

BSSMC Meeting #65 Jul 2009 Combined reports



Date: 9 July 2009

BSS Management Committee Report #65 – Matters arising from the previous meeting

64.4.1 Membership BW re-organisation has resulted in the BSS moving from within the BW Technical directorate to the BW Operations directorate. At present there is no threat to the BSS staffing levels which are planned to reduce anyway.

64.4.2 Hire Boat Code at the last meeting it was agreed that the BSSMC should sign up to a high level message setting out their advice to the Navigation Authorities and suggesting the role that BSS can fulfil. It was felt that this could help the Navigation Authority representatives with their input into the June meeting of the MCA–chaired hire boat code licensing working group meeting.

The high level position was developed by the BSS Office and agreed by the BSSMC Exec. It is understood that the clarity of thought within this document helped the Navigation Authority representatives at the meeting and a position was agreed. The high level message document is available upon request.

BSS Secretariat



1 July 2009

Report of incidents and accidents recorded Jan to July 2009, inferences drawn and proposed BSS risk-activity

This is a year-to-date report of incidents for 2009 as recorded by the BSS Office as of 1 July.

1.0 Introduction

1.1 - The inferences drawn from reviewing incident reports are key to the effective planning of BSS activity to reduce risk. Incident reports are used to help identify patterns of risk and any new risks not previously envisaged. It relies on the receiving-of or gathering-in of details of boating incidents including fire, carbon monoxide (CO) poisoning, capsizes and man overboard.

1.2 - The incident data used to populate this report is recorded by the BSS Office. The data includes incidents relating mostly to boats used on inland waterways. However, incidents of fire, explosion and CO on coastal boats are recorded where the craft may be of the type that could be used inland or where the systems aboard may be common to those on inland boats.

1.3 - The data cannot be considered as a complete record of incidents on any waters. Many minor incidents are not reported to any agency, let alone published. Where agencies, typically fire, ambulance or other health organisations have records of a boat related incidents, there are still likely to be only a minority of such records made public. Government records nationally suggest that fire services attend around 300-350 boat fires each year, although the definition of boats may not be consistent.

1.4 - Where fire has spread from one boat to another each boat affected is counted as one record and cause is recorded as conflagration. This alludes to one of the purposes of the Scheme to help prevent such events from happening.

2.0 The Incident and Accident Data

2.1 – This review is based on 62 reports of incidents for this year obtained thus far. The BSS has gathered details of 43 incidents on inland waterways and 19 on inshore coastal waters including marinas, harbours, creeks and inlets. A breakdown is provided in Annex A attached.

3.0 Summary

3.1 – As referred to above, the total number of incidents reported so far this year is 62 and this is more than the 51 found by this date in 2008. This is also more than the 51 reports for 2007 at this stage of the year. However the 2007 figures have been boosted by further reports added over the past two years such as from MAIB and RNLI.

3.2 - Of the 48 fire, explosion and deliberate fire-setting events, 30 are recorded on Association of Inland Navigation Authority (AINA) member waterways.

3.3 - In terms of severity of incidents, it is about the same last year and it has been a much better year than the same period for 2007. There has been one death on a boat on an inland water through fire and there have been far fewer serious injuries.

3.4 – There has been only one CO related incident recorded to date, causing no injury.

3.5 – For the year to date there are too few complete records to indicate any substantial patterns for this year

3.6 – With solid fuel stoves installation, maintenance and use problems are indicated in the three incidents, one being pyrolysis behind tiling and the other being CO incident from poor ash disposal practice and the third was related to not cleaning out the flue routinely.

3.7 – There have been three petrol flash burn/explosion incidents in May, two in Environment Agency locks and one near a lock on the R Avon. The incidents reflect a number of similar incidents in previous years where owners' actions and the type and age of craft and petrol engine are repeated. We are undertaking a review of the risks, and risk management solutions, associated with older petrol engined boats with the intention to improve focussed messages for owners of such boats to help prevent the 2-3 significant fire incidents that seem to happen each year.

3.8 – We are still awaiting access to IRS, the new Department for Communities database of fire incidents. This apparently went 'live' this April as a required monitoring process for the English fire service authorities.

3.9 – We are encouraging all stakeholders to think creatively as to how they can encourage reporting of incidents, near incidents and in particular the close detail of these incidents. Whilst we may receive the brief reports of fires and poisonings, unless it is fatal, it is only by a huge effort by members of the BSS office that further details sometimes become available. In some cases even the further details only reveal the seat of the fire and not the underlying cause. This is where confidential reporting will make a difference to the risk information such as is being presented to the committees about solid fuels stoves, electrical fires and petrol explosions.

4.0 'Dangerous Boat' Reports

4.1 – There are no unusual trends for the year to date 'Dangerous Boat' reports. A breakdown will appear in the annual report unless unusual patterns occur, in which case a report will occur quarterly.

See Annex A attached for a more details breakdown of the data collected year to date.

Compiled and drafted by the BSS Office 1 July 2009

Annex A

Total to 1 July, 62 incidents

Table A1 Basic statistics from the records	<u>Inland BSS</u>	<u>Non-BSS</u>	<u>Coastal</u>
Number of incidents recorded	40	3	19
Fire/explosion (inc immediate risk of)	30	3	18
CO (including near incidents)	1	0	0
Man Overboard	4	0	0
Capsize, collision and sinking (inc one near incident)	7	0	1
Personal injury	0	0	1

Table A2 When accidental fire happens	<u>Inland BSS</u>	<u>Non-BSS</u>	<u>Coastal</u>
Moored	10	3	4
In lock	2	-	-
Underway/casting off	1	-	3
Hard-standing/boat yard	-	-	1
Not recorded	2	-	1

Table A3 Systems & causes: all fire & CO	<u>Inland BSS</u> 27 fire 1 CO	<u>Non-BSS</u>	<u>Coastal</u> 17 fire
Deliberate Fire setting	3	1	1
Conflagration	2	2	-
Electrical (system / installed appliances)	3	-	1
Engine room / exhaust	1	-	3
Not known (inconclusive / not known to BSS)	9	1	10
Petrol leak / refuelling	4	-	-
LPG vapour	-	-	1
Solid fuel stoves / Oil fired stove	4 (inc. 1 CO)	-	-
Portable items (/ lamps / heaters / stoves)	1	-	-
Smoking / candles	1	-	1

Table A4 Use of vessel	<u>Inland BSS</u>	<u>Non-BSS</u>	<u>Coastal</u>
Pleasure and leisure	13	2	4
Intensive (residential use and extended periods)	7	-	3
Not recorded/not known	8	2	4
Brokerage / renovation / under repair	-	-	1
Hire and small passenger boat	-	-	5
Workboats / other small commercial	-	-	-

Table A5 Serious incidents where known (Note: Major injury = treated at hospital)		
inland waterways 8 incidents total causing 4 deaths, 4 major injury cases		
coastal 3 incidents causing 2 deaths; 3 major injury cases		
Totals (Number of incident in brackets below)	<u>Fatalities, inland incidents</u> people died	<u>Major injuries, inland incidents</u> people treated
Explosion/fire, petrol, gas, fume ignition (1)	-	2
Fire, not known (1)	1	1
MOB (3)	3	1

Table A6 Incidents on BSS applied waterways – certification nature where known	
Craft having current BSS certificates	5
BSS - not appropriate open boat/short term	1
Boat not certified/certificate status expired	2
MCA Class V	1

Table A7 **Information on major non-fire and CO inland waterway incidents** where available

Date	Nav Authority	Details:	Cause:	Boat status:	Use of craft:
Feb	BW	A man fell off his boat and drowned whilst to changing a gas cylinder	Slip, Trip or Fall	Moored	Intensive
Jun	BW	Man slipped between tender and main boat	Slip, Trip or Fall	Moored	Pleasure

Table A8 Incidents by Navigation Authority	Fire	CO	other
BW	16	-	6
BWML	3	-	1
EA	4	-	3
MSC-Bridgewater	1	-	-
Broads	1	-	-
Cams Conservators		1	-
Avon Trusts	2	-	1
Windermere	3	-	-

Table A10 Sources of information	Initial Source
Google news alert (subsequent local media link)	19
Nav Authority	17
FRS	10
Examiner	2
Other Stakeholder	2
Craft owner	-
Insurance related	-
Internet forum	7
Not recorded	-
MAIB/MCA	-
RNLI website	-
BBC website	3
Waterways & boating media	2



Date: 9 July 2009

BSS Management Committee Report #65 –Report from the BSSAC Chair

On behalf of the BSSAC Chair, the following items are drawn from the notes of BSSAC meeting #68 held on 2 June 2009. It is open to the BSSAC Chair to add commentary.

- Members reviewed the available documents supporting the purpose and approach of the BSS, including the draft revised MOU supplied with the agreement of BSSMC.

It was agreed that members comments on the high level approach covered in first page of draft revised MOU and any identified shortfall of approach in the three other support documents provided, should be forwarded to the BSS Office by the end of July. It is intended that the BSS Office would take account of comments received and produce a document for BSSAC to further consider.

- The Chair reported the outcome of the request for the BSSAC user group representatives to gauge the views of their respective organisations on any environmental awareness role for the BSS. Two of the six user organisations strongly agreed with the concept and four strongly disagreed.
- Solid fuel stove fire and CO incidents. Members commenced their task to provide initial guidance supporting a framework for assessing the potential impact of the BSI code nearing publication, including on any need for new Navigation Authority requirements in relation to the known causes of solid fuel stove fires and CO incidents.

Members agreed with BSSTC on the way forward set out below:

- The BSS office will draw out the key facts from the incident data.
- The BSS office will draw from the published version of the bsi code the key impacts and overlay these against the incident data and the existing bss requirements.
- The BSS office will continue to seek BSSAC endorsement for its user-focused solid fuel stove safety messages.

The outcomes will be presented in a report to BSSTC and BSSAC in advance of their respective November meetings. This is dependent upon the date of the availability of the final version of the Code.

- Members received a progress report on the BSS IT improvements and heard from practitioner members '*so far so good*' about the introduction of the administration facility part of BSS examiner website supporting registration and materials ordering.

In response to a request from the BSS Manager for members to comment upon the stated principles and benefits of using hand-held devices several mainly negative comments were received for the BSS Office to take account of within future IT project documents.

- Members received a quality management report from the BSS Quality and Technical manager and an activity an incident report from the BSS Manager.
- Under AOB the ABSE rep raised the matter of the 'scope' of the bss as currently published within bss documentation and in particular concerning open boats powered solely by outboard motors and the boundary between those requiring a bss certificate and those where owner self-certification may reasonably be relied upon by navigation authorities in support of their licensing conditions. The bss manager reported that this issue concerning the scope was to be subject to an initial review by relevant navigation authority officers.

Compiled by BSS Secretariat



Date: 9 July 2009

BSS Management Committee Report #65 – Report from the BSSTC Chair

The BSSTC met on Monday 27 April. The following comments summarise the items covered and are drawn from the notes of the meeting. It is open to the BSSTC Chair to provide further commentary.

- Members reviewed the proposal for a simplified test of the operation of flame supervision devices (FSDs) procedure in support of Navigation Authority objectives. It was accepted that the Navigation Authority objectives are to address any unnoticed build-up of LPG in the event either a hob gas tap was inadvertently knocked on or in the event an appliance burner was blown out by a gust of wind.

Competent body comments are being sought and a further assessment of the potential risk associated with the circumstances for unnoticed gas build-up as described in the first paragraph above.
- From initial research it is clear that the outer surface of lagged exhausts generally operate at temperatures in excess of the auto-ignition temperature of fuels and in excess of the temperatures that will cause harm if touched. It was reported that further research had been carried out with manufacturer's of lagging to help determine the thickness of lagging required in order to drop the surface temperature below the auto-ignition temperature of fuels and with ten UK insurance companies as to whether exhaust related incidents featured in claims during the year 2008. The insurance companies were not aware of any claims during 2008. A further paper will be provided to BSSTC members once the research is completed.
- The ABSE representative introduced a paper covering perceived short-comings in the BSS coverage of AC electrical system faults found by examiners and that ABSE consider dangerous for people. He said such defects do not discriminate between 1st or 3rd parties and currently do not fit within the current scope of the Scheme. Members agreed the ABSE list as representing genuine AC system defects. It was agreed that the fire risks would be drawn out and moved forward separately and that the arguments concerning the nature of electrocution risks to visitors to the waterways or waterway staff would be further explored. A straw poll of members resulted in 6 supporting the view that electrocution risks were relevant to visitors and staff. One member disagreed. It was agreed to test the views of the Navigation Authorities concerning any need to address the electrocution risk.
- Members were tasked with agreeing a framework for assessing the potential impact of the boat solid fuel stove (SFS) BSI Code of Practice against the known causes of SFS incidents as drawn from BSS records, including on any need for new Navigation Authority requirements. Members agreed that the level of risk should be graded as a 'safety issue' rather than a 'major problem'. It was also agreed that three causal factors are generally at play, namely installation issues, user behaviour and user lack of attention to maintenance. Members determined that these three factors are roughly equally weighted. The following actions were agreed. The BSS Office will draw out the key facts from the incident data and will draw from the published version of the code the key impacts and overlay these against the incident data. The BSS Office should continue to seek BSSAC endorsement for its user-focused messages. The outcomes will be presented in a report to BSSTC in advance of the November meeting.
- At the previous meeting the question was raised about the level of assurance provided by older portable fire extinguishers (PFE)s and any need for servicing or replacement. The BSS Manager reported that he had recently met with the Fire Industries Association's (FIA) Extinguisher Manufacturing Technical Committee (EMTC) who were able to comment on all of the points raised and agreed to provide empirical data in support of older PFEs that have never been serviced, being

ineffective when operated or appearing unlikely to operate when serviced. This information will be brought to BSSTC along with the results of a planned survey of the knowledge and experience of BSS examiners.

- Members heard six technical appeals in support of; allowing water tank inspection hatches in LPG cylinder lockers on a class of day hire boats; a modified multi-fuel heating appliance running on used vegetable oil should be considered compliant with BSS requirements; removal of BSS requirements sight gauges, soft soldered joints, metal conduits and exhaust lagging; allowing a sight gauge arrangement on small capacity day tank.
- Members considered a submission from ABSE to add glossary terms. It was stated that the terms 'electrical equipment space' and 'gas-proof conduit', as used within the BSS examination checking procedures, should be provided with clear definition. It was agreed to review and develop glossary definitions for both and it was recognised that any change to 'gas-proof conduit' may require an ECP change.
- Under AOB the ABSE representative referred to an examiner's correspondence with the BSS Office concerning any impact on the BSS LPG tightness test of 'caravan' type 30 mbar regulators on 37 mbar propane systems. The BSS Manager reported that the impact was minimal and that the current tightness test procedure was adequate to take account of this circumstance. It was reported that the answer to the examiner would be published to all examiners and may mean a very minor adjustment to the tightness test procedure.
- Also under AOB, the surveyor's representative reported the concerns that the 10 sec period bubble testers are operated is insufficient in determining a gas leak and that this fact meant that there was a significant variation in approach between the use of bubble testers and manometers. It was agreed to approach the sole known manufacturer Alde for a view since it is their instructions that are represented within BSS test procedures.

Compiled by BSS Secretariat



Date: 9 July 2009

BSS Management Committee Report #65 – BSS Managers Report

The following matters have arisen since the last meeting. Two actions on members are included:

Safety Initiatives

A joint BSS/Hants Trading Standards media release outlining explosion hazards and guiding safe use of portable gas stoves was issued. A copy of the release is available upon request.

Ministerial support from the fire minister, Sadiq Khan, for Boat Fire Safety Week and the BSS awareness generally was achieved within a media release issued by CLG on Whit Bank Holiday Monday. A copy of the release is available upon request.

Two meetings chaired by carbon monoxide (CO) detector trade association CoGDEM have moved forward the CO project. The initiative will influence the development of European CO alarm manufacturing standards and, it is hoped, will for the first time provide a high level of confidence in CO alarm equipment in boats.

The first of two meetings has taken place of the joint BSI working group reviewing comments received on the Draft for Public Comment version of the *Code of practice for the installation of solid fuel fired heating and cooking appliances in recreational craft*. BSI remains optimistic that the code will be published by late summer. The BSS are assessing the impact of the code against our incident database and will report conclusions through BSSTC and BSSAC.

BSSMC Member Action – Navigation Authority reps on BSSMC are challenged to form a view concerning the nature of electrocution risks presented by boats to visitors to the waterways or waterway staff. Until now, electrocution risks have been considered first party boat owner risks and therefore not subject to mandatory BSS checks. A straw poll of BSSTC members resulted in six members supporting the view that electrocution risks were relevant to visitors and staff, one member disagreed. The risks are associated with AC grounding faults manifesting themselves through steel-hulled vessels, stray AC currents presenting a theoretical risk to nearby swimmers and lastly, shore cables plugged into the shore supply and the opposite end of the cable having exposed male pins and being left lying around on the towpath or public area. A paper will be circulated in due course however members are invited to express an initial view concerning the principles.

Incidents

The first boat fire fatality for 15 months occurred on Friday 22 May on the Kennet and Avon canal. The incident involved a female in her early 40's. Investigation of the cause by Coroner's Officers and fire investigators is ongoing but without pre-empting the outcome of the Coroner's enquiry, the cause may have been associated with the use of candles onboard.

Three boats fires involving the total destruction of the boat and all involving older petrol-engined boats occurred during May. These events have added emphasis to the planned review of the BSS petrol safety awareness information currently ongoing.

Threats

Linked to the above item, four civil claims against BSS examiners are currently being handled by the BSS examiner block policy professional indemnity (PI) insurers. The link is that all of the boats concerned involve older petrol engined boats of a 1970s/80s vintage.

My view is that these claims are largely spurious and none of the examiners concerned are being investigated for any alleged breach of their duty to the Scheme. I am working with insurer's representatives and ABSE to identify measures to limit the potential for successful claims against examiners. My view is that increasing claims against the block PI insurance policy will need to be defended and successful claims will have to be paid out. Increased costs to the insurers will lead to substantially increased premiums for examiners or even a difficulty in achieving PI insurance cover *per se*. My view is that this scenario presents the biggest current threat to the Scheme.

It is difficult to be specific about the threat level, but as an illustration the general PI premium for those on the block policy is around £280 (depending upon individual risk variances). 167 examiners out of the 208 registered examiners use the block PI policy. Professional marine surveyors are used to PI premiums of £1500 to £3000 (or higher). Imagine the block PI policy premium goes up by £1000 to £1280. This will add £167K to examiner costs and if this is to be recovered from the 14000 certificates issued annually this adds around £12 to owner costs. This simple illustration does not identify the additional risks, namely that those low volume examiners will no longer be able to compete with high volume examiners because they won't be able to recover insurance costs. Large numbers of examiners will leave and market forces will determine that examiner charges will rise and over and above the amount caused by the premium increase. It is also predictable that owners will not be able to find examiners to examine their boats within a reasonable timeframe, which will itself impact upon craft licensing income and enforcement activity.

BSSMC Member Action – Notwithstanding that this issue is being discussed with ABSE and will arrive at BSSAC, I would appreciate your initial thoughts as to the extent to which the BSS should act to seek to protect the very low current PI block policy premiums. Is this essential in your view or desirable or should the insurance market forces be left to determine PI premiums? My view is that the BSS should do all in its powers to repel this threat. This may mean imposing reasonable and minor additional reporting requirements for examiners to enable spurious claims to be rejected at an early stage. Your views please.

BSS staffing levels are unexpectedly reduced following the decision of the BSS Special Project Co-ordinator not to continue working for health reasons. He was employed on a casual 2-days per week basis and his leaving will have a significant impact on the BSS operation especially concerning the handling of complaint allegations against BSS examiners. The aim is to manage his absence without incurring additional cost, but for this to be achieved certain activities may have to be curtailed. Any curtailment of activity will be made known to BSSAC/BSSMC in advance.

IT Update

Examiner administration facility – Update - all examiners registered online for 2009/10. All examiners are ordering materials online. A test group is helping refine online examination data reporting examiners and this facility is due to go live within one month, or so to all examiners.

Threat – The task to clean SQL examination data has proven much more labour intensive than ever imagined. Clean data is an essential pre-requisite to online examination data reporting, which in itself is an essential pre-requisite to removing the BSS Admin Assistant from BSS staffing levels. The task has meant the BSS Administrator is working mostly from home to complete the task which in itself is drawing other BSS staff away from their tasks to cover admin duties.

Examiner support facility – work is progressing developing the material and functionality of the new examiner website. It is hoped to launch the website in August.

Committee member website – this is also due for launch in August

BSS Manager