BSS Examination - Part 10 Hire boats

[Interim Version 1 April 2017 – the ratified version will follow Summer 2017]

10.1 Protection from falling overboard

10.1.1	Are all designated external Crew Areas, companionway steps, and boarding planks provided with suitable slip-resistant surfaces?	R

Identify all designated external Crew Areas from the hire operator. Visually check all designated external Crew Areas for the presence of suitable slip-resistant surfaces. Visually check all boarding planks for the presence of a suitable slip-resistant surface on one side. Visually check all companionway steps for the presence of a suitable slip-resistant surface. Visually check for any gaps in the suitable slip-resistant surfaces. Measure any gaps in the suitable slip-resistant surfaces.	All designated external Crew Areas (as designated by the hire operator) must be provided with suitable slip-resistant surfaces. All boarding planks must be provided with a suitable slip-resistant surface on one side. All companionway steps must be provided with a suitable slip-resistant surface. Suitable slip-resistant surfaces need not be continuous, but any gaps must not be greater than: • 75 mm for non-glazed areas; • 500 mm for glazed areas (e.g. deck hatch). Any loose coverings in place to provide a suitable slip-resistant surface, such as rubber mats or gratings must not be capable of unintended movement. Such coverings must be held in place by fixings or by the layout of adjacent boat structures.

Applicability – examiners must use their training materials to recognise suitable slip-resistant surfaces. In cases where the hire operator claims an unrecognised surface is suitably slip-resistant examiners must contact the BSS office for advice. See Appendix N for additional information.

Applicability – possible causes of gaps in suitable slip-resistant surfaces may include, but are not limited to: there being no suitable slip-resistant surface present; wear, or other damage or deterioration to a previously suitable slip-resistant surface; or, contamination present on an otherwise suitable slip-resistant surface. When checking for gaps examiners should pay particular attention to high-tread areas such as cockpits and adjacent side decks, stern and bow decks, and areas around mooring points. In regard to possible gaps caused by wear or other damage or deterioration, or by contamination, examiners must refer to their training materials to determine whether a gap exists.

Applicability – for the purpose of this requirement, 'companionway steps' include all steps used by hirers to enter the interior of the boat from designated external Crew Areas.

Applicability - Suitable slip-resistant surfaces on 'companionway steps' need not be continuous, but there must be no gaps greater than 75 mm on the leading edge of each step. The leading edge extends from the front edge half-way towards the back edge of each step.

Applicability – examiners must be able to visually assess the surfaces of all designated external Crew Areas, boarding planks and companionway steps. In the event not all surfaces can be viewed (e.g. where external surfaces are covered in snow) the check must be recorded as 'not verified' on your checklist, and it must be considered that the check has not been completed until such time as all surfaces have been viewed.

Applicability – small deck fittings on which hirers occasionally stand, such as deck filling points, Desmo-type table leg bases, cleats and winches are exempt from this requirement.

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10.1.1 Continued

Supplementary information – suitable slip-resistant surfaces are those intentionally prepared, machined, covered, moulded, etc. to provide increased adherence between the foot (or shoe) and the surface of the deck. Examples of suitable slip-resistant surfaces include: paint with slip-resistant characteristics; pattern moulded FRP; timber and composite boards and panels; embossed metal plate covered / painted with a suitable slip-resistant coating; unpainted timber; and loose slip-resistant coverings (e.g. rubber mats and gratings). See Appendix N for additional information.

Supplementary information – examiners are recommended to make notes on their checklist, pictorially and/or in writing, of the extent of the designated external Crew Areas.

Guidance for owners – hire operators are recommended to present boats for examination with all external Crew Area surfaces visible (e.g. free of snow) and clean (e.g. free of any contamination).

Guidance for owners – it is recommended that external Crew Areas include all areas on the exterior of the boat where hirers are permitted to walk and/or stand. It is the hire operator's responsibility to determine the extent of external Crew Areas. There is no requirement for suitable slip-resistant surfaces to extend to the outer edges of individual external Crew Areas, boarding planks or companionway steps, but hire operators are recommended to determine through risk assessment where to terminate suitable slip-resistant surfaces, particularly in regard to step and deck edges.

10.1.2	**Are all designated external Crew Area decks provided with suitable handholds in good condition?**	**R**

Identify all designated external Crew Area decks from the hire operator. Check all designated external Crew Area decks for the presence of proprietary handholds. Establish from the hire operator whether they nominate any parts of the boat as handholds even though being handholds may not be their main function. Check the condition of all Crew Area deck handholds by sight and by the application of light manual force. Check the extent of all Crew Area deck handholds and measure any gaps.	All designated external Crew Area decks must be provided with handholds. Crew Area deck handholds must be secured against unintended movement and be free of signs of damage and/or deterioration. Any gaps between handholds must not exceed 1.5m.

Applicability – for the purpose of this requirement 'Crew Area decks' include all external areas where the hire operator permits hirers to walk or stand during normal operation of the vessel and/or when moving from one part of the vessel to another, from where a slip, trip, or other fall could lead to a hirer falling directly overboard. Areas such as cabin roofs on which hirers do not stand or walk during normal operation of the vessel and/or when moving from one part of the vessel to another, but where they are permitted to sit or lie, are excluded from this requirement.

Applicability – handholds may be located inboard of the deck (e.g. on the cabin structure) and/or outboard of the deck (e.g. guard-rails and guard-lines).

Applicability – handholds can be any part of the boat that may be gripped by hand to reduce the risk of falling overboard, even if it is not its main function, providing it is secured against unintended movement and permanently available as a handhold. Hire operators are responsible for nominating such boat parts as handholds. Examples of boat parts that may be nominated by a hire operators as a handhold even though it's not its main function include, but are not limited to; shrouds/stays, tops of windscreens, steering wheels, permanently installed seats, cleats and mooring rings.

Supplementary information – examiners are recommended to make notes on their checklist, pictorially and/or in writing, of the extent of the designated Crew Areas, and of any boat part nominated by a hire operator as a handhold even though being a handhold is not its main function.

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10.1.2 Continued

Guidance for owners – it is the hire operator's responsibility to determine the extent of the Crew Area decks and to advise the examiner accordingly.

Guidance for owners – hire operators are recommended to determine by risk assessment whether to allow hirers to sit or lie in areas not protected by handholds as set out in this requirement, and how best to instruct and guide hirers to ensure they can use such areas safely.

Guidance for owners – hire operators are recommended to determine by risk assessment the extent and specification of handholds around hire boats, and to base handhold provision on established boatbuilding construction standards. When nominating boat parts as handholds even though it is not its main function, hire operators are also recommended to refer to established boatbuilding construction standards for guidance.

10.1.3	**Is the arc of the narrowboat tiller clearly identified?**	**R**

Identify the presence of a narrowboat tiller.

Establish the full extent of the movement of the tiller, with any extensions and/or handles fitted.

Check the deck immediately below the tiller for markings which identify the full extent of the tiller's movement from one side of the boat to the other.

Check for the presence of a label within open view of the helm position. Check the markings and lettering on the label and whether they are clearly visible from the helm position.

On all narrowboats fitted with a tiller:

- The full arc described by the movement of the tiller must be clearly identified on the underlying deck. The segment described by the whole tiller, or the arc described by the forward end of the tiller, must be clearly marked and distinguishable from other parts of the deck forward of the tiller. The arc or segment markings must be permanent, but must not be a trip or slip hazard for hirers.

Or,

- A warning label with all markings and lettering complete must be in open view and clearly visible from the helm position. The label must show pictorially the tiller and the 'at risk' area formed by the tiller arc.

Applicability – this check applies to all narrowboats (narrowboats with a nominal beam of 2.08m) fitted with a tiller where uncontrolled movement of the tiller could lead to a hirer being unintentionally knocked overboard irrespective of the style of the stern (trad/semi-trad/cruiser, etc), or whether guard-rails or similar are fitted around the stern deck.

Applicability – in terms of being in open view, warning labels may be positioned on the inside of stern cabin/bulkhead doors.

Applicability – options for marking the arc described by the forward end of the tiller on the underlying deck include, but are not limited to: a curved line painted on the underlying deck or deck board; or, a curved line of permanent self-adhesive tape. Note that the paint or tape would not have to be suitably slip-resistant provided it was no wider than 75mm (see Check Item 10.1.1). Alternatively, different coloured paint or surface coverings could be used to denote the segment described by the whole tiller provided the surface was slip-resistant (see Check item 10.1.1).

Guidance for owners – hire operators with narrowboat-style boats with a nominal beam greater than 2.08m are recommended to determine by risk assessment whether to adopt this risk control measure.

10.2 Life-saving appliances

10.2.1	**Are all lifebuoys of suitable proprietary manufacture and in good condition, and is at least one lifebuoy positioned in an appropriate location?**	**R**

Check for the presence of one or more lifebuoys. Check the accessibility and location of the lifebuoy(s). Check the condition of the lifebuoy(s) that can be seen and reached. On boats based on MCA Category C and/or D waters check for the presence of a buoyant lifeline attached to at least one lifebuoy. Check the diameter, condition and length of the lifeline where it can be seen and reached.	All lifebuoys must be of suitable proprietary manufacture and be free of signs of damage or deterioration. All boats must be provided with at least one suitably positioned lifebuoy which must be: • readily accessible; **and,** • located where it can be quickly and effectively deployed overboard. On boats based on MCA Category C and/or D waters a buoyant lifeline must be attached to at least one suitable lifebuoy. The lifeline must have a diameter of at least 8mm, and be no less than 18m in length. The lifeline must be free of signs of damage or deterioration.

Applicability – the one suitably positioned lifebuoy may be located on the exterior of the boat, or within a cabin provided it is located immediately adjacent to an exit point from where it can be deployed quickly and effectively.

Applicability – examiners are not to remove lifebuoy lifelines where these are contained within bags (valises) or other such cases. The checking actions must be limited to those parts which can be seen with the line within its bag (valise) or other such case.

Applicability – in circumstances where the hire operator claims that it is impractical to stow a lifebuoy due to the space restrictions on a small day boat, an alternative lifesaving appliance may be accepted subject to the hire operator contacting the BSS Office with details of the appliance carried.

Applicability – Further guidance on MCA Categories may be found in Merchant Shipping Notice MSN 1837(M) – Categorisation of Waters.

Guidance for owners – hire operators are recommended to ensure life-saving appliances conform to the requirements set out in Merchant Shipping Notice 1676 (M) – The Merchant Shipping (Life-Saving Appliance) Regulations 1999.

Guidance for owners – where buoyant lifelines are attached to lifebuoys hire operators should consider using proprietary marine safety throw lines contained within a bag (valise) or other such case to keep the line tidy and ready for quick and effective deployment.

10.3 Means of reversing

10.3.1	**Is the boat provided with a means of reversing operable from every helm position?**	**R**

Identify the presence of a power-driven propulsion system. Identify the means of reversing and the helm positions. Check for the presence of a reverse gear lever, or other method of operating the means of reversing, at each helm position.	Boats with power-driven propulsion systems must be provided with a means of reversing operable from every helm position.

Applicability – this check applies to all boat types fitted with power-driven propulsion systems, including, but not limited to: fixed internal combustion engines; fixed electric motors; outboard motors; steam engines; and Stirling engines. Boats manufactured prior to 16 June 1998 are exempt from this requirement.

Applicability – means of reversing may include, but are not limited to: gearboxes operated by lever controls; swivelling drives, such as on small outboard motors; and Kitchen-type rudders.

Applicability – examiners are not required to check the completeness, operation or effectiveness of the means of reversing.

Applicability - in the event non-compliant arrangements are contested by the owner on the grounds that a previous exemption is no longer being applied, examiners should contact the BSS Office for guidance.

10.4 Fire extinguishing and escape

10.4.1	Is the fire blanket fixed permanently in open view?	R
Check the location of the fire blanket.	Fire blanket containers must be: • Fixed permanently in a position which allows the blanket to be removed quickly and effectively from the container; **and,** • In open view from the main cooking appliance with all removable lids, doors, curtains etc in place.	
Applicability – this requirement only applies to boats where a fire blanket has been found to be necessary at BSS ECP Part 6 Fire Extinguishing and Escape, Check 6.2.1. Applicability – fire blanket containers will usually be fixed permanently by the container being hung on one or more screws or similar fastenings.		

10.4.2	Are all means of escape, other than main doors, clearly marked with a suitable label in good condition?	R
Identify the two means of escape from each accommodation space as designated by the hire operator. Check each designated means of escape, other than main doors, for the presence of a label in open view indicating its use as a means of escape. Where tools are required to open a means of escape (such as hammer to break a window) check for the presence of a label in open view providing guidance on how to operate the means of 'breaking out'. Visually check the condition of all labels.	Designated means of escape, other than main doors, from all accommodation spaces must be clearly marked by a label of suitable proprietary manufacture positioned in open view with all removable lids, doors, curtains etc. in place. Where tools are required to open a means of escape (such as hammer to break a window) a label in open view (with all removable lids, doors, curtains etc in place) giving guidance on how to operate the means of 'breaking out' must be provided on or immediately adjacent to the opening. Labels must be in good condition, with all markings clear and complete.	
Applicability – this requirement only applies to boats where two means of escape have been found to be necessary at BSS ECP Part 6 Fire Extinguishing and Escape, Check 6.3.1. Applicability – the use of embossed tape (e.g. Dymo) or other lettering that can become illegible through cleaning or normal use is not acceptable. Guidance for owners – hire operators are recommended to refer to ISO 9094 (Small craft – Fire protection), when determining escape routes and to ISO 7010 (Safety signs and symbols) when choosing labels. Means of escape labels may be available from local chandlers, internet based suppliers, builders merchants, hardware and DIY stores and are likely to have a green background and white (or off-white luminous) image (the 'emergency sign' colours from ISO 7010). Typical examples of labels based on ISO 7010 symbols are shown below.    		

10.5 Fixed ventilation

10.5.1	Are accommodation space fixed ventilators protected by warning labels in open view?	R
Identify accommodation spaces requiring fixed ventilation. In accommodation spaces where fixed ventilation is required check for the presence of one or more warning labels in open view. Visually check the condition of all labels.	All accommodation spaces requiring fixed ventilation must be protected by: • A warning label prohibiting the blocking of ventilators adjacent to each ventilator; **or,** • A label warning of the risk of asphyxiation if ventilators are blocked (and/or inadequate) adjacent to each unflued, open-flued and closed-flued appliance; **or,** • The provision of at least one warning label in a prominent position prohibiting the blocking of ventilators. All warning labels must be in open view with all removable lids, doors, curtains etc. in place. All warning labels must be in good condition, with all markings clear and complete.	
Applicability – this requirement only applies to boats and accommodation spaces where fixed ventilation has been found to be necessary at BSS ECP Part 8 Ventilation, Check 8.9.1. Applicability – the use of embossed tape (e.g. Dymo) or other lettering that can become illegible through cleaning or normal use is not acceptable.		

10.6 Glazing materials

10.6.1	Is all glazing material of a suitable type?	R
Identify all glazing, including ports, hatches, windows, partitions, screens and doors. Where they can be seen, check all glazing for: • General material type; • Any manufacturer's markings; • Any adhesive film coverings. Check the condition of any adhesive film coverings where they can be seen.	All glazing must be of a suitable type by being: • Toughened (tempered) glass; **or,** • Laminated glass; **or,** • Wire-reinforced glass; **or,** • Unspecified glass covered in adhesive film; **or,** • Plastic. Where adhesive film has been applied to protect otherwise unprotected/unspecified glass the film must cover the entire glass panel and be free of signs of damage or deterioration (including air bubbles and lifting at the edges or corners).	
Applicability – this requirement applies to all general glazing materials, including those fitted internally, but does not apply to 'bullseye' (also known as 'domed') or prismatic decklights, or to mirrors or glass shelving. Applicability – toughened (tempered) glass is treated after manufacture, and may be etched accordingly. Applicability – where it is been installed professionally, safety window adhesive film may be marked with the manufacturer's name and the relevant standard but examiners are not required to identify such marks on adhesive film. Around the outer edges of a glass panel, film does not have to extend all the way to the frame. It is acceptable for film to terminate within approximately 5mm of the frame. Applicability – where glazing is plastic, examiners are not required to determine the exact material type (e.g. polycarbonate, acrylic, polyester). Applicability – where glazing cannot be confirmed by visual assessment to be of a suitable type the glazing as compliant. However, under such circumstances examiners must make a record of the hire operator's declaration using the 'non specific' facility on Salesforce. A record of the hire operator's declaration will therefore appear on the BSS Examination Report (Certification). Guidance for owners – In cases where glass panels are replaced but not marked, hire operators should retain evidence of the glass used. Where hire operators use adhesive film to protect non-safety glass they should use safety window film offering performance to BS EN 12600. In cases where the film is not marked with the manufacturer's name and the relevant standard, hire operators should retain evidence of the film used.		

10.7 Hull openings

10.7.1	Is the weed hatch opening at least 150mm above the normal laden waterline, and are the cover securing and sealing arrangements in good condition?	R

Identify all stern propeller weed hatches with openings within the interior of the vessel. If present, identify the opening's cover and how it is secured to the main hatch structure. Also identify the level of the opening were the cover to be released. Measure the height of the weed hatch opening above the normal laden waterline (if appropriate, calculate the height by measuring from the opening to an accessible datum point and from the datum point to the normal laden waterline). Check the condition of the means of securing the cover where it can be seen and reached with the cover and means of securing in place. Check the condition of the gasket between the cover and the main hatch structure where it can be seen or reached with the cover and means of securing in place.	Stern propeller weed hatch openings within the interior of the vessel must be at least 150mm above the normal laden waterline. Stern propeller weed hatch cover securing arrangements within the interior of the vessel must be complete and free of signs of damage or deterioration. Where located within the interior of the vessel, weed hatch gaskets between the cover and the main structure must be free of signs of damage or deterioration.

Applicability – examiners are not to release weed hatch securing mechanisms and/or remove covers. Where an examiner cannot determine the height of the opening with the cover in place the hire operator may be invited to remove and refit the cover so the examiner can measure the height of the opening above the normal laden waterline with the cover removed. Under such circumstances the cover must be refitted by the hire operator.

Applicability – in cases where a boat is ashore at the time of the examination examiners may determine the position of the normal laden waterline from any significant tidelines visible on the exterior of the vessel adjacent to the weed hatch.

Applicability – weed hatch opening heights above the normal laden waterline that cannot be measured accurately must be recorded as non-compliant on the BSS Examination Report.

Applicability - in addition to stern propeller weed hatches, this requirement is applicable to additional through-hull appliance hatch openings (such as bow thrusters and mud boxes) where these are within the interior of the vessel, and where hirers are permitted to remove the hatch cover/s. If such additional through-hull appliance hatch openings are present examiners must establish from the hire operator whether or not hirers are permitted to remove the cover/s. Examiners are recommended to retain field notes as a record of whether or not such additional through-hull appliances were examined.

Applicability – where a weed hatch opening height above the normal laden waterline is found not to comply with this requirement but the vessel is CE marked according to the RCD and the Declaration of Conformity references ISO 12217-1:2013 or ISO 12217-3:2013 as the Harmonised Standard meeting the RCD Essential Requirement 3.2, 3.3, and 3.5, examiners should contact the BSS Office for guidance.

10.7.2	Are all through-hull openings located below the normal laden waterline protected by closable valves, and are the valves readily accessible and free of signs of leaks?	R

Identify all through-hull openings below the normal laden waterline. Examples may include: • Sink wastes; • Toilet inlets/discharge; • Raw water intakes for engines; • Cockpit drains. Check that all such through-hull openings are fitted with a closable valve (seacock) connected directly to the hull fitting. Check the accessibility of all such closable valves, and check the valves and their connections for signs of leaks by sight.	All through-hull openings below the normal laden waterline must be fitted with a closable valve connected directly to the hull fitting. All closable valves (including their means of operation and their connections) on through-hull openings below the normal laden waterline must be readily accessible, and all such valves and their connections must be free of signs of leaks.

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10.7.2 Continued

Applicability – examiners must not operate valves.

Applicability – to be considered as closable, a valve must be fitted with its operating handle/wheel.

Applicability – hull fittings forming an integral part of the hull (such as a welded pipe on a steel hull) extending from the hull to above the normal laden waterline are not covered by this requirement. Engine exhausts are also not covered by this requirement.

10.7.3	**Are all through-hull openings above the normal laden waterline <u>either</u> watertight, <u>or</u> is the risk of water flooding into the interior of the vessel at the associated downflooding point minimised?**	R

Identify all through-hull openings and measure their height above the normal laden waterline. For hull openings greater than 250mm above the normal laden waterline no further checking is required.

For any hull openings within 250mm of the normal laden waterline establish whether the opening is watertight to the interior of the vessel by checking the configuration and condition of the skin fitting and internal pipes, hoses, ducts, connections, and other associated vessel structures where they can be seen or reached. For hull openings watertight to the interior of the vessel no further checking is required.

For any hull opening not watertight to the interior of the vessel, establish the downflooding point where it can be seen or reached. Measure the height of the downflooding point above the normal laden waterline.

Where the downflooding point is inboard of the hull side check the condition of any skin fitting and any pipes, hoses, ducts, connections, or other associated vessel structure between the hull opening and the downflooding point by sight and by the application of light manual force where they can be seen or reached.

Where the downflooding point is a door sill, ventilator, or other such opening from a self-draining cockpit into the interior of the vessel, measure the least height from the lowest point of the opening/s into the interior of the vessel above the level of the cockpit deck.

All through-hull openings above the normal laden waterline must <u>either</u> be watertight to the interior of the vessel <u>or</u> comply with the following requirements:

The height from the normal laden waterline to the downflooding point (whether this is the hull opening or a point inboard) must be at least 250mm.

However, downflooding points within self-draining cockpits may be less than 250mm above the normal laden waterline provided the height from the cockpit deck to the lowest point of the opening into the interior of the vessel is at least 150mm.

Where the actual hull opening is less than 250mm above the normal laden waterline and the downflooding point is inboard of the hull any skin fittings, pipes, hoses, ducts and other associated vessel structures between the hull opening and the downflooding point must:

- be permanently installed;
- be free of signs of damage, or deterioration;
- be secure;
- not show signs of leaks.

Applicability – Appendix O provides information and guidance on downflooding, which installations/systems might be watertight to the interior of the vessel, and how to examine downflooding points within self-draining cockpits (and well decks).

Applicability – for the purpose of this requirement, self-draining cockpits are those where the cockpit or well deck is watertight to the interior of the vessel and where the vessel structures around the cockpit deck are watertight to a minimum height of 150mm above the cockpit deck.

Applicability – where the height of a downflooding point within a self-draining cockpit (or well deck) is found not to comply with this requirement but the vessel is CE marked according to the RCD, and the Declaration of Conformity references ISO 12217 as the Harmonised Standard meeting the RCD Essential Requirement 3.2, 3.3, and 3.5, examiners should contact the BSS Office for guidance.

Supplementary information – in circumstances where a hull opening is found to be within 250mm of the normal laden waterline but the internally connected pipes, hoses, ducts or other associated vessel structures, etc, cannot be seen or reached, and therefore the watertightness or downflooding height cannot be confirmed, examiners are recommended to bring the presence and location of the hull opening to the hire operator's attention and to make appropriate notes on their checklist.

10.8 Smoke, and carbon monoxide alarms

10.8.1	If the vessel has overnight accommodation, is at least one suitable smoke alarm provided?	R
Identify the presence of overnight accommodation. If present, check for the presence and location of smoke alarm(s). Check the markings on each smoke alarm. Identify the test function button on each smoke alarm.	A smoke alarm must be fitted at high level within 10m of each cabin used for overnight accommodation. Smoke alarms must be marked as being certified by an accredited third-party body to EN 14604 or equivalent. Smoke alarms must be ceiling-mounted, or wall-mounted between 150mm – 300mm below the ceiling height. Smoke alarms must be provided with a test function button.	
Applicability – where not self-evident, examiners must establish from the hire operator whether the boat is let out for overnight stays. Applicability – the main accredited third-party certification bodies in the UK are BSI and LPCB. For the following makes of smoke alarm third-party accreditation can be assumed - Ei Electronics, Fire Hawk Alarms, Honeywell, Kidde, First Alert, Fire Angel, BRK and Dicon. For other makes, removing the alarm from its base may be necessary to view labels and approval marking on the base. Permission for removal should be sought from the hire operator. Documentary evidence of accredited third-party accreditation is acceptable. Applicability – Smoke alarms may be wall mounted outside of the range specified in the requirement (…. between 150mm – 300mm below the ceiling height) where any such alternative location is permitted by the alarm manufacturer and where appropriate supporting documentary evidence is available. In cases where alarms are mounted outside of the range specified in the requirement, examiners are recommended to make a note of the alarm make and model and the supporting documentation in their field notes. Guidance for owners – 'optical' alarms are the best choice for boats. They are more effective at detecting slow-burning fires and are less likely to alarm falsely. Guidance for owners – the actual number and location of smoke alarms should be determined through hire operator risk assessment and through adherence to alarm manufacturer instructions.		

10.8.2	Are smoke alarms in good condition?	R
Where one or more smoke alarms have been found to be necessary at Check 10.8.1 visually check the condition of each required smoke alarm, and operate the test function button on each alarm.	Smoke alarms must be in good general condition, and must not show signs of any of the following indicators of poor condition: • damage or deterioration to the body of the alarm or the fixing mechanism; • having passed any manufacturer's express replacement date; • failing the test function check.	
Applicability – examiners are not required to open up alarms to check for internal damage or deterioration or for manufacturer's express replacement dates.		

10.8.3	**If the vessel has overnight accommodation and an installed solid fuel stove, are the correct number of suitable carbon monoxide alarms provided?**	R
Identify the presence of overnight accommodation. Identify the presence of a solid fuel stove appliance. If both are present, check for the presence and location of carbon monoxide alarm(s). Check the markings on each carbon monoxide alarm. Identify the test function button on each carbon monoxide alarm.	All boats having overnight accommodation and an installed solid fuel stove appliance must be provided with a carbon monoxide alarm within the same space as the solid fuel stove. Carbon monoxide alarms must be marked as being certified by an accredited third-party body to EN 50291 or equivalent. Carbon monoxide alarms in the same space as the solid fuel stove must be wall-mounted at high level, but must be at least 150mm below the ceiling height. Within each overnight accommodation space separated from the space containing the solid fuel stove by a door(s), and being greater than 10m distance from the carbon monoxide alarm, an additional carbon monoxide alarm must be provided, located in the "breathing zone", i.e. near to a bed head. Carbon monoxide alarms must be provided with a test function button.	
Applicability – boats with a single open-plan cabin require only one carbon monoxide alarm. Applicability – the main accredited third-party certification bodies in the UK are BSI and LPCB. For the following makes of carbon monoxide alarm third-party accreditation can be assumed - Ei Electronics, Fire Hawk Alarms, Honeywell, Kidde, First Alert, Fire Angel, BRK and Dicon. For other makes, removing the alarm from its base may be necessary to view labels and approval marking on the base. Permission for removal should be sought from the hire operator. Documentary evidence of accredited third-party accreditation is acceptable. Applicability – CO alarms may be mounted outside of the range specified in the requirement (…. *at high level, but must be at least 150mm below the ceiling height*) where any such alternative location is permitted by the alarm manufacturer and where appropriate supporting documentary evidence is available. In cases where alarms are mounted outside of the range specified in the requirement, examiners are recommended to make a note of the alarm make and model and the supporting documentation in their field notes. Guidance for owners – carbon monoxide alarms marked to the 'EN 50291-2' are the best choice for boats. They have been tested to meet the more onerous conditions found in recreational vehicles, including boats.		

10.8.4	**Are carbon monoxide alarms in good condition?**	R
Where one or more carbon monoxide alarms have been found to be necessary at Check 10.8.3, visually check the condition of each required carbon monoxide alarm, and operate the test function button on each alarm.	Carbon monoxide alarms must be in good general condition, and must not show signs of any of the following indicators of poor condition: • damage or deterioration to the body of the alarm or the fixing mechanism; • having passed any manufacturer's express replacement date; • failing the test function test.	
Applicability – examiners are not required to open up alarms to check for internal damage or deterioration or for manufacturer's express replacement dates.		