

# FISHING VESSEL SURVEYS AND INSPECTIONS

How to prepare for your next MCA visit



## **Acknowledgements**

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The online version of this guide includes links to MGNs, MSNs and other online resources, for example the Safety Folder, websites and email addresses for other organisations.

To read the regulations listed in the printed copy of this guide, visit gov.uk and use the search box. For example, type MGN 587 into the search box and you will get a link to the full guidance.

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### Introduction

Preparing and presenting your vessel properly for inspection or survey will save you both **time** and **money**.

Forward planning and preparation could make the difference between success and failure. This leaflet sets out useful advice to help ensure that your next inspection or survey is a successful one.

#### Applying for inspection or survey

Apply early to your local Marine Office. Your inspection or survey can begin up to six months before your Fishing Vessel Certificate expires. Your local Marine Office can advise you of this date of expiry if you are unsure.

Organise your inspection or survey to limit the number of visits the inspector or surveyor must make. If your vessel is well prepared, then most inspections or surveys can be completed in one visit.

#### Under 15m LOA Vessels

For vessels of less than 15m Length Overall (LOA) the first visit to inspect the vessel against MSN 1871 is free, but any return visits will be charged for.

#### Vessels of 15m LOA and over

Most surveys on vessels of over 15m can be completed in two visits.

The most efficient order for these surveys is an 'out of water' survey followed by an 'afloat' survey.

Ensure your Marine Consultant conducts stability checks while the surveyor is conducting the afloat survey as and when applicable. The surveyor will advise you what tests are required.

#### **Relevant Codes**

Before you start, check which type and length of vessel you are operating so that you comply with the relevant Code requirements. Note that the Codes may be amended. You should check that you are using the most current amendment.

- ••• Less than 15m LOA MSN 1871
- \*\* 15m LOA to less than 24m Registered Length (L) MSN 1872
- \*\* 24m L and over MSN 1873

Our Marine Office contact details can be found on gov.uk.



## Out-of-water inspection/survey

#### What should you consider?

Surveyor checks may include the items below, so following these guidelines will cut down the time the surveyor spends on board and any need for re-visits:

- ••• Pressure wash the hull (but do not repaint until after the survey)
- \*\* Provide/arrange safe access to vessel including external hull areas
- Remove and clean sea valves, both inlets and overboard
- \*\* Check and record propeller shaft clearances, by lifting the shaft and using a clock gauge or feeler gauges. A decision can then be made on whether withdrawal or renewal of the shaft is required
- \*\* Check the condition of propeller hub and blades and operation if you have a controlled pitch propeller
- ··· Check and record the rudder pintle bearing clearances
- \*\* For steel vessels; carry out ultra-sonic tests on the hull plating and any suspect areas when the surveyor is present
- \*\* For GRP vessels surveyors will check for signs of de-lamination, damage, osmosis or loss of strength caused by insufficient thickness of GRP, poor bonding, lack of stiffeners etc
- \*\* For wooden vessels surveyors will check for signs of attack by marine borers (gribble/ toredo), damage and may check fastenings by withdrawing a sample to check the condition
- → For wooden vessels; have a shipwright available at survey time, the surveyor can then discuss any action with him
- → For wooden vessels; fastenings will be withdrawn at the discretion of the surveyor

#### **Draft marks**

- · Check draft marks if applied to the vessel. Stability data will be required and that draft marks are required to be checked and applied in order to verify the working draft of the vessel
- --- Draft marks only require checking every five years, or after a modification



## **Documents**



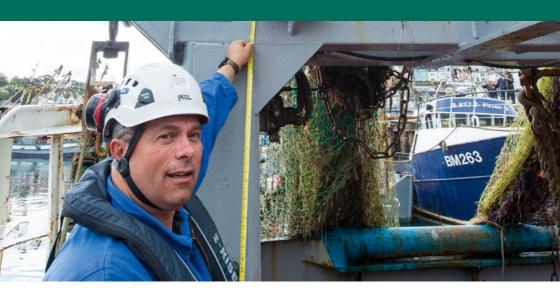
Please note, this booklet is not a definitive guide and compliance with regulations in force at the time is required.

Bring the following documents or evidence with you to be checked.

- \*\* Certificate of Registry: the change of ownership and/or modifications to the vessel such as change of length, engine etc, will require that the Certificate of Registry be renewed/amended
- --- Signed annual self certification forms (less than 24m only)

- \*\* Crew training certificates, which will be checked for validity (the training requirements may change and you should ensure you check the requirements in force at the time of your inspection or survey):
  - \*\*\* Basic health and safety
  - → Basic sea survival
  - Basic fire fighting
  - --- Basic first aid
  - Safety awareness
- \*\* Safety awareness and risk assessment copies on board/available in risk assessment folder. Note change of ownership or change of mode of fishing will require amended/new risk assessments. You must demonstrate the crew are aware of the risk assessment
- ··· Note: Assessment for man overboard risks MUST be written
- Radio licence can be done online at Ofcom.org.uk
- Radio certificates of competency one of the crew should hold either:
  - \*\*\* Short Range Radio Certificate (Area A1)
  - \*\*\* Restricted GMDSS (Area A2)
- ··· Hours of work records
- ··· Records of drills
- \*\* Validity of any servicing certificates for fire appliances, liferafts, etc
- --- Certificates for fixed fire fighting systems, fire detection and alarm systems, as appropriate
- Any other training certificates, for example Navigation Watch-keeping, Engine Room Watch-keeping, Stability Awareness etc
- ··· Crew induction records.
- ••• Written health and safety policy (if five or more crew)
- ··· Crew lists
- \*\* Stability information, i.e stability information booklets
  - ··· Wolfson notices
  - ··· Records of freeboard
  - ··· Records of roll or heel tests

## **Modifications**



Substantial modifications, either funded through grants or other means, or alterations affecting the vessel's dimensions, structure or stability, the removal or repositioning of machinery or engines, changes in the vessel's mode of fishing and/or its gear or the fitting of additional equipment shall be investigated, prior to making any changes.

To ensure that the vessel will continue to comply with the required stability criteria, modifications or alterations to any vessel shall only be carried out after consultation and with the approval of the MCA.

# Construction, watertight and weathertight integrity



- ··· Hull: condition
- \*\*\* Bulkheads: frames, intact condition, penetrations properly sealed
- --- Any store rooms: clear so the internal hull and decks can be inspected
- ••• Decks: condition, watertight, no perforation/damage, unplugged holes, non-slip
- \*\* Watertight doors: condition and operation, seal properly when closed, rubber seals in good condition. Clips and dogs operate freely
- \*\*\* Watertight door clips: free and seals in good condition
- ••• Hold back clips: removed and notice fitted on both sides of the door stating: 'Door to be kept closed at sea'
- ••• Watertight hatches/coamings: condition, height and operation. Seal properly when closed, clips and dogs operate freely

#### Construction, watertight and weathertight integrity continued

- \*\*\* Shelter access hatches and clips: condition and operation
- \*\* Flush hatches and scuttles: condition, operation and watertight when closed
- •• Seawater inlet valves: easily and readily accessible and operable from above floor plate level
- \*\* Freeing port areas: clear of obstructions/blockages
- \*\* Freeing ports: pivot freely, shutter types fitted with retaining chains. Freeing port area recommended to be minimum 3% of bulwark area. Open vessels must not have freeing ports
- ••• Discharges: if fitted below freeboard deck, must have shut off valve and non-return valve. Exhaust pipes penetrating hull below deck need non return valve, device or flap
- \*\* Windows: condition, weathertight above weatherdeck and watertight below. Wooden or steel blanks available
- \*\* Port holes/windows: securing clips and deadlights free, blanks available for external windows if they are broken
- \*\* Skylights: condition, operation, close watertight, blanks available if skylight not of same strength as surrounding structure



## Stability and freeboard



**Stability:** condition of vessel. Stability information booklets for vessels with mandatory stability requirements, owners of vessels without mandatory stability should use roll test or heel test to assess stability.

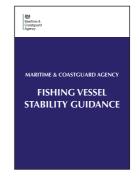
<u>MGN 503</u> contains information on conducting heel and roll tests and <u>MGN 526</u> contains information on using the Wolfson method. The Wolfson stability guidance also provides simple loading guidance that can be applied to any vessel. Based on the vessels size it provides advice to the operator on the level of safety from capsizing in various sea states.

All vessels required to maintain a record of stability tests must have these available. Where a stability information book is NOT currently required, a record book should be maintained which contains:

- \*\* Results of heeling tests conducted to facilitate detection of changes in stability
- Size of and where Wolfson guidance freeboard mark would be positioned to provide direct guidance on safe loading and lifting. It is not necessary to place the mark on the vessel

Additional guidance on stability is contained in our free 'FISHING VESSEL STABILITY GUIDANCE' available to order from <a href="mailto:ecgroup:co.uk">ecgroup:co.uk</a> by quoting MCA/263 or online at gov.uk.

All vessels shall exceed the minimum requirements for stability and freeboard for all envisaged conditions of service.



The skipper shall take the precautionary measures necessary to maintain adequate stability of the vessel.

Information on the vessel's stability shall be available on board and accessible to those on watch.

Instructions supplied concerning the vessel's stability shall be strictly observed by those on watch.



## **Machinery**



- ••• Main and auxiliary engines: suit design and size of vessel, condition, guards, exhaust protected, clear of fuel and oil lines, no exposed high temperature surfaces, high pressure fuel lines sheathed, shielded and no leaks, means and power to go astern
- --- Lighting: facilitates easy inspection
- ••• Fuel: Shut offs remote and labelled with tank they close. Fuel jettisonable, if applicable
- ---> Propeller shafts: condition and operation suitable for power
- \*\* Rotating machinery and hot areas: such as exhaust manifolds should be properly guarded

- \*\* Bilges: condition, no oil being pumped overboard, cleaned to allow access to seawater pipes/bulkheads etc
  - → Bilge systems
  - → Bilge pump/s work by testing them
  - ··· Clear of obstructions
  - --- For all watertight spaces and where bilge is not visible

Note that the use of automatic bilge pumps is not allowed in machinery spaces under marine pollution regulations. See MARPOL

- \*\* Bilge alarm: in all watertight spaces and where bilge is not visible, sensors in good working order, audible and visual at control station
- \*\* Pipework: suitable material. i.e. stainless steel, aluminium bronze, cupro-nickel, galvanized steel or other corrosion resistant material, condition, securing clips, well supported, skin fittings, sea cocks and their ease of operation, minimal flexible piping which meets fire protection standards
- \*\* Save-alls: should be fitted where required and especially below fuel filters
- \*\* Electrical cables: condition, securely clipped, electrically safe
- ··· Compressed air systems air storage bottles safety valves tested
- **Batteries:** condition, ventilated, terminals well lubricated, no cables able to short circuit together
- ••• Main and emergency steering gear: condition, operational test, emergency means of steering upon failure of remote system e.g. tiller arm fitted to the top of the rudder stock
- \*\* Keep records: of any planned maintenance/servicing of machinery
- \*\* Remotely operated valves and dampers: dampers or valves fitted to ventilation openings, routine functionality checks done
- \*\* Arrangements for oil fuel, lubricating oil and other flammable oils: operation of remote means of closing valves on tanks that contain oil fuel, lubricating oil and other flammable oils
- \*\* Flexible hydraulic hoses: properly clipped and should not be too long
- ••• Ventilators: meet air requirements of machinery, flaps and closures operate freely

- --- Indication: should show open and closed positions of ventilation flaps
- \*\* Air pipes from fuel tanks: fitted with a flash back gauze and satisfactory closing device. Provision to prevent overpressure or vacuum when tanks being filled or emptied
- \*\* Air pipes and sounding pipes: marked to indicate tanks they serve and sounding pipe, formal closures or caps attached to the sounding pipe with short chain
- \*\* Ladders: metal where possible, fixed securely
- \*\*\* Floor plates: non slip, securely fastened
- ••• Electrical appliances: safe and have correct wiring fuses, circuit breakers/ protection against overload
- \*\* Switchboard: guarded, clearly marked, correct ratings, mats or gratings provided
- \*\*\* Emergency generating system: runs safety and navigation equipment
- \*\* Shore power: if fitted, reliable, safely installed with appropriate circuit breakers and sufficient for the necessary services working together, for safety as well as domestic purposes
- --- Failure of shore power: ensure crew know what to do
- ••• Change over to ship power: ensure 'live aboard' crew can change over to ship power from shore power
- --- Leaks: no leaks of fuel or any oil to be present
- \*\* Self-closing valves: fitted to water drains and gauge glasses on fuel tanks
- \*\* Appropriate signs: displayed prohibiting discharge of oil overside and indicating high noise level
- \*\* Cleanliness: engine room and other machinery in a clean condition so oil and fuel leaks are readily visible and may be removed as they are also a fire hazard
- Mooring and anchoring: suitable arrangements in place

# Fire protection, detection and fighting





#### Fire protection

- \*\* Structural fire protection: complies with Code requirements. Penetrations properly plugged. Doors meet same requirements as surrounding surfaces
- ••• Fire risks and hazards: awareness of risks, i.e. exhausts in good condition and no flammable materials near hot surfaces
- --- Fire doors, flaps etc: condition
- ··· Fire hazards: tea towels, etc, should not hang over galley stove
- ••• Heaters: away from combustible material, serviced and comply with MGN 312
- ••• Electric stove/fryers/ventilation or extractor fan: switches to isolate this equipment fitted outside the galley/messroom

- ··· Oil fuel and other pumps: that discharge flammable liquids: able to stop
- --- Cylinders: marked correctly and stored safely

#### Fire detection

- --- LPG detection/shut down alarm: system operates satisfactorily
- --- Alarms fitted in compartments: required by code alarms operate on ship and shore power
- --- Smoke detectors: fitted and operational
- Audible and visual alarms: where necessary in wheelhouse, accommodation, machinery space and working on deck

#### Fire fighting

- ••• Fixed fire extinguishing system: for galley vent system, if fitted, and any grills, need to be cleaned of grease
- ··· Fixed fire fighting system for machinery spaces as appropriate:
  - --- System and alarms operational
  - ··· Means of operation clearly marked
  - ··· Nozzles clear
  - --- Sufficient capacity for the space it protects
  - --- Distribution pipework proved clear
  - Advance warning system for occupied spaces
  - Adequately maintained and serviced according to manufacturer's instructions
  - \*\* Means of operation clearly marked
  - \*\*\* Spaces can be made gas tight
  - --- System based on class of fire risk
- ··· Fire Pump/s: fire main, hydrants, hoses and nozzles
- \*\* Each pump operated separately: jet of water produced at any part of the ship whilst required pressure is maintained in fire main (as applicable). If pump and its power source in the machinery space, then emergency pump and power source must be available outside. Nozzles not aluminium

#### Fire protection, detection and fighting continued

- ••• Portable and non-portable fire extinguishers: correct type and number as required by Code. Complying with BS EN 3, 1996 or the Marine Equipment Directive, condition, adequately maintained (annual service), and location
- \*\*\* Fire bucket: and lanyard, if applicable, need not be steel
- ••• Fire blanket: (if galley and cooking area) light duty, to BSEN 7944 or recognised equivalent



## **Protection of crew**



- Drills: conducted regularly and crew aware of responsibilities. See MGN 570
- --- Assess risk of man overboard: you MUST carry out a written risk assessment of areas where MOB might occur, if you cannot eliminate the risk of going overboard you must wear PFD or safety harness/lifeline in those areas. See MGN 588
- --- Bulwarks and rails: condition, height and in working order
- \*\* Embarkation arrangements and launching appliances: for each survival craft including relevant tests
- \*\*\* Ease of access: to safety equipment
- \*\* Escape hatches and clips: free and seals in good condition
- \*\*\* Signs: marking escape ways

- ••• Open decks: recommended to have lifelines or points for attachment of safety harnesses. Should also be covered by risk assessment
- " 'Trip' hazards: removed or clearly marked
- •• Doors and hatches: condition, be easily opened, from both sides for emergencies and self-closing device not disabled
- Doors: fitted with self-closing devices should be free from hindrance. This type of door would be situated at the galley, engine room entrances and any stairways fitted with structural protection. Unapproved hook backs must not be used; only electromagnetic hold backs linked to the fire detection system are acceptable
- ••• Gas detectors: securely fixed in lower parts of compartments near gas appliances, visible and audible alarms in space and control position, notice placed giving action to take if alarm goes off.
- \*\* Carbon monoxide detectors: in all spaces with fired cooking or heating appliance or where exhaust penetrates accommodation space. Fitted and operational. Lithium type
- ••• Means of escape: clear access, no obstructions, signs in place and emergency light/s fitted and working. Are there two means of escape to the deck? Hatches and doors operable from both sides. If one escape is blocked by fire is the alternative available?
- \*\* Hygiene: in living and working areas must be of an acceptable standard
- --- Medical kit:
  - \*\* First aid kits category 'C' standard for vessels up to 60 nautical miles from shore and category 'B' for vessels operating between 60 and 175 nautical miles from the nearest port
  - •• MSN 1768 (M+F) provides guidance on the contents which should be included

#### Fishing and lifting gear

PUWER and LOLER regulations apply. See MGN 619, MGN 331 and MGN 332. This affects all equipment on a fishing vessel. The legislation is risk-based legislation; there is no prescriptive way of doing this. What is reasonably expected is that:

- --- All work equipment and lifting gear should be maintained in good repair and working order
- All work equipment and lifting gear should be tested and examined at regular intervals and a written record maintained of all tests and examinations

Hauling and hoisting gear should have appropriate stop facilities for emergencies including emergency stop facilities, these should be locally placed (next to the equipment) and in the wheelhouse too.



## Life saving appliances



#### \*\*\* Lifejackets/PFDs with lights:

- \*\* Meets Code requirements for number needed on board
- → The battery expiry on light
- \*\*\* Reflective tape is in good condition
- --> Straps and stitching are sound
- --- There are no signs of dampness or rotting fabric
- \*\* Stored in a readily accessible place and crew aware of location and donning instructions clearly displayed
- ··· Inflatable lifejackets have been serviced annually
- ••• Inflatable lifejackets: comply with EN ISO 12402, auto inflation and are of at least 150 Newtons buoyancy

#### --- Lifeboat/survival craft if applicable:

- \*\*\* MED standard SOLAS B Pack
- → Be readily available in case of emergency
- → Be capable of being launched safely and rapidly under all conditions
- Be capable of rapid recovery if fulfilling also the requirements for a rescue boat
- ··· Be so stowed that:
  - Their prompt handling is not impeded
  - Embarkation can be affected rapidly and in good order
  - The operation of any other survival craft is not interfered with
  - The marshalling of persons at the embarkation deck is not impeded

#### ··· Inflatable liferaft/s (as applicable):

- --- Liferaft meets standard required by the applicable Code
- --- Sufficient capacity for all on board
- \*\* Where is it stowed, will it float free if vessel sinks or capsizes
- \*\* VHF handheld radio for liferaft
- \*\* The hydrostatic release unit and/or float free arrangements. Note reduced strength HRU (Green Hammar type) may be used for smaller liferafts
- ••• Services carried out as required or as per the manufacturer's instructions, see MGN 548 (SOLAS) and MGN 553 (Non SOLAS)
- --- Instructions for use posted next to liferaft stowage position
- ·· On vessels over 15m capable of being launched from either side of vessel

#### \*\*\* Lifebuoy, rescue quoits:

- \*\* Correctly marked with name, port of registry and retro reflective tape;
- --- Location, ease of use

#### ---> Parachute flares, hand-held flares and smoke signal/s:

- -- Date and condition
- --- Readily available and in a waterproof container

#### ··· Man overboard recovery:

- \*\*\* Boarding ladder or system suitable for vessel i.e. means capable of operation from the water
- \*\* Risk assessment has considered methods for recovery of unconscious person
- ··· Instructions for use posted up
- --- Drills with equipment conducted

#### **...** Line throwing apparatus:

Minimum two shot capability, readily available, suitable container (15m and over only)

#### **---** Safety harness:

BS EN 365 or equivalent. Safe means to attach to rails or wires

#### ··· Personal floatation devices:

- \*\* If cannot eliminate risks, of going overboard, PFD or lifeline to be worn
- \*\* Choice of equipment depends on risk assessment, and can be a lifejacket or a buoyancy aid of at least 150N or a wearable buoyancy device of at least 50N

#### ··· PIRBs:

- \*\*\* 406 MHz Satellite
- \*\* The hydrostatic release unit and float-free arrangements
- Registered with MCA to current vessel/owner at <a href="www.gov.uk/406beacon">www.gov.uk/406beacon</a>
- → Battery is in date
- \*\* Stowage position so will float free clear of gear/rigging
- \*\* Conform to IMO Resolution A.810 (19). The Radio and Telecommunication Terminal Directive Declaration of Conformity shall include reference to IEC 61097-2 or EN 300 066 or the Marine Equipment Directive Annex referenced by the Compliance Certificate shall be A.1/5.6.

#### **...** Personal locator beacons:

- \*\* Registered with MCA (if 406MHz) at <a href="www.gov.uk/406beacon">www.gov.uk/406beacon</a>
- → Battery in date
- --- EN302 152
- ••• May be AIS if 406MHz EPIRB carried. Recommend if single handed PLB is always 406MHz
- --- Record of LSA equipment: examined
- •• Instructions for on board maintenance of LSA are on board: inspect any immersion suits, thermal protective aids etc

#### **Emergency procedures**

**Emergency instructions:** available for each person on board. Copies of suitably up-dated muster list posted in conspicuous places **and in a language understood by all** persons on board and posters or signs in the vicinity of survival craft and their launching stations as applicable.

#### Drills

- --- A safety certificate will not be issued unless satisfactory drills are carried out
- \*\* The crew members must be able to satisfy the surveyor/inspector as to their familiarity with vessel emergency procedure for abandon ship and firefighting equipment. On every inspection, a man overboard drill will be carried out
- --- Drills: a record must be kept
- ••• Lists: A muster list and emergency stations list is recommended to be displayed as applicable

Reference to the RNLI website at <u>rnli.org.uk</u> and <u>MGN 570</u> and <u>MGN 571</u> are highly recommended.

#### Man overboard

Quick rescue of man overboard is vital due to the dangers of cold water shock and hypothermia.

Unless a person is rescued within five minutes, they probably won't be able to help themselves and it's likely that they will become unconscious. The stages that a person in the water goes through are:

#### <u>Cold shock – stage one – death can occur within five minutes</u>

- On immersion, the victim experiences hyperventilation and increases in blood pressure and pulse rates
- \*\* This increases the risk of drowning or heart failure
- Pulse rates and breathing do not return to normal until after about five minutes of immersion

#### Swimming failure – stage two – death can occur within 10-15 minutes

- \*\* If the victim survives the cold shock stage, then the cold water rapidly cools the nerves and muscles of the limbs. This causes inability to conduct simple survival actions requiring manual dexterity such as climbing into a life raft, holding a becketed line or unwrapping and firing a flare
- \*\* When attempting to swim without the aid of a lifejacket, the body angle of attack travelling through the cold, dense water is increased. Scientific tests have shown that at the start of a swim the angle of attack is likely to be 18° and at the point of failure will have reached 35°. At the same time, swimming strokes become shorter, more rapid and uncontrolled
- \*\* This results in drowning through swimming failure as the victim becomes more vertical in the water, the leg movements become ineffective, the victim becomes exhausted, inhales the next wave and drowns
- Swimming ability in warm water bears no relationship to that in cold water

#### Hypothermia – stage three – death after 30 minutes

- --- As the deep body temperature falls, humans lapse into unconsciousness
- --- Death may occur in two ways drowning through incapacitation and cardiac arrest

#### Stage four – death during or soon after rescue

- --- About 20% of rescued survivors die. Most die from drowning in the process or soon after rescue
- ••• For the hypothermic victim who has been in the water for some time, being pulled out of the water, particularly in a vertical position causes a massive loss of blood pressure. This is complicated by the reinstatement of gravity, decreasing blood volume, increased blood viscosity and a diminished work capacity of the cold heart.

## ••• In layman's terms this is really a massive faint from which the cold victim cannot recover

As time is vital, when deciding how you will rescue a person from the water you should:

- 1. Have a plan for recovering a conscious person
- 2. Have a plan for recovering an unconscious person
- 3. Have the ability to locate a person in the water (visual means or otherwise) ensure you have sufficient search lights and/or rings on board
- 4. Have a means to get hold of and recover an unconscious person
- 5. Have a life buoy at the aft end and/or near to the place where the chances of falling overboard are the highest
- 6. Have equipment practical for the vessel
- 7. Know how to use the equipment you have on board
- 8. Practice using the equipment
- 9. Make sure the retrieval equipment is usable with the levels of manning on board ensure it can be operated by the crew if one of them has gone overboard
- 10. Conduct and record man overboard drills to familiarise your crew with the procedures
- 11. Review the drills with the crew and put in place any improvements identified
- 12. Have a written down plan and procedures for recovering the casualty for the benefit of the crew

- 13. Ensure the crew are wearing PFDs unless you have eliminated the risk of going overboard
- 14. If the recovery necessitates one crew member entering the water, ensure the person is suitably protected
- 15. If working single-handed, put in place a means to get yourself back on board, for example, there is advice on being 'rigged and ready' on the RNLI website at rnli.org.uk.

#### Preventing man overboard situations

You must carry out a written risk assessment for all areas of the vessel and activities where a person may go overboard. The following sets out how to identify situations where man overboard risks can occur and the measures that you can take to reduce or eliminate those risks. Further detail is contained in MGN 571.

## ACTION ONE: Identify areas where regular work activity takes place within one metre of the deck edge

For example, activity relating to hauling, shooting or repairing gear, are surfaces anti-skid, is there a risk of tripping.

It is preferable that the work activity be re-designed to eliminate risk. However, if this is not possible, what precautions are necessary, for example wearing PFDs, safety harnesses or safety lines.

## ACTION TWO: Identify each work activity and how it can be changed to reduce risk

The four steps of a safety assessment are:

#### Step one: Identify and note hazards

Involve all the crew. It may help to research known hazards from credible sources, e.g. MAIB, MCA.

#### Step two: Assessment of hazards/determination of risk

How often is the risk encountered, how likely is a person to go overboard whilst doing this work. This will help the crew to establish the priority for taking action. It may be useful to use a simple means of assigning levels of importance and frequency to the risk.

#### Step three: Taking action/exercising control

<u>Eliminate the hazard</u> – The aim should be to eliminate hazards. An example would be to remove work activity from the deck edge.

<u>Isolate the hazard</u> – If it is not possible to eliminate a hazard completely, it should be isolated in order to separate crew members from the danger. For example, this could mean putting guards around moving parts.

<u>Minimize the risk</u> – If it is not possible to eliminate or isolate the hazard, action should be taken to minimize the possibility that it will cause harm or, at least, to reduce the harm caused. For example, this could be done by providing protective clothing and equipment or providing training.

Involve the crew, the person closest to the operation may be in the best position to find solutions; and a discussion of the problem and potential solutions will be enhanced by having the benefit of the ideas of several persons.

#### Step four: Review of the hazard

The process of safety assessment and management is **continuous**. As noted above, the hazards will vary with each vessel. Furthermore, the hazards will change on that vessel when conditions change.

For example, if the type of fishing operation changes, there is a change in the <u>crew</u> or a new piece of equipment is installed, some of the hazards on board may change and perhaps also the risks associated with those hazards.

## Radio and navigation safety



- \*\* Wheelhouse visibility: must be good. See MGN 314 for guidance
- \*\* Radio equipment: as required by Code or Merchant Shipping (Radio)(Fishing Vessels) Regulations 1999, suitable for area of operation, MMSI number posted up. Batteries have marked expiry date
- --- AIS: fitted to all vessels over 15m
- \*\* Charts: suitable scale and details, for area of operation, latest available
- ··· Nautical publications: up-to-date
- --- Compass: hand-held or fixed for under 15m, otherwise magnetic
- ••• Table or curve of residual deviations for magnetic compass: deviation card may be provided
- ••• Navigational systems: operational, and, where appropriate, maintenance manuals provided

- --- Sound signals: operational
- \*\* Radar reflector: if applicable, enable detection by radar at 9 and 3 GHz
- ••• Navigation lights: appropriate to the vessel see MSN 1781 and MGN 393. Applies to all vessels regardless of operation, main and emergency power source operational
- ••• Signal lamp: either waterproof torch and searchlight or a portable daylight signalling lamp. Reserve power and spare bulbs



## **Crew accommodation**



For all fishing vessels, the following must be appropriate to the service of the vessel and the length of time crew live on board:

- → Maintenance of accommodation and galley spaces with due regard to hygiene and overall safe health and comfortable conditions
- ---> Ventilation, heating, cooling and lighting
- ··· Mitigation of excessive noise and vibration
- Sanitary facilities, including toilets and washing facilities, and supply of sufficient hot and cold water

Further details on the minimum crew accommodation requirements are set out in:

- ••• MSN 1871 (F) The Code of Practice for the Safety of Fishing Vessels of less than 15m Length Overall (LOA)
- \*\* MSN 1872 (F) The Code of Practice for the Construction and Use of Fishing Vessels of 15m LOA to less than 24m Registered Length (L)
- •• MSN 1873 (F) The Code of Practice for the Construction and Use of Fishing Vessels of 24m (L) and Over



## **Training and certification**

#### **New entrants**

NOTE: The training and certification requirements set out below may change and you should ensure you check the requirements in force at the time of your inspection or survey.

A new entrant is defined as a person who is for the first time gainfully employed or engaged as a crew member on a commercial fishing vessel registered in the United Kingdom.

Before starting work as a fisherman all new entrants must have completed the following course:

· One-day basic sea survival

Within three months of starting work, all new entrant fishermen must complete the following additional courses:

- One-day basic fire fighting and prevention
- ··\* One-day basic first aid
- •• One-day basic health and safety (only required of new entrants after 1 January 2005)

Upon completion of these four courses, new entrants are recommended to apply to Sea Fish Industry Authority (Seafish) for a new entrant photo identification card verifying their compliance with these requirements.

#### **Experienced fishermen**

An experienced fisherman is defined as a fisherman who has been working as a fisherman for two years or more.

In addition to the courses required of new entrants (above), all experienced fishermen, regardless of whether they hold a Certificate of Competency, must complete the following course:

··· One-day safety awareness and risk assessment

# CERTIFICATION REQUIREMENTS FOR OFFICERS ON FISHING VESSELS

#### Deck

The minimum manning requirement for qualified Deck Officers is as follows:

Fishing area	Length of vessel	Deck Officer Certificate of Competency (Fishing Vessel) Class 1	Deck Officer Certificate of Competency (Fishing Vessel) Class 2	Deck Officer Certificate of Competency (Fishing Vessel) Class 3
Unlimited	40m and over	2	1	
Unlimited	Under 40m	1	1	
Limited*	30m and over	1	1	
Limited*	24m or more but under 30m		1	1
Limited*	16.5m or more but under 24m		1	

<sup>\*</sup> Limited area means any location within the area bounded by a line from a point on the Norwegian coast in latitude 62° N due west to a point 62° N 3° W; thence to a point 58° N 10° W; thence to a point 53° N 12° W; thence to a point 49°N 12° W; thence to a point 46° 30′N 6° W and thence due East to the French coast

With the exception of vessels of less than 24m operating in the limited area, only people holding a Certificate of Competency as a Deck Officer or a five day bridge watch-keeping course shall be in charge of a navigational watch.

### Engineer

Every fishing vessel with a propulsive power of 750 kilowatts or more operating in the unlimited area must carry at least two qualified engineer officers, being at least a Chief Engineer holding an Engineer Officer Certificate of Competency (Fishing Vessel) class one and a Second Engineer holding an Engineer Officer Certificate of Competency (Fishing Vessel) class two.

#### Further information

Further information, for example on training accepted as equivalent to the basic safety training courses, is contained in MGN 411 (M&F) Training and Certification Requirements for the Crew of Fishing Vessels and their Applicability to Small Commercial Vessels and Large Yachts.



# **Vessels new to the Register**

New build vessels of less than 24m must be constructed in accordance with Approved Fishing Vessel Construction and Outfit Standards.

All vessels of 24m and over, whether new build or not, must be constructed and certificated to class standards. Vessels must remain certificated with a Class Society or a Marine Administration whilst on the UK Register.

#### All vessels

Vessels flagging-in will be treated as being new vessels, so must comply with the requirements of the relevant Code at the time of joining the Register.

Before purchasing and applying to register a vessel in the UK, owners are advised to consider the consequences of compliance with the Code. Owners are recommended to seek early advice from their technical consultants and MCA prior to making any commitment for registering a vessel that has not been constructed under the survey of a Classification Society or other organisation with delegated powers granted by a Marine Administration.

# Under 15m vessels wishing to join the Register for the first time or that have been off the Register for more than 6 months

Fishing vessels of less than 15 metres, built on or after 16 July 2007 must be built and certificated to Approved Fishing Vessel Construction and Outfit Standards before entering service to make sure that they comply with the appropriate certification requirements.

Vessels of less than 15m length overall, built before 16 July 2007 must undergo a registration survey, by a surveyor authorised by the MCA, who will survey the vessel against Approved Fishing Vessel Construction and Outfit Standards.

If your vessel was built after 16 July 2007 and is either:

- ••• Less than 7m registered length and has a Seafish Construction Certificate or a certificate demonstrating the vessel has been constructed to another approved fishing vessel construction standard or:
- \*\* 7m registered length to less than 15m length overall and has a Seafish Construction and Outfit Certificate or a certificate demonstrating the vessel has been constructed and outfitted to another approved fishing vessel construction and outfit standard

then you may also use authorised surveyors to prove the vessel is seaworthy.

Vessels not certificated to Seafish or another approved fishing vessel construction and outfit standards after 16 July 2007 will not be accepted.

The authorised surveyor will provide a comparison report to the MCA for consideration. Based on this report, the MCA may decide to reject the vessel, require additional work on the vessel or accept the vessel as meeting the Seafish or other approved fishing vessel standards. The vessel must then be inspected.

# Fishing vessels of 15m and over wishing to Register as UK fishing vessels

The vessel will be assessed against a flag-in matrix, prior to acceptance on the UK flag. Depending on the outcome of the assessment, the vessel will either be flagged-in by MCA through survey, have a pre-flag inspection by MCA prior to flag-in survey or referred to the flag-in panel for a decision.

# **Further advice**

## MCA publications

We have published instructions for surveyors for the survey and inspection of fishing vessels on Gov.uk. You can use these instructions to help prepare your vessel for a survey or inspection:

www.gov.uk/government/publications/survey-and-inspection-of-fishing-vessels-chapters-1-to-17-msis-27

We have also produced a number of documents which can assist in improving safety on your vessel:

#### **Fishing Vessel Stability Guidance**

www.gov.uk/government/publications/fishing-vessel-stability-guidance

#### Fishermen's Safety Guide

www.gov.uk/government/publications/fishermens-safety-guide

Other guides and booklets can be downloaded from the MCA online catalogue: http://mca.ecgroup.net/browse.aspx

#### These include:

- \*\*\* Emergency radio procedures sticker Quote ref MCA/102
- ··· GMDSS benefits of digital selective calling Quote ref MCA/103
- \*\*\* Radio medical advice stickers Quote ref MCA/168
- \*\* Preventing slips, trips and falls on board Quote ref MCA/151
- \*\*\* Managing fatigue in seafarers Quote ref MCA/182
- \*\* Personal survival at sea Quote MCA/075
- --- Entry into enclosed spaces Quote Ref MCA/198
- \*\* Know your safety signs Quote Ref MCA/165

#### **RNLI**

The RNLI website contains important safety information and videos on a number of safety subjects:

#### www.rnli.org/safety/choose-your-activity/commercial-fishing

On this site you can access videos on:

- \*\*\* Man overboard recovery solutions
- ··· Personal floatation devices

#### **SEAFISH**

#### www.seafish.org/safety-training

On the Seafish website you can obtain advice and guidance on:

- --- Safety training mandatory and voluntary
- \*\*\* Single handed operation
- --- Safe access to vessels
- --- PFD wear

# Legislation and guidance

The Regulations, Merchant Shipping Notices and Marine Guidance Notes listed below are not a comprehensive list but are provided to assist you in finding key documents relating to survey items referenced in this guide.

#### The Codes of Practice

- \*\* SI 2017 No. 943 The Fishing Vessels (Codes of Practice) Regulations
- •• MSN 1871 (F) The Code of Practice for the Safety of Fishing Vessels of less than 15m Length Overall (LOA)
- \*\* MSN 1872 (F) The Code of Practice for the Construction and Use of Fishing Vessels of 15m LOA to less than 24m Registered Length (L)
- \*\* MSN 1873 (F) The Code of Practice for the Construction and Use of Fishing Vessels of 24m (L) and Over

Key regulations – Please note this is not a list of all regulations but is provided to assist you in finding key regulations relating to survey items referenced in this guide.

#### Health and safety

- \*\* SI 1997, No. 2962 The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations as amended by SI 1998 No.2411 and SI 2001 No.54, SI 2014 No. 1616, SI 2015 No.21, SI 2016 No.1692, SI 2016 No. 1026, SI 2018 No.1109 and any subsequent amendments
- \*\* SI 1998, No. 2411 The Merchant Shipping and Fishing Vessels (Health and Safety at Work)(Employment of Young Persons) Regulations as amended by SI 2002 No.2125, SI 2016 No.21 and any subsequent amendments
- \*\* SI 1999, No. 2205 The Merchant Shipping and Fishing Vessels (Personal Protective Equipment) Regulations and any subsequent amendments

- \*\* SI 2001, No. 3444 The Merchant Shipping and Fishing Vessels (Safety Signs and Signals) Regulations as amended by SI 2015 No.21 and any subsequent amendments
- \*\* SI 2006, No 2183 The Merchant Shipping and Fishing Vessels (Provision and Use of Work Equipment) Regulations 2006, as amended by SI 2008 No.2165, SI 2016 No.1025 and any subsequent amendments
- ••• SI 2006 No.2184 The Merchant Shipping and Fishing Vessels (Lifting Operations and Lifting Equipment) Regulations as amended by SI 2008 No.2166 and any subsequent amendments
- \*\* SI 2010 No. 332 The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Work at Height) Regulations, any subsequent amendments
- \*\* SI 2018 No. 1106 The Merchant Shipping (Work in Fishing Convention) Regulations
- \*\* SI 2018 No. 1107 The Merchant Shipping (Work in Fishing Convention) (Survey and Certification) Regulations
- \*\* SI 2018 No. 1109 The Merchant Shipping (Work in Fishing Convention) (Consequential Provisions) Regulations
- \*\*\* MSN 1870 (M+F) The Merchant Shipping and Fishing Vessels (Personal Protective Equipment) Regulations 1999 MSN 1874 (M+F) Marine Equipment The Marine Equipment Directive, Other Approval and Standards (Amendment 2)
- → MSN 1882 (F) ILO Work in Fishing Convention, 2007 Implementation of EC Directive 94/33 Minimum Age and Protection for Young Persons on Fishing Vessels
- \*\* MGN 309 (F) Fishing Vessels The Dangers of Enclosed Spaces
- → MGN 311 (F) Working and Protective Gear for Fishermen
- \*\* MGN 331 (M+F) The Merchant Shipping and Fishing Vessels (Provision and Use of Work Equipment) Regulations 2006
- \*\* MGN 332 (M+F) The Merchant Shipping and Fishing Vessels (Lifting Operations and Lifting Equipment) Regulations 2006
- ••• MGN 556 (M+F) The Merchant Shipping and Fishing Vessels (Safety Signs and Signals) Regulations 2001
- → MGN 577 (M+F) Guidance on the Maintenance of Lists of Crew Ashore

- \*\* MGN 587 (F) International Labour Organization Work in Fishing Convention (No. 188) Health and Safety Responsibilities of Fishing Vessel Owners, Managers, Skippers and Fishermen
- ••• MGN 591 (M+F) Provision of Safe Means of Access to Fishing Vessels and Small Vessels in Ports
- \*\* MGN 596 (F) Fishing Safety Management Code: Helping to Improve the Management of Safety on Fishing Vessels
- \*\* MGN 619 (F) Merchant Shipping and Fishing Vessels (Lifting Operations and Lifting Equipment) Regulations 2006 (LOLER) and the Merchant Shipping and Fishing Vessels (Provision and Use of Work Equipment) Regulations 2006 (PUWER)

#### Working and living conditions

- \*\* SI 1972, No. 919 The Merchant Shipping (Crew Agreements, List of Crew and Discharge of Seamen)(Fishing Vessels) Regulations as amended by SI 1979 No.1519, SI 1983 No.478 and SI 2018 No 1109 and any subsequent amendments
- \*\* SI 1981, No. 570 The Merchant Shipping (Official Log Books)(Fishing Vessels) Regulations as amended by SI 2002 No.1473 and any subsequent amendments
- \*\* SI 2004, No 1713 The Fishing Vessels (Working Time: Sea fishermen) Regulations and any subsequent amendments
- \*\* MSN 1057 (F) Merchant Shipping (Crew Agreements, Lists of Crew and Discharge of Seamen) (Fishing Vessels) (Amendment) Regulations 1983
- \*\* MSN 1891 (F) ILO Work in Fishing Convention, 2007 List of Crew
- \*\* MSN 1884 (F) International Labour Organization Work in Fishing Convention (No. 188) Working Time Application of the Fishing Vessels (Working Time Sea-fishermen) Regulations 2004 as Amended
- ••• MGN 413 (F) Voluntary Code of Practice for Employment of Non-European Economic Area (EAA) Fishing Crew
- ••• MGN 583 (F) International Labour Organization Work in Fishing Convention (No. 188) Fishermen's Work Agreements
- → MGN 584 (F) ILO Work in Fishing Convention, 2007 Repatriation
- → MGN 585 (F) ILO Work in Fishing Convention Payment of Fishermen

- ••• MGN 589 (F) International Labour Organization Work in Fishing Convention (No. 188) Complaints
- \*\* MGN 595 (F) ILO Work in Fishing Convention, 2007 Provision of Food and Water

#### Medical requirements

- \*\* SI 1995, No. 1802 The Merchant Shipping and Fishing Vessels (Medical Stores) Regulations as amended by SI 1996 No.2821 and any subsequent amendments
- \*\* SI 2018 No. 1108 The Merchant Shipping (Work in Fishing Convention) (Medical Certification) Regulations
- ••• MSN 1883 (F) Work in Fishing Convention (No. 188) Medical Examination and Certification for Fishermen Application of the Merchant Shipping (Work in Fishing Convention) (Medical Certification) Regulations 2018
- → MSN 1885 (F) ILO Work in Fishing Convention, 2007 Survey and Inspection MSN 1886 (M+F) Maritime Labour Convention, 2006 Work in Fishing Convention, 2007 (ILO No.188) Appointment of Approved Doctors and Medical and Eyesight Standards
- with MGN 225 (M+F) Radio Medical Advice for Ships at Sea
- ••• MGN 522 (M+F) Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 and Merchant Shipping (Maritime Labour Convention) (Medical Certification) Regulations 2010; New and Expectant Mothers
- → MGN 586 (F) ILO Work in Fishing Convention, 2007 Medical Care

#### Training and certification

- \*\* SI 1984, No. 1115 The Fishing Vessels (Certification of Deck Officers and Engineer Officers) Regulations as amended by SI 1995 No.1428 and SI 1998 No.1013 and any subsequent amendments
- \*\* SI 1989, No. 126 The Fishing Vessels (Safety Training) Regulations as amended by SI 2004 No.2169 and any subsequent amendments
- ••• MGN 411 (M+F) Training and Certification Requirements for the Crew of Fishing Vessels and their Applicability to Small Commercial Vessels and Large Yachts

#### **Navigation**

- \*\* SI 1996, No. 75 The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations as amended by SI 2004 No.302 and any subsequent amendments
- \*\* SI 2002, No 1473 The Merchant Shipping (Safety of Navigation) Regulations as amended by SI 2004 No.302, SI 2004 No.2110,, SI 2005 No.2114, SI 2010 No.610 and SI 2010 No.1075, S.I. 2011 No. 2978 and any subsequent amendments
- ••• MGN 137 (M+F) Look-out During Periods of Darkness and Restricted Visibility
- \*\* MGN 266 (F) Guidance on the Interpretation of SOLAS Chapter Five for Fishing Vessels
- → MGN 313 (F) Keeping a Safe Navigational Watch on Fishing Vessels
- \*\*\* MGN 314 (F) Wheelhouse Visibility Onboard Fishing Vessels

#### Communications

- \*\* SI 1999, No.3210 The Merchant Shipping (Radio)(Fishing Vessels) Regulations as amended by SI 2002 No.2201, SI 2016 No.1025 and any subsequent amendments
- \*\* SI 2000 No.1850 The Merchant Shipping (EPIRB Registration) Regulations and any subsequent amendments

#### Marine equipment

- \*\* SI 2016 No.1025 The Merchant Shipping (Marine Equipment) Regulations, and any subsequent amendments
- → MGN 554 (M+F) Marine Equipment: Marine Equipment Directive UK Applicant Notified Bodies

#### **Vessel Safety**

- → MSN 975 (F) Freeboards of Fishing Vessels
- \*\*\* MGN 165 (F) Fishing Vessels: The Risk of Flooding
- ••• MGN 190 (F) Fishing Vessels: The Premature Failure of Copper Pipes in Engine Cooling Water Systems
- \*\* MGN 281 (F) Fishing Vessels Freeboard and Stability Information Booklet

- ••• MGN 310 (F) Fishing Vessels: Risk of Fire and Explosion from Gas Welding and Burning
- ••• MGN 312 (F) Use of Liquid Petroleum Gas (LPG) and Diesel Fuelled Appliances on Fishing Vessels
- •• MGN 316 (F) Re-Applying Paints, Varnishes and Other Finishes to Interior Surfaces
- ••• MGN 415 (F) Fishing Vessels: The Hazards Associated with Trawling, including Beam Trawling and Scallop Dredging
- \*\* MGN 439 (F) Survey Standards for 24m and Over Registered Length Fishing Vessels
- ••• MGN 494 (M+F) Media and Other Organisations Using Ships and Fishing Vessels
- •• MGN 503 (F) Procedure for Carrying out a Roll or Heel Test to Assess Stability for Fishing Vessel Owners and Skippers
- ••• MGN 526 (F) Stability Guidance for Fishing Vessels: Using the Wolfson Method
- … MGN 564 (M+F) Marine Casualty and Marine Incident Reporting
- **™** MGN 570 (F) Fishing Vessels: Emergency Drills
- \*\* MGN 571 (F) Fishing Vessels: Prevention of Man Overboard
- MGN 581 (F) Fishing Vessels: Registration Surveys for Fishing Vessels of Less than 15m Built before 16 July 2007
- \*\* MGN 588 (F) Compulsory Provision and Wearing of Personal Flotation Devices on Fishing Vessels

#### Life saving appliances

- ••• MSN 1467 (F) Emergency Position-Indicating Radio Beacons, Float Free Arrangements for Liferafts and Lifejackets on Fishing Vessels
- \*\* MGN 267 (F) The Location and Stowage of Liferafts and Emergency Positioning Radio Beacons (EPIRBs) on UK Registered Fishing Vessels
- ••• MGN 343 (M+F) Hydrostatic Release Units (HRU) Stowage and Float Free Arrangements for Inflatable Liferafts

- ••• MGN 548 (M+F) Life-Saving Appliances Inflatable SOLAS Certificated Liferafts, Lifejackets, Marine Evacuation Systems, and Repair of Inflated Rescue Boats Servicing Requirements and Approved Service Stations
- ••• MGN 553 (M+F) Inflatable Non-SOLAS Liferafts, Lifejackets, Marine Evacuation Systems, Danbuoys and Lifebuoys



## GOV.UK

The online version of this Guide includes links to MGNs, MSNs and other online resources, for example the Safety Folder, websites and email addresses for other organisations.

To read the regulations listed in the printed copy of this guide, go to gov.uk and use the search box. Type in for example: MGN 587 into the search box and you will get a link to the full guidance.



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