



26 July 2012

Dear BSSMC member,

Combined BSS Quality Management & BSS IT Report [Doc D1, BSSMC #77]

1. Core Process Report – Delivering Consistent Examinations

a) BSS Examiner Field Assessments

The first batch of 17 new-approach field assessments has concluded using a four-stage assessment process. All but three assessed were newly qualified examiners. I have below provided a number of the headline results for the committee.

Value for money - In this exercise using only one assessor we managed 10 examiners in 5 days and then the remaining 7 on separate days. This is approximately twice the throughput of the original assessment process.

Outcomes - The new field assessment process is a 'self-improvement' process, and will not have any 'final' result. Each part of the field assessment will have individual consideration and one-to-one feedback at three stages.

- Use of a checklist. 87% good or satisfactory;
- Thoroughness and the extent of your methodical approach. 77% good or satisfactory;
- General understanding of the Examination Checking Procedures (ECPs). 88% good or satisfactory;
- Knowledge of the risk principles supporting the ECPs. 100% good or satisfactory;
- Ability to communicate your checking actions and compliance decisions. 88% good or satisfactory.

Overall results indicated that this new field assessment process needs some fine tuning but is the right vehicle to deliver improvement of examiners and meet the objectives of improving consistency of examinations, and we intend to roll this out across 40+ examiners during October 2012 to March 2013

b) Examiner Support Website

This website is now considered fully fit for purpose and is fully populated albeit the site will be in a continual improvement regime.. At the recent BSSAC meeting only one member commented on this premise in terms of one highly specific technical issue. The recommendation is that all examiners should access the support site at least twice per month for news and updates.

The BSS Team are monitoring use of this site by the examiner community and will promote its functions and products wherever possible.

Initial BSS Examiner Training Course

The two BSS Examiner training courses will be held later in the year in late October and mid-November. Invitations have now been sent out and we are anticipating full attendance on both courses.

2. Core Process Report – Risk Management

The review of the BSS Risk Management Process has now moved from the consultant to the BSS Office. Members of BSSTC and BSSAC will shortly receive the draft process document for review and comment. This process is employed to help ensure that 'real' and accepted risks are identified and that risk management recommendations to the Navigation Authorities are appropriate, balanced and timely.

Members of the BSS Team met with a National Water safety Forum representative to take forward BSS engagement with the WAID database. It is envisaged that two way information sharing will be in place by the Autumn. Around the same time boat information from the Fire and rescue Services is hoped to be populated on the database.

3. Other Quality Assurance measures

Navigation Authority Staff Hazardous Vessel Training and Incident Investigation Training

The BSS Office has undertaken training for both the EA Thames and the EA Medway and completed hazardous vessel training and incident investigation training with a number of EA staff. The BSS Office is now working with the EA in providing a Hazardous Boat Manual for use by EA members and following the route that the BA has followed with their manual.

Training of Canal and River Trust Safety Advisers is planned to take place in September concerning the initial investigation of boat-related incidents.

4. Examiner examination reporting monitoring

Examiners examination returns

Below is a selection of reports which provoke activity within the BSS Office, plus others that are presented for members of the BSSAC consideration. (Please note numbers in **bold** are from 2010/2011 years for comparison)

Number of certificates sold from April 2011 until end March 2012 15075 (**15422**)

Number of examiners resigning during March 2012 10 (**9**)

Number of examiners at April 2012 215 (**217**)

Full time BSS staff 5 (**5**)

Part time or temporary staff (0) (**0**)

5. Improvement programme

The following items are representative of a number of projects or improvements which are fully funded and resourced for delivery during this financial year.

Risk review process - implementation of the improved BSS Risk Management Process.

New field assessment process - forty examiners to be field assessed using the new process.

IT2 - the new paperless examination process to be started and used by all examiners

V5 Salesforce - online reporting will be delivering improved risk management and an improved experience for all examiners.

New committee website - allowing centralised viewing, comment and discussion of committee issues.

Examiner course waiting list - review and "culling" against enhanced qualification criteria.

Communications - improved service to examiners and members of the public following outsourcing of telephone answering. More field-based activity from BSS Office team members in the interest of greater examiner feedback.

6. BSS IT Report

Existing website is running smoothly with a substantial reduction in reported queries over the past year.

The BSS Quality and Technical Manager monitors the input into the site against a number of criteria and contacts examiners if errors are noted or examiners start to move away from the agreed process or criteria.

A number of examiners have been assisting with testing the next version of the examination reporting called V5. Their contribution has been valuable and a number of changes have been incorporated. The BSS office have now requested a much larger number of examiners to help test and fine tune V5 ready to roll out to all examiners from January 2013 in conjunction with the IT2 process.

IT2 is the next stage of implementation moving towards the “paperless” examination and examiner model. The BSS Team have been engaged with a small team comprising of an owner and examiner representative who have worked together to reduce the documents used by examiners in line with BSSAC agreed criteria. Full details of this next phase will be presented to the BSSMC before the end of this year and use of IT2 is expected to start in January 2013

P Rickett,
BSS Quality and Technical Manager

26 July 2012



19 July 2012

Dear BSSMC member,

Report from BSSAC Chair for BSSMC [Doc E1, BSSMC #77]

The following items are drawn from the recent BSSAC meeting #80 held on 16 May 2012.

1. Publishing notes of BSSAC/MC meetings

Members heard that notes of BSSAC and BSSMC meetings for the past three years were now on the BSS website. The webpage was demonstrated.

2. Update on the ECP Review

Members raised some points on the proposals but the consensus was to allow the ECP change proposals to proceed to BSSMC. Members heard that the proposals would also be published on the BSS website and comments invited from boaters and BSS Examiners. Any comments received from committee members or members of the public or examiners, would be shared with all BSS committee members.

3. Examiner guidance on decommissioned or disconnected or not present systems

Guidance was agreed on how BSS Examiners carry out examinations on vessels where systems, system components, appliances or items which are the subject of BSS checks are found missing or removed, disabled or decommissioned or disconnected. This guidance is now to be published on the BSS examiner and public website.

4. BSS Examiner Support Website – fitness for purpose

The BSS Manager stated that, in-line with the outcomes of the Service Level Agreement, the examiner support website has been added to and improved and is now considered by the BSS Office to be fit for purpose. Members requested that examiner Q&As be published for boat owners on the public site and that the range of Q&As be added to as necessary.

5. BSS IT Project Update and Quality Management Update

Members heard updates on the progress of IT2 and plans for a wider group of examiners testing Salesforce V5, and of 'core process' activity as per papers with BSSMC.

6. Annual report of incidents and accidents recorded, inferences drawn and planned BSS risk-activity for 2012

One member was concerned at the proportion of boat fire/CO incidents where there was no or inconclusive information.

The BSS Manager drew members' attention to the fire fatalities at Bath where the fire and rescue service are indicating that a spare petrol container in the cockpit escalated the incident to a fatal one

One member raised the level of inconsistency between fire and rescue services towards boat events, including Boat Fire Safety Week.

One member referred to deliberate fire setting and its position as the main cause of boat fires year on year. He expressed disappointment with fire and rescue service reaction to such an event and said that appropriate storage of diesel and petrol containers ought to be stressed if such incidents, or the consequence of them, are to be reduced.

7. AOB items

None were raised.

Drafted by Graham Watts, BSS Secretariat, on behalf of BSSAC Chair 19 July 2012



19 July 2012

Dear BSSMC member,

Report from BSSTC Chair for BSSMC [Doc F1, BSSMC #77]

BSSTC met on 17 April. A verbal update was given on the ECP Review and list of technical appeals handled by the BSS Office since the last meeting. The list of outstanding BSSTC technical issues was also considered and the three remaining items added to the activity list at item 2 below.

The main items considered at the meeting included:

1. Nominations for BSSTC Chair's position

The BSSTC Chair is retiring at the end of July. In the absence of nominations to replace him, the Chair will pass temporarily to the BSS Quality & Technical Manager in the event no nominations are received and accepted by then. It is anticipated to have the replacement Chair in place by the time of the November meeting.

2. To prioritise the issues requiring risk review at BSSTC that have fallen from the ECP review process and identify the necessary actions to support the risk reviews.

The items falling from the ECP review as requiring further risk review were considered. The opportunity was taken to consider the process used to ensure items arriving at BSSTC are prioritised and dealt with in a timely and appropriate way. It was recognised that this may involve the BSS in additional costs. A prioritised activity list approach is to be used and a commitment to develop the approach in association with the BSS's risk management consultant. Once developed, the process will be shared with BSSAC for comment.

Falling from this agenda item three items were considered to impact on the current ECP's and as a consensus view was achieved, the items are included in this report and promoted for noting or consideration at BSSAC.

3.2.2 and 3.7.2 – battery cable sizing and low-resistance return cable sizing respectively.

The ECP Working Group was reluctant to move away from specifying 25mm² cable sizing for battery cables because the competent advice from BMEA in 2004 was to retain the requirement. At the recent meeting it was agreed that BMEA should be contacted to see if their advice has changed. BSSTC consider a condition check of battery cables to meet the needs of the navigation authorities.

7.8.3 – LPG pipework joints of the correct type

The BSS requirement is for compression or screwed fittings. BSSTC are keen to allow for hard soldered and/or brazed connections as allowed for in the relevant British and International LPG installation standards. The difficulty for examiners would be to differentiate between acceptable hard solder and unacceptable soft solder. In view of the fact that such soldered connections are rare, any examiner not assured that the connections were hard soldered (i.e., that they were soft solder and so a concern in respect of the risk of failure due to the effects of vibration or fire) could refer the owner to the BSS Office for a decision based upon the available evidence as furnished by the boat owner.

7.8.6 – pipework through 'electrical spaces'

The BSS requirement is for LPG pipework running through petrol engine spaces or electrical equipment spaces to be jointless and run in a gas-proof conduit. Members considered the level of risk to be sufficiently low to allow the reference to 'electrical spaces' to be deleted from the requirement. Another supporting reason is that the term 'electrical space' was not, in the view of members, easily defined. The BSS Manager is to check the position at the 2004 Standards Appraisal process to assess any barrier to the proposal to delete the reference from the check.

3. To consider the risk review of the BSS requirements associated with the storage of spare petrol outboard tanks, spare petrol containers and petrol contained in the integral tanks of outboard motors and generators (Checks 5.2.2, 5.3.1 and 5.4.2 respectively)

Members received a presentation from the Chair and considered the risk review as produced by the BSS Office. Members were keen that the reduced level of risk associated with spare petrol for outboard motors being stored in spare portable petrol tanks is taken account of within BSS petrol storage requirements. The risk review is to be re-submitted taking into account the comments received at the meeting.

Drafted by Graham Watts, BSS Secretariat, subject to change by the BSSTC Chair 19 July 2012



To: BSSMC
 From: Philip Rickett, BSS Quality and Technical Manager
 Date: 26 July 2012

BSS Financial Report for the BSSMC [Doc G1, BSSMC #77]

In lieu of the usual verbal update, I have prepared this quarterly BSS financial report for members.

In accordance with the notes of the last meeting at 76.8.4.1, I have included the BSS year-end accounts for FY 2011/12 as signed-off by the BSSMC Exec, and the signed-off budget for this financial year.

As these would in ordinary circumstances be attached to the BSSMC meeting notes, this information can be considered public information.

a) Previous Financial Year 2011/12

The completed financial results from year 2011/12 were approved and signed off by the BSSMC Executive during April 2012.

Results

Below is the summary of the BSS financial reports for the financial year 2011/12 as compiled and audited by the C&RT financial team, and as intended to be published.

Financial results for FY 2011/12		
Account section	Actual	Plan
External income	469,450.04	430,587.47
Payroll	198,036.76	199,145.7
Staff related costs	26,794.56	29,686.1
Premises and Office costs	49,233.82	54,768.43
Professional Fees	52,975.57	56,489.38
Finance and other charges	14,505.13	18,145.44
Total Controllable Costs	341,545.84	358,235.05
Total Reserves	127,904.20	72,352.42

Note to the results

External income was up by approximately 10% due to both changes to the EA jurisdiction and the inclusion of the River Medway into the scheme.

Professional fees are down to year end but do include a number of projects running across the year end.

Most controllable costs have been reduced by 10% or more due to a combination of factors such as re-negotiations, changes to plan, better ways of working and good control of finances.

b) Financial year budget plan 2012/13

The budget plan for this financial year was agreed by the BSSMC Executive in May 2012

Budget

The BSSMC Executive agreed to publish to the wider BSSMC members the following resume of the budget plan.

Budget plan FY 2012/13	
Account section	Plan
External income	431,000.00
Total Payroll Costs	209,571.28
Staff related costs	16,057.66
Premises and Office costs	40,030.40
Professional Fees	93,500.00
Finance and other charges	15,000.00
Total Controllable Costs	376,409.34
Total Reserves	54,590.66

Note to the budget plan

External income - Income stream remains similar to other years. Cost of certificate is fixed until 2014 and examiner annual registration remains same as previous years. We are anticipating a fall-back in Certificate sales due to cyclic influences.

Payroll Costs - Staff numbers remain constant at five. Payroll figure includes the first pay rise in three years, at 3%.

Professional Fees - Spend on professional fees is approved on a project by project basis.

Internal Rent Charge - Internal rent charges remain the same as previous years. However we are anticipating a reduction in costs after the move to Milton Keynes from 1 August as the BSS team have moved from three work stations to one work station.

Total reserves remain in line with the BSS Business Plan for 2010/14 document V18.

c) Results of financial year 2012/13 periods 1 -3

This P & L report covers both the period from 1 April 2012 until 31 June 2012 (Periods 1 - 3).

Profit and loss accounts	Plan	Actual
Total Income	112,000.00-	121,093.83-
Payroll Costs	34,271.84	33,435.38
Staff related costs	2266.66	1310.72
Premises and Office Costs	2400	1735.84
Professional Fees	11,000.00	2,968.80
Finance and other charges	3750	2500
Total controllable costs	53,688.50	41,950.74
Total Reserves	58,3115-	79,143.09-

Notes to period 1-3 results

For brevity not all details of every GL code costs are included, however all sub-totals are correct as at June 2012.

The full year's figures relate to the BSS P & L Business Plan for 2010/14 document V18.

Details of selected items

1. Total Income. Slightly above plan to end of June. There is not enough data to be able to project any trends at this stage. The UK economic situation will impact upon certificate sales during this year, but to what level and at what stage is not yet understood.
2. Staff. This will rise during July due to the on-going BSS data cleaning task requiring temporary staff.
3. Professional fees. We expect that this year's budget may be exceeded due to bringing forward projects planned for other financial years. More details will be released during August.
4. Total reserves. This exceeds plan by 25% as a result of under expenditure to date.

This abbreviated P&L indicates that we are at present matching our financial plan V18 and see no reason to make any adjustments at present.

Philip Rickett,

BSS Quality and Technical Manager,

26 July 2012



27 July 2012

Dear BSSMC member,

Report of incidents and accidents recorded for the year so far 2012 and inferences drawn [Doc H1, BSSMC #77]

This is a report of incidents and accidents for the calendar year 1 Jan – 30 June, 2012 as recorded by the BSS as of 30 June 2012.

1.0 Introduction

1.1 - The inferences drawn from reviewing incident reports are key to the effective planning of BSS activity to help address the risks presented by boats that have been inadequately constructed or maintained or inappropriately used.

Incident reports are used to help identify patterns of risk and any new risks not previously envisaged. The process employed 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 role of the BSSAC is key in determining the precise activity of the BSS Office by helping prioritise the activity and helping determine any appropriate risk-management measures based upon input at BSSAC meetings.

1.3 - Your attention is also drawn to section 4 which reports against the planned BSS risk activity for 2012; as agreed by BSSAC/BSSMC at meetings in February and March respectively.

1.4 – The information within this report is not reproduced for comparative purposes. Its sole purpose is to provide picture of risk trends, potential hazards and the nature of incidents occurring on small craft, especially those on inland waterways.

2.0 The Incident and Accident Data

2.1 - 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.

2.2 - 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 & rescue service (FRS) attend around 300-350 boat fires each year, although the definition of boats may not be consistent.

2.3 – 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.

2.4 – Where two or more boats collide in one event, it is counted as one incident.

3.0 Summary

3.1 – This review is based on 88 relevant reports obtained for this year by 30 June 2012.

The BSS has gathered details of 65 incidents on inland waterways and 23 on UK coastal waters including marinas, harbours, creeks and inlets. A breakdown of all incidents collected is provided in Annex A attached.

3.2 – On Association of Inland Navigation Authority (AINA) member waterways, 58 incidents were recorded for the 2012 year to 30 June.

3.3 – For the first time in many years, there has double fatal boat fire. The victims are the owners of two boats that were breasted-up on visitor mooring on the section of the river Avon in Bath immediately below Poultney Bridge. These moorings are owned by the local authority and under the management of a local private enterprise. The stretch of waterway is not controlled by Canal & River Trust and its navigation authority status is unclear.

The exact circumstances are unclear. However we believe from reports that the larger boat, a 7m Cleopatra, was bought a few days or weeks before the incident by a Swindon-based man in his 30s. It's use was to be a 'crash-pad' for the owner after he enjoyed the nightlife that Bath has to offer. It is assumed this was also the case for the other man who was also from Swindon and reported to be the owner of the much smaller weekend cruiser alongside.

The initial reports that are subject to confirmation at the inquest suggest, that tea-lights, candles, smoking materials or a barbeque set fire to seating on the rear deck. The fire service then believes that the fire was substantially intensified by petrol stored in a container on that deck. The fire was so intense that it set light to the GRP structure of the boat.

Nearby tourists and moorers say that they tried to rescue both men. One could not be rescued and was recovered dead at the scene by the FRS. The other jumped into the water and was taken to hospital overcome by smoke and with serious burns. He was treated initially at one hospital for smoke inhalation and then moved to a specialist burns unit at another Bristol hospital. We believe he died around six days later.

The Cleopatra had a valid BSSC and was registered with British Waterways. At the moment there are no indications that there is any question about the application of the BSS Examination and issue of a certificate.

There are no records found on the C&RT or BSS systems for the other vessel.

The MAIB has been informed and has made initial investigations. No formal full investigation was planned by the MAIB when we spoke to the relevant officer three days after the incident.

See also supporting activity in 4.3.1 below

3.4 – We have retrospective information about a CO fatality in December 2011 on the Leeds and Liverpool Canal. It only came to our attention after details of the inquest were published in a local paper. The fatality was originally reported in the newspapers as a 'sudden adult death syndrome' case.

Two young men bought a Dawncraft cruiser to live on. It had an unconventional cabin extension. It also had a solid fuel stove with an exceptionally long chimney. The craft also appears to have been routinely covered with various tarpaulins



The two men had felt dizzy when they ran stove and assumed that it was the heat. They were also in the habit of staying off the boat with their girlfriends. It was while returning from such an absence that one of the men found the other face down and dead, about 0.5m away from the stove

The post mortem revealed that the man had no underlying medical conditions and that the cause of death was linked to the 75% saturation carboxyhaemoglobin with no related factors of any significance.

The stove was found to have no sealing rope in the door and as is common, no seal in the top plate. The flue-pipe joints were not sealed. Tests found that the stove could be made to produce high levels of CO in the cabin, especially if was run with the stove door open.

During the period when the man died, the boat had been under observation for non-payment of the licence fee. Patrol officers had recorded several visits.

The survivor continues to own and use the vessel

In 2012 we have records of 5 non-fatal CO incidents. These are reports of alarm actuations that have been tracked by the owners to a) blow-back or inversion on a drip-feed oil fired stove; b) a damaged or cracked solid fuel stoves, c) a blocked chimney and d) burning ash or embers in an open bucket in a cover cratch area by a vent.

3.5 – Also arising this quarter was a serious injury incident. A nine year-old child fell overboard from a hired narrowboat on the Kennet & Avon Canal during the Easter School holiday. This is what a local newspaper reports. The incident happened at the rural location of Pewsey, Wiltshire and it appears the family reversed the boat to the child in the water. The child was drawn into the propeller and suffered severe leg injuries with heavy blood loss according to reports.

The child arrived at a Bristol hospital by air ambulance two hours after the incident happened. As there is as yet no formal report, we do not know what nature of training or experience the hiring family had. We are aware that MAIB were informed, but we have no knowledge of any investigation as yet.

3.6 – There were six incidents linked to solid fuel stoves in as many weeks at the beginning of the year. Causes related to a mix of installation, maintenance and use. The BSS used blogs and tweets to raise awareness of risks, such as warning boaters about forecast windy weather and the potential for down-draughts.

3.7 - There are three fatal MOB incidents included within this report, all of which are under investigation by the navigation or harbour authority and both still subject to Coroner's inquest decisions. However there has been very recent news of a fourth incident which will have to feature in the next report.

In the first; two anglers were in a small, powered, open boat upstream of a weir. It is not yet clear how or why, but the craft fetched up alongside the weir.

The craft became unstable and the anglers entered the water. The lock keeper noticed the boat had disappeared and called emergency services. At least one angler was washed downstream and was found dead by rescuers, his clothes and life jacket ripped off by the current. The other angler survived and was taken to hospital for treatment of hypothermia.

The other incident is where a lady who lives aboard a boat in BWML marina. It is believed that she may have fallen from the boat in the early hours of the morning. Her partner dived in the water, but was unable to get her out and swam to the bank to get help. It is currently assumed that she drowned, but this will be subject to confirmation.

The third is the event that received much newspaper coverage where a father and his children were taken over a weir in their small boat. The man and his son died in the incident. The other children survived.

The stretch of river is not one controlled by any navigation authority.

4.0 Quarterly Report against BSS Planned 2012 Risk Activity

This section provides a quarterly update against the planned BSS risk activity for 2012, as agreed at BSSMC [Doc F1, BSSMC #76].

The following number references relate to *Doc F1, BSSMC #76 and Annual report of incidents and accidents recorded for the year 2011, inferences drawn and proposed 2012 BSS risk-activity [Doc I1, BSSAC #79]*.

Reports on significant BSS risk activity is provided below.

4.1 – 240v ac electrical safety –

4.1.1 – work on the text for the website and for a leaflet continues and is near completion. There are discussion ongoing with BMEA and BMF as to how best to promote boaters to seek competent help from BMET certificate holders in the installation and maintenance of the boat's electrical systems

4.1.2 – the proposed revised ECPs including new checks addressing some 230v a.c. risks, have been published in a public comment exercise. This committee has already agreed the proposals. Final versions will be published in the autumn and implemented in January 2013.

4.3 – Petrol engine and vapour incidents –

4.3.1 - a media update covering the need to limit the carriage of spare petrol to that which is absolutely necessary to complete the journey was issued in May.

4.5 - Portable Appliance Use

4.5.1 – a recent media update drew attention to the risks associated with the use of portable self-contained gas appliances.

4.6 – The Risk to Residential Boaters

A planned meeting with C&RT boating management staff and RBOA to seek to identify the size and extent of the risks and how best to help address them, is planned to take place within the next two months.

4.7 – Incident Information

4.7.1 - *Risk management (Core Process Improvements)* - The BSS risk management process review by our consultant is now complete and the consultant's report is to be shared with BSSAC members in advance of the next meeting. The process outlines the pressures for change, the risk review stage, the role of committees and the implementation and monitoring phase of introduced changes.

Work to align BSS incident data collection tools with National Water Safety Forum's WAID database continues and will be complete by the end of this year.

4.7.2 – *Data improvements/partnership working* - At a meeting in on 15 March, the BSS Manager moved forward co-operation with Amlin Underwriting Services Limited on matters of mutual interest. Amlin are the largest UK boat insurer and own companies like Haven-Knox Johnson and St Margaret's. Informal links were set up to ensure a conduit for views on matters of mutual interest.

Amlin's claims data related to boat Fires/CO/Man-overboard/Sinking/Collisions is to be shared with BSS [not personal data, only date/location/boat name/details of occurrence (and cause if known)]. 17 incidents have been shared to date, some of which were previously unknown to the BSS. Amlin are to identify any other risk issues for BSS to consider adding to its communications initiatives or for further BSS risk review. For example, sinkings caused by rusted gas lockers on narrowboats.

Wider areas of engagement were agreed intended to improve the mutual working relationship with the BMF's IFSLA insurance members:

Amlin's sponsorship potential was recognised and it is possible that the re-print of the Fire Safety on Boats leaflet could be sponsored by Amlin, or some alternative joint initiative.

4.8 - Carbon Monoxide

4.8.1 – the planned re-vamped CO leaflet has been printed and distribution is starting to take place. This is being supported by a planned media release within the next few days

The CO information on the BSS website is being upgraded and aligned with the information in the leaflet

A news release highlight the risks of fire and CO poisoning if using a BBQ aboard a boat was distributed in May. This also supports the Government's CO lobby campaign through the All Party Parliamentary Gas Safety Group to discourage the use of BBQs in or near enclosed spaces such as tent and caravans. There have been seven deaths in the camping world from such activities in the last twelve months.

4.10 - Deliberate Fire Setting

BSS records for this continue to show that around a quarter of fires on inland waterways boats are set deliberately. A BSS report to BSSMC on this subject is scheduled to be produced in advance of the next BSSMC meeting.

4.11 - Smoke Alarms

The strong BSS recommendation for smoke alarms in boats with overnight accommodation is now five years old and is about to be reviewed. The BSS has sought partnership with the Fire Industries Association (FIA) and with possibly a renewed commission for the Fire Protection Association (FPA), acting as the BSS's competent advisor.

It is likely that this will involve a survey of boater attitudes to fire/CO safety. The outcome of this planned survey will likely guide BSS activity in many respects.

One possible and positive outcome of this engagement with the FIA and FPA will be to support the UK position through BSI in respect of the revision of ISO 9094 (Small craft – Fire Protection) and the perceived need for this standard to include fire detection within its clauses.

4.12 - Planned incident data improvements

4.12.1 – As well as information from Amlin insurance, risk data improvements are to be introduced in partnership with NWSF and linked to the WAID database (see above at 4.7.1).

See Annex A attached for a more detailed breakdown of the data for 2012 as collected by 30 April 2012.

See Annex B attached for information about the role of the BSS concerning incident report collection including the limitations.

Compiled and drafted by Rob McLean and Graham Watts from investigative work by Dave Washer

27 July 2012

Annex A – Total - 1 January to 30 June 2012 88 incidents

Table A1 <u>Basic statistics from the records</u>	<u>BSS</u>	<u>Non-BSS</u>	<u>Coastal</u>
Number of incidents recorded	56	9	23
Fire/explosion (inc immediate risk of)	31	6*	22
CO (including near incidents)	5		
Pollution	-		
Man Overboard	5	1	
Personal Injury	-		
Capsize (1), sinking (6), collision (1), grounding (4), lock hang-up (1), stranding (3)	15	2	1

*vessels included in multi-vessel incidents

Table A2 <u>When accidental fire happens</u>	<u>BSS (25)</u>	<u>Non-BSS (4)</u>	<u>Coastal (22)</u>
Moored	18	3	12
Approaching, traversing, departing Lock or Bridge	1	-	-
Underway/setting off	3	-	7
To Be Confirmed	-	-	1
Hard-standing / abandoned	2	1	2
Dry Dock/Construction	1	-	-

Table A3 <u>Use of vessels (65) in all inland incidents</u>	<u>BSS waters</u>	<u>BSS waters</u>	<u>Non-BSS</u>
Note: Navigation = all other inc Capsize, Sinking, Grounding etc	<u>Fire, CO & Pollution</u>	<u>'MOB & Navigation'</u>	<u>inland</u>
	(36)	(20)	<u>All incidents</u>
			(9)
Pleasure and leisure	16	10	4
Not recorded/not known	10	6	4
Intensive [residential and extended use)	7	1	-
Hire and passenger boat	2	3	-
Workboats / other commercial	1	-	1
Brokerage / renovation / under repair	-	-	-
Abandoned	-	-	-

Table A4 <u>Systems & causes: all fire & CO inland waters</u>	<u>Inland BSS</u> (36)	<u>Non-BSS</u> (6)	
Deliberate Fire setting	6	2	
Conflagration	-	1	
Bullseyes	-	-	
Electrical [all installations and systems]	5	-	
Engine [installed] / engine room / exhaust	1	-	
Flammable vapour [type tbc)	-	-	
Galley Accidents / Smoking / candles/ un-specified appliance	-	1	
Gas escape / installed gas appliance	3	-	
No information [TBC, not reported, not investigated & inconclusive]	9	2	
Oil fired stoves and heaters [installed]	2		
Other [inc machinery, welding, DIY, etc]	1		
Petrol installed [leak, refuelling, detonation, etc]	1		
Portable engines / outboards / generators	-		
Portable items [lamps / heaters / stoves]	-		
Solid fuel stoves	8		

Table A5 <u>Serious incidents on all inland waterways</u> [Note: Major injury = treated at hospital]		
<u>Totals</u>	<u>Fatalities</u>	<u>Major injuries</u>
Explosion/fire, petrol, gas, fume ignition	2	5
Carbon Monoxide	-	-
MOB/Capsize	4	4
Other personal injuries	-	-

Table A6 all inland waters <u>Trends in systems & causes: All fire & CO</u>	<u>2012 to date</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Totals	42	90	105	66	67	76
Deliberate Fire setting	8	25	27	17	29	15
Conflagration	1	5	5	7	0	5
Totals of accidental and original incidents	34	60	72	42	38	56
Bullseyes	-	1	2			
Electrical [system / appliances]	5	17	8	10	7	3
Engine / engine room / exhaust	1	8	6	4	3	6
Flammable vapours (not yet identified)	-	3	2			
Other domestic, galley, smoking, candles, appliances	1	1	3	0	0	3
Gas escape / installed gas appliance	3	3	3	0	2	7
Not known [inconclusive / tbc to BSS]	11	13	23	11	8	13
Oil fired stoves and heaters [installed]	2	1	1	1	2	2
Other [inc machinery, welding, DIY, etc]	1	0	0	2	0	4
Petrol related – leaks, refuelling, etc	1	1	3	7	4	1
Portable engines / outboards / generators	-	1	5	0	4	1
Portable items [lpg, oil, BBQ, electric, etc]	-	4	2	2	4	0
Solid fuel stoves	8	7	15	5	4	16

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 partnerships, we may seek to influence relevant British and European standards-making activities.

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.