The EXAMINATION & TESTING of MINIATURE STEAM BOILERS

Boiler Test Code Review

Comments received by the Model Engineering Liaison Group during the period September 2011 to December 2011 together with the Group's responses

The comments received have been summarised identifying the principal point being made. The batch numbers and page numbers in the second column of the question/query section refer to the master copy of comments received.

Any queries, or any requests for further clarification, should be made via either the 71/4 Gauge Society, the Midland Federation of Model Engineering Societies, the Northern Association of Model Engineers or the Southern Federation of Model Engineering Societies as appropriate.

Boiler Construction/Design

| 1. | Batch 1 Page 46/47 01.Nigel Trafford-Jones | Boiler construction requirements, material certificates, weld samples etc | |
|-------|--|---|--|
| | This topic is actually associated with boiler design and construction and not a boiler test code but | | |
| see B | see Boiler Test Code 2012 paragraphs 5.1 to 5.4, 6.2 and 7.4 and for reference to weld samples | | |
| see B | see Boiler Test Code 2012 paragraph 6.3 | | |

| 2. | Batch 2 Page 1 Para 3. Royston & District | Introduce record sheet for new build of boilers |
|--|--|---|
| Some Clubs/Societies do this already – see Boiler Test Code 2012 Paragraph 5.4 | | |

| 3. | Batch 2 Page 17 Para 4. Saffron Walden | Suggest use of record sheet by member building new boiler |
|--|---|---|
| Some Clubs/Societies do this already - see Boiler Test Code 2012 Paragraph 5.4 | | |

| 4. | Batch 2 Page 25 Para 7. Royston | Suggested record sheet for new boiler build |
|--|------------------------------------|---|
| Some Clubs/Societies do this already – see Boiler Test Code 2012 Paragraph 5.4 | | |

| | Batch 2 Page 1 Para 4. | Boiler Valves & captive spindles |
|----|------------------------|----------------------------------|
| 5. | Royston & District | |

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

Batch 1 Page 64 Boiler Valves & captive spindles 6. 09.ME letters page

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

Batch 3 Page 30. Clive Boiler Valves & captive spindles 7. Young of Romney Marsh

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Batch 3 Page 41. Jon 8. Mottershaw of Colchester

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Batch 4 Page 82 Para 10 Boiler Valves & captive spindles 9. & Page 83. Malden

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

| 10. | Batch 1 Page 66 Doug Rundle | 11 | Include a boiler design code |
|--------|---|----|------------------------------|
| A Roil | A Boiler Design Code is a congrate subject from the Boiler Test Code and may be produced some | | |

A Boiler Design Code is a separate subject from the Boiler Test Code and may be produced some time in the future.

| | Batch 1 Page 74 | Boiler Design Code (inc reference to Australian Code) |
|-----|-------------------|---|
| 11. | 17 Duncan Webster | |

A Boiler Design Code is a separate subject from the Boiler Test Code and may be produced some time in the future.

| 12. | Batch 2 Page 3 Para 5. Oxford | Page 18 – water gauge paragraph | |
|--------|--|---------------------------------|--|
| The pa | The paragraph has been rewritten - see Boiler Test Code 2012 paragraph 6.8 | | |

| 13. | Batch 2 Page 4 Para 3. South W & Severnside | Page 18 – water gauge paragraph | |
|--------|--|---------------------------------|--|
| The pa | The paragraph has been rewritten - see Boiler Test Code 2012 paragraph 6.8 | | |

| 14. | Batch 3 Page 32. Robert Walker of Malden | Page 18 – water gauge paragraph | |
|--------|--|---------------------------------|--|
| The pa | The paragraph has been rewritten - see Boiler Test Code 2012 paragraph 6.8 | | |

| 15. | Batch 3 Page 33. John Bayes of Winchester | Page 18 – water gauge paragraph | |
|--------|--|---------------------------------|--|
| The pa | The paragraph has been rewritten - see Boiler Test Code 2012 paragraph 6.8 | | |

| 16. | Batch 4 Page 86 Para 4 SMEE | Page 18 – water gauge paragraph | |
|--------|--|---------------------------------|--|
| The pa | The paragraph has been rewritten - see Boiler Test Code 2012 paragraph 6.8 | | |

| 17. | Batch 5 Page 105 Para 1 Stafford & Dist MES | Page 18 – water gauge paragraph |
|--|--|---------------------------------|
| The paragraph has been rewritten - see Boiler Test Code 2012 paragraph 6.8 | | |

| 18. | Batch 5 Page 112 Para 2/4 City of Oxford SME | Water gauge paragraph |
|--------|--|-----------------------|
| The pa | The paragraph has been rewritten - see Boiler Test Code 2012 paragraph 6.8 | |

| 19. | Batch 5 Page 131 Para 5 MSRVS | Page 18 – water gauge paragraph |
|--|----------------------------------|---------------------------------|
| The paragraph has been rewritten - see Boiler Test Code 2012 paragraph 6.8 | | |

| 20. | | Why is the design of a safety valve not a criterion for a new boiler |
|---|--|--|
| A Roiler Design Code is a separate subject from the Roiler Test Code and may be produced some | | |

A Boiler Design Code is a separate subject from the Boiler Test Code and may be produced some time in the future. Components may be included in a Boiler Design Code as well as the design of the boiler shell.

| 21. | Batch 2 Page 10 Para 7. Leyland | Copper material specification |
|---|------------------------------------|-------------------------------|
| This query is really a subject for a Boiler Design Code but see Boiler Test Code 2012 paragraph 7.4 | | |

| 22. | Batch 2 Page 12 Paras 1 to 4. Rochdale | Inspection during construction |
|--|--|--------------------------------|
| See Boiler Test Code 2012 paragraphs 6.2 and 7.4 | | |

| 23. | Batch 2 Page 12 Para 5. Rochdale | Clause 4 and published design verification – there should be some check on acceptability of design |
|---|-------------------------------------|--|
| See Boiler Test Code 2012 paragraphs 5.1 to 5.4 and 7.4 | | |

| 24. | Batch 2 Page 12 Para 6. Rochdale | Clause 6.1 who recognises a commercial boilermaker |
|---|-------------------------------------|--|
| Comments accepted. Commercial boilermakers are however subject to the full force of the | | |
| Pressure Equipment Regulations | | |

| 25. | Batch 2 Page 14 Para 5. Urmston | Re appendix A – what weld sample tests are required |
|---|------------------------------------|---|
| See Boiler Test Code 2012 paragraph 6.3 | | |

| 26. | Batch 5 Page 103 Para 2 Steve Larner | Who has reviewed/approved the designs published in the ME press |
|---|---|---|
| Not known – see Boiler Test Code 2012 paragraphs 5.1 to 5.4 and 7.4 | | |

| 27. | Batch 5 Page 103 Para 4 Steve Larner | Design calculations |
|--------|---|---------------------|
| See bo | See boiler Test Code 2012 paragraphs 5.1 to 5.4 and 7.4 | |

Boiler Inspectors' Responsibility

| 28. | Batch 3 Page 29. Clive Young of Romney Marsh | Responsibility for checking design integrity |
|---------|---|--|
| Boile | r inspectors are, and always | have been, responsible for design and design calculation |
| verific | cation – see Boiler Test Code | 2012 paragraphs 5.1 to 5.4 and 7.4. Boiler Inspectors should |
| only | work within their capabilities see | e Boiler Test Code 2012 paragraph 3.9c |

| 29. | Batch 3 Page 34/35. John Bayes Winchester | There is more responsibility being placed on the boiler tester and first rate documentation is required |
|--|---|---|
| The responsibility placed on boiler inspectors has not changed, it is now no more than it has been in the past. It is hoped that the new documents will meet the request for 'first rate documentation'. | | |

| 30. | Batch 4 Page 93 East Somerset | Boiler inspectors knowledge needs improving - more seminars and/or discussions needed |
|---|-------------------------------|---|
| Agreed. It is hoped that Boiler Test Code 2012 and the redesigned certification will make life easier | | |
| for the inexperienced boiler inspector | | |

Boiler Test Code Application/Parameters

| our juig persons producting manufactures | Batch 2 Page 4 Para 1. Include boilers of boats and launches capable of carrying persons providing within bar litre limitations |
|--|---|
|--|---|

The Boiler Test Code 2012 extends to include boilers, not exceeding 1100 bar litres, in a steam powered model or a steam powered boat, see Boiler Test Code 2012 paragraphs 2.5, 4.2, 4.3 and 4.4. It should be noted that flash steam boilers, drum boilers (as fitted to steam cars, not in association with water tubes) and coil boilers are specifically excluded from Boiler Test Code 2012, see Boiler Test Code 2012 paragraph 2.6.

| | Batch 2 Page 6 Para 5. | Include boilers of 12in to the foot – boats and steam cars |
|-----|------------------------|--|
| 32. | Unknown | |

The Boiler Test Code 2012 extends to include boilers, not exceeding 1100 bar litres, in a steam powered model or a steam powered boat, see Boiler Test Code 2012 paragraphs 2.5, 4.2, 4.3 and 4.4. It should be noted that flash steam boilers, drum boilers (as fitted to steam cars, not in association with water tubes) and coil boilers are specifically excluded from Boiler Test Code 2012, see Boiler Test Code 2012 paragraph 2.6.

Batch 5 Pages 100/101 Extend code to include boilers in full size steam boats 33. Steam Boat Association

The Boiler Test Code 2012 extends to include boilers, not exceeding 1100 bar litres, in a steam powered model or a steam powered boat, see Boiler Test Code 2012 paragraphs 2.5, 4.2, 4.3 and 4.4. It should be noted that flash steam boilers, drum boilers (as fitted to steam cars, not in association with water tubes) and coil boilers are specifically excluded from Boiler Test Code 2012, see Boiler Test Code 2012 paragraph 2.6.

Batch 5 Page 114 Size of boilers that can be tested 34. City of Sunderland MES

The Boiler Test Code 2012 extends to include boilers, not exceeding 1100 bar litres, in a steam powered model or a steam powered boat, see Boiler Test Code 2012 paragraphs 2.5, 4.2, 4.3 and 4.4. It should be noted that flash steam boilers, drum boilers (as fitted to steam cars, not in association with water tubes) and coil boilers are specifically excluded from Boiler Test Code 2012, see Boiler Test Code 2012 paragraph 2.6.

| | Batch 2 Page 6 Para 6. North Wales | Re paragraph 3.9 in addition to 3.8 an inspector should |
|---|---------------------------------------|---|
| The words should, shall and ancure have been rationalised | | |

The words should, shall and ensure have been rationalised.

| 36. | Batch 2 Page 6 Para 7. North Wales | Should there be an appeals procedure? |
|---|------------------------------------|---------------------------------------|
| After discussion it was decided that an appeals procedure was not appropriate | | |

| 37. | Batch 2 Page 10 Para 3. Leyland | Re 1.1.3 – Do the Pressure Systems Safety Regulations 2000 apply? |
|--|------------------------------------|---|
| Yes – if the Health & Safety at Work Act applies | | |

| 38. | | Re 2.6 How many boiler inspectors have theoretical knowledge and can prove a design by calculation? |
|---|--|---|
| Not known – such information is not available | | |

| 39. | Batch 4 Page 81 Malden | Safety valve & design pressure/working pressure |
|--|---------------------------|---|
| Definitions have been amended – see Boiler Test Code 2012 paragraphs 3.5 and 3.6 | | |

| 40. | Batch 4 Page 86 Para 3. SMEE | Re para 10.4 size of boiler and two independent means of water feed |
|--|---------------------------------|---|
| There will, at this time, be no change to basic parameters | | |

| | Batch 4 Page 87 Para 4. | Re 5.4 – clarification required re new CE marked boilers |
|-----|-------------------------|--|
| 41. | & pg 88 Romney Marsh | |

Clarification data on CE marking is contained in a number of Information Sheets issued by the Southern Federation and/or Northern Association. CE marking is not within the remit of the Boiler Test Code 2012 which is concerned with Pressure Systems Safety Regulations 2000. CE marking is a manufacturing requirement and is associated with the Pressure Equipment Regulations 1999. A boiler which should have CE approval/marking but in fact does not is in contravention of the PER and must not be tested or used

Batch 4 Page 90 Com 5 Explanation of CE mark & reason for prohibiting testing of non CE marked boilers

Clarification data on CE marking is contained in a number of Information Sheets issued by the Federations and/or Associations. CE marking is not within the remit of the Boiler Test Code 2012 which is concerned with Pressure Systems Safety Regulations 2000. CE marking is a manufacturing requirement and is associated with the Pressure Equipment Regulations 1999. A boiler which should have CE approval/marking but in fact does not is in contravention of the PER and must not be tested or used.

Batch 4 Page 90 Com 1 In 'introduction' delete the word normally 43. South Cheshire

If the Health & Safety at Work Act applies the Pressure Systems Safety Regulations 2000 apply and therefore the word normally must remain.

Batch 4 Page 90 In 1.1 delete paragraph 3 and re-word paragraph 4 44. Com 2 South Cheshire

If the Health & Safety at Work Act applies the Pressure Systems Safety Regulations 2000 apply also see Boiler Test Code 2012 paragraph 2.4

| 45. | Batch 4 Page 90 Com 3 South Cheshire | Delete paragraph 2.7 as witness not needed |
|--|---|--|
| See Boiler Test Code 2012 paragraphs 3.9f and 3.10 | | |

| 46. | Batch 4 Page 90 Com 4 South Cheshire | Suggested re-word for 3.10 refusal to test a boiler |
|--|---|---|
| See Boiler Test Code 2012 paragraphs 4.7 and 4.8 and 4.9 | | |

| 47. | Batch 5 Page 104 Stafford & Dist MES | Where do you record 'refusal of test' |
|--|---|---------------------------------------|
| See Boiler Test Code 2012 paragraphs 4.7 and 4.8 and 4.9 | | |

| 48. | Batch 4 Page 90 Com 6 South Cheshire | In 5.7 marking of boilers add 'see paragraph 7.10' |
|---|---|--|
| Text and configuration has been amended - see Boiler Test Code 2012 paragraph 7.7 and | | |

| paragraph 8.3 | | |
|---------------|-----------------|--|
| | | |
| | Batch 4 Page 90 | How do Boiler Inspectors identify a valid notified body? |

Details can be supplied by the Department for Business Innovation and Skills, 1 Victoria Street, London SW1H 0ET tel 020 7215 5000 (www.bis.gov.uk) or contact your Association or Federation

| 50. | Batch 4 Page 91 Com 3&4 South Cheshire | Re-word 11.5 (periodicity) and add a further paragraph |
|--------|---|--|
| Wordin | Wording has been clarified – see Boiler Test Code 2012 paragraph 12.5 | |

| 51. | Batch 4 Page 94 Para 6 Steam Itinerants | Confirmation that the Test Code requirements are not retrospective | |
|--------|---|--|--|
| Boiler | Boiler Test Code 2012 is not retrospective, see Boiler Test Code 2012 paragraph 4.1 | | |

49.

Com 7 South Cheshire

| 52. | Batch 5 Page 103 Para 1 Steve Larner | Club does not hold own insurance but believes that it can issue certificates under the Southern Federation insurance umbrella |
|-------------|---|---|
| ~ !! | | |

Clubs and Societies must arrange their own insurance – there is no umbrella arrangement

Batch 5 Page 107 Para 1 Guildford MES Code should be more user friendly – in need of reorganisation Boiler Test Code 2012 is a complete rewrite and, it is hoped, less ambiguous and more user

Boiler Test Code 2012 is a complete rewrite and, it is hoped, less ambiguous and more user friendly

54. Batch 5 Page 109 Para 2 Examined hot and examined cold are ambiguous Boiler Test Code 2012 is a complete rewrite and, it is hoped, less ambiguous and more user

Boiler Test Code 2012 is a complete rewrite and, it is hoped, less ambiguous and more user friendly

Batch 5 Page 109 Para 3 Suggest a check list is used and then retained by boiler owner

The way Boiler Test Code 2012 has been written it can easily be adapted by boiler inspectors to form a check list with their requirements

Batch 5 Page 111 Para 1 City of Oxford SME The witness cannot be the owner but the maker is acceptable – see Boiler Test Code 2012

| 57. | Batch 5 Page 111 Para 2 City of Oxford SME | Clarify modification re drilling holes in traction engine boiler |
|---|---|--|
| See Boiler Test Code 2012 paragraph 7.6 and 8.4 | | |

| 58. | Batch 5 Page 111 Para 5 City of Oxford SME | Re 11.3 bullet points for date of steam test & safety valve set pressure should not be there as they do not appear |
|-----|---|--|
| | | on the hydraulic certificate. |

Certification has been amended and Regulation 9 paragraph 144 of the Pressure Equipment Safety Regulations 2000 sets out what must appear on a certificate, see Boiler Test Code 2012 paragraph 12.3

| 59. | | Re 11.5 a reminder is required re expiry of hydraulic is not exceeded when issuing steam certificate |
|---|--|--|
| Agreed - see Boiler Test Code 2012 paragraph 12.5 | | |

| 60. | Batch 5 Page 111 Para 7 City of Oxford SME | Re 12.5 – should read 'this is particularly important' |
|---|---|--|
| Agreed - see Boiler Test Code 2012 paragraph 13.5 | | |

| 61. | Batch 5 Page 111 Para 8 City of Oxford SME | Re Appendix A which refers to TIG welding – should state current definition TAGS |
|--|---|--|
| This topic is actually associated with boiler design and construction and not a boiler test code but | | |
| see Boiler Test Code 2012 paragraph 6.3 | | |

paragraph 3.10 also paragraph 3.9f

Batch 5 Page 112 Para 1 Re Appendix B – 'inspectors may wish to consider' is too City of Oxford SME 62. weak, needs to be stronger

Appendix B has been deleted and incorporated in to Boiler Test Code 2012 - see Sections 7 to 11

Re page 21 'safety Valves' add 'preferably' before locked Batch 5 Page 112 Para 5 63. City of Oxford SME and add a paragraph

Statement has been re-written - see Boiler Test Code 2012 paragraph 11.9

Batch 5 Page 133 Para 7 Safety valves do not lend themselves to locking by non Fareham & Dist SME destructive methods 64.

See Boiler Test Code 2012 paragraph 11.9

Batch 5 Page 113 Para 2 Ambiguity re commercial and non commercial 65. **High Wycombe MEC** requirements re new private built boilers

See Boiler Test Code 2012 Sections 6, 7 and 8

Batch 5 Page 113 Para 3 Suggest that commercial and private built boiler test 66. **High Wycombe MEC** procedures are separated

See Boiler Test Code 2012 Sections 6, 7 and 8

Batch 5 Page 116 Para 7 Are flash steam boilers included? 67. **Peter Bolderston**

No, flash steam boilers are specifically excluded from Boiler Test Code 2012, see paragraph 2.6

Batch 5 Page 117 Para 8 Why don't boiler sizes follow Pressure Equipment 68. **Peter Bolderston** Regulations (PER)?

The Pressure Equipment Regulations are concerned with boiler manufacture whereas the Boiler Test Code 2012 is concerned not with manufacture but with testing.

Batch 5 Page 117 Para 9 Re 5.1- consider adding a definition of commercially 69. Peter Bolderston

Wording amended - see Boiler Test Code 2012 paragraphs 6.3 and 6.4

Batch 5 Page 117 Para 10 | Re 5.4 & material certificates what is 'where appropriate' 70. **Peter Bolderston**

Wording amended - see Boiler Test Code 2012 paragraph 7.4

Batch 5 Page 118 Para 16 | Re 11.8 A record of the boiler's history 71. **Peter Bolderston**

See Boiler Test Code 2012 paragraphs 12.7 and 12.8

Batch 5 Page 128 Para 2 Any changes should not be retrospective Stockholes Farm MR 72.

Agreed - any changes will not be retrospective, see Boiler Test Code 2012 paragraph 4.1

Batch 5 Page 128 Para 2 Code should specify what must be done but leave boiler testers to decide how to achieve

Boiler Test Code 2012 is descriptive in order to guide all boiler inspectors in to a common approach.

| | Batch 5 Page 128 Para 5 | When revised edition is issued include details of all |
|-----|-------------------------|---|
| 74. | Stockholes Farm MR | changes made |

Unfortunately this is not possible as the whole document has been rewritten

Batch 5 Page 131 Para Include a resume of legislation requirements etc 2/3/4 MSRVS

Clarification data on CE marking is contained in a number of Information Sheets issued by the Southern Federation and/or Northern Association. CE marking is not within the remit of the Boiler Test Code 2012 which is concerned with Pressure Systems Safety Regulations 2000. CE marking is a manufacturing requirement and is associated with the Pressure Equipment Regulations 1999. A boiler which should have CE approval/marking but in fact does not is in contravention of the PER and must not be tested or used

Certificates/Documentation

| | Batch 1 Page 51 | Transferability of certificates |
|-----|------------------|---------------------------------|
| 76. | 05. John Baguley | |

The boiler certificates attach to the boiler and should be handed to any new owner in the same way that an MOT certificate is handed to the new owner of a car – see Boiler Test Code 2012 paragraph 12.8. The boiler certificate remains valid providing the new owner complies with Boiler Test Code 2012 paragraph 2.1. The new owner of the boiler will however need a new Written Scheme of Examination.

Batch 1 Page 76 Expiry date of commercial boiler makers certificate and 77. 19. B Gasson Tonbridge providing duplicate certificates

Manufacturers' initial (Shell) tests are valid for life but some manufacturers do put an expiry date on their certificates for the end of a guarantee period – see Boiler Test Code 2012 paragraphs 8.1 to 8.4. Pressure system certificates are valid only for the periods indicated on the certificates – see Boiler Test Code 2012 paragraph 12.5. Duplicate certificates can be issued – see Boiler Test Code 2012 paragraph 12.8.

78. Batch 5 Page 113 Para 1 Confusion re certificates issued with new commercially built boilers

Manufacturers' initial (Shell) tests are valid for life but some manufacturers put an expiry date on their certificates for the end of a guarantee period – see Boiler Test Code 2012 paragraphs 8.1 to 8.4. Pressure system certificates are valid only for the periods indicated on the certificates

| 79. | Batch 1 Page 75 18. Alan Reid | Amend Documentation (tear off slip) |
|----------|----------------------------------|-------------------------------------|
| Certific | cation has been amended | |

| 80. | _ | Pre number hydraulic tear off slip and an extra certificate to evidence examination during construction |
|----------|-------------------------|---|
| Certific | cation has been amended | |

| 81. | Batch 1 Page 67 12.Peter Gardner of Frimley & Ascot | Revamp Certificates/Documentation |
|----------|---|-----------------------------------|
| Certific | cation has been amended | |

| 82. | Batch 2 Page 1 Paras 9/11. Frimley & Ascot | Paperwork is longwinded and repetitious and some entries can be interpreted ambiguously | | | | | |
|----------|---|---|--|--|--|--|--|
| Certific | cation has been amended | | | | | | |

| | Batch 3 Page 40. Peter | How is it recommended that paperwork is applied in the |
|-----|------------------------|--|
| 83. | Gardner of Frimley & | case of club owned locomotives |
| | Ascot | |

A boiler inspector may test the boiler on a club loco provided he was not the builder of the boiler and provided that he has not carried out any subsequent work or repairs on the boiler. The certificate should be issued in the name of the club/society.

| Batch 2 Page 1 Para 12. Frimley & Ascot | Boiler Test Record Card |
|--|-------------------------|
|--|-------------------------|

Boiler Test Record Cards are not mandatory. If used the card entry should give a specific date if it is available (previous documentation) or a fair estimate if no definitive data is available. When the existing stock of Cards is exhausted it is not intended to re-print.

| 85. | Batch 5 Page 110 Para 2 Warrington & D MEs | Is blue card needed? |
|-----|---|----------------------|
| | 3 | |

No, Boiler Test Record Cards are not mandatory - but the blue card can still be used as it contains a record of information not stored elsewhere. When the existing stock of Cards is exhausted it is not intended to re-print.

| | Batch 2 Page 2 Paras 2 & | Include example of how to complete certificates plus |
|-----|--------------------------|--|
| 86. | 3. Frimley & Ascot | provide a sequential checklist of items to check during test |
| | | toot |

The certificate pads contain a sheet giving instructions for the completion and distribution

| 87. | Batch 2 Page 3 Para 2. Fareham | Boiler certificate disposal | |
|-------|-----------------------------------|--------------------------------------|---------------------|
| There | is no definitive answer as to | how long records are to be retained. | Industry norm would |

There is no definitive answer as to how long records are to be retained. Industry norm would appear to be 10 years – it is up to each club/society to decide on their procedure.

| | Batch 2 Page 4 Para 2. | Clumsy | and | ill | considered | and | time | consuming |
|-----|------------------------|----------|------|-----|------------|-------|-------|-------------|
| 88. | SW & Severnside | paperwoi | k ma | kes | impossible | deman | ds on | volunteer's |
| | | time | | | | | | |

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate.

| 89. | Batch 2 Page 4 Para 6. Worthing | Duplication on hydraulic certificate |
|--------|------------------------------------|--|
| Boiler | certification has been redes | igned, each boiler will have its own Written Scheme plus a |
| combir | ned Hydraulic and Steam cert | ificate. |

Batch 2 Page 4 Para 7. Description of model should be on steam certificate 90. Worthing

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate. A description of the model is included.

Batch 2 Page 5 Para 9. Description of model should be on steam certificate 91. Welling

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate. A description of the model is included.

Batch 2 Page 11 Para 2. Description of model should be on steam certificate 92. Leyland

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate. A description of the model is included.

Batch 4 Page 95 Para 3 Description of model should be shown on certificate 93. Steam Itinerants

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate. A description of the model is included.

Batch 2 Page 4 Para 8. Presence of a working whistle should be included on the steam certificate

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate. Re a working whistle see Boiler Test Code 2012 paragraph 11.6

Batch 2 Page 4 Para 9. Should be some sort of annual certificate for small boilers

See Boiler Test Code 2012 Section 14.

96. Batch 2 Page 5 Para 3. Name of boiler designer should be recorded

Owners may record the name of the boiler designer if they so wish – to be kept with the other boiler paperwork – see Boiler Test Code 2012 paragraph 12.8

Batch 4 Page 79 97. Freesteamers MES Details of test gauge should be recorded on hydraulic certificate

The information does not need to be recorded on the boiler test certificate - see Boiler Test Code 2012 paragraph 12.3

Batch 4 Page 87 Para 1 Test code should be split in to several smaller booklets 98. Romney Marsh

As with Pressure Systems Safety Regulations 2000 it is considered better for all aspects of Boiler Test Code 2012 to be contained in one book

| | Batch 2 Page 5 Para 8. | Return slips should include printed certificate number |
|-----|------------------------|--|
| 99. | Welling | |

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate. The copy for the Boiler Registrar does have a pre printed number

Batch 2 Page 6 Para 3. Introduce a 'combined' certificate

100. Welling

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate.

Batch 2 Page 11 Para 3 & Re 11.8 and 11.9 – keeping of records 101. 4. Levland

See Boiler Test Code 2012 paragraphs 12.7 and 12.8

Batch 2 Page 11 Para 6. Re 12.4 keeping a record of steamings

102. Leyland

Boiler Test Code 2012 is a Test Code. It is optional on the user whether or not to keep a record of the service use. See Boiler Test Code 2012 paragraph 13.4

Batch 2 Page 13 Para 2. Section 11 Certification only refers to the hydraulic certificate

Wording amended – see Boiler Test Code 2012 paragraph 12.1 to 12.8

Batch 2 Page 13 Para 5. Re 11.8 and 11.9 guidance needed for occasions where paperwork has been lost

If the current certificate issuer cannot be traced, and duplicate certificates issued, the boiler should be submitted for retest - see Boiler Test Code 2012 paragraph 12.8

Batch 5 Page 110 Para 1 Combine hydraulic and steam on to one certificate
105. Warrington & D MES

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate.

Batch 2 Page 14 Para 8. Hydraulic certificate contains a lot of unnecessary information

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate.

Batch 2 Page 17 Para When buying loco suggest tracing back the boiler certificate to check authenticity

A good suggestion and to be recommended

Batch 5 Page 106 Create a hobbywide data base of all boilers
108. Lincoln & Dist MES

This is already done by the boiler registrars of the Northern Association and the Southern Federation

Batch 5 Page 115 Are not the date of hydraulic test and valid from date the same

Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate.

| | Batch 5 Page 117 Para 14 | Re 11.3 & bullet re means of identifying – is this boiler or |
|------|--------------------------|--|
| 110. | Peter Bolderston | engine/vehicle the boiler is on? |

It is the number stamped or engraved on the boiler – see Boiler Test Code 2012 paragraphs 7.7 and 8.3

| | _ | Re 11.3 units specified for capacity (litres) but not for pressure, are any units acceptable eg atm? |
|--|---|--|
|--|---|--|

Pressure is standard practice i.e. psi and bar

Meaning of Words Used

| 112. | Batch 1 Page 48 02. Peter Squire | The word 'Ensure' as used in the forward and purpose statements |
|---|-------------------------------------|---|
| The word has been removed from Boiler Test Code 2012. | | |

| | Batch 3 Page 29. Clive | In 2.8 re Bar Litre replace 'capacity' by 'stored energy' |
|--|------------------------|---|
| 113. | Young of Romney Marsh | |
| See Boiler Test Code 2012 paragraph 3.11 | | |

| | Batch 3 Page 30. Clive | Definition of design pressure |
|---|------------------------|-------------------------------|
| 114. | Young of Romney Marsh | |
| Pressures used have been defined - see Boiler Test Code 2012 paragraphs 3.5 and 3.6 | | |

| 115. | Batch 3 Page 32. Robert Walker of Malden | Re safety valves there is no definition of 'set pressure' |
|--|---|---|
| The wording has been amended – see Boiler Test Code 2012 paragraphs 3.5, 11.8 and 11.9 | | |

| 116. | Batch 3 Page 36. Jim Wilson of Guildford | The word 'shall' and acceptability of commercial boiler certificates in 11.7 | |
|---|---|--|--|
| The paragraph has been amended and the word 'shall' has been removed – see Boiler Test Code | | | |
| 2012 p | 2012 paragraph 12.6 | | |

| 117. | Batch 2 Page 5 Para 5. Canterbury | Definition of Bar Litre |
|--|--------------------------------------|-------------------------|
| See Boiler Test Code 2012 paragraph 3.11 | | |

| 118. | Batch 2 Page 7 Para 1. North Wales | Appendix B page 19 – what does relatively cool mean |
|--------|------------------------------------|--|
| Appen | dix B has been incorporated | in to the main body of the document – see Boiler Test Code |
| 2012 p | aragraph 10.4 | |

| 119. | Batch 2 Page 7 Para 3. North Wales | What is the difference between the working pressure and the design pressure |
|---|---------------------------------------|---|
| Pressures used have been defined - see Boiler Test Code 2012 paragraphs 3.5 and 3.6 | | |

| 120. | Batch 2 Page 11 Para 12. Rochdale | Re clause 5.1 the word 'will' is not included in definitions |
|---------|--------------------------------------|--|
| All 'wi | lls' have been removed | |

| 121. | Batch 2 Page 13 Para 6. Rochdale | Re reference to setting safety valves in paragraph 2.5 - modify wording | | | |
|-------|--|---|--|--|--|
| See B | See Boiler Test Code 2012 paragraph 11.8 | | | | |

| 122. | Batch 4 Page 82 Para 1 & 2 .Malden | How to spell bar-litre | | |
|--------|--|------------------------|--|--|
| See Bo | See Boiler Test Code 2012 paragraph 3.11 | | | |

| 123. | Batch 4 Page 82 Para 3. Malden | Use of the words 'The Scheme' is incorrect | | |
|--------|--|--|--|--|
| Use of | Ise of the word 'Scheme' has been discontinued | | | |

| 124. | Batch 5 Page 104 Para 2 Stafford & Dist MES | Use of the word Scheme is incorrect | | | |
|--------|--|-------------------------------------|--|--|--|
| Use of | Use of the word 'Scheme' has been discontinued | | | | |

| 125. | Batch 4 Page 82 4. Malden | Para | What is the definition of the word 'may'? | | |
|--------|---|------|---|--|--|
| Standa | Standard English definition i.e. 'expressing possibility' | | | | |

| 126. | Batch 4 Page 82 Para 7/8/9. Malden | Potential contradiction in 10.5 steam accumulation test | | | | |
|--------|---|---|--|--|--|--|
| Contra | Contradiction has been corrected - see Boiler Test Code 2012 paragraph 11.8 | | | | | |

| 127. | Batch 4 Page 87 Para 2 Romney Marsh | Definition of pressure | | |
|-------|---|------------------------|--|--|
| See B | See Boiler Test Code 2012 paragraphs 3.5 and 3.6. | | | |

| 128. | Batch 4 Page Romney Mar | | | Re 2.8 places | quot | e cc | onv | ersior | is t | o n | o more th | an two d | ecimal |
|--------|-----------------------------|-----------|------|------------------|------|------|-----|--------|------|-----|-----------|----------|--------|
| | ard definitions ations 2000 | are being | used | - bar | and | psi | as | used | in | the | Pressure | Systems | Safety |
| Regula | 1110NS 2000 | | | | | | | | | | | | |

| 129. | Batch 4 Page 91 Com 5 South Cheshire | Re 12.3 – owner/operat | • | as | the | responsibility | of | the |
|---|---|---------------------------|---|----|-----|----------------|----|-----|
| Corrected - see Boiler Test Code 2012 paragraph 13.3. | | | | | | | | |

| 130. | Batch 5 Page 104 Para 1 Stafford & Dist MES | Words 'Club/Society' not consistently used |
|-------|--|--|
| Accep | ted and amended | |

| 131. | Batch 5 Page 104 Para 2/4 Stafford & Dist MES | Words 'Inspector, Boiler Inspector, Boiler Tester' not consistently used |
|-------|---|--|
| Accep | ted and amended | |

| 132. | Batch 5 Page 107 Para 4 Guildford MES | Change from Shall to May in paragraph 6.1 commercially built boilers | | |
|-------|---|--|--|--|
| Amend | Amended - see Boiler Test Code 2012 paragraphs 8.1, 8.2 and 8.3 | | | |

| 133. | Batch 5 Pg 116 Para 1/6 Para 17 Peter Bolderston | Various comments re grammar used and typographical errors | |
|---|---|---|--|
| Every effort will be made to avoid grammatical and typographical errors | | | |

| 134. | Batch 5 Page 117 Para 12 Peter Bolderston | 'The Accumulation Test' is not defined |
|----------|--|---|
| It is no | ot defined as such (boiler ins | spectors should know what it is) but there is a whole section |
| devote | ed to the procedure - see Boile | er Test Code 2012 paragraphs 11.1 to 11.10. |

| 135. | Batch 5 Page 119 Para 1 Winchester MES | Employ a professional to do the re-write | |
|--------|---|--|--|
| The ex | The expense of employing a professional writer would be prohibitive | | |

Periodicity

| 136. | Batch 1 Page 49 03.Peter Seager | Clarification of steam test periodicity |
|---|------------------------------------|---|
| The steam certificate shall be effective from the date of the test, no earlier and no later. It can run | | |

The steam certificate shall be effective from the date of the test, no earlier and no later. It can run for a maximum period of 14 months from the date of test but not beyond the expiry date of the hydraulic certificate - see Boiler Test Code 2012 paragraphs 11.1 and 12.5

| 137. | Batch 1 Page 65 10. Clive Young of Romney | Extend steam test periodicity and introduce a maximum pressure |
|---|---|--|
| It has been decided not to change periodicity at this time. The Boiler Test Code must be flexible | | |

It has been decided not to change periodicity at this time. The Boiler Test Code must be flexible and hence a maximum pressure limit cannot be introduced

| 138. | Batch 1 Page 69 14. Alan Phillips | Extend periodicity for steel hydraulic to 4/6 years | |
|--------|---|---|--|
| It has | It has been decided not to change periodicity at this time. | | |

| 139. | Batch 1 Page 73 16. Brian Reading | Extend steam test periodicity to 2 years | |
|--------|---|--|--|
| It has | It has been decided not to change periodicity at this time. | | |

| 140. | Batch 3 Page 29 & 31. Romney Marsh | Steam test periodicity | |
|----------|---|------------------------|--|
| It has I | It has been decided not to change periodicity at this time. | | |

Batch 2 Page 2 Para 2. Steam test periodicity
141. Frimley & Ascot

It has been decided not to change periodicity at this time.

Batch 4 Page 84 Steam test periodicity
142. Romford MEC

It has been decided not to change periodicity at this time.

Batch 2 Page 15 Para 7. Steam test periodicity
143. Manx Steam

It has been decided not to change periodicity at this time.

Batch 2 Page 4 Para 10. Steam test every two years 144. Worthing

It has been decided not to change periodicity at this time.

Batch 2 Page 6 Para 2. Steam test every two years Welling

It has been decided not to change periodicity at this time.

Batch 5 Page 107 Para 5 Steam test every 24 months 146. Guildford MES

It has been decided not to change periodicity at this time.

Batch 2 Page 6 Para 9. Para 11.5 – amend to 4 years from the initial or last test 147. North Wales

It has been decided not to change periodicity at this time.

Batch 2 Page 13 Para 8. Re 8.1 amend calibration of test gauge to every three years

Test Houses normally expect gauges to be calibrated annually. It is a concession for our boiler test gauges to be calibrated every two years

Batch 4 Page 85 Periodicity – cladding removal
Perranporth

For all copper boilers and for steel boilers not exceeding 500 bar litres cladding removal is at the discretion of the boiler inspector – see Boiler Test Code 2012 paragraph 9.1. For steel boilers of 500 bar litres and above see Boiler Test Code 2012 paragraph 9.2

Batch 4 Page 96 Periodicity – cladding removal
150. Brian Hicks

For all copper boilers and for steel boilers not exceeding 500 bar litres cladding removal is at the discretion of the boiler inspector – see Boiler Test Code 2012 paragraph 9.1. For steel boilers of 500 bar litres and above see Boiler Test Code 2012 paragraph 9.2

Batch 5 Page 111 Para 3 Para 7.1 clarification re periodicity of cladding removal 151. City of Oxford SME

For all copper boilers and for steel boilers not exceeding 500 bar litres cladding removal is at the discretion of the boiler inspector – see Boiler Test Code 2012 paragraph 9.1. For steel boilers of 500 bar litres and above see Boiler Test Code 2012 paragraph 9.2

| Batch 5Page 132 152. Richard Brown COSME | clarification re periodicity of cladding removal |
|---|--|
|---|--|

For all copper boilers and for steel boilers not exceeding 500 bar litres cladding removal is at the discretion of the boiler inspector – see Boiler Test Code 2012 paragraph 9.1. For steel boilers of 500 bar litres and above see Boiler Test Code 2012 paragraph 9.2

| | Batch 4 Page 98 | Amend hydraulic periodicity to 10 years in line with |
|------|-----------------|--|
| 153. | John Brockley | commercial practice |

It has been decided not to change periodicity at this time.

| | Batch 5 Page 108 | 9.1 and 10.1 - steam test periodicity | clarification |
|------|--------------------|---------------------------------------|---------------|
| 154. | Plymouth Min Steam | required | |

The steam certificate shall be effective from the date of the test, no earlier and no later. It can run for a maximum period of 14 months from the date of test but not beyond the expiry date of the hydraulic certificate - see Boiler Test Code 2012 paragraphs 11.1 and 12.5

| 155. | Batch 5 Page 12-0 Para 2 - Winchester MES | Amend steel hydraulic to match copper |
|---|--|---------------------------------------|
| It has been decided not to change periodicity at this time. | | |

| | Batch 5 Page 124/125/ | All boiler tests every two years with just one certificate |
|------|-----------------------|--|
| 156. | 126 - Maidstone MES | |

It has been decided not to change periodicity at this time. Boiler certification has been redesigned, each boiler will have its own Written Scheme plus a combined Hydraulic and Steam certificate.

Test Procedure

| | Batch 1 Page 50 | How do you test a traction engine which does not have a |
|------|------------------|---|
| 157. | 04. Phil Hancock | blower |

Make the engine 'work' as hard as possible during the accumulation test – see Boiler Test Code 2012 paragraph 11.8. If the boiler inspector is not satisfied that the test has suitably demonstrated the efficiency of the safety valve/valves the boiler shall be removed from service – see Boiler Test Code 2012 paragraph 11.10. Inspectors are not under any obligation to test every boiler presented for certification – see Boiler Test Code 2012 paragraph 4.7

| 158. | Batch 1 Page 55/62 07.Russel Eberhardt | French system plus pdf copy |
|--|---|-----------------------------|
| Input appreciated – very useful to compare | | |

| | Batch 2 Page 17 Para 7. | What is position if member or visitor has a stainless |
|------|-------------------------|---|
| 159. | Saffron Walden | steel boiler |

Boiler Test Code 2012 paragraph 4.5 precludes the testing of stainless steel boilers. There are no problems however if a member or a visitor has a stainless steel boiler and the boiler has a boiler test certificate issued by an insurance company or other commercial body.

Batch 1 Page 63 O8. Derek Atford Allow testing of stainless steel plus pressure gauge testing and testing of superheaters

Boiler Test Code 2012 paragraph 4.5 precludes the testing of stainless steel boilers. For pressure gauge testing see Boiler Test Code 2012 paragraphs 6.10, 10.2, 10.8, 11.3 and 11.7. For superheater testing see Boiler Test Code 2012 paragraphs 9.6d, 9.6e, 10.7, 10.9 and 11.4.

Batch 5 Page 108 Code should include a statement of the status relating to stainless steel

Boiler Test Code 2012 paragraph 4.5 precludes the testing of stainless steel boilers. There are no problems however if a member or a visitor has a stainless steel boiler and the boiler has a boiler test certificate issued by an insurance company or other commercial body.

| | Batch 2 Page 14 Para 6. | Re appendix B page 18 - not possible to check |
|------|-------------------------|---|
| 162. | Urmston | superheaters |

For superheater testing see Boiler Test Code 2012 paragraphs 9.6d, 9.6e, 10.7, 10.9 and 11.4

Batch 2 Page 14 Para 7. Re page 20 Steam Testing of Boilers (All Types) re superheaters and safety valves

For superheater testing see Boiler Test Code 2012 paragraphs 9.6d, 9.6e, 10.7, 10.9 and 11.4. Safety valve paragraphs have been amended - see Boiler Test Code 2012 paragraphs 11.8 and 11.9

| | Batch 3 Page 11 Para 9. | How to check radiant superheaters for corrosion |
|------|-------------------------|---|
| 164. | Leyland | |

For superheater testing see Boiler Test Code 2012 paragraphs 9.6d, 9.6e, 10.7, 10.9 and 11.4

| | Batch 1 Page 64 | Boiler Valves & captive spindles |
|------|--------------------|----------------------------------|
| 165. | 09.ME letters page | |

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

| | Batch 2 Page 1 Para 4. | Boiler Valves & captive spindles |
|------|------------------------|----------------------------------|
| 166. | Royston & District | |

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

| | Batch 2 Page 11 Para 8. | Boiler Valves & captive spindles |
|------|-------------------------|----------------------------------|
| 167. | Leyland | |

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

Batch 3 Page 30. Clive Boiler Valves & captive spindles Young of Romney Marsh

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

Batch 3 Page 41. Jon 169. Mottershaw - Colchester Boiler Valves & captive spindles

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

Batch 5 Page 128 Para 2 Captive spindles 170. Stockholes MR

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

Batch 5 Page 133 171. Para 4 Fareham & Dist SME Captive Spindles mandatory on all new boilers & acceptable on old boilers with a recommendation that they be made captive

This requirement should not have been part of the Boiler Test Code working text and has been moved to section 6 Preliminary Requirements and Preparation for Test. The topic is actually associated with boiler design, or to be more precise, an element of design of a component in the pressure system. The text has been amended to clarify the situation – see Boiler Test Code 2012 paragraph 6.5.

| 172 | Batch 1 Page 68 13. Peter Evans | Brass fittings, regular changing of gauge glasses |
|------|------------------------------------|---|
| 172. | 13. Peter Evalis | |

See Boiler Test Code 2012 paragraph 9.6f re brass fittings. The regular changing of gauge glasses is classed as maintenance and hence is outside the scope of a test procedure however see Boiler Test Code 2012 paragraph 13.3

| 173. | Batch 1 page 76 19. B Gasson of Tonbridge | Query re old boiler presented for test |
|--------|--|---|
| Covere | ed in Design Verification and I | Preparation for Test – see Boiler Test Code 2012 paragraphs 5 |

Covered in Design Verification and Preparation for Test – see Boiler Test Code 2012 paragraphs 5 and 6

| 174. | Batch 2 Page 1 Para 2 & Para 5. Royston & District | Consult boiler tester if safety valve adjustments are required plus locking of safety valves |
|--|--|--|
| See Boiler Test Code 2012 paragraphs 11.8 and 11.9 | | |

| 175 | Batch 2 Page 5 Para 2. York | Stripping down/cleaning safety valves should invalidate steam certificate. Suggest refer to boiler tester prior to going back in service |
|-----|--------------------------------|--|
| | | |

We rely on the owner to advise the boiler inspector that the safety valve/s have been stripped down or cleaned – see Boiler Test Code 2012 paragraph 11.9

| | Batch 2 Page 2 Para 4 & Para 5. Frimley & Ascot | Include other safety items and also petrol locos and electric locos | |
|--|---|---|--|
| Cush itams and leasmatives are cutaide the remit of a Pailar Test Code | | | |

Such items and locomotives are outside the remit of a Boiler Test Code

| 177. | Batch 1 Page 63 08. Derek Atford | Pressure gauge testing |
|--|-------------------------------------|------------------------|
| See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 178. | Batch 2 Page 1 Para 1. Royston & District | Checking of pressure gauges | |
|-------|--|-----------------------------|--|
| See B | See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 179. | Batch 2 Page 2 Para 6. Fareham | If FSD is less than WP+50% remove pressure gauge during hydraulic to 1.1/2 times then refit and retest to whatever the gauge FSD is |
|--|-----------------------------------|---|
| See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 180. | Batch 2 Page 2 Para 7. Fareham | Pressure gauge range | |
|--------|--|----------------------|--|
| See Bo | See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| | Batch 2 Page 3 Para 4. Oxford | 10.3 requires correct operation of the pressure gauge shall be verified. What does this mean | |
|--------|--|--|--|
| See Bo | See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 182. | Batch 2 Page 4 Para 4. Mold | Calibration of pressure gauge | |
|--------|--|-------------------------------|--|
| See Bo | See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 183. | Batch 3 Page 30/31. Young of Romney Marsh | Annual removal of pressure gauge |
|--|--|----------------------------------|
| See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 184. | Batch 3 Page 34. John Bayes of Winchester | Verifying pressure gauge prior to steaming |
|--|--|--|
| See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 185. | | Re checking gauges prior to steaming – paragraphs 10.2 and 10.3 should be interchanged |
|--|--|--|
| See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 186. | Batch 5 Page 128 Para 4 Stockholes MR | Re checking pressure gauge - delete prior to steaming in bullet point 2 |
|--|--|---|
| See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 187. | Batch 2 Page 5 Para 1. York | Annually check pressure gauge against master |
|--|--------------------------------|--|
| See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 188. | Batch 5 Page 111 Para 4 City of Oxford SME | Annual checking of gauge – guidance required re deviation allowed |
|--|---|---|
| See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 189. | Batch 5 Page 129 Para 1 Pembrokeshire ME | Testing pressure gauge should be part of the 12 month steam test | |
|-------|--|--|--|
| See B | See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 190. | _ | How can pressure gauge of 1.3 times WP be included in 1.5 times hydraulic test | |
|-------|--|--|--|
| See B | See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 191. | | Pressure gauge should be checked against test gauge at both hydraulic test and steam test |
|--|--|---|
| See Boiler Test Code 2012 paragraphs 6.10, 6.11, 10.2, 10.8, 11.3 and 11.7 | | |

| 192. | Batch 3 Page 29. Romney Marsh | 7.2 removal of cleading at 7 year intervals |
|--|----------------------------------|---|
| For all copper boilers and for steel boilers not exceeding 500 bar litres cladding removal is at the | | |
| discretion of the boiler inspector – see Boiler Test Code 2012 paragraph 9.1. For steel boilers of | | |
| 500 bar litres and above see Boiler Test Code 2012 paragraph 9.2 | | |

| 193. | Batch 3 Page 30. Clive Young of Romney Marsh | Acceptability of doing a steam test where hydraulic is out of date | |
|--|--|--|--|
| A steam test can only be undertaken after and during the validity period of a satisfactory hydraulic | | | |
| test. S | test. See Boiler Test Code 2012 paragraphs 11.1 and 12.5 | | |

| 194. | Batch 3 Page 37. Chris Biggs of South Somerset | Are revisions retrospective? |
|----------|---|------------------------------|
| Revision | Revisions are not retrospective – see Boiler Test Code 2012 paragraph 4.1 | |

| 195. | Batch 3 Page 37. Chris Biggs of South Somerset | Operative date of revisions | |
|---------------------|--|-----------------------------|--|
| 1 st Jan | 1 st January 2013 – see Boiler Test Code 2012 paragraph 4.1 | | |

| 196. | Batch 3 Page 37. Chris Biggs of South Somerset | Will any revisions be retrospective and at what stage are revisions applicable. How are changes to be reconciled with prototypical equipment? |
|---|---|---|
| Davisions will not be retroppective and revisions will some in to offeet 1st January 2012. See Bailar | | |

Revisions will not be retrospective and revisions will come in to effect 1st January 2013 – see Boiler Test Code 2012 paragraph 4.1. If the prototypical equipment does not comply with the Test Code the boiler must fail – see Boiler Test Code 2012 paragraph 6.2

| 197. | Batch 3 Page 38. R Gomersall of Brighouse | Details of weld samples and where to send them | |
|-------|--|--|--|
| See B | See Boiler Test Code 2012 paragraph 6.3 | | |

| 198. | Batch 2 Page 16 Para 2. Manx Steam | Weld Samples – what test required and by who | | |
|--------|---|--|--|--|
| See Bo | See Boiler Test Code 2012 paragraph 6.3 | | | |

| 199. | Batch 5 Page 102 A N Harrison | Guidance re welders test pieces | | |
|-------|--|---------------------------------|--|--|
| See B | ee Boiler Test Code 2012 paragraph 6.3 | | | |

| 200. | Batch 5 Page 103 Para 3 Steve Larner | Who can weld a boiler |
|-------|---|-----------------------|
| See B | See Boiler Test Code 2012 paragraph 6.3 | |

| 201. | Batch 4 Page 88 Para 5/6. Romney Marsh | Assessing of welder qualification tests | | |
|-------|--|---|--|--|
| See B | ee Boiler Test Code 2012 paragraph 6.3 | | | |

| 202. | Batch 3 Page 40. Peter Gardner of Frimley & Ascot | Process for dealing with small boiler hydraulic retest exempt boilers |
|--------|---|---|
| See Bo | oiler Test Code 2012 Section | 14 |

| 203. | Batch 3 Pages 42/43. Richard Simpson of Kirklees | Testing of small boilers |
|--------|--|--------------------------|
| See Bo | oiler Test Code 2012 Section | 14 |

| | Batch 3 Pages 44/45. | Hydraulic tests for new commercially built boilers |
|------|-------------------------|--|
| 204. | C Walliman - Halesworth | , , |

If the new boiler is supplied with a test certificate (hydraulic shell test) with a pressure test value of $2 \times P_w$ it is not necessary to do another $2 \times P_w$ hydraulic shell test however if any modifications to the boiler have been undertaken a retest to $2 \times P_w$ will be needed – see Boiler Test Code 2012 paragraphs 8.1, 8.2 and 8.4. When all the fittings are in place and before the steam test a 1.5 $\times P_w$ hydraulic test will be needed – see paragraphs 9.1 to 9.11

| 205. | Batch 2 Page 4 Para 5. Mold | Confirmation that new boilers need a hydraulic test before the steam test | | | |
|------|--|---|--|--|--|
| | After the initial shell test at $2 \times P_w$ it is necessary, and always has been, to hydraulically test a boiler with all fittings in place to $1.5 \times P_w$ before doing the steam test. The wording has been | | | | |

amended in order to make this requirement clearer - see Boiler Test Code 2012 paragraphs 7.6,

8.2 and 8.4

Batch 4 Page 88 Para 3 & Re 5.6 is it necessary to re-test a new CE marked boiler 206. 4. Romney Marsh

If the new boiler is supplied with a test certificate (hydraulic shell test) with a pressure test value of $2 \times P_w$ it is not necessary to do another $2 \times P_w$ hydraulic shell test however if any modifications to the boiler have been undertaken a retest to $2 \times P_w$ will be needed – see Boiler Test Code 2012 paragraph 8. When all the fittings are in place and before the steam test a 1.5 $\times P_w$ hydraulic test will be needed – see paragraph 9.

| | | Re paragraph 7.5 retest procedure should conform to para 6.4 |
|--|--|--|
|--|--|--|

A structurally repaired boiler is treated as a new boiler hence test pressure is 2 x P_w - see Boiler Test Code 2012 paragraphs 7.6 and 8.4

| | Batch 2 Page 6 Para 8. | Re para 9.1/10.1 what if the examination period exceeds |
|------|------------------------|---|
| 208. | North Wales | 14 months |

The period of validity of a steam certificate must not exceed 14 months or the expiry date of the hydraulic certificate whichever occurs first – see Boiler Test Code 2012 paragraphs 11.1 and 12.5

| Batch 2 Page 10 Para 6. Leyland | Practicalities construction | of | examining | а | boiler | twice | during |
|------------------------------------|-----------------------------|----|-----------|---|--------|-------|--------|
| | | | | | - | | |

The requirements are covered by the word 'should' meaning not mandatory only advisory - see Boiler Test Code 2012 paragraph 6.2

Batch 2 Page 10 Para 8. Water temperature unnecessary Leyland

It is advisory (the word used is 'ideally') not mandatory. In practice it is be preferable for the water temperature to be at air ambient temperature - see Boiler Test Code 2012 paragraph 10.4

| 211 | Batch 2 Page 11 Para 1. Leyland | Small boiler gauge glasses often cannot be blown down |
|------|------------------------------------|---|
| 211. | Leyland | |

Small boilers are not subject to this requirement see Boiler Test Code 2012 paragraph 14

| | | Batch 2 Page 11 Para 5. Leyland | 12.3 ensure heat source can be removed – not always possible |
|------------------------------|--|------------------------------------|--|
| The wording has been deleted | | | |

| 21 | 3. | Batch 2 Page 14 Para 4. Urmston | 12.3 ensure heat source can be removed – not always possible |
|----|------|------------------------------------|--|
| Th | e wo | ording has been deleted | |

| Batch 2 Page 11 Para 7. 214. Leyland | | Inspection during construction |
|--|--|--------------------------------|
| The requirements are covered by the word 'should' meaning not mandatory only advisory - see Boiler Test Code 2012 paragraph 6.2. | | |

| 215. Rochdale | Re 7.5 re-test after structural repair at 1/1.2 times or twice |
|---------------|--|
|---------------|--|

A structurally repaired boiler is treated as a new boiler hence test pressure is 2 x P_w - see Boiler Test Code 2012 paragraphs 7.6 and 8.4

Batch 2 Page 13 Para 1. Accumulation test should not be annual 216. Rochdale

It has been decided not to change periodicity at this time.

| | 217. | Batch 5 Page 9 Bob Bramson | 9 | | De | epth of fire | e during accumulation test |
|--|------|-------------------------------|---|--|----|--------------|----------------------------|
|--|------|-------------------------------|---|--|----|--------------|----------------------------|

Wording amended – see Boiler Test Code 2012 paragraph 11.8

| | Batch 2 Page 13 Para 9. | Re 8.2 not necessary to provide a stop valve between |
|------|-------------------------|--|
| 218. | Urmston | boiler and test pump |

The stop valve eliminates the possibility of back leakage through the test pump.

| | Batch 2 Page 13 Para 10. | Re 8.3 testing under quiet conditions is not necessary |
|-----|--------------------------|--|
| 219 | . Urmston | |

Quiet conditions are recommended – see Boiler Test Code 2012 paragraph 10.4

| | Batch 2 Page 14 Para 2. | Re 8.4 bullet 5 – test in shade not necessary |
|------|-------------------------|---|
| 220. | Urmston | |

It is a fact that the pressure can rise significantly, and without anyone realising, if a boiler is subject to the heat from direct sunlight during the hydraulic test - see Boiler Test Code 2012 paragraph 10.4

| | Batch 2 Page 14 Para 3. | 12.2 refers to 5/10 which does not exist (but sections 5 to |
|------|-------------------------|---|
| 221. | Urmston | 10 do) |

Section 12.2 refers to Sections 5 to 10 (i.e. sections 5, 6, 7, 8, 9 and 10) not section 5.2.10

| 222. | Batch 2 Page 15 Para 6. Manx Steam | Re 8.7 - dezincification |
|------|---------------------------------------|--------------------------|
|------|---------------------------------------|--------------------------|

It is not considered practical to condemn all brass fittings. Boiler inspectors should be aware of the possibility of failure due to dezincification.

| | Batch 2 Page 15 | Re10.3 where hand pump is one of the two methods of |
|------|--------------------|--|
| 223. | Para 8. Manx Steam | feeding boiler it should always be used for hydraulic test |

Incorrect. The boiler inspector's test pump <u>must</u> be used. The operation of the hand pump is however part of the test – see Boiler Test Code 2012 paragraph 11.6.

| 224. | <u> </u> | Re 10.4 and severe punishment on superheaters during the accumulation test | | |
|--|----------|--|--|--|
| See Boiler Test Code 2012 paragraph 11.4 | | | | |

See Boiler Test Code 2012 paragraph 11.4

| 225. | Batch 2 Page 16 Para 3. Manx Steam | Re page 20 para 5 – suggest tell-tale holes in stays be mandatory |
|---|---------------------------------------|---|
| There are no plans to make tell-tale holes in stays mandatory | | |

| 226. | Batch 2 Page 17 Para 1. Saffron Walden | Safety valves once set and checked must not be adjusted altered or tampered with |
|--------|--|--|
| Agreed | d, but it is not possible to pol | ice what happens between tests - see Boiler Test Code 2012 |

Agreed, but it is not possible to police what happens between tests - see Boiler Test Code 2012 paragraph 11.9

| | Batch 2 Page 17 Para | Check that blower jet size has not changed for steam |
|------|----------------------|--|
| 227. | 3. Saffron Walden | test |

Point noted but it is not possible to police what happens between tests.

| 228. | Batch 2 Page 17 Para 6. Saffron Walden | Where there are double safety valves both must be checked | |
|---|--|---|--|
| Agreed – see Boiler Test Code 2012 paragraph 11.8 | | | |

| | Batch 2 Page 17 Para | Any part inspected during test must not be altered after |
|------|----------------------|--|
| 229. | 7. Saffron Walden | test |

Agreed - it is a test of a pressure system but it is not possible to police changes to the pressure system between tests.

| 230. | ı | Combine 9.1 annual cold examination with steam test section and re-word 10.1 |
|--|---|--|
| See Boiler Test Code 2012 paragraph 11.2 | | |

| | Batch 5 Page 109 Para 1 | Guidance required for testing 'old' steel boilers and |
|------|-------------------------|---|
| 231. | North Wilts MES | laying up procedure |

It is at the discretion of the boiler inspector how he carries out the inspection - see Boiler Test Code 2012 paragraph 9.7. For laying up procedure see Boiler Test Code 2012 paragraph 13.5

| | Batch 5 Page 110 Para 2 | How to proceed when a boiler is presented for test with |
|------|-------------------------|---|
| 232. | Warrington & D MES | no history and no paperwork |

See Boiler Test Code 2012 paragraphs 6.2, 7.4 and 7.5. If the boiler inspector has any doubts about the boiler he is at liberty not to inspect - see Boiler Test Code 2012 paragraph 4.7

| 233. | Batch 5 Page 119 Para 9 Winchester MES | Steam accumulation test and issue of overpressure |
|------|---|---|
| Comm | Comments noted | |

| | Batch 5 Page 121 | Testing welded copper boilers |
|------|------------------|-------------------------------|
| 234. | Nigel Woodham | |

There are really no differences between testing a silver soldered copper boiler and testing a welded copper boiler. A boiler inspector must only test within his capabilities - see Boiler Test Code 2012 paragraph 3.7. If he is not happy testing welded copper boilers he should not test them.

| 235. | Batch 5 Page 122 Hatfield & Dist SME | Map out the testing process using a flowchart |
|---|---|---|
| In Pailar Toot Code 2012 the toyt flow has been amended to improve readability. Pailar inspectors | | |

In Boiler Test Code 2012 the text flow has been amended to improve readability. Boiler inspectors are at liberty to use this to create their own chart

| 236. | Batch 5 Page 129 Para 2 Pembrokeshire ME | Why don't we test at working pressure + 10% |
|------|--|--|
| | ald be P_L +10% but it is not aphs 3.5 and 3.6 | w accepted to use P_w +10% - see Boiler Test Code 2012 |

| 237. | Batch 5 Page 133 Para 1 Fareham & Dist SME | Re para 8.6 – amend hydraulic test duration |
|--------|--|--|
| It has | been decided not to change | ge the hydraulic test duration - see Boiler Test Code 2012 |
| paragr | aph 10.12 | |

| 238. | Batch 5 Page 134 Para 1 Fareham & Dist SME | Re small boilers what do you test to & what is legal interpretation of 'recommend' |
|---|---|--|
| See Boiler Test Code 2012 Section 14, the word recommend is no longer used. | | |

Water Feed

| 239. | Batch 3 Page 30. Clive Young of Romney Marsh | Accept single boiler inlet with two check valves |
|--|---|--|
| Acceptable – see Boiler Test Code 2012 paragraphs 6.6 and 11.6 | | |

| 240. | _ | Does 'two independent means' mean that each must have its own check valve |
|---|---|---|
| Yes – see Boiler Test Code 2012 paragraphs 6.6 and 11.6 | | |

| 241. | Batch 2 Page 5 Para 4. Winchester | Boiler water feed arrangements should be more clearly worded |
|---|--------------------------------------|--|
| See Boiler Test Code 2012 paragraphs 6.6 and 11.6 | | |

| 242. | Batch 2 Page 6 Para 4. Unknown | Water feed arrangements for model boats |
|--------------------------------------|-----------------------------------|---|
| See Boiler Test Code 2012 Section 14 | | |

| 243. | Batch 5 Page 117 Para 11 Peter Bolderston | Clarification needed re two independent means |
|---|--|---|
| See Boiler Test Code 2012 paragraphs 6.6 and 11.6 | | |

| 244. | | Discretion to test a stationary boiler which is not part of a complete system |
|---|--|---|
| The 'system' must be complete in order to carry out any test. | | |

Witnesses

| | Batch 1 Page 52/54 | Why is there a suggestion of removing the need for a |
|------|--------------------|--|
| 245. | 06. Stan Bishop | witnesses |

There are several reasons for a witness becoming non mandatory: -

- 1) for societies based in rural areas the logistics of getting the boiler, its owner, the boiler inspector and a witness all in the same place at the same time are often difficult and may entail two or three people driving many miles
- 2) It is known that many societies do not treat the witness seriously they simply look for someone to sign the certificate whether they have actually witnessed the test or not
- 3) A witness is not needed for tests carried out in accordance with PSSR 2000
- 4) The insurers, Royal Sun Alliance, do not require the presence of a witness
- 5) Witnessing tests was considered good training for potential boiler inspectors but it is known that this does not happen very often
- 6) If there was an incident, and it finished up in cour,t it is the boiler inspector whose head would be on the block the witness would take no part in the proceedings particularly if he had not witnessed the test.
- 7) If the boiler inspector wishes to work with a witness, or the boiler owner wishes to have a witness, no problem. It is not being suggested that witnesses are withdrawn merely made non mandatory.

| 246. | Batch 2 Page 10 Para 5. Leyland | Qualification of a witness – how many clubs can provide a witness with a sound knowledge of the design and construction of small boilers? |
|---|------------------------------------|---|
| The word 'preferably' has been added – see Boiler Test Code 2012 paragraph 3.11 | | |

| 247. | Batch 4 Page 94 Para 4 Steam Itinerants | Support the presence of a witness |
|--|--|-----------------------------------|
| If the hoiler inspector wishes to work with a witness or the hoiler owner wishes to have a witness | | |

If the boiler inspector wishes to work with a witness or the boiler owner wishes to have a witness, no problem. It is not being suggested that witnesses are withdrawn – merely made non mandatory

| 248. | Batch 5 Page 130 Wolverhampton & Dist | Support the presence of a witness |
|--|--|-----------------------------------|
| If the hoiler inspector wishes to work with a witness or the hoiler owner wishes to have a witness | | |

If the boiler inspector wishes to work with a witness or the boiler owner wishes to have a witness, no problem. It is not being suggested that witnesses are withdrawn – merely made non mandatory

Written Scheme of Examination

| 249. | Batch 1 Page 70/72 15.Barrie Wilkinson | Giving comments on Written Scheme of Examination | |
|---|---|--|--|
| The Boiler Test Code 2012 plus a separate boiler specific document will form the Written Scheme | | | |

| 250. | Batch 5 Page 119 Para 34/5/6 Winchester MES | Sections 7 to 10 should become the Written Scheme of Examination | |
|---|---|--|--|
| The Boiler Test Code 2012 plus a separate boiler specific document will form the Written Scheme | | | |