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# **BSS EXAMINER NEWS**

Dear Examiner,

This edition of BSS Examiner News provides an update on the examiner web improvements, announces important details about the examiner electrical training and assessment course and points to this year's Boat Fire Safety Week which takes place countrywide next week.

# Examiner website update

The administration part of the BSS Examiner website continues to develop, with online registration proving for the most part to be a relatively smooth experience for both examiners and the BSS Office alike. In all, 194 examiners were registered by 1 April and now the total has grown to 207, with still a couple more newly qualified entrants to join shortly.

As you know, examiners are now responsible for amending their own details online and in the last edition of BSS Examiner News I provided simple instructions on how to do this. More recently the online BSS Examiner material ordering facility went live on 7 May and things seem to be going well with report pads and certificates generally arriving with examiners on time.

After materials ordering the next facility to be launched will be online examination recording planned for a staged release from late June and into July. Stand by for more information this soon.

A feature of the introduction of each new BSS Examiner administration facility is the 'How to Guide', and another one is about to hit your inbox. Now before you groan that you will have yet more to read, don't worry; and don't expect there to be hundreds of these 'How to Guides', there will only be enough to help you become familiar with your administration tasks. So keep them handy because the next time you need to order certificates online could be many weeks away and you may be grateful for help in recalling how you did it last time.

We never imagined that all examiners would be computer whiz kids or even adept silver surfers and we haven't been proven wrong. While many examiners are skilful computer users, I know that a good proportion appreciate all the help we can give. With this in mind the next 'How to Guide' will arrive very soon and will explain again in simple terms how to save the link to the log-on portal in your favourites or bookmarks. For those of you who struggle with finding the logon page, once you have saved this link it will be a piece of cake to bring up the screen that asks you for your user name and password.

In a couple of weeks time another 'How to Guide' will arrive and will repeat the instructions for amending your own personal contact details or county listings etc and will offer you the choice to add the initials of your professional organisation, e.g. MABSE or IMarEST, to your details. This additional feature will be part of a new look 'search for an examiner ' results page coming soon to the public website.

Other eagerly awaited website features such as technical and policy guidance supporting the examiner role will be rolled out on the examiner website throughout the second part of the year.

# Avoid commenting to customers about licensing rules

This paragraph concerns boats that appear to be a 'square peg in a round hole' as far as the scope of the Scheme or licensing categories may be concerned. I've been requested by one Navigation Authority to remind examiners not to express a view to customers about the likelihood of achieving a licence to navigate or pass comment about the nature of licensing conditions.

Please direct your customers to the waterway office that can help them as to whether the particular Navigation Authority requires a certificate for that particular class of vessel and be careful not to interpret licensing, registration or mooring conditions. Please restrict your comments to what items on the vessel fall within scope of the BSS to be checked.

# BSS Examiner electrical training assessment – dates and locations announced

As covered in previous editions of BSS Examiner News all examiners who are planning to continue their registration in 20010/11 will need to undergo an assessment of their electrical knowledge and understanding. The courses are being provided in conjunction with the British Marine Federation (BMF) and their contractors, Waterside Training of St Helens.

The cost, the dates and the provisional general locations of the BSS Examiner electrical training and assessment courses are provided below. I have also attached your Pre-course Self-assessment Questions to help you decide whether to attend the full 2-day training and assessment course or opt for the ½ day assessment without training.

Also attached is a list of questions and answers explaining why the electrical training and assessment is necessary and what it means for you.

# What is the cost of training/assessment?

Training & Assessment is a 2-day course costing - £175.

Assessment only is a 1/2 day course costing - £50.

The cost covers course provision, lunch and morning and afternoon teas/coffee/biscuits.

# When and where are the courses taking place?

The dates and venues are set out below and you should anticipate 09.00 start times on both days. It is anticipated that the vast majority of examiners will be able to travel to their chosen course and return home on the same day. It is accepted that some examiners may be compelled to, or may choose to, book overnight accommodation at their own expense.

20 – 21	October 2009	<ul> <li>Inverness, Scotland</li> </ul>
2-3	November 2009	<ul> <li>Lowestoft, Suffolk</li> </ul>
16 – 17	November 2009	– Egham, Surrey
18 – 19	November 2009	– Egham, Surrey
8 – 9	February 2010	- Warrington, Cheshire
10 – 11	February 2010	- Warrington, Cheshire
15 – 16	February 2010	- Hatton, Warwickshire
17 – 18	February 2010	- Hatton, Warwickshire
8 – 9	March 2010	- Bristol, South West
10 – 11 What do	March 2010 I need to do now?	- Bristol, South West

What do I need to do now?

At the moment all you need do is two things:

Most importantly, - have a go at answering the Pre-course Self-assessment Questions, but <u>don't</u> send your answers back to us. Instead come to you own honest conclusion as to whether or not your understanding of electrical safety is sufficient to enable you to answer 90% of the questions – this means you can only falter on answering 4 of the 43 questions! If your understanding isn't sufficient or if you are at all unsure, then you should choose to attend 2-day training and assessment course. If you reckon your knowledge is sufficient to answer the questions then you can opt for assessment only, but my advice is to come along to the training because I'm convinced you will benefit from it.

Secondly, pencil in to your diary your preferred course dates but don't contact us at this stage. I will contact you in about a month's time to seek your course preferences and by the end of August course attendances will be confirmed.

# BSS staff not attending shows this year

It is with some regret that Phil, Dave, Rob and myself have taken the decision not to attend the two major boating events this year, Crick and the Inland Waterways Festival. The decision was not taken lightly but is based upon the fact that attendances are simply not an effective use of BSS Office staff time, it would be different if we were inundated with boaters clambering to talk to us, but that's not happen in the past couple of years. We will review this decision on an annual basis and we may attend some small events for specific reasons from time to time.

We remain committed to helping where we can those examiners intending to represent the Scheme at this year's busy summer season of events. Special thanks to the two examiners who are helping out on the British Waterways stand at the Crick Show this weekend – take your wellies! And thanks also to those examiners who have supported the BSS at events that have taken place this year already; the Paddington Cavalcade and the well attended boating safety event on the Thames at Molesey Lock.

If there is a boat festival, show or rally in your locality and you would like to formally represent the Scheme, please let Tracy or Kerry know and Rob will call you back.

# Boat Fire Safety Week - this coming week!

Fire and Rescue Services and the BSS are once again joining forces during Boat Fire Safety Week (25-31 May) to urge the boating community to be more fire safe on board.

You will be familiar with the messages; fit a smoke alarm if you sleep on the boat, make a fire action plan and take extreme care when refuelling with petrol or changing gas cylinders.

Firemen may be offering boaters Boat Fire Risk Checks to provide an opportunity to gain invaluable help and advice from their local Fire and Rescue Service about how to identify potential problems before a fire starts and what to do if fire should break out.

There are many Fire and Rescue Service events taking place all over the country and we know of some BSS Examiners who are actively helping out. I encourage you to get involved in supporting the activities if you can and if you do take part make sure you familiarise yourself with the good advice on our Fire Advice Portal, especially concerning the type and placement of smoke alarms. The reason I say this is that the focus of the events is fire safety awareness and not necessarily BSS examinations. Our Fire Safety Portal can be viewed at <a href="http://www.boatsafetyscheme.com/fire">http://www.boatsafetyscheme.com/fire</a> .

# The next BSS Examiner News

The next edition will be with you in about a month and will include a request for your help with a survey about the continued effectiveness of older portable fire extinguishers and whether or not they work if called upon.

Best regards,

Graham Watts, BSS Manager

# Annex - BSS Examiner Electrical Training and Assessment Pre-course Self-assessment Questions

- 1. Electricity is said to 'flow'. What is it that flows around a circuit?
- 2. What is a Galvanic Isolator?
- 3. What legislative electrical regulations were introduced to UK in 1989?
- 4. A BS 3036 fuse is also known as a ......Fuse?
- 5. What is the maximum value of an extra low voltage DC system?
- 6. What is the flammable range of hydrogen?
- 7. What is protective equipotential bonding?
- 8. Explain what a DC 2 wire insulated return unearthed system is?
- 9. What is the nominal single phase voltage line to neutral?
- 10. What is the standard UK mains electrical supply frequency?
- 11. What is a typical KW power rating of a bow thruster?
- 12. What is a Residual Current Device (RCD) in relation to electrical equipment?
- 13. Above a current of what value is generally accepted as lethal?
- 14. What is the basic function of an Inverter?
- 15. What is a fuse or circuit breaker designed to protect?
- 16. What are the 5 dangers of electricity?
- 17. Describe how you identify between 12V or 24V battery arrangements?
- 18. What does the IP rating of electrical equipment mean?
- 19. What is the generally accepted minimum number of strands in a multi-strand copper cable?
- 20. What are the 3 general effects of electric current?
- 21. You come across a light blue cable, is this likely to be a live, neutral or earth conductor?
- 22. What is the maximum value of a RCD used for personal protection in the UK?
- 23. What is the capacity of a battery normally measured in?

24. Name three types of cable termination that are not suitable in boat electrical systems?

25. For a given circuit which is greater - fuse size or cable current carrying capacity?

26. What is the lowest value of electric current perceptible by humans?

27. What is the fundamental difference between AC and DC?

- 28. What is the purpose of earthing mains AC electrical equipment?
- 29. What is the relative density of hydrogen, compared with that of the air?
- 30.Is it permissible to use the hull of a boat as a return conductor?
- 31. What is the minimum IP rating appropriate to a shore boat inlet connection in any location likely to be subject to the weather or splashing?
- 32. If a Mains shore supply is connected what is the nominal Line to earth Voltage?
- 33. What potential danger may arise if there is more than one shore connection inlet?
- 34. What is an RCBO in relation to electrical equipment?

35. What is the generally accepted minimum temperature rating of cables?

- 36. What is an Isolating Transformer and how does it increase safety aboard boats?
- 37. To comply with 1989 Electrical Legislation a BSS Examiner should be what?
- 38. What is the key feature of a deep cycle Marine/Leisure battery?
- 39. When is the use of a double-pole circuit breaker necessary?
- 40. Reducing a cable's cross sectional area does what to the current carrying capacity?
- 41. What are the 3 types of new BS EN 60898 circuit breakers?
- 42. What should be installed if an inverter & shore supply can be energised simultaneously?
- 43. What is galvanic corrosion?

# Annex - BSS Examiner Electrical Training and Assessment - Your Questions Answered

1) Why do examiners need to be trained and assessed on their electrical knowledge and understanding?

The training is necessary because of the increasing complexity of boat electrical systems encountered and the need to refresh knowledge and skills on the application of the electrical BSS Examination Checking Procedures including on background knowledge of electrical hazards and risks. This bearing in mind that the original BSS electrical training material was developed in the late 1990's and electrical systems have come on remarkably since then.

The training will help examiners identify the range of electrical components likely to be encountered and so will enable an increased consistency of BSS examination.

Equally importantly it will help keep examiners safe from the potential for electrocution because the course will provide an appropriate level of understanding of the risks associated with AC electrical systems on boats.

# 2) Why not just provide training, why an assessment as well?

At the end of the day passing an assessment is what the BSS require of examiners and we recognise that there are some examiners who already have enough knowledge to do this without the need for training, hence the option to choose the  $\frac{1}{2}$ -day assessment.

Passing the assessment provides the BSS and the Navigation Authorities, with a continued assurance that examiners have appropriate knowledge and understanding of the risks associated with AC and DC electrical systems and components to safely and effectively examine electrical installations on boats to BSS requirements.

# 3) What if an examiner doesn't pass the assessment by registration time in 2010?

Passing the assessment before the end of March 2010 is a condition of BSS Examiner reregistration next year. It is recognised however, that there may be circumstances that mean a small number of examiners have been unable to achieve this. The circumstances will be viewed on an individual basis, but in essence those few examiners concerned will have to be booked on to one additional course in April 2010 to permit re-registration. This final course will likely be in the Northwest of the country and examiners will have to attend at their own expense.

# 4) Who is providing the training and assessments?

The training and assessments are being delivered by Waterside Training of St Helens Merseyside. Waterside Training specialise in delivering practical skills based training particularly concerning electrical and mechanical engineering disciplines. The training material has been developed by Waterside training in conjunction with the BMF and BSS and the delivery will be a combination of PowerPoint, practical demonstrations and with plenty of opportunity for input from attendees.

# 5) How many examiners can go on any one course?

A maximum of 15 examiners can attend a course with up to an additional 5 attending for the assessment only.

# 6) Will passing the assessment give me a qualification to fit electrical equipment in boats?

No, but it will provide a basic understanding of boat electrical safety that could be a good grounding for those intending further training as marine electrical fitters.

# 7) Will I need to go on a refresher course in the future?

There are no plans for periodic assessment courses for examiners concerning electrical systems.

# 8) Will the training lead to safer boats?

Electrical fires, as a cause of accidental boat fires recorded by the BSS has remained in the top three of known causes for many years. The problem with the information we have is that there is not enough detail upon which to determine the precise causes, i.e. cables, fusing appliance circuitry, batteries, etc. It is hoped that increased consistency of BSS checks may help increase BSS understanding of how electrical fires are caused and may help reduce the proportion of electrical fires.