

## **Notes of Boiler Test Group Meeting held at Bedford 16<sup>th</sup> March 2011**

Present: Mr A Wood – Walker Midgley    Mr B Reading - 71/4” Gauge Society  
Mr W Pearson - Southern Federation    Mr F Stephen – Northern Association  
Mr M Armstrong – Midland Federation.

Apologies for Absence : Mr M Raybould – Footman James.

The meeting commenced at 10.15 am.

A brief introduction was made by Mr Wood who offered to chair the meeting during the proposed discussion on the Model Engineering Liaison Group (MELG) Terms of Reference (ToR). These had been circulated to all members prior to the meeting.

### **1.     Terms of Reference for M.E.L.G**

Using a visual presentation of the document all clauses of the ToR were debated and amended as appropriate.

The title of the group was debated; suggestions were “Miniature” or “Model” Engineering Liaison Group. Agreed that the title would be “Model Engineering Liaison Group”

The final version of the ToR\*\* was agreed. The ToR is attached as Appendix 1 for formal agreement by the organisations. The results of the ratification by the organisations to be circulated by email. Should there be major disagreement the ToR would be re-tabled for the next meeting.

It was agreed that the Chairman of the MELG would hold and maintain the master copy of the Terms of Reference. (\*\* After meeting note - proposed change of wording to Item 14)

Chairmanship of the meetings was then discussed. A proposal by Mr Pearson that ‘Mr Wood be appointed Chairman’ was unanimously agreed by the organisations.

The meeting were very appreciative of the work previously carried out by the Boiler Test Group Chairman, Mr R Greatrex. It was agreed that a letter of appreciation be sent to him by the Chairman

### **2.     HSG 216 and Entertainment Sheet 12**

The meeting noted that an e-mail had been sent by Mr M Sandell, HSE to the Chairman of the Northern Association and subsequently circulated to the Chairman of the Southern Federation and N.T.E.T.

The e-mail informed that the HSE is currently undergoing a major review of the guidance that it publishes and makes available.

One of the documents likely to be withdrawn is ‘Safe Operation of Miniature Railways, Traction Engines and Road Vehicles’, HSE Entertainment Sheet No. 12. Thoughts and comments were asked for, with a view to a rewrite or review.

Further enquiries had established that Entertainment Sheet 12 was issued well before HSG 216. Entertainment Sheet 12 was also the only document relevant to Miniature Traction Engine and Road Vehicles, something that HSG 216 is not able to do as it is railway specific.

The meeting agreed that Entertainment Sheet 12 should be updated and kept.

Mr A Budd, secretary of Northern Association had contacted relevant organisations regarding the e-mail from Mr Sandell and would be asked to become involved or pass the matter over to M.E.L.G on the basis that it represented the hobby.

The meeting was then joined by Mr R Garnett of Royal Sun Alliance.

### **Item 3 – Written Scheme of Examination. (WSOE)**

Mr Garnett advised that he had been working closely with the HSE on professional business. No specific discussion had taken place regarding models but it was noted that boiler inspectors acting on behalf of societies were ‘not at work’.

Mr Garnett presented the meeting with two documents, an outline for a WSOE and a Pressure systems inspection procedure. It was emphasised that both of these documents were typical for full size locomotive boilers and, as presented, were not applicable to miniature steam boilers. During discussion the following points were noted:

Miniature boilers would fall into the small or intermediate category – not due to physical size, but because of the operating pressure.

Inspection should consider the ‘whole system’ with regard to hazard or scalding. That is everything from the boiler to the steam inlet fitting of the cylinder. Cylinders are not included in the scheme.

During discussion it was mentioned that Mamods and the likes of Prestige Pressure Cookers had to have a WSOE if used where the HSAW act applied, e.g. Schools and colleges.

The group agreed to:-

1. Consider the documents and their possible application to miniature boilers.
2. Consider whether a carefully worded statement to the hobby regarding WSOE’s was required.
3. Consider if the hobby could offer a WSOE as a service to those who specifically require it. e.g. Traction Engines at showgrounds and Locomotives operating on a ‘Commercial’ site.

For ‘full compliance’ both the WSOE and Pressure Systems Inspection Procedure documents would be required. The documents would be ‘certified’ by ‘competent’ persons which in all probability would be the boiler inspectors.

Further discussion took place regarding the requirement of the hobby to follow the ‘full compliance’ route particularly in view of the original approval of the red/blue book by the HSE.

The debate concluded by agreeing to implement items 1, 2 and 3 above. Mr Garnett offered to co-ordinate input from the organisations on possible WSOE’s

At this stage of the meeting Mr Pearson of Southern Federation requested that the questions he had circulated be debated.

The meeting agreed that whilst questions may be asked some answers may only be obtained from a judicial process. In particular with reference to the HSAW Act – see Information Sheet 12. Even if PSSR is not applicable the hobby should apply best practice.

### **4. Boiler Tests and Witness.**

A draft paper outlining the original purpose for a witness had been circulated, see Appendix 2. The proposal was that the witness would be optional, as outlined in the document.

The Southern Federation representative stated he was unable to comment on the document, it not having been circulated to the Southern Federation Committee. The Southern Federation representative also indicated that he had serious reservations on the advisability of removing the need for a witness to a boiler test.

Following further explanation from the Southern Federation representative, it was agreed that the organisations be appraised of the proposal regarding witnesses. Responses would be circulated by e-mail. If the matter was unresolved it would be placed on the agenda of the next meeting.

**5 & 6** – Manufacturers Hydraulic Certificates and mixing of manufacturer's certificates and Society Certificates.

Boiler Hydraulic test documents issued by manufacturers are '**shell tests only**'. They are usually issued with the manufacturer as the owner, tested on behalf of a customer.

Purchasers of commercially built boilers should ensure that their order states that the boiler is to be tested under the Blue Book Code and can safely withstand an initial TWICE (2X) working pressure.

Before being put into service the **new owner** is then required to have the boiler subjected to a further hydraulic test as follows;

A one and half times (1.5 x) working pressure test shall be carried out, with all the back head and check valves etc. fitted, to prove the integrity of the fittings and thread interfaces.

A re-examination and re-test at TWICE (2X) working pressure where any modifications have been made that affect the structural integrity of the boiler.

Where a boiler changes hands following a commercial pressure system hydraulic examination any subsequent steam tests should also be commercially carried out.

The intent of the hobby scheme was that it applied to both hydraulic and steam tests and was not complimentary to a 'mix and match' certification. Refer to section 6. in the boiler test code (Blue Book).

**7 & 8** These agenda items were covered under previous matters.

## **9. Any Other Business.**

Clarification regarding P.L. certificates was sought. This is a matter to be dealt with by the respective organisations through their insurance brokers.

Following a recent R.A.I.B. enquiry regarding a railway it emerged that whilst initial 'training' and recording had been carried out on safety specific issues, there had not been any subsequent follow up or recording. This reinforces the importance of record keeping and the requirement of keeping records up to date. In particular, where activities are of a long duration and possibly safety critical, there is a need to have a rolling program of assessments/re-assessments and to maintain adequate records

A matter regarding the import and sale of boilers was raised. Should they be CE marked?

Depending upon their bar litre capacity CE marking may be required but not necessarily through a notified body.

The recommendation was that boilers should always be examined and tested before use preferably involving the boiler inspector.

The date of the next meeting was possibly Wednesday, 14<sup>th</sup> September 2011 but subject to actions outlined in the minutes being completed.

The Chairman closed the meeting at 16.10 hrs.

**APPENDIX 1.****MODEL ENGINEERING LIAISON GROUP****BACKGROUND**

In the 1990s The Miniature Railway Liaison Group (MRLG) was set up in conjunction with, and hosted by, the Health and Safety Executive (HSE) and consisted of representatives from all model engineering associations/federations, certain model engineering societies, the model engineering press, the model engineering trade, commercial miniature railway operators, insurance representatives and the Office of the Rail Regulator. Amongst other work undertaken by the Group HSG216 was drafted and published and the agreement reached that the separate boiler test codes of the 7.1/4" Gauge Society, the Northern Association of Model Engineers and the Southern Federation of Model Engineering Societies be merged in to one universal test code. A subcommittee, the Boiler Test Group (BTG), was set up to undertake this task.

The HSE considered that the raison d'être of the MRLG had reached an end and the BTG was left to continue its work on the boiler test code. It became apparent that there was a need for the BTG to have wider terms of reference in order to consider other issues which affected the hobby in general and in the interest of efficient management the core membership of the BTG should be kept as small as possible.

**TERMS OF REFERENCE**

1. The Group shall be known as the Model Engineering Liaison Group (MELG)
2. The membership of the Group will normally consist of one formally appointed representative from each of the following organisations.

The 7¼ inch Gauge Society  
The Midland Federation of Model Engineers  
The Southern Federation of Model Engineering Societies  
The Northern Association of Model Engineers

The Insurance Brokers of the relevant organisations shall also be invited to attend.

3. In the event that the formally appointed representative is unable to attend a meeting the relevant organisation can appoint a deputy to attend.

4. The Group can co-opt other persons, who have specialist knowledge on a particular subject, to serve for a specific period.
5. Other organisations can apply to join the Group but any permanent change in the membership shall require the approval of the organisations listed above.
6. The Chairman of the Group shall be appointed annually from one of the representatives of the organisations or be an independent person at the discretion of the members of the MELG.
7. Meetings shall be called as and when specific needs arise but there shall be a minimum of one meeting per year.
8. The Group shall make arrangements for a Minutes Secretary to attend all meetings.
9. The Minutes Secretary shall produce minutes of the meeting for circulation to the members of the Group for approval by them. The minutes may then be circulated to the member organisations.
10. The Chairman of the Group shall ensure that a formal Agenda is circulated to all members of the Group two weeks before the date of the next meeting.
11. Members of the Group wishing to include items on the Agenda for discussion shall notify the Chairman before the Agenda is published.
12. In the event that an organisation feels that there is a specific item requiring specialist knowledge then they shall have the right to request an expert representative be invited to attend that part of the meeting. Rejection of such a request shall be justified.
13. If a vote on an issue is necessary the appointed representative from each Organisation shall have one vote. Other persons at the meeting may not vote.
14. Any decision made by the Group for mandatory issues shall be the unanimous decision of the Organisations. For discretionary issues the Group can agree to individual action by the Organisations.
15. Whilst the Organisations retain their autonomy they agree that an approach to, or conversations with, the Health & Safety Executive or any other government or enforcement body which may have implications for the modelling or model engineering hobby as a whole should be with the full agreement of the Group
16. The venue for the meetings shall be agreed by the members of the MELG.

17. The cost of hire of the venue and any postage incurred shall be shared by the organisations.

18. The costs of travel and any other costs involved to enable the representative and, where necessary any co-opted person, to attend a meeting shall be met by the relevant organisation.

19. Any proposed changes to the Terms of Reference for the MELG shall be submitted to the Group for discussion and formally agreed by the organisations.

*\*\* Item 14 Note that the wording has been changed and this is the final wording.*

Signed and Agreed on behalf of their respective bodies

Brian Reading 7¼" Gauge Society	
Malcolm Armstrong Midland Federation of Model Engineers	
Frank Stephen Northern Association of Model Engineers	
Wally Pearson Southern Federation of Model Engineering Societies	

Dated

2011

Issue 3

**APPENDIX 2.**

## **DRAFT PAPER FOR CONSULTATION**

MELG Information Sheet 1

## MODEL ENGINEERING LIAISON GROUP

### The Examination and Testing of Miniature Steam Boilers (Revised Edition 2008)

#### Witness to an examination of a boiler

Paragraph 2.7 of the Examination and Testing of Miniature Steam Boilers (Revised Edition 2008) – the “Blue Book” – sets out the definition of the role of a witness to a boiler examination (which can be a hydraulic test and or steam test). Certificates for hydraulic examinations and for steam examination have a line for the signature of the witness. This implies that a witness is a mandatory requirement.

It has been agreed by the MELG that with effect from (*insert date*) there is no longer a mandatory requirement for a witness to either type of boiler examination and therefore for a witness to sign certificates. Until new stocks of certificates are issued the boiler inspector can endorse the section for witness signature **“no longer required”**

It is still open for the owner of a boiler, a boiler inspector or a model engineering club to request the presence of a witness if there are particular circumstances where this is thought to be helpful.

This Information Sheet is issued with the support of the following organisations:-

Midlands Federation of Model Engineering Societies  
Northern Association of Model Engineers  
7.1/4” Gauge Society  
Southern Federation of Model Engineering Societies

#### Explanatory Note

At the time the Test Code was compiled the position of witness was included mainly because some of the previous schemes of examination had this provision and it was thought that the role of witness would represent a training opportunity for future boiler inspectors. Operational experience of the Code has shown that in practice there is considerable variation in the role of a witness and it is felt that more appropriate training opportunities should be available; in addition current advice is that the responsibility of the boiler inspector in signing certificates in that capacity is a personal responsibility and cannot be shared with a witness. It is therefore thought appropriate to regard the presence of a witness to an examination as discretionary rather than mandatory.