledge of the SAR or the specific area.

AT ALL TIMES ALL PEOPLE ON BOARD MUST WEAR A PERSONAL FLOTATION DEVICE (PFD)

The following equipment should be onboard:

- Anchor & line
- Drogue & line
- Towing bridle
- Compass
- In-date fire extinguisher
- Waterproof first aid kit
- Foot pump
- 2 paddles
- Sheathed knife
- Kill Cord and spares
- Hypothermia bags/wraps
- Survivors lifejacket
- Pyrotechnics
- Fire Blanket

- Spare starter key
- 2 Body Bags
- Boat Hook
- 2 Throw Bags (15 metre)
- Bailer
- 3Glow Sticks Red,White,Green
- Divers Down flag
- Righting lines
- Waterproof Stopwatch
- Radar Reflector (if applicable under Solas 5)
- Sufficient fuel for task plus $\frac{1}{3}$ reserve
- Life Saving Signals table (**Appendix 9**)
- Searchlight and back-up torch, if applicable.
- Spare Hand Held waterproof VHF set, carried by crewmember and tested
- Engine tool kit (plug, spanner, screwdriver, propeller replacement nuts and washers and sparkplugs)
- 10 Lock Cards and Lock Key (Inland waterways only)

Braided ropes should be used

Before slipping, he is to satisfy himself that all is secure on deck and engine checks were carried out as per manufacture's manual.

1.6 Log Keeping

The Ships Log is an **official document** that is to be maintained throughout training or operations. Coxswain is to be held responsible for keeping a good Logbook.

Whenever the vessel is leaving on either an exercise or mission the names of all the crewmembers are to be entered in the log. Everything considered important during exercise/mission should be entered immediately into the log. Realising this can be difficult during adverse weather conditions it should then be done immediately **after** the mission/exercise or whenever there is an opportunity.

1.7 Communications

VHF communications should only be made by qualified personnel or under supervision of a qualified person.

Each time before proceeding to sea the Coast Guard Radio Station is to be called giving the following info:

- Call Sign of the boat
- Task to be carried out – Exercise – SAR – Safety Cover
- Area of operation
- Number of People On Board (POB)
- Estimated time of completion of task.

When the boat and crew have arrived at their final destination – home base or elsewhere – the Coast Guard Radio Station must be again contacted to report their safe arrival and end of exercise.

Where Possible, a 4th member of the team is to remain in the base or official vehicle on communications (comm.'s) watch whilst the boat is on exercise.

During Operations or Exercises:

- i. The Coxswain should make sure that an Operations Normal Report (Ops Normal) or a more detailed Situation Report (SitRep) shall be transmitted every 20 minutes to shore base, Water Unit Coxswain (WUC) or CDO via VHF radio, if contact is not established through the VHF radio, other means of communications such as a mobile phone could be used.
- ii. Where possible the Units vehicle should proceed along the Shore/Bank to maintain visual and radio watch on the craft. Boats experiencing initial radio difficulties should 'move to improve' and try again.
- iii. White Flares fired in quick succession from the shore, may be used as emergency recall in the event of a communications failure.
- iv. In the event of a total communications failure boats should return to their launch point or closest sheltered harbour and establish communications.
- v. If the boat fails to call in on its Ops normal comm.'s check, the shore base will endeavour to establish communications with the boat. If after a further 20 mins no contact is made MRCC is to be informed.

1.8 General Rules for Coxswain and Crew

- i. Whilst underway, the coxswain will at all times comply with International Regulations for the prevention of collisions at sea (ColRegs).
- ii. The boat is to be handled in a proper seaman like manner.
- iii. At beginning and on completion of exercise the Coast Guard is to be informed, by Radio or Phone.
- iv. The Person in charge is to ensure the boat is washed down with fresh water, fuelled, oiled, made ready for call-out and secured properly.
- v. The coxswain is to report to the CDO on completion of the exercise/incident and any mechanical/electronic faults or damage are to be reported.
- vi. Anyone who has consumed alcohol or illegal drugs prior to being called out for training or operational work will not be deemed fit for duty.
- vii. No member of the crew will consume alcohol or illegal drugs during the operation of the boat.
- viii. If a proposed crewmember is taking prescribed, un-prescribed or over-the-counter medications the CDO must be notified, *attention should be given to the side-effects as listed by the drugs company.*
- ix. The coxswain should be aware of his responsibilities under the Maritime Safety Act 2005 (Part 3) when permitting crew members to take to the water.
- x. No smoking is allowed on board.
- xi. The duty is not complete until all equipment has been power cleaned using fresh water and mild detergent.
- xii. The coxswain should utilise the knowledge and experience of the crew on board.

1.9 Personal Safety

The crew's safety is vital and members of the crew should be aware and are primarily responsible for their own safety. The following issues are *just some* of the many aspects of safety, which a crewmember may meet and need to be aware of:

i. Manual Handling

Boating is a potentially hazardous and arduous activity requiring significant physical effort from crewmember/s. However, this does not negate a Coxswains responsibility to take all reasonable precautions to protect crewmembers from physical injury, particularly back injuries. All activities should be properly supervised to ensure that tasks are within the physical capability and training of the crew.

ii. Crush Injuries and Friction Burns

Coxswains should brief crewmembers of the dangers on handling sheets and halyards/ropes, especially when these are under extreme load. The chances of severe friction burns or crush injuries to hands and feet where lines are passing through fairleads, around bollards and or cleats also when coming alongside or leaving should be emphasised. Crush injuries and friction burns should be treated as per First Aid Training and the assistance of the Emergency Services should be considered.

iii. Sun Burn and Exposure

Coxswains are responsible for ensuring that their crew are adequately protected from the sun and are sufficiently hydrated. Sunglasses and Sun Cream should be worn whenever necessary. Coxswains are to ensure that their crewmembers are aware of the symptoms and effects of exposure.

iv. Jewellery

Boating is potentially hazardous and arduous environment, due to this personal safety is paramount; Civil Defence will not allow the wearing of any type of jewellery, onboard any of its vessels. Any persons found in contradiction of this order, will not be allowed onboard. Scuba diving watches may be worn.

v. Hypothermia

Hypothermia is a very serious condition that can affect any member of the boat crew or other people on board. All crew should be aware of the signs and symptoms of hypothermia and the First Aid required. Each crewmember should try to avoid hypothermia, by being responsible for his/her own health and welfare and wearing appropriate clothing and PPE.

1.10 Qualifications

The Coxswain is to be suitably qualified by successful completion of an approved boat-training course. Civil Defence personnel are to undergo an Irish Sailing Association (ISA) National Powerboat Certificate as the basic qualification. Students should complete training as at *Appendix 1*.

Each crewmember must;

- i. Be able to swim without a lifejacket and/or be water confident wearing a lifejacket.
- ii. Have an Occupational First Aid Certificate.
- iii. Have attended a Civil Defence Board approved boat-training course.

1.11 Crew Training

All crew should be trained and competent as listed in *Appendix 1*

1.12 Ongoing Training and Re-assessment

- i. Each crewmember must complete a Training Log (*Appendix 3*). This log will be retained by the CDO and will be subject to audit by the Civil Defence Board and if deemed necessary by the Civil Defence Board other investigating agencies.
- ii. Each crewmember must log a minimum of 20 Training Drills / Duties during a minimum 9-month to 12 month period. During this period a number of exercises must be undertaken (see Appendix 3A)

Note:

Training includes care and Maintenance of the boats, equipment and engines together with 'on-water' training. If weather conditions are favourable and meet limitations (Section 1.4) as stated training can be undertaken over a 12-month period.

- iii. One-day assessment – relevant to their qualification to be undertaken every 3 years

1.13 Debrief

After every mission or training exercise a **debriefing** should be held. The purpose of a debrief is to find out what exactly went well and, more important, what went wrong and **WHY** did it go wrong. A debrief must be held in a calm environment. The purpose of a debrief is to **learn** from mistakes, decide a solution and include recommendations.

1.14 Risk Assessment

Each Civil Defence Officer should endeavour to complete a 'Risk Assessment' on all known and possible launch and recovery sites within his area. This should be carried out with the assistance of the Local Authority Health & Safety Officer. A generic 'Risk Assessment' that may be amended to satisfy local conditions is included with this document. (*See Appendix 10*)





Section 2 Boat Handling

2.1 Types of Craft

i. Inflatable Boat

This type of craft is utilised where portability and shallow water operation are prime requirements.

ii. Rigid Inflatable Boat

They can only be transported on specially designed trailers. This restricts launching and recovery to smooth firm shoreline or conventional slipways offering an adequate depth of water to float the craft off or on the cradle.

2.2 Launching

This information is issued for guidance only and cannot substitute for the use of common sense and the exercise of good seamanship by the crew when faced with actual conditions on the day.

i. Launching - Ramps or Slipways

- a. Consider sea conditions and state of tide.
- b. Consider using a rope or extendable tow bar between towing vehicle and trailer; thus keeping the vehicle out of the water.
- c. Reverse down ramp/slipway until the trailer wheels are at the waterline, the crewman in the water holds onto the bowline until he ensures that the winch recovery hook is disengaged.
- d. Coxswain enters the boat, lowers and starts the engine(s) ensuring that there is sufficient depth of water.
- e. Once the boat has floated or rolled off the trailer, the vehicle and trailer are taken above the High Water mark and parked safely – not causing obstruction.
- f. Once engine(s) are running correctly, the Coxswain, wearing the kill cord, instructs the crew to board and then proceeds to sea.

ii. Launching from Shore - Fair Weather

When launching from a flat shore it may be necessary to break the back of the trailer and allow the boat to slide into deep enough water. Engines must be in the raised and in the locked position for this manoeuvre.

Crew must then turn the boat bow to sea. Then follow the procedure from d) above.

NOTE: Boats should not be launched through heavy surf or swell as this may result in serious swamping.

2.3 Recovery

i. General

The advice given regarding common sense and good seamanship applies equally to boat recovery operations. The reverse procedure for launching the boat should be followed. Be aware that conditions may have changed since the launch. When winching ensure the boat occupies a central position on the trailer.

ii. Beaching - Calm Water and Inflatables only

- a. Ensure that the engine tilt mechanism is unlocked.
- b. Ensure that the Coxswain is wearing the Kill Cord.
- c. Ensure that a crewmember is in the bow keeping watch for rocks, shoals, etc.
- d. Motor gently in towards the beach until in about 2 metres of water.
- e. Cut and tilt the engine.
- f. Paddle into shore.

iii. Beaching with Some Swell running

- a. Ensure that the engine tilt mechanism is unlocked.
- b. Ensure that the coxswain is wearing the Kill cord.
- c. Ensure that the crewmember is in the bow keeping watch for rocks, shoals, etc.
- d. Select a swell and put the boat firmly on the back of it, adjusting engine speed so that you proceed inshore at the same rate as the swell. Do not be distracted by the sound of breaking surf astern of you.
- e. When in a reasonably constant water depth of about 1.5 metres, cut, tilt and lock the engine, simultaneously turning the boat stern to shore and ordering the crew out either side of the boat. When the crew are in the water on each side they complete turning the bow to seaward with the stern to shore and hold it in that position.
- f. The coxswain now enters the water, and, working together, the crew back the boat into the beach, keeping the bow to sea at all times.

iv. NOTES:

- (a) This procedure requires practice and a good understanding between crew and coxswain.
- (b) On a steep shelving beach, this procedure can be dangerous and should therefore be avoided this should only be attempted by a well-trained crew.
- (c) At the time that the first crewmember enters the water, he must be able to touch bottom with his feet.
- (d) Whenever possible, a well trained shore reception party should be in attendance to assist with beaching in swell conditions, particularly when the boat is to be put on a trailer.

v. **Beaching in an Emergency on a Lee Shore in Heavy Sea and Swell**

- a. **It must be stressed that this is an emergency procedure only**, when an alternative safer landing is not possible, and should only be attempted by a well-trained crew.
- b. Immediately before the swell deposits the boat on the beach, cut tilt and lock the engine.
- c. As soon as the boat grounds, all crew should quickly leave it, bodily dragging it clear of any following surf.

2.4 **Handling**

i. **General**

- a. When in the interests of safety, it is not advisable to turn it off the engine should be in neutral.
- b. When under way, balance the craft by moving crew/equipment so as to allow the boat to plane to best advantage in order to achieve peak speed commensurate with the prevailing sea conditions.
- c. In achieving the latter, avoid driving the craft into the sea, as this will cause leaping out of the water, propeller slip and possible over-revving of the engine.
- d. Avoid violent alterations of course at speed as these place undue strain on the engine, boat and mountings, except in an emergency. Crew should always remain seated with one hand on a grab handle.
- e. Only by experience and a natural sense of caution will good seamanship be learnt.

ii. **Speed and Trim**

- a. The ideal pace for a semi-rigid or inflatable boat is to enable it to get onto the plane and throttling back so that the boat is still just on the plane. This method will halve the fuel consumption obtaining at full throttle, and will give a much more comfortable ride.
- b. When driving in heavy seas, approach individual waves at an angle of about 30° or 40°. This approach will much improve crew comfort and safety but it should be understood that this method could perhaps double normal fuel consumption. It is also important not to approach waves at too broad an angle, as due to the perspective, the odd rogue wave may not be recognised and the boat could be rolled over.
- c. In order to exercise maximum control over the boat, always come alongside a person in the water into the wind. Beam on, pick up of man overboard can be undertaken if conditions are suitable. When coming alongside a boat, buoy or quay, etc. approaches should be into the tide or wind; whichever is the greater (20 knots of wind = 1 knot of tide).
- d. Boats should always be balanced with an even distribution of crew and weights. This is particularly important in flat-bottomed boats, which are inherently unstable.
- e. Boat crews should be aware that conditions could deteriorate rapidly due to strengthening winds or currents or a change in direction, even in apparently sheltered waters.

2.5 Picking up a Survivor from the Water

- i. Always approach a person in the water from down wind. Under certain wind and sea conditions recovery of person in the water beam on to the wind may be more suitable.
- ii. One person is appointed to speak to the survivor throughout the exercise, continuously explaining what is happening and why.
- iii. If the survivor is unconscious, improvised strops should be secured in the boat, the outboard ends of which are passed under the casualty, and with a steady pull on the strops, keeping them horizontal at all times. This method is less demanding on the crew and practice of this procedure should be exercised periodically.
- iv. Manoeuvre slowly down wind. The crewmember at the bow of the boat keeps an eye on the survivor and continually point's in the direction of the survivor. Approach the victim at slow speed, from 5-6 boat lengths off. Maintain steerageway by short movements into gear. Put the engine into neutral, whilst a crewmember manoeuvres the survivor alongside, except in certain surf and wind conditions.
- v. Depending in the injury and circumstances. The crew turns the survivor so that his back is against the boat sponson, and grasps him, one crew to each armpit
- vi. With a concerted and co-ordinated effort, the crew now ducks the survivor and utilising the upward thrust of the water, lean backwards and pulls the man into the boat.

NOTES:

- (a) Should the survivor be exceptionally heavy, it may facilitate the operation to make a strop from a spare piece of line, securing it to a grab handle and lowering it into the water, so that the survivor can get leverage by using his foot or knee.
- (b) In order to minimise further damage to already injured survivors; a blanket or stretcher should be floated underneath them, prior to recovery into the boat.

2.6 Capsize Drills and Procedures

General

- i. Because it is relatively easy to capsize a small craft, particularly an all-inflatable one, it is essential to be aware of, and to exercise in the drill involved in righting such a craft.
- ii. Should a capsize occur, in order to minimise risk to the crew, and loss of equipment, it is essential that any Civil Defence boat at sea must be rigged as follows:
 - a) All equipment securely fastened down.
 - b) Any non-waterproofed equipment stowed in tied waterproof covers.
 - c) Coxswain wearing the kill cord at all times.

The Capsize Drill

- i. Should the boat capsize, throwing all crew into the water, the kill cord will be pulled away, cutting out the engine. It is possible that one or more crewmembers will be 'trapped' under the boat. Any of the crew so trapped may be more fortunate than others, in as much as they have plenty of air to breathe and are still firmly in contact with the boat and follow training procedures.
- ii. Crew underneath the overturned boat should feel along the outside of a sponson until they get hold of a grab handle. Using this grip, pull down and around to the outside of the boat, retaining the hold on the grab handle, as the boat may be adversely affected by wind.
- iii. Crew thrown clear of the boat should immediately try to regain contact with it. Should any of the crew be unable to regain contact, they should not exhaust themselves in further attempts, but fully inflate their lifejackets, float in the most comfortable position, raising one arm vertically into the air to indicate their position. If more than one crewmember is in such a position they should tie themselves together using a lifeline.

Crewmembers in contact with the boat should now proceed as follows:

- iv. Using the Pre-attached righting line/s. Throw the righting line end across to the opposite side of the upturned hull.
- v. Two crewmembers should now board the boat over the transom, which is where most purchase is afforded. These crewmembers now take the righting line/s in hand, and stand on the leeward sponson.
- vi. Leaning well forward and bending the knees, the crewmembers firmly grasp the righting line and simultaneously heave backwards, hauling on the righting line. The boat will rise, slowly at first, and then quickly flipping over a righted position.
- vii. Crew must retain hold of the righting line/s until they have regained proper contact with the righted boat. The crew will now board, once again over the transom, assisting each other as necessary.
- viii. The boarded crewmembers must now immediately deploy the anchor/drogue in order to prevent/reduce any drift, whilst attempting, visually, to locate any crewmembers still in the water. Attempt to restart the engine, inserting a new, dry plug if necessary. Should the attempt fail, try to paddle towards, and recover any crewmembers still in the water. If this last manoeuvre in any way endangers the boat and those already in it, it should not be attempted. If all else fails, do not hesitate to indicate distress by radio, flare or standard hand signal.

RIB Capsize

- In the case of semi-rigid boats it is more difficult to carry out this righting procedure. Whenever this procedure proves impracticable, utilising the righting line/s rigged from one side to the other of the upturned hull, form a safety or steadying line and sit tight, indicating distress by any means available.

2.7 Collisions and Groundings

- i. All collisions and grounding, however slight, must be noted in the ships Log with as many particulars as possible.
- ii. An extract of the Log and a complete written Report should then be submitted to the WUC and the CDO. If necessary, a survey will be authorised to assure the continued seaworthiness of the vessel. An official report should be submitted by the CDO to the Civil Defence Board.
- iii. It is important that in all communications with a third party, in order to avoid the suggestion of admission of liability, or the waiver of any legal right, it should be made clear that the action is taken “without prejudice”. These words imply that the action proposed to be taken, does not involve any acceptance of liability. The Coxswain should record all actions in the ships Log.
- iv. Any Civil Defence boat involved in a collision or grounding should be examined by a marine Surveyor as recommended by the Dept. of Transport

2.8 Night Rescue/Recovery /Training Operations

INLAND WATERS ONLY

- i. It maybe necessary to go out to a Rescue/Recovery/Training at night. The person in charge of this action will be the WUC or CDO.
- ii. An annual application in advance must be made, to the School Principal, for all training operations to be carried out during the hours of darkness
- iii. Under no circumstances should Civil Defence boats operate in an unknown area during hours of darkness.
- iv. Reconnaissance must be undertaken, e.g. routes in daylight should be drawn up, Markers, Buoys, Harbour Entrances, Slipways, Sluices, Lock Entrances, Jetties, Pontoons should be marked with reflective tape where possible and permission from Waterways Ireland or Governing Body over the river section should be sought to do this. When training at night the use of lights and how best to use them on a boat should be part of training procedures.
- v. Navigational techniques at night by experienced persons only should be used.
- vi. Know your area, all information gathering should be done in daylight.

Section 3 Boat Helicopter Operations

General procedures are outlined in the Irish Coastguard CD-ROM, available from each CDO. It is essential that all personnel familiarise themselves thoroughly with these procedures.

Section 4 Maintenance

4.1 The Hull

- i. The maintenance of all boats is the responsibility of the Civil Defence Officer.
- ii. Servicing is to be carried out in accordance with the instructions contained in the boat manufacturer's handbook.
- iii. Major servicing and repair is to be placed in the hands of the manufacturer or an approved agent, depending on the nature of the work.
- iv. Details of all servicing completed must be recorded and those records stamped by the servicing agent.
- v. Civil Defence volunteer personnel can carry out *routine* inspection, servicing and minor repair subject to approval by the CDO.
- vi. Inspect for leakage and abrasions in the inflatable section of the hull. Top-up as required and apply doubler patches to punctures or severe abrasions.
- vii. Inspect the hull for abrasions or deep scratches, which must be filled as soon as practicable. Once water has penetrated the outer Gel coat repair becomes much more difficult.
- viii. The whole hull should be washed down with the pressure washer using fresh water and the interior cleaned of stones and abrasive particles.
- ix. Periodically the hull and sponsons should be given an application of silicone polish to protect the overall finish.
- x. It should be noted that Inflatables should always be kept to maximum pressure, as per manufactures recommendations.
- xi. At regular intervals, Inflatables should be deflated, the bottom boards removed and the interior thoroughly cleaned out in order to prevent any build up of trapped debris.
- xii. Chafing strips should be carefully checked and replaced as required.
- xiii. If a valve in a buoyancy tube is seeping, deflate the compartment and clean the valve.

4.2 Boat Trailers

These are provided to facilitate storage and deployment as the majority of the craft cannot be transported or launched, etc., without the use of a purpose built trailer.

i. User Checks

- a. Wheels - security of attachment.
- b. Tyres - correct pressure and damage (including spare).
- c. Brakes (if fitted) - correct operation, adjustment.
- d. Towing Point - security of attachment and correct operation.
- e. Lights - damage?
- f. Wheel bearings

In addition, the points listed below should be checked prior to moving off following attachment:

- g. Overall security of attachment including the safety chain.
- h. Operation of lights.
- i. Correct location and security of the craft on the trailer and the safe stowage of ancillary items carried in or on the craft.

ii. User Maintenance

- a. It is important to ensure that all moving parts are properly lubricated.
- b. Wheel bearings should be greased at regular intervals, particularly after immersion and also before/after journeys of any distance. Whenever possible, trailers should not be water immersed when wheel bearings are still hot. Ideally, this would mean a 10 to 15 minutes time lapse between trailing and launching.
- c. Use approved bearing grease such as Shell Retinax or other manufacturer approved product.
- d. Hubs not fitted with grease nipples are to be repacked with grease after removal of the hubcaps.
- e. Other moving parts such as brake cables, towing couplings, rollers, etc. should be kept lightly oiled and free of sand/salt deposits.
- f. After use the trailer should be thoroughly washed off with clean fresh water with particular attention being paid to flushing out the brake drums.

NOTE: Brakes will usually be ineffective until dried out.

When housed for storage, trailer wheels are to be securely checked and the brakes left in the off position in order to avoid shoes sticking/rusting to the brake drums.

Servicing/Repair

- (a) Repairs and maintenance, which are outside the scope of the user, are to be entrusted to the manufacturer, his agent, or other suitably qualified workshop. All trailers should be garage serviced yearly, preferably at the beginning of the main season. These services should include close inspections of braking systems and wheel bearings.

4.3 Engines

General

- i. Outboard Engine cooling system is to be flushed through with fresh water following use and prior to storage when appropriate.
- ii. Hose flushing kits are a requirement for all engines.
- iii. Servicing is to be carried out by the appropriate agent in accordance with the instructions contained in the manufacturer's handbook. All engines should be serviced twice yearly, preferably at the beginning and end of the main season. Approved agents should only carry out these services.
- iv. The user should carry out routine maintenance in accordance with the manufacturer's recommendations.
- v. Only manufacturer-approved grease and oils are to be used, and recommended petrol mixtures strictly adhered to, to avoid damage to the engine.
- vi. Local agents will advise on compatible brands and their suitability for use.

4.4 Routine Maintenance

- i. Generally there is very little maintenance for the steering, throttle box and cable other than periodic inspection for corrosion, grit, dirt or salt.
- ii. Examine the cooling water intakes and clear blockages if necessary.
- iii. Check condition of the engine casing and check to see that the sealing strip is correctly fitted and in good condition. Inspect and lubricate exposed linkages and threads with suitable grease.
- iv. Examine propeller blade and trim tabs ensuring engine is switched off. Replace if necessary.
- v. Wipe down the engine with an oily rag. Store the engine in an upright position in a dry and well-ventilated place.
- vi. The propeller(s) should be removed regularly and the shaft checked and lubricated with waterproof grease. Do not over tighten the nut or split pin on reassembling, as this will make propeller change at sea difficult.

4.5 Vehicle used for towing boats

The care and maintenance of all vehicles used to tow Civil Defence boats is the responsibility of the CDO and must adhere to regulations as per the Road Traffic Acts.

4.6 General Principles

- i. It is only by proper maintenance procedures that a boat can be used to its fullest potential. The CDO should designate tasks to his Unit (Fuel, boat maint., trailer maint., etc) and change these duties periodically.
- ii. After each service or exercise the job is not completed until the boat is refueled, re-oiled, washed out and put on trickle charge. By completing this regime every time you can have full faith in your boat when you need it most.



APPENDIX 1

Certification

Civil Defence boat certification will be completed under the auspices of the Irish Sailing Association (ISA).

The following courses and times are the minimum requirements for Civil Defence Boat crews:

All Crew Members course:

- Introduction to Powerboat
- ISA/RYA National Powerboat Certificate
- Occupational First Aid Certificate

A minimum of two calendar years training must then be logged before commencing Coxswain training.

Note: All Training includes care and maintenance of the boats, equipment and engines together with 'on water' training.

Trainee Coxswain Course:

- Coastal Navigation
- ISA/RYA Advanced Powerboat Certificate
- Short Range Certificate

The trainee Coxswain will then need to log a minimum of one calendar years training before being considered as competent.

An additional course, which is specific to Civil Defence, will be available at specific ISA Training sites.

Optional Courses:

- ISA/RYA Safety Boat Certificate
- ISA Dive Boat Certificate

PLEASE NOTE

- New recruits to Civil Defence may be brought out in the boats during training exercises but they are not recognised as crew until they have successfully completed the minimum crewmembers course requirements.
- Official Duties – only qualified personnel can be involved as part of the crew during official duties including search and rescue operations.
- The Civil Defence School has a Recognition of Prior Learning (RPL) Policy – therefore anyone who has completed training elsewhere should submit evidence of such training, through their CDO, to the Civil Defence School for consideration under the RPL policy.

APPENDIX 2

Crew Personal Protective Equipment (PPE)

- Dry suit
- Personal Flotation Device (PFD)
- Water Rescue helmets
- Day/Night Signal Flares (Pains-Wessex or similar)
- Knife (Blunt End)
- Gloves - Neoprene
- Sunglasses/Sun hat/Sun Cream
- Bottled drinking water – Snacks

Note: Personal equipment should not be stored in the boat's 'Emergency Dry Box' as leaks and spills can damage the emergency equipment



APPENDIX 3

CIVIL DEFENCE - BOAT CREW - TRAINING LOG						
Name:	Local Authority:					
Register Number:	Civil Defence Officer:					
Courses	Date	Completed Successfully Yes/No	Instructor Signature	Re-fresher	Date	Instructor Signature
Pre-requisites for all Boat crews						
Coastguard CD Rom (Viewed and Understood)						
Maritime Safety Act (Read and Understood)						
Road Traffic Act, Re: Emergency Vehicles						
Health & Safety Act (Read and Understood)						
Crew Members Course						
Introduction to Power boating						
ISA/RYA National Powerboat Certificate						
Occupational First Aid						
2 Calendar Years Training Logged						
Trainee Coxswain (+ the above courses)						
ISA/RYA 1 Day Coastal Navigation Course						
ISA/RYA Advanced Powerboat Certificate						
Short Range VHF Certificate						
1 Calendar Year Training Logged						
Other Courses						
Civil Defence - Specific Course						
ISA/RYA Safety Boat Certificate						
ISA/RYA Dive Boat Certificate						
GPS/Chart plotter Training						
Re-Fresher (Every 3 Years)						

APPENDIX 3A

CIVIL DEFENCE BOAT CREW - TRAINING LOG			
Name:	Registered Number:		
Civil Defence Officer:	Local Authority:		
Exercise	Date Completed	CDO/Instructors Signature	
Section 1 - Launch & Recovery			
1	Identify the various PDF and appropriate use		
2	Identify the main factors when launching a boat		
3	Identify the main factors when recovering a boat		
4	Demonstrate the safe launching of a boat		
5	Demonstrate the safe recovery of a boat		
6	Describe how to prepare a boat for towing on a road trailer		
7	Demonstrate appropriate pre-start checks on engine		
8	Demonstrate starting & stopping the engine		
9	Demonstrate how PPE must be worn		

Section 2 - Boat Preparation			
1	Describe how to fit & remove outboard engine		
2	Safely refuel, stow tanks and connect fuel lines		
3	Safely stow and secure equipment on board		
4	Demonstrate a 'Safety Briefing' to the crew		
5	<i>Identify and demonstrate the use of:</i>		
	Mooring lines, fenders, anchor & warp		
	Boathook, bailer, paddles/oars		
	Compass, torch, charts		
6	<i>Identify and explain the use of:</i>		
	Fire extinguisher, First Aid Kit,		
	Flares and whistle		
	Engine Spares and tools		

Section 3 - Engine and Boat Maintenance			
1	Discuss the advantages of 2-stroke & 4-stroke diesel engines		
2	Discuss the advantages of single and twin engines		
3	Conduct a routine engine check		

4	Explain basic maintenance of the engine		
5	Discuss basic fault diagnosis of the engine		
6	Give instruction to the crew in setting up a tow from another boat		
7	Give instruction to the crew in setting up towing another boat		
8	Explain towing alongside and astern - when which is appropriate		

Section 4 - Exercises while Boat is Underway

1	Explain how excessive wash affects other boats		
2	Demonstrate turning the boat in its own length		
3	Demonstrate maneuverings against wind and current		
4	Describe the effects of loading & trim on the boat		
5	Demonstrate bring the boat safely onto the plane		
6	While planing the boat steer and turn		
7	While planing the boat maneuver through S-turn & U-turn		
8	Demonstrate bring the boat safely off the plane		
9	Demonstrate safe use of cleats, bollards & rings to secure boat		
10	Describe correct protocols for the use of fenders		
11	Describe correct protocols for stepping across other boats		
12	Describe correct protocols for sharing cleats, bollards & rings		
13	Moor the boat safely & correctly alongside a pier, pontoon, boat		
14	Secure the boat safely and correctly to a mooring buoy		
15	Anchor the boat safely and correctly		
16	Describe the advantages & disadvantages of different anchors		
17	<i>Demonstrate using appropriate knots:</i>		
	Securing a line to a cleat, mooring bollard, ring & anchor		
	Demonstrate how to coil & store a line		
18	<i>Demonstrate the following & describe when they should be used:</i>		
	Round-turn-&-two-half-hitches, Clove hitch, Bowline & Sheet bend		
19	Explain how the weather may affect boating activities		
20	Identify sources of weather forecast		
21	Interpret today's forecast with regard to planned activities		
22	<i>Using a local Chart or Map (inland waterways only):</i>		
	Orienteering using features and a compass		

	Identify hazards and their positions		
	Identify distances - using the chart		
23	Demonstrate the use of a hand held compass		
24	Describe the effects of compass deviation and variation		
25	Use transits to estimate position and hold course		
26	Steer while taking account of wind & current		
27	Correctly identify buoys and marks		
28	Where relevant describe the effects of tides on your activities		
29	Using local tide tables estimate tidal heights		
30	Discuss the effect the tides have on the flow of tidal currents		
31	Discuss the contents of the 'dry box' and their uses		

Section 5 - Emergencies

1	Explain the procedure in a 'man-overboard' incident		
2	Identify how is best to avoid a 'man-overboard' incident		
3	Explain how to summon help in an emergency		
4	Explain how to minimize risk of capsizing during high speed		
6	Explain correct use of 'kill-cord'		
7	<i>Explain the protocol for the following:</i>		
	Engine failure while underway		
	The boat being holed		
	The boat being swamped		
	A Capsize		
	The boat running aground		

Section 6 - SOP's and Regulations

1	Discuss the Civil Defence SOP's for boats		
2	Discuss the implications of the Maritime Safety Act part 3		
3	Identify and describe the principal IALA A buoyage system		
4	Discuss local Regulations and By-laws		

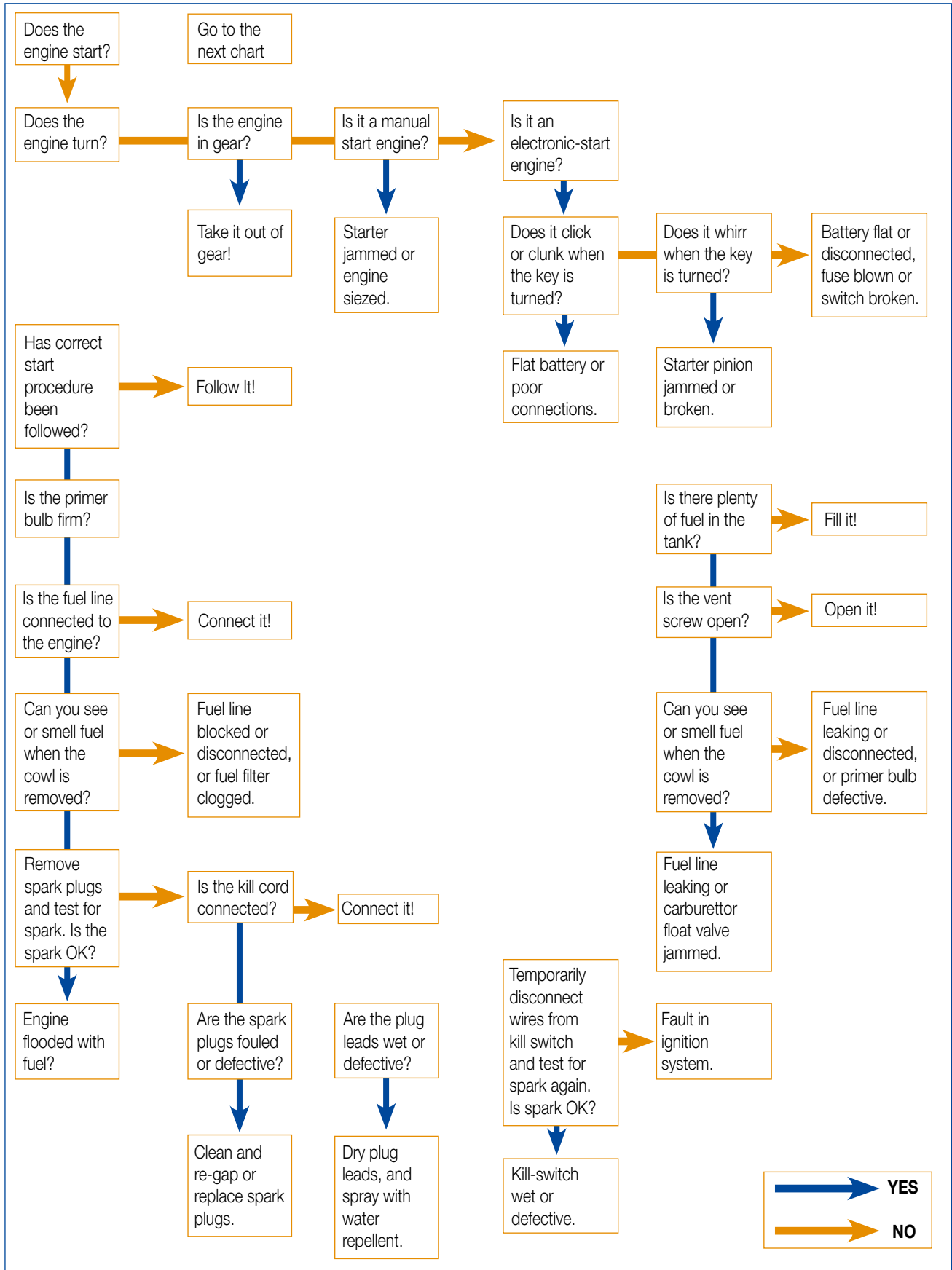
Note: A minimum of 40 of the above exercises should be completed during each boating season and all should be completed during a two season period, most if not all of the above are part of the ISA/RYA National and/or Advanced Powerboat Certificate

APPENDIX 4

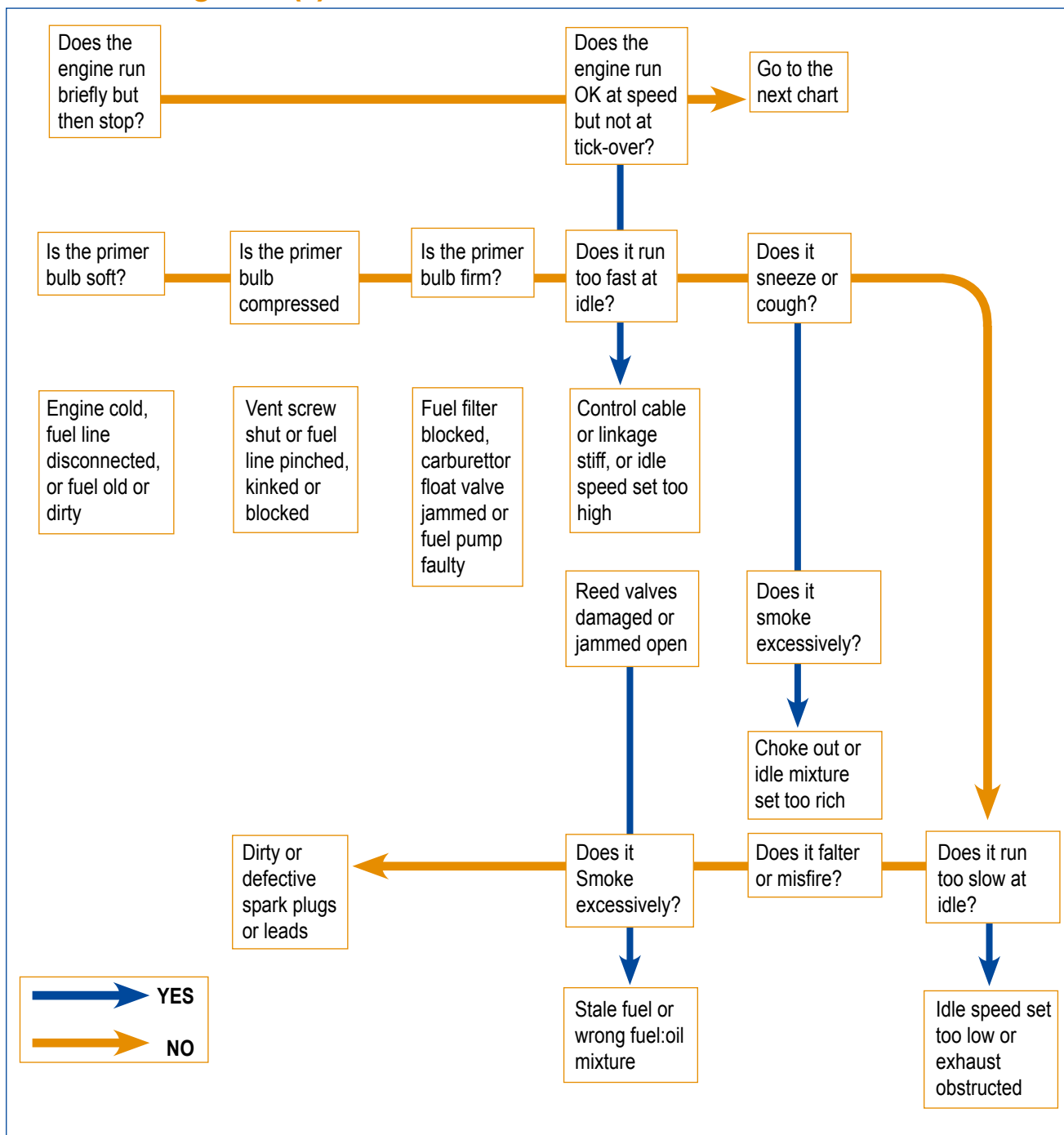
Checklist

Check	✓
Dry Suits & Gloves	
Lifejackets - whistles, lights, straps, and gas bottle.	
Helmets	
Crew Briefed – task, forecast, emergency drills, crew duties	
Sufficient fuel for task plus reserve	
Anchor & line	
Mooring lines	
Drogue & line	
Towing bridle	
Throw Bag	
Compass	
Spare H/H waterproof VHF set	
Pyrotechnics – Coastal pack - Kept in waterproof storage	
In-date fire extinguisher	
Waterproof first aid kit	
Foot pump	
2 paddles	
Sheathed knife	
Engine tool kit (plug, spanner, screwdriver, propeller replacement nuts and washers, sparkplugs)	
Engine spares – 2 litres oil, fuses for engine and console and fuel lead	
Kill cord and spares	
2 Hypothermia bags/wraps	
Survivors lifejacket	
Searchlight and back-up torch.	
Risk Assessment	

APPENDIX 5 Fault-finding table(1)



APPENDIX 5a Fault-finding table(2)



APPENDIX 6

Beaufort Scale

Beaufort Force	Description	Sea State	Speed in Knots
0	Calm	Sea like a mirror	Less than 1
1	Very light	Ripples with appearance of scales, no foam crests	1-3
2	Light breeze	Wavelets, small but pronounced. Crests with glassy appearance, but do not break	4-6
3	Gentle breeze	Large wavelets, crests begin to break. Glassy looking foam, occasional white horses	7-10
4	Moderate breeze	Small waves becoming longer, frequent white horses	11-16
5	Fresh breeze	Moderate waves of pronounced long form. Many white horses, some spray	17-21
6	Strong breeze	Some large waves, extensive white foam crests, some spray	22-27
7	Near gale	Sea heaped up, white foam from breaking waves blowing in streaks with the wind	28-33
8	Gale	Moderately high and long waves. Crests break into spin drift, blowing foam in well marked streaks	34-40
9	Strong gale	High waves, dense foam streaks in wind, wave crests topple, tumble and roll over. Spray reduces visibility	41-47
10	Storm	Very high waves with long overhanging crests. Dense blowing foam, sea surface appears white. Heavy tumbling of sea, shock-like, poor visibility	48-55
11	Violent storm	Exceptionally high waves, sometimes concealing small and medium sized ships. Sea completely covered with long white patches of foam. Edges of wave crests blown into froth. Poor visibility	56-63
12	Hurricane	Air filled with foam and spray, sea white with driving spray, visibility nil – poor	>64

APPENDIX 7

Number 11 of 2005

MARITIME SAFETY ACT 2005

PART 3

Prohibitions Relating to Vessels — Codes of Practice for the Safe Operation of Vessels, etc.

- 27.**— (1) This section applies to the master, or another member of the crew, of an Irish ship in waters anywhere or any other vessel while in Irish waters.
- (2) If a person to whom this section applies, while on board his or her vessel or in her immediate vicinity—
- (a) does any act which causes or is likely to cause—
 - (i) the loss or destruction of or serious damage to his or her vessel or machinery, navigation equipment or safety equipment on board the vessel,
 - (ii) the loss or destruction of or serious damage to any other vessel or any structure, or
 - (iii) the death of or serious injury to any person,
- or
- (b) omits to do anything required—
 - (i) to preserve his or her vessel or machinery, navigation equipment or safety equipment on board the vessel from being lost, destroyed or seriously damaged,
 - (ii) to preserve any person on board his or her vessel from death or serious injury, or
 - (iii) to prevent his or her vessel from causing the loss or destruction of or serious damage to any other vessel or any structure, or the death of or serious injury to any person not on board his or her vessel, and the act or omission was deliberate or amounted to a breach or neglect of duty or the person to whom this section applies was under the influence of alcohol or a drug or any combination of drugs or drugs and alcohol at the time of the act or omission, that person is, subject to *subsection (4)*, guilty of an offence.
- (3) A person guilty of an offence under this section is liable—
- (a) on summary conviction, to a fine not exceeding €5,000 or to imprisonment for a term not exceeding 6 months or both, or
 - (b) on conviction on indictment, to a fine not exceeding €100,000 or to imprisonment for a term not exceeding 2 years or both.
- (4) In a prosecution for an offence under this section it shall be a defence to prove—
- (a) that the defendant could have avoided committing the offence only by disobeying a lawful command, or
 - (b) that in all the circumstances the loss, destruction, damage, death or injury in question or, as the case may be, the likelihood of its being caused either could not reasonably have been foreseen by the defendant or could not reasonably have been avoided by him or her, or
 - (c) if the act or omission alleged against the defendant constituted a breach or neglect of duty, the defendant took all reasonable steps to discharge that duty.

- (5) In this section— “breach or neglect of duty”, except in relation to a person in command or in charge, includes any disobedience to a lawful command; “duty”—
- (a) in relation to a master or another crew member, means any duty falling to be discharged by him or her in his or her capacity as such, and
- (b) in relation to a master, includes his or her duty with respect to the good management of his or her vessel and his or her duty with respect to the safety of operation of his or her vessel, or machinery and equipment on board; “structure” means any fixed or movable structure (of whatever description) other than a vessel.

28.— (1) A person being in command or in charge or another member of the crew of a vessel in Irish waters or an Irish ship in waters anywhere shall not operate or control or attempt to operate or control the vessel or carry out any task or duty in relation to such operation or control while he or she or the other is under the influence of alcohol or a drug or any combination of drugs or drugs and alcohol to such an extent as to be incapable of properly controlling or operating the vessel or carrying out the task or duty.

- (2) A person who fails to comply with *subsection (1)* is guilty of an offence and is liable on summary conviction to a fine not exceeding €5,000 or to imprisonment for a term not exceeding 3 months or both.

29.— (1) (a) The person in command or in charge of a vessel may—

(i) refuse to permit to board the vessel a person who, in the opinion of the person in command or in charge, is, by reason of being under the influence of alcohol or a drug or any combination of drugs or drugs and alcohol, in such a condition or misconducts himself or herself in such a manner, as to cause injury or serious offence or annoyance to persons on the vessel, to cause damage to the vessel or to obstruct, impede or molest a member of the crew of the vessel,

or

(ii) put such a person ashore at any convenient place.

(b) A person who, under *paragraph (a)*, has been refused permission to board, or been put ashore from, a vessel shall not be entitled to be repaid any fare paid by him or her in respect of any voyage or excursion to which his or her attempted boarding of, or presence on, the vessel related.

- (2) If a person in command or in charge or another member of the crew of a vessel is, while on duty, under the influence of alcohol or a drug or any combination of drugs or drugs and alcohol to such an extent that his or her ability to discharge his or her duties is impaired, he or she is guilty of an offence and liable on summary conviction to a fine not exceeding €5,000.

30.— (1) A person on board a vessel in Irish waters or an Irish ship in waters anywhere shall not consume alcohol or take a drug or any combination of drugs or drugs and alcohol while on board the vessel in circumstances which could affect the safety of persons or create a disturbance or serious nuisance on board the vessel or affect the safety of other persons using Irish waters or constitute a nuisance to such persons.

- (2) A person in command or in charge of a vessel in Irish waters or an Irish ship in waters anywhere shall take all reasonable steps to ensure that all persons on board comply with *subsection (1)*.
- (3) A person who fails to comply with *subsection (1)* is guilty of an offence and is liable on summary conviction to a fine not exceeding €5,000 or to imprisonment for a term not exceeding 3 months or both.

31.— (1) A person on board a vessel in Irish waters or an Irish ship in waters anywhere who, without justification, engages in behavior that is likely to cause serious offence or annoyance to any person on board the vessel, at any time after having been requested by a member of the crew of the vessel to cease such behavior, is guilty of an offence.

(2) A person on board a vessel in Irish waters or an Irish ship in waters anywhere who engages in behavior of a threatening, abusive or insulting nature whether by word or gesture with intent to cause a breach of the peace or being reckless as to whether a breach of the peace might be occasioned is guilty of an offence.

(3) A person guilty of an offence under this section is liable on summary conviction—
(a) in the case of an offence under *subsection (1)*, to a fine not exceeding €2,000, or
(b) in the case of an offence under *subsection (2)*, to a fine not exceeding €5,000 or to imprisonment for a term not exceeding 6 months or both.

32.— (1) A person on board a vessel in Irish waters or on an Irish ship in waters anywhere who through any deliberate or reckless action or by reason of being under the influence of alcohol or a drug or any combination of drugs or drugs and alcohol puts at risk or endangers the safety, security or seaworthiness of the vessel or the lives or safety of persons on board is guilty of an offence.

(2) A person guilty of an offence under *subsection (1)* is liable—
(a) on summary conviction, to a fine not exceeding €5,000 or to imprisonment for a term not exceeding 6 months or both, or
(b) on conviction on indictment, to a fine not exceeding €100,000 or to imprisonment for a term not exceeding 2 years or both.

(3) In a prosecution of an offence under this section it is a defence for the defendant to show that he or she could have avoided committing the offence only by disobeying a lawful command.

APPENDIX 8

Number 10 of 2005

SAFETY, HEALTH AND WELFARE AT WORK ACT 2005

PART 1

Preliminary and General Interpretation. **2.**—(1) In this Act, unless the context otherwise requires—

“competent person” shall be read in accordance with *subsection (2)*;

- (2) (a) For the purposes of the relevant statutory provisions, a person is deemed to be a competent person where, having regard to the task he or she is required to perform and taking account of the size or hazards (or both of them) of the undertaking or establishment in which he or she undertakes work, the person possesses sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken.

APPENDIX 9

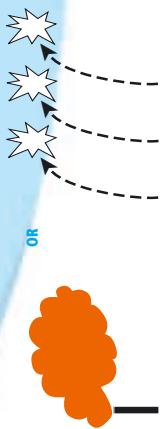
LIFE SAVING SIGNALS

To be used by Ships, Aircraft or Persons in Distress, when communicating with life-saving stations, maritime rescue units and aircraft engaged in search and rescue operations.



Search and Rescue Unit Replies

You have been seen, assistance will be given as soon as possible.



Orange smoke flare.

Three white star signals or three light and sound rockets fired at approximately 1 minute intervals.

Shore to Ship Signals

Safe to land here.



Vertical waving of both arms, white flag, light or flare.

Morse code signal by light or sound. Landing here is dangerous. Additional signals mean safer landing in direction indicated.



S: ... Morse code signals by light or sound.
R: ... Land to the right of your current heading.
L: ... Land to the left of your current heading.

Horizontal waving of white flag, light or flare. Putting one flag, light or flare on ground and moving off with a second indicates direction of safer landing.

Surface to Air Signals

Message	ICAO/IMO Visual Signals
Require assistance	V
Require medical assistance	X
No or negative	N
Yes or affirmative	Y
Proceeding in this direction	↑

Note: Use International Code of Signal by means of lights or flags or by laying out the symbol on the deck or ground with items which have a high contrast to the background.

Air to Surface Replies

Message Understood.

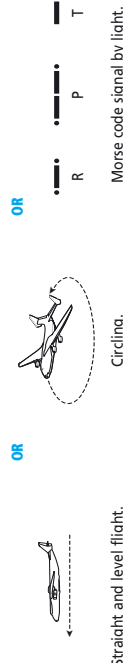


Drop a message.

Rocking wings.

Flashing landing or navigation lights on and off twice.

Message Not Understood – Repeat.



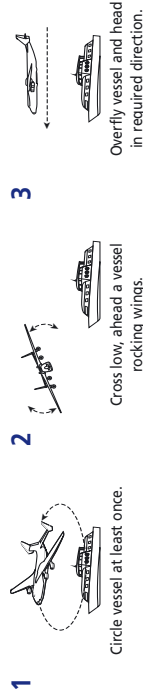
Straight and level flight.

Circling.

Morse code signal by light.

Air to Surface Direction Signals

Sequence of 3 manoeuvres meaning proceed to this direction.

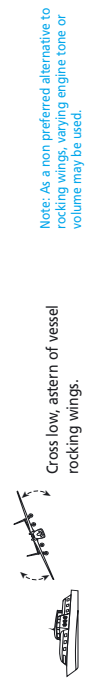


Circle vessel at least once.

Cross low, ahead a vessel rocking wings.

Overfly vessel and head in required direction.

Your assistance is no longer required.

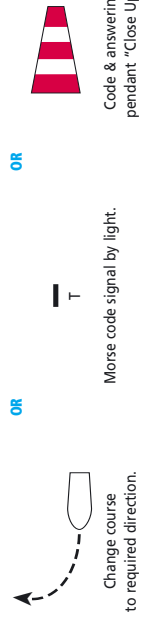


Cross low, astern of vessel rocking wings.

Note: As a non preferred alternative to rocking wings, varying engine tone or volume may be used.

Surface to Air Replies

Message Understood – I will comply.



Change course to required direction.

Morse code signal by light.

Code & answering pendant "Close Up".

I am unable to comply.



Morse code signal by light.

International flag "N".

Note: Use the signal most appropriate to prevailing conditions.

APPENDIX 10

Civil Defence

HAZZARD IDENTIFICATION & RISK ASSESSMENT FOR LAUNCH AND RECOVERY

LOCATION _____

NUMBER OF PERSONS AT RISK _____

COXSWAIN IN CHARGE _____ DATE _____

LAUNCH DETAILS _____

Risk Assessment	YES	NO	N/A
Is the crew familiar with slipway?			
Is access to slipway safe?			
Is the area free of trip hazards?			
Is the surrounding ground safe for vehicle and trailer?			
Are there any slip or fall hazards?			
Are there any dangers from other vehicular traffic?			
Are all personnel wearing full P.P.E including PFD?			
Is there any risk to other personnel not involved in launch procedure?			
Has all equipment been inspected prior to launching?			
Has a safety brief been given to crew prior to launch?			
Brief diagram of Launch Area if required			

RISK ASSESSMENT	YES	NO	N/A
Has all equipment from trailer being removed for launch (light board etc)			
Is it safe to reverse vehicle onto slipway			
Is trailer secure to vehicle and jockey wheel raised			
Are there any sharp hazards that could cause an injury?			
Is all loose equipment stored in the boat?			
Has crew been given launch instructions and positions?			
Can boat be floated off trailer?			
Are there any other moving vehicles or machinery that may cause injury?			
Is there enough fuel in the boat?			
Has a plan for the evacuation of personnel in an emergency been planned?			
Has a full Health and safety brief been given to crew before launch?			
Is there a plan in place for summoning medical assistance			
Will a First Aid Kit be available?			
<p><i>If any of the shaded areas have been ticked then a control measure must be shown below for the risk or Upon completion of the exercise a copy of the training record and risk assessment must be given to the CDO. risks.</i></p>			

CONTROL MEASURES:

COXSWAIN: _____ DATE: _____

REVIEW DATE: (2 YEARS) _____