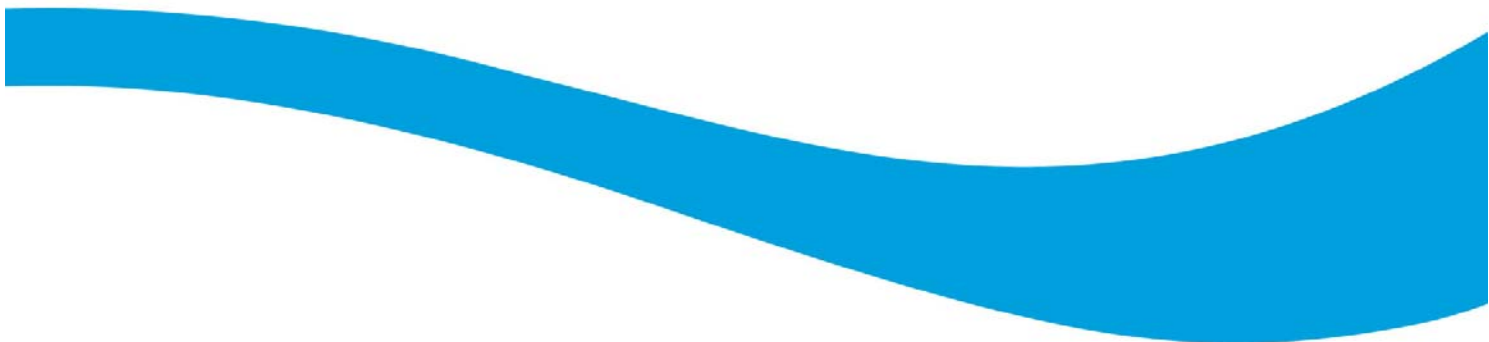




Small Vessel Safety Guidance Booklet

(for vessels under 15m overall length)

Issue 1 (May 2007)



Endorsed by the MCA

Introduction

This booklet contains a list of questions that the owner/operator of a vessel should consider in order to assess the safety of the fishing operation and therefore demonstrate a responsible approach. The questions are provided for guidance only and as such they may not cover every issue relating to a particular vessel. When assessing safety, all concerns and hazards that may exist on the vessel should be considered.

Performing a safety assessment

The questions are divided into sections with headings such as 'The Vessel', 'The Crew' and 'General Working', etc, with separate sections also relating to specific fishing operations. Consider the questions listed under each heading and decide if they are relevant to your vessel and fishing operation. By answering the questions honestly, and considering whether or not improvements can be made, you will be assessing the safety of the vessel and fishing operation.

This form of assessment should not be confused with a risk assessment – it is purely intended to help identify safety issues aboard a vessel. You don't have to spend money unnecessarily. If you are quite satisfied and can justify the situation on your vessel, there is no need to make any changes.

Note: A blank 'pull-out' risk assessment sheet has been provided at the centre of this booklet for use on small vessels. It includes a simple step-by-step guide to help you perform a risk assessment.

Why you should perform a safety assessment

It is important for vessel operators to consider the safety of the fishing operation and make every reasonable effort to make it as safe as possible. Reading through the booklet and considering the questions will help you to assess the safety of the fishing operation and identify any possible improvements.

The Vessel
The MCA Small Vessel Code: Have you complied with the requirements of the Code with respect to your vessel?
Safety Equipment: Have you considered having additional safety equipment not required by the Code but that would be sensible on your vessel such as a liferaft or an E.P.I.R.B. etc.?
General Condition: Is the hull in sound condition and do all hatches, doors and vents have an effective means of closure? Is the steering gear in good condition?
Freeing Ports/ Pumping Systems: If the vessel is decked, are the freeing ports clear of obstructions? Is the pumping system effective to pump water out of the hull?
Structural Changes: Have changes been made that have added or removed weight, e.g. main engine changed, shelter deck added, new winch, stern gantry or net drum added? If so, are you satisfied that the stability of the vessel is still acceptable? (Significant changes in weight, especially high up will have a big effect on stability and it should be checked by a competent person.)
Propulsion: Are the main engine, gearbox, propeller shaft, stern gland and propeller in good condition?
Sea Water Systems: Are the sea inlet valves, discharge valves, pumps and piping in good condition?
Bilge Level Alarms: Are bilge level alarms fitted in suitable spaces and in good working order?
Electrics: Are the batteries and the electrics on the vessel in good order?
Navigation: Is the navigation equipment on the vessel adequate for the area of operation and is there any back up in the event of failure?
Communication: Do you have adequate means of communication and is there a back up system? Have you any form of emergency position indicating/reporting system such as, an EPIRB or a confidential reporting/location system?

The Crew
Safety Courses: Have all persons completed the Sea Survival, 1st Aid, Fire-fighting and Safety Awareness courses that are required by regulation?
Concerns: Are there any concerns with crewmembers such as, youth, lack of experience, disability or language difficulties?

Emergency Procedures

Man-over-board: Do all persons know what they are to do if a man-overboard situation occurs? Think how such a situation would be best handled on your vessel and provide any suitable equipment and instruct all crewmembers in how they should react.

Fire: Is the fire fighting equipment on your vessel sufficient and in good order? Do all persons know what to do? Consider possible fire situations and instruct the crewmembers in how they should respond.

Abandon Ship: Do all persons know what to do? Consider what action is necessary in an abandon ship situation and ensure that all crewmembers are aware of what should be done and when.

Helicopter Rescue: Do all persons know what to do? Instruct crewmembers in the precautions necessary when receiving the line from the helicopter.

General Working

Boarding & Leaving the Vessel: Is the boarding of the vessel safe, are the harbour ladders in good order, can you make it safer?

Sea Gear: Do all the crewmembers have suitable oilskins, clothing and gloves? Safety boots with toe protectors should be considered.

Personal Buoyancy Devices (PBDs): Crewmembers are to wear suitable buoyancy devices (inflatable lifejackets etc) when working on deck. Have you provided effective items that are suitable to be worn when working?

Working on the Vessel: Is it possible to move easily around the working areas of the vessel without the dangers of tripping, slipping or falling? Are there any obstructions that need to be removed or made safer? Are all handrails in place and are they of sufficient height? Is there adequate lighting installed?

Wheelhouse

Watch-keeping: Are all watch keepers competent? Ensure that anyone left in charge of the vessel is competent to be so.

Adequate Lookout: Is an adequate lookout kept at all times? The Skipper must ensure that at all times he is aware of the movements of other vessels in the area and if working on deck there must be provision to control the vessel and to be able to see what is around.

Tiredness: Has the watch keeper always had sufficient rest? Should a 'watch alarm' system be installed on the vessel?

Accommodation/Galley

Heating & Ventilation: Is the heating and ventilation adequate considering the level of accommodation and the use of it? Dampness and fumes will cause ill health.

Cooking Facilities: Are the cooking facilities adequate and in good order?

Fire: Are smoke detectors fitted and suitable fire extinguishers available including a fire blanket near the stove?

Calor Gas: Are the necessary safety precautions in place? If used for heating or cooking, ensure that a gas detector is fitted and the cylinder is stored outside the accommodation.

Escape Route: Is the accommodation area kept clear of obstructions and is there an alternative escape route in the event of fire?

Engine room / engine space

Drives: Are all belt drives effectively guarded?

Cleanliness: Is the engine and other machinery kept in a clean condition so that oil and fuel leaks are readily visible?

Fire risk: Are exhausts in good condition and no flammable materials near hot surfaces?

Fire fighting: Have you suitable fire fighting equipment to fight an engine fire?

Batteries: Are they in good order, in a ventilated area and kept clear of items that could short across them causing a fire/explosion?

Landing Operations

Lifting equipment: Are the landing derrick, the rigging, the box hooks and winch rope/wire are in good order and suitable for the load being lifted? Note: legislation is soon to be introduced that will require lifting equipment to be tested and certified with a safe working load (SWL).

Crew Safety: Do you make sure that your crewmembers are standing clear when loads are lifted and have you considered the wearing of hard hats to protect from swinging box hooks or items falling?

Public Safety: Do you ensure that members of the public are not at risk when landing your vessel?

Maintenance Work

Protective Equipment: Have you provided suitable masks, gloves, goggles etc as may be required to carryout the maintenance tasks on the gear and the vessel?

Electrical Tools: Are you using circuit breakers or, 110 V. equipment to protect from electrical shock?

TRAWLING: Fishing Operation

Vessel Layout: Does the layout on your vessel allow the safe working of the trawl gear? Can the layout of the winch and warp runs be improved and can the crewmembers move around the working area safely without risk from slippery deck areas or trips over obstructions?

Unguarded Winch/Warp Runs: Is the winch adequately guarded, if a person fell against the moving winch would they be safe? A hand rail or a simple guard could be sufficient to prevent someone being caught up in the winch. Is there danger from the moving warps? Could a frayed wire snag on oilskins and pull a hand or foot into the sheave? Can you prevent such risks by a guard or a barrier?

Worn Components & Gear: Is the winch and other equipment in good order? Are the brakes, clutches, guiding on gear and controls still effective? Are the winch rollers and deck sheaves in good condition and also the hanging blocks and shackles? Worn equipment and gear may fail unexpectedly causing injury.

Location of Winch Controls: Can the winch operator clearly see that the crewmen, handling the trawl doors and other operations, are stood clear before operating the winch? If not, a clear systems of signals needs to be established to ensure the safety of the crew.

Net Drum: If a net drum has been installed are you confident that the vessel still has good stability?
Can the person at the net drum controls clearly see the crewmen handling the net to be able to immediately stop the drum if necessary?

Powerblock: If a powerblock has been installed are you confident that the vessel still has good stability? Are the powerblock and controls in good working order?

Emergency Stops: Is there any provision to stop the winch or other machinery in an emergency from a position other than the normal controls? Consider the operations and layout on your vessel and decide if an additional emergency stop in a suitable position is needed.

Trawl Doors: Is it easy to reach to chain up the door at the gantry, would a step make it easier? Would an additional hand rail at a higher point make door handling safer?

Towing Chains: Is the towing point, the towing chains/wires and the 'stopper' chains in good condition? Are the crewmembers aware of the dangers and do they stand clear?

Pair Trawling – Warp Transfer: Is the weighted end of the throwing line padded to lessen the chance of injury? Are precautions taken against the danger of the slip hook springing back when it is released?

Hooking in the Lifting Becket: Is the crewman at risk when reaching outboard? Can you make any changes that will make the operation safer?

Bag Handling: Is there an effective means of preventing the bag swinging excessively? Can the winch operator clearly see the crewmen handling the bag?

Excessive Loads in Net: Will you be aware if the net contains an excessive load and do you have provision to deal with it safely?

Ability to Jettison Gear: In an emergency, have you the means to be able to quickly free the vessel from the trawl gear?

TRAWLING: Catch Handling

Working Area: Is the catch handling area free from obstructions and can the crewmembers work safely and comfortably?

Machinery: If conveyors, elevators or gutting machines are installed, do they have adequate guards and provision for emergency stop?

Dipping Prawns: Are all crewmembers aware of the dangers when using sodium metabisulphite for dipping prawns and have you provided the necessary safety precautions?

Fishroom: Can the crewmen work in the fishroom safely without the risk of tripping over obstructions or missing gratings? Is the lighting adequate and is the ladder in good condition and securely mounted?

TRAWLING: Fouled Gear & Gear Mending

Reaching Outboard: Do you have a safety harness and suitable rigging to enable work to be carried out safely?

Tools and Safety Equipment: Do you have suitable tools in good condition to be able to carry out the necessary work and are the appropriate gloves, goggles etc available to be able to use the tools safely?

POTTING: Fishing Operation
Vessel Layout: Does the layout on your vessel allow the safe working of pots/creels? Are there any possible snag points that the rope or pots may snag on when shooting? Could you modify the vessel to enable the pots to be shot directly off the deck, via a transom gate or, a shooting ramp?
Pot Stacking: Can the pots be securely stacked in sequence ready for shooting? Have you a system of clearly marking any out of sequence pot?
Number of Pots: Is the number of pots in a 'string' limited to the number that can be easily and safely worked in the deck space available on the vessel? Are you satisfied that the number per string is safe or would safety be significantly improved by reducing the number per string?
Stability: Are you confident in the number of 'strings' you can safely carry on the vessel? Have you considered the effect on stability of carrying pots stacked high on the vessel? Consider all aspects of the loading on the vessel, the weight of pots and rope, the catch on deck, the pull of the hauler and the effects of wind and tide. Is your vessel overloaded?
Hauler: Are the sheaves in good condition and is the rope ejector knife correctly in place? Is the angle of wrap sufficient to ensure that the rope will not pull out?
Controls: Are they in good working order and easily reached by the operator? Is there any risk of the rope snagging the control? Is there an emergency stop for the hauler that can be quickly reached by other crewmembers?
Davit Block/ Roller: Is it in good condition and does it enable the pots to be hauled in board with minimum manual effort and with safety for the crew? Does it effectively retain the rope even when the vessel is rolling heavily?
Shooting: Are crewmembers at risk from becoming tangled in the rope when shooting? Is it possible to improve safety by installing a barrier to separate the rope from the area where the crew handle the pots?
Shooting Speed: Is the speed when shooting the pots safe? Would a modest reduction in speed ease the pressure on the crew and give improved safety?
Shooting Emergency: Have you considered possible emergency action should an incident happen when shooting and do all crewmembers know what to do?
Hauling: Is the crewman at the rail able to bring the pots inboard without excessive effort in reaching, bending and lifting? Would alterations to the davit block, the position of the control or adopting a rail mounted roller make the job easier?
Emptying & Baiting: Are the pots at a comfortable working height and is the crewman able to empty and bait pots without continually bending down?
Stacking: Is the deck area non-slip and free of obstructions that may cause a trip?

POTTING: Catch Handling
Working Area: Is the catch handling area free from obstructions and can the crewmembers work safely and comfortably?
Fishroom: Can the crewmen work in the fishroom safely without the risk of tripping over obstructions or missing gratings? Is the lighting adequate and is the ladder in good condition and securely mounted?
Catch Stowage: If the catch stowed on deck are you confident that it will not shift in bad weather or, block the freeing ports or, the boxes fill with water and overload the vessel?

NETTING / LINING / JIGGING: Fishing Operation

Vessel Layout: Does the layout on your vessel allow the safe working of the fishing gear? Are there any possible snag points that the nets/lines may snag on when shooting? Are the crewmembers at risk from the gear when shooting and is a shooting chute needed to make it safer?

Net/line storage: If the nets/lines are stored in bins or tubs, are these secure on the deck and will not slide in heavy seas un-balancing the vessel? Do the bins/tubs have good drainage and are they fitted with covers to prevent them filling with water from waves?

Dahn & Anchor storage: Are these stowed where crewmen can easily take them without risk of tripping and falling? Is the visibility from the wheelhouse reduced?

Stability: Are you confident in the quantity of gear that you can safely carry on the vessel? Have you considered the effect on stability of carrying gear stacked on the deck of the vessel or at a higher level? Consider all aspects of the loading on the vessel, the weight of gear and rope, the catch on deck, the pull of the hauler and the effects of wind and tide. Is your vessel overloaded?

Net Hauler: Is it in good condition and does it grip the gear effectively? Is it effectively guarded or are the crewmen at risk from a hand or arm being dragged into it? Can it easily be controlled to follow the lay of the gear?

Line Hauler: Are the sheaves in good condition and is the line ejector knife correctly in place? Is the angle of wrap sufficient to ensure that the line will not pull out?

Fairlead/hanging Block: Does it effectively retain the line when the vessel is rolling heavily and enable the man at the rail to bring fish inboard safely?

Jigging Equipment: Are the jigging reels/mackerel gurdies securely mounted at a height that allows the crewmen to operate them comfortably and safely?

Controls: Are they in good working order and easily reached by the operator? Is there any risk of the gear snagging the control? Is there an emergency stop for the hauler that can be quickly reached by other crewmembers?

Shooting: Are crewmembers at risk from becoming tangled in the gear when shooting? Is a knife to hand to cut the gear if someone becomes snagged? Have you considered possible emergency action should an incident happen when shooting and do all crewmembers know what to do?

Shooting Speed: Is the speed when shooting safe? Would a modest reduction in speed ease the pressure on the crew and give improved safety?

Hauling: Are all the crew able to do their tasks safely and comfortably? Is there a risk that the gear may pull back out? Are the crew at risk from jellyfish stings etc and is protective equipment provided?

Fish Strippers: Is there a risk of eye or facial injuries from 'flying hooks' and is protective equipment provided?

NETTING / LINING / JIGGING: Catch Handling

Working Area: Is the catch handling area free from obstructions and can the crewmembers work safely and comfortably?

Machinery: If conveyors, elevators or gutting machines are installed, do they have adequate guards and provision for emergency stop?

Fishroom: Can the crewmen work in the fishroom safely without the risk of tripping over obstructions or missing gratings? Is the lighting adequate and is the ladder in good condition and securely mounted?

BEAM TRAWLING & DREDGING: Fishing Operation

Vessel Layout: Does the layout on your vessel allow the safe working of the fishing gear? Can the layout of the winch and warp runs be improved and can the crewmembers move around the working area safely without risk from slippery deck areas or trips over obstructions?

Unguarded Winch/Warp Runs: Is the winch adequately guarded, if a person fell against the moving winch would they be safe? A hand rail or a simple guard could be sufficient to prevent someone being caught up in the winch. Is there danger from the moving warps? Could a frayed wire snag on oilskins and pull a hand or foot into the sheave? Can you prevent such risks by a guard or a barrier?

Worn Components & Gear: Is the winch and other equipment in good order? Are the brakes, clutches, guiding on gear and controls still effective? Are the winch rollers and deck sheaves in good condition and also the hanging blocks and shackles? Worn equipment and gear may fail unexpectedly causing injury.

Location of Winch Controls: Can the winch operator clearly see that the crewmen, handling the gear, are stood clear before operating the winch? Can the skipper be sure of rapid response from the winch in an emergency? Ensure that a good system of communication is in place.

Emergency Stop: Is there any provision to stop the winch or other machinery in an emergency from a position other than the normal controls? Consider the operations and layout on your vessel and decide if an additional emergency stop in a suitable position is needed.

Handling Gear: Is the means of restraining the beams/dredges effective to prevent heavy gear swinging, rolling or sliding across the deck and injuring persons? Can crewmembers work on the gear safely with out the risk of crushed hands or limbs?

Stability Awareness: Do all persons involved in the operation of the vessel have awareness of the dangers of uneven loading and the need to avoid 'light ship' conditions when working the fishing gear?

Gear fouled on sea bed: Are all persons aware of the danger when attempting to free 'a fastener' of uneven loading resulting in vessel capsize? Are lifejackets worn, hatches and doors closed, Coastguard informed and every precaution taken?

Safety Release Devices: Is your vessel equipped with a means of transferring the warp from the end of the derrick to a position at the side of the vessel to reduce the overturning load if the gear is fast?

Hooking in the Lifting Becket: Is the crewman at risk when reaching outboard? Can you make any changes that will make the operation safer?

Excessive Loads: Will you be aware if the net/dredges contain excessive loads and do you have the provision to deal with it safely?

Ability to Jettison Gear: In an emergency, have you the means to be able to quickly free the vessel from the gear?

BEAM TRAWLING & DREDGING: Catch Handling

Working Area: Is the catch handling area free from obstructions and can the crewmembers work safely and comfortably?

Machinery: If conveyors, elevators or grading machines are installed, do they have adequate guards and provision for emergency stop?

Catch Stowage: Is the catch stowed on deck and if so, are you confident that the vessel's stability is sufficient? Is the catch securely stowed such that it cannot shift in heavy seas and are bags/boxes covered to prevent them filling with water from waves and endangering the vessel? Are the freeing ports kept clear?

Fishroom: Can the crewmen work in the fishroom safely without the risk of tripping over obstructions or missing gratings? Is the lighting adequate and is the ladder in good condition and securely mounted?

BEAM TRAWLING & DREDGING: Fouled Gear & Gear Mending

Reaching Outboard: Do you have a safety harness and suitable rigging to enable work to be carried out safely?

Tools and Safety Equipment: Do you have suitable tools in good condition to be able to carry out the necessary work and are the appropriate gloves, goggles etc available to be able to use the tools safely?

Notes

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Seafish Marine Services
Seafish House, St. Andrew's Dock, Hull, HU3 4QE
Tel: 01482 327837

www.seafishmarineservices.com