



1 July 2011

Dear BSSMC member,

Combined BSS Quality Management & BSS IT Report [Doc B1, BSSMC #73]

Due to financial uncertainty 2010/11 was one of change and 'essential spending only'. The effect of the Government spending review on the BSS did not become clear until early 2011. This uncertainty resulted in reductions of BSS spend by withholding finance for many of the proposed activities planned at the start of the year.

During March 2011 the BSS had its three year budget agreed by the BW board which was largely in line with the previous plan issued in April 2010.

A number of initiatives planned for the previous year were not delivered and are repeated within the programme for this year.

Period January – June 2011

Field Assessments and other quality assurance measures

We managed to assess 5 of the newly qualified examiners during this period and we are committed to carrying out a large number of field assessments this year while developing improvements and changes outlined below.

- Field assessment approximately 15 assessments across the year, targeting the newly qualified examiner who has started to undertake examinations.
- The development of a variant on the "mystery shopper" process. The process, procedure and timing has been developed within the team. However as the arrangements have to involve contacting owners and therefore using personal information stored within other areas of BW the process is being reviewed by the legal team.
- The retraining of all field assessors to meet the latest assessor's qualification requirements. We have a budget, but before we go ahead we will ensure that it gives us value for money and takes in the right direction for future growth.
- Improvements to the overall BSS quality approach as the BSS aligns itself to the EFQM excellence model (European Federation for Quality Management), and as supported by BW.
- Process review. This is an on-going process improvement measure instigated in February 2011. It forms a key element of the EFQM excellence model. The initial focus is on core processes ensuring consistent BSS examinations and ensuring robust incident data upon which the BSS support committee can make recommendations to BSSMC.
- IT project stage 2 is underway and discussion papers defining Stage 3 will be delivered during the year.

Activity

Number of certificates sold in 2010/11 15422 approximately 10% down on previous year, due to annual variations

Number of guides sold 2009/10 218 (These are no longer sold by the BSS team and are being sold through BW's Customer Service Centre)

Number of examiners at 31/05/10 218 up by 1

During 2010/11 we have had 9 examiners resign.

Full time BSS staff 5

Part time/temporary BSS staff 0

Examiners examination returns

The provision of online examination reporting was rolled out to all examiners before the end of April 2011. All examiners have transferred to the live system. To date over 16000 examinations have been recorded.

Initial BSS Examiner Training Course and other courses

The most recent examiner training course was run in March at South Worcestershire College.

BSS examiner training course waiting list has 75 applicants at present. The BSS Team have reviewed the course content in conjunction with the college tutors and the external assessor. The following changes are planned to be implemented.

- Annual review of every applicant's examination results is underway.
- All attendees must provide the correct PPE following revisited joining instructions.
- Changes the course syllabus and material to be introduced will include extra IT training.

The next course dates have been agreed as 3rd October 2011, and invitations have gone out.

Looking forward - We have been using South Worcestershire College for our examiner training for some time and have planned to have the course content reviewed during this year.

Technical Updates (TU's)

Several technical updates were released during 2010. The process was put on hold after deciding to go ahead with the ECP review. (Now underway)

The BSSTC have dealt with a number of appeals during the year. Many of these are incorporated with the ECP review process.

IT. Progress Summary

Newly qualified examiners will have had the sandbox training online and will be moved across to the live system at a rate which depended upon their application date, insurance provision and their proficiency within the sandbox.

Once reporting online, examiners no longer have to report monthly consequently the BSS post inwards has decreased dramatically, therefore meeting our planned activity levels.

The planned support meetings have been put on hold during the registration period but will be restarted in June. At the time of producing this report four meetings had been held at Bray, Wroxham, Stafford and Runcorn.

Now we have all examiners regularly reporting examination results on the system we can start to implement the phase two of the IT development plan.

Online material ordering

No problems reported with this function. The BSS Office is delivering all items within its planned target times.

Online examination reporting

As discussed in the summary all examiners are now reporting online. During this year the quality of these inputs will come under quality analysis using a number of inbuilt reporting tools on the salesforce system to back up the aim of examiner consistency.

Examiners self-managing

Examiners are now able to change, edit and add details about themselves including all insurance details. Examiners are exclusively responsible for all of their contact information being up to date, and accurate.

Examiners' support website

Further development has been on hold during the registration period, although updated incident news, H&S updates and small incidental updates have been added. New materials will be going online such as examiner guidance documents on decommissioning, CE marked boats, the consultation on the proposed revised Conditions of Registration and by September, the Clinic for technical and other queries.

Other IT news

A small number of hand held devices will be purchased and supplied to selected users for field trials of instant inputting and field use. The IT Phase 3 programme proposals will be finessed and issued for comment during the summer months prior to becoming a formal document.

BSS Quality and Technical Manager

1 July 2011



1 July 2011

Dear BSSMC member,

Report from BSSTC Chair for BSSMC [Doc D1, BSSMC #73]

A meeting was held on 26 April. The following items have been moved forward since the last report:

1) Petrol risks – mitigation measures – members reviewed papers on the mitigation measures - bilge blowers, flammable vapour alarms and engine space fire suppression systems and agreed that the BSS website should contain neutral information on each measure to be drawn from the papers. This approach was agreed at the recent BSSAC meeting (#76).

2) Solid fuel stoves – members considered the six recommendations to further address the risks associated with solid fuel stoves. The report containing the recommendations was drawn up by the BSS Office in association with their consultant and took account of BSS incident data and the publication of BS 8511. The following comments were recorded at the meeting:

- members wished greater emphasis to be placed on manufacturer's installation instructions relevant to boats, in addition to promoting the code;
- BSSTC members were keen that the benefits to boaters in fuel efficiency savings should be emphasised to encourage take up of twin-insulated flue products to the code;
- members' considered that the BSS should strive to add awareness information in the form of a leaflet as part of the current range of leaflets, rather than place sole reliance upon web-based information;
- members' were concerned that promoting the new code to the marine and solid fuel industries would not influence the DIY market assessed at around 40% of new and replacement appliances.

3) Examination Checking Procedures (ECP) Review – members have received tables in respect of suggested minor changes to the ECPs concerning Parts 5, 6, 8 and 9 and more substantial changes to Part 3. Members were invited to provide any comments on the suggestions. Comments tables on parts 2, 7 and 4 are anticipated within the next few weeks. Members agreed two participants for the ECP Working Group which is to be re-formed to review the change suggestions and move the review forward.

4) LPG tightness testing – Members agreed a suggestion for the BSS to carry out comparative testing of manometers, bubble testers and high pressure gauges. The testing will involve industry representatives and will inform BSS testing procedures and is intended to influence BSI standards work.

5) Outstanding technical items – members heard updates concerning several long-standing technical items discussed at BSSTC and were pleased that some were to be addressed in the ECP review.

The BSSMC position concerning responsibilities in respect of the level of assurance provided by older fire extinguishers was reviewed and the BSS Manager was advised to assess publicly available BSS information guiding boat owners in respect of their responsibility in respect of maintaining portable fire extinguishers.

Drafted by BSS Secretariat, on behalf of BSSTC Chair 1 July 2011



1 July 2011

Dear BSSMC member,

Report from BSSAC Chair for BSSMC [Doc E1, BSSMC #73]

The following items are drawn from the recent BSSAC meeting #76 held on 7 June 2011.

1. Solid fuel stove risk review

Members reviewed the six recommendations set out in the detailed BSSTC risk review report. Members were generally happy with the approach and recommendations and confirmed their general contentment with the approach.

It was agreed that the recommendations can proceed to BSSMC with an agreed strong message from members to the marine trade associations to make every effort to ensure their trade members adopt and install to the code and especially ensure installation to stove manufacturer's instructions in this respect.

2. CO awareness and CO alarms in boats

Prior to the meeting members were informed that the BSS CO awareness leaflet is being revised in partnership and of the opportunity to comment on the draft text. The purpose of the discussion at the meeting was to discuss and develop a position on the suggested promotion of the use of CO alarms on boats, including guidance on type selection and installation guidance in a similar way the BSS does with smoke alarms.

It was agreed that the recommendations concerning CO alarms on boats can proceed to BSSMC subject to the members' comments on clarity of public messages. It was also agreed that the marine industry seek a hire industry position in the light of the assurances of detector suitability for boats. The suggestion for a trial on hire boats was promoted.

3. Update on the development of BSS documents supporting the purpose of the Scheme

Members review the initial draft of the Navigation Authority Agreement is one of the documents being developed in support of the purpose of the Scheme. Specific comments related to the length and style of the document, members in general wished the document to be more concise and less aspirational but supported the overall approach of the document.

The exclusion of commercial classes of boats from the agreement was questioned and an assurance from BSSMC for a transparent approach to commercial rules is sought.

It was agreed that the BSS Office will issue a further revised version taking into account members' comments. The version will include a clear representation as to how the various key documents and processes. Once further comments are received, a near-final version will then be distributed to BSSAC members not later than the beginning of September, for review at the next meeting.

4. BSS Examiner Conditions of Registration (CoR)

Members heard that formal consultation with all BSS examiners had commenced and that responses can be reviewed at the next meeting.

5. Draft procedure covering audio recording of contested examiner case review meetings

Members reviewed the draft procedure and considered it fine to proceed to BSSMC subject to one typo adjustment.

6. *Stage 2 of the BSS IT project*

Stage 2 of the BSS IT project concerns online boat risk data recording and changes to BSS documentation and members heard that the sub-group of BSSAC tasked with moving Stage 2 forward had met and that positive outcomes had been agreed.

7. *Petrol risk review – risk mitigation measures*

Members reviewed the BSSTC recommendation that basic and neutral information should be placed on the BSS website concerning petrol risk mitigations measures, namely, bilge blowers, flammable vapour detector alarms and engine space fire suppression systems. Subject to one minor amendment it was agreed that the basic information on mitigation measures will be added to the BSS website

8. *Guidance for BSS Examiners concerning ‘decommissioned’ or disconnected systems or equipment*

Members reviewed draft guidance on this subject and it was generally felt that the approach and draft text provided in advance of the meeting goes too far. It was agreed that the BSS Office would develop the paper further in conjunction with the practitioner reps. Guiding principles will sit alongside detailed guidance on the nature of decommissioning specific to particular items or circumstances.

The significance of the proposed guidance was appreciated with the following principles at play:

- it was agreed that what is needed is reasonable and measured advice that supports consistent examinations
- it was agreed that there is a need to ensure the potential new risks to third parties, that could be introduced by any less-than-robust approach, are properly taken account of;
- the need to stress the responsibility of boat owners to maintain boats to the requirements in-between examinations was emphasised;
- it was agreed that the guidance cannot become a charter for use by boaters seeking to evade BSS requirements.

Drafted by BSS Secretariat, on behalf of BSSAC Chair 1 July 2011



1 July 2011

Dear BSSMC member,

Report of incidents and accidents recorded 1 Jan to 20 April 2011 [Doc G1, BSSMC #73]

This is a year-to-date report of incidents for 2011 as recorded by the BSS Office as of 20 April 2011.

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.

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.

1.5 – The table below refers to major and minor injuries; minor injury indicates an injury that was treated at the scene; major injury indicates that the victim(s) received hospital treatment, this could be for any length of time.

1.6 – The term 'intensive use' refers to a boat being used as a residence or in continuous use for around three months or more. The concept is that significant amounts of energy will be used to support a lifestyle that may add weighting to any picture of risk.

1.7 – The term 'moored' is applied to a boat that is in use, if the main engine is in use, it would be only for such use as charging batteries, testing, etc. i.e. there is no intention or preparation being made to move away from the mooring. Conversely underway will cover starting up, moving off and moving along the waterway. Locking is a term to cover the specialised nature of the risk linked to an incident in a navigation authority structure such as a lock or boat lift. It includes the whole process of arriving at a lock, waiting for entry, within the lock structure and exiting the structure.

1.8 – This information within this report is not reproduced for comparative purposes. Its sole purpose is to provide a picture of risk, potential hazards and the nature of incidents occurring on small craft, especially those on inland waterways. Comparative data may be able to be provided once data reporting, collection, recording and collation has been improved.

2.0 The Incident and Accident Data

2.1 – This review is based on 40 reports of incidents obtained for this year thus far. The BSS has gathered details of 33 incidents on inland waterways and 7 on inshore coastal waters including marinas, harbours, creeks and inlets. A breakdown is provided in Annex A attached.

3.0 General overview of incidents and recording

3.1 – As referred to above, the total number of incidents reported so far this year is 40 and this is less than the 57 reported by June meeting 2010, but broadly similar to the 31 reports to June 2009 meeting.

3.2 – On Association of Inland Navigation Authority (AINA) member waterways subject to the BSS, by the June meeting last year we had recorded 27 fire, explosion and deliberate fire-setting events, and 14 by BSSAC June 2009 and 25 by BSSAC June 2008, this year 22 incidents are so far recorded.

3.3 – The trend of fewer injuries and deaths from fire continues. In regards to CO, a couple in their yacht at sea were overcome by toxic fumes from a generator installed within the boat, a leaking non-proprietary exhaust system is believed to be the culprit. Also, we have just obtained information of an incident in December 2010, it was due poor condition door seals on a wood-burner on a liveaboard narrowboat. A further acute claim of CO exposure has been made to the BSS office, linked to poor condition flues on a water heater. In neither case was public information available.

3.4 – Generators continue to feature in fire and CO incidents (as above).

3.5 – So far there have been 6 electrical equipment incidents confirmed. Reports of incidents linked to batteries, especially under charge, are growing. As yet we cannot predict if this is a reporting improvement, or an actual increase of battery incidents, or a mix of both factors. Knowledge and information about battery incidents would be welcome from the committee member's constituencies.

3.6 – Once again, with solid fuel stoves (SFS) installations, maintenance and incorrect use problems causing incidents of fire and CO feature in incident reports.

3.7 – So far this year, there has been one incident inland most probably linked to petrol vapour and an inboard petrol propulsion engine running 'roughly'.

3.8 – The effectiveness of BSS intelligence gathering has been affected by the reduction of BSS Office staff and this is compounded in the event navigation authority local teams don't report boat related incidents. There are notable exceptions and improvements being the Broads Authority and the Thames area of South region EA.

The BSS hope to encourage an institutional approach to boat-related incident reporting. We believe we can help their process by providing usable and accessible models combined with good feedback, so that the teams and their members can appreciate the value of anything they provide the BSS.

4.0 Updates on BSS Activity in 2011

4.1 – *AC Electrical risk issues* – A BSS draft text for leaflet, website and articles has been drafted and is with the Electrical Safety Council which is being approached as a joint owner of the information. Once returned it will go to BMEA for a similar review before returning the BSSTC.

4.2 – *Petrol engine and vapour incidents* – the mitigation measure papers were endorsed at the BSSTC and are intended to form part of a news release message this month.

4.3 – *Portable Appliance Use* – Monitoring of the issue continues and this has led to links with the New Zealand fire service that has produced a report on the risks linked to the portable cartridge butane stoves commonly available in the plastic 'suitcases'. The NZFS has issued a warning to boat

owners following the research which, in part, included evidence from two incidents, one of those was an explosion on a boat. The BSS intend to re-issue previous warnings this month.

4.4 - Carbon Monoxide – Draft text has been produced with CoGDEM which will jointly publish and new leaflet and the endorse information on a proposed new BSS CO portal. This includes the new position on recommending CO alarms meeting BS EN 50291.

The leaflet printing is by funded in the main by joint contributions from CoGDEM members. The design is being provided without charge by the safety equipment wholesaler and web based retailer SafeLincs. Its name will appear in the leaflet credits as designer and again on the BSS website where it will appear as a hyperlink. Safelincs will also use the information on the safety notes on its website. The information will also be freely available for use by anyone so long as BSS/CoGDEM are credited as the source.

4.5 - Solid Fuel Stoves - The BSS has contacted all known solid fuel appliance makers and suppliers operating in the marine sector (approximately 50 companies have been identified). The intention is to help ensure availability of appliances, flue systems, insulation methods and installation instructions that meet the code.

The review of BSS published information is under way as is the development of supporting information for a media release promoting products to the new BSI code scheduled for July.

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

Compiled and drafted by BSS Office
1 July 2011

Annex A - Total to 20th April 2011 39 incidents

Table A1 Basic statistics from the records	<u>BSS</u>	<u>Non-BSS</u>	<u>Coastal</u>
Number of incidents recorded	31	2	7
Fire/explosion (inc immediate risk of)	22	1	6
CO (including near incidents)	1	1	1
Man Overboard	5	-	
Capsize (1), sinking (14), collision (7), grounding (6), stranding (0)	2	-	

Table A2 When accidental fire happens	<u>BSS</u>	<u>Non-BSS</u>	<u>Coastal</u>
Moored	17	1	3
Locking	-		
Underway/setting off	-		3

Table A3 Use of vessel all incidents	<u>Inland BSS</u>	<u>Non-BSS</u>	
Pleasure and leisure	18	1	
Not recorded/not known	6	1	
Intensive [residential and extended use]	6	-	
Hire and small passenger boat	-	-	
Workboats / other commercial	-	-	
Brokerage / renovation / under repair	1	-	
Abandoned	-	-	

Table A4 Systems & causes: all fire & CO inland waters	<u>Inland BSS</u>	<u>Non-BSS</u>	
Deliberate Fire setting	4		
Conflagration	2		
Bullseyes	-		
Electrical [all installations and systems]	6		
Engine [installed] / engine room / exhaust	2	1	
Flammable vapour [type tbc]	1		
Galley Accidents / Smoking / candles			
Gas escape [installed systems & appliances]	1		
Gas Appliances	1		
No information [TBC, not reported, not investigated & inconclusive]	3	1	
Oil fired stoves and heaters [installed]	-		
Other [inc machinery, welding, DIY, etc]	-		
Petrol installed [leak, refuelling, detonation, etc]	-		
Portable engines / outboards / generators	1		
Portable items [lamps / heaters / stoves]	-		
Solid fuel stoves [inc steam pressure expl]	2		

Table A5 Serious incidents on all inland waterways [Note: Major injury = treated at hospital]		
<u>Totals</u>	<u>5 Fatalities</u>	<u>1 Major injuries</u>
Explosion/fire, petrol, gas, fume ignition	-	1
MOB/Capsize	5	-

Table A6 all inland waters Trends in systems & causes: All fire & CO	<u>2011 to date</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>
Totals	25	105	66	67	76	51
Deliberate Fire setting	4	27	17	29	15	10
Conflagration	2	5	7	0	5	1
Totals of accidental and original incidents	-	72	42	38	56	40
Bullseyes		2				
Electrical [system / appliances]	6	8	10	7	3	4
Engine / engine room / exhaust	3	6	4	3	6	2
Flammable vapours (not yet identified)	1	2				
Galley incidents / accidents and smoking		3	0	0	3	1
Gas escape / installed gas appliance	2	3	0	2	7	5
Not known [inconclusive / tbc to BSS]	4	23	11	8	13	12
Oil fired stoves and heaters [installed]		1	1	2	2	0
Other [inc machinery, welding, DIY, etc]		0	2	0	4	2
Petrol related – leaks, refuelling, etc		3	7	4	1	2
Portable engines / outboards / generators	1	5	0	4	1	3
Portable items [lpg, oil, BBQ, electric, etc]		2	2	4	0	2
Solid fuel stoves [inc steam pressure expl]	2	15	5	4	16	7

Annex B

The Role of the BSS Concerning Accident and Incident Data Collection

The BSS Office collects reports of UK recreational boat-related accidents and incidents from any source.

We are interested to establish causes and circumstances to help establish trends and inform BSS Office activity aimed at helping prevent re-occurrences. Our job is to react to trends, or identify new risks or predict potential risks, in an appropriate way. This involves working with stakeholder groups through the BSS Advisory and Technical Committees. The data collected feeds into current and future BSS activities associated with the key risk areas. The data is also used to support navigation authority input concerning their other activities such as the development of the MCA hire boat code.

We are not responsible for, and do not conduct investigations into accidents/incidents, but we may view fire reports or coroner's verdicts in order to inform our assessment. We may help the investigation of incidents by facilitating the return for testing of suspected faulty equipment to the manufacturer/ supplier. We also assist Navigation Authorities in their responsibilities in investigating incidents.

We may also test the experience of the 200+ independent BSS examiners by way of targeted surveys. Through our partnership with Warwickshire Fire and Rescue Service [WFRS] we may identify research needs and seek sponsorship for such research and through our representation at British Standards Institution [BSI] we may seek to influence relevant standards-making activity.

In the event any accident or incident casts doubts about the issue of a BSS Certificate, the BSS Office will seek to view the vessel in order to investigate any potential for an inconsistent examination.

This report has been generated by the interrogation of Fire and Rescue Service web sites, news sites and boating newsgroups. Information from the Maritime and Coastguard Agency and the Marine Accident Investigation Branch and dealings with Coroners Officers is also included. Discussions with BW and EA navigation staff have generated further reports of accidents/incidents and a number of BSS examiners and others people from the marine trade have been helpful in reporting incidents or supplying greater detail. We also review key stakeholder statistics such as from the Royal National Lifeboat Institute and CO-Gas Safety.

