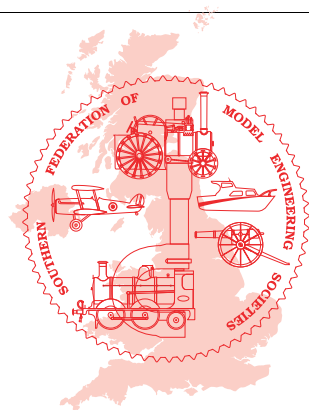


SOUTHERN FEDERATION NEWSLETTER

INSIDE THIS ISSUE:

<i>From the Chairman</i>	2
<i>Southern Federation Insurance</i>	2
<i>Southern Federation AGM</i>	3
<i>Autumn Rally Report</i>	4
<i>Testing Miniature Steam Boilers & Gas Tanks</i>	6
<i>Small Boiler Documentation</i>	8
<i>Pressure Gauge Testing</i>	9
<i>Checking your Records on our Computer</i>	10
<i>Diary of Events</i>	11



Editor

John Walker

Tel: 01789 266 065

E-mail: jgwal@btinternet.com

Views and comments expressed in this publication are not necessarily those of the Southern Federation of Model Engineering Societies

EDITORIAL

The Committee of the Southern Federation wish all our readers a very merry Christmas and a happy New Year.

The summer is over and by now it must be back to the workshop and get stuck into all those projects that need finishing.

2013 was by far a better season than 2012 and we hope that you were able to take advantage of it and increase your passenger carrying activities. Regarding rallies, we have noted that there has been a reduction in the number of attendees; is it the cost of travel? Or are we getting older. I find it more difficult to hump about heavy engines. Time is taking it's toll.

We do have a very serious problem on the committee, I shall not be seeking re-election next year after 14 years. One of the most important



'Bernard Clark member of the Northampton Society winner of the AALS Trophy with his 3 1/2" gauge Mogal at the Autumn Rally. See page 4. for report.

posts is that of Newsletter Editor by which means we keep in touch with our clubs and societies. There must be someone who could take on the job. I had not done it before and managed to produce this series of Newsletters.

Come and have a go, you will get my help and support. *John Walker* Newsletter Editor

THE FEDERATION NEEDS YOU...

Over the past few years we have had a declining number of people who are willing to participate on the committee of the Southern Federation. The situation is now getting desperate because after the Annual General Meeting we will be down to about four members. At this level we would find very difficult to run the Federation and may have to close it down.

Please, please have a word with members of your Club or Society to see if any member would join us. It is a rewarding job, six meetings a year in London with travel costs paid for. They would be part of the hobby we love and would be able to help us to move the Federation forward into the modern world.

Wally Pearson, our Safety Officer has already stated that he will not be seeking re-election, and we would like to thank him for all the work he has carried out

There may be others, whose decisions have not been made.

It's up to you, do you want the Federation to continue? It's been supporting you for 40 years. Do nothing and it will close. All the work done in the past will go in the skip, we can't let that happen can we.

Contact our Secretary and put your name forward, it's not too much to ask.

Contact Ivan Hurst by E-mail: ivanatshed73d@yahoo.co.uk or phone 01252 510 340

**We're on
the Web**

www.sfmcs.co.uk

DATA PROTECTION ACT NOTICE

Information Sheet 18 outlines our Data Protection Policy. Walker Midgley is a new supplier of services to the Federation as indicated under that policy. Those clubs that have had their data shared with Footman James as part of the Footman James policy will now have their details open for sharing with Walker Midgley. If you do not wish this to happen please let me know.

Walker Midgley is able to access our website and see the personal details of Officers of only those clubs that have been designated as consenting to share their details

Martin Baker

Membership Secretary
membership-
secretary@sfmcs.co.uk

A WORD FROM THE CHAIRMAN...

Dear Engineers

I feel it is important that you attend this years Annual General Meeting at Bedford as some important announcements will be made . Due to the lack of interest of members coming forward to assist in the running of the Federation some inevitable changes in the amount of services we will be able to offer you the members is inevitable . When I became Chairman I had hoped to increase the committee size to take

some of the burden from the few . Well the few are to become two fewer at this A G M . Those whom are left have lives to live so less committee members means less services . This can only be solved by people coming forward to serve but I will not hold my breath ! We have had a giant leap forward in my first year at the regulator as , you can now all read your own copy of the newsletter at home and , print it out if you so desire or , they will be available on said Web site . Also all the

advisories are there for your perusal .

I hope your year has been fun as that is what a hobby is and after the winter maintenance an early spring will enable us to start a new year , running ,sailing ,or just clock watching but enjoying one of the best hobbies around . I wish you all a happy Christmas

Brent Hudson

Chairman

SOUTHERN FEDERATION INSURANCE

PLEASE READ THIS ARTICLE IT CONTAINS IMPORTANT INFORMATION REGARDING YOUR INSURANCE

The Southern Federation insurance scheme has been running for over 40 years, initially direct with the insurance company and latterly via Footman James, and as stated elsewhere in this Newsletter the running of the Federation is meeting challenging times. In order to ensure that our insurance scheme is ready for any eventuality, for example worst case scenario if the Federation was to be disbanded, the Committee has decided to change insurance brokers from Footman James to Walker Midgley Insurance Brokers Limited.

The premium rates for both club and society insurance and for individual member insurance will benefit from a 10% discount off Walker Midgley's standard premium rates. In order that those affiliated clubs, societies and members who already place their insurance on a standard Walker Midgley club and society policy or on an individual member policy may benefit from the

discounted rates as soon as possible the change to Walker Midgley is with immediate effect.

You do not need to do anything at this stage, full details of the transitional arrangements will be issued shortly. Those with current Walker Midgley club and society insurance or individual member insurance will receive their renewal papers direct from Walker Midgley in the usual way but they should check that the paperwork is badged Southern Federation which will mean that the discounted rates have been applied.

For all amendments to existing cover, or to report a new claim, please contact Walker Midgley direct (telephone 0114 250 2770 or email southernfed@walkermidgley.co.uk). Walker Midgley will also be taking over the handling of all current and ongoing claims.

If you wish to place your insurance with another insurance provider you are, of course, free to do so but we would ask you to bear in mind that the Federation will be receiving an introducer commission from Walker Midgley so the more policies they write on our scheme the greater will be the much needed income for the Federation.

The Insurance Scheme will be under the banner of the Southern Federation of Model Engineering Societies and be identical to that supplied by Walker Midgley to other modelling and model engineering organisations.

We look forward to a very long and successful relationship with Walker Midgley.

If you require more details you can contact Walker Midgley direct on telephone 0114 250 2770 or email:

See below

E-mail address: southernfed@walkermidgley.co.uk

ANNUAL GENERAL MEETING 2014 WILL BE HELD AT THE BEDFORD MODEL ENGINEERING SOCIETY ON MARCH 8TH



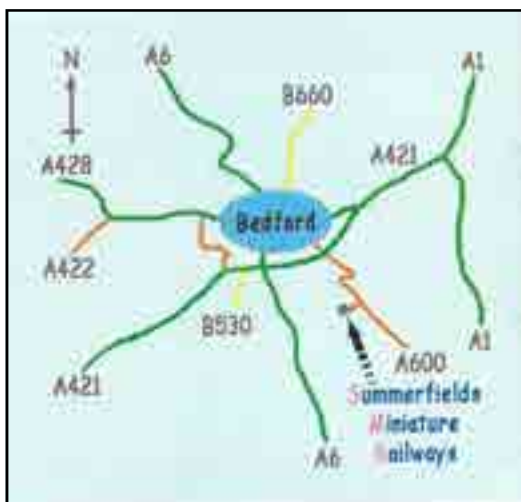
The Annual General Meeting of the Southern Federation of Model Engineering Societies will be held at the Bedford Model Engineering Society at their Summerfields Miniature Railway site. There is plenty of parking and it is wheelchair friendly .

The Society was formed in 1948 to cater for local interest in Model Engineering hobby in it's many aspects. At the site the Society has a clubhouse and both raised and ground level multi-gauge tracks with two main stations, Haynes End and Hammer Hill. It caters for gauges of 2½", 3½" and 5" on the raised section; 5" and 7¼" ground level in the area surrounding the raised track. There is plenty of space and hard surface for road vehicles.

The meeting will take place in the afternoon at 2pm sharp; agenda, details of how to get there will be posted to all secretaries via the E-mail system and in the next Newsletter. Please make an effort to come ; we need your support.

Our new Insurance supplier Tony Wood of Walker Midgley will be in attendance to answer your questions.

How to find the Bedford Society: Summer fields Miniature Railway is located about 6 miles to the South of Bedford alongside the A600 road from Bedford to Shefford, close to the village of Haynes.



Views of the Bedford Clubhouse



Road and rail action at the Bedford Track



Pictures supplied by the Bedford Society of Model Engineers

SOUTHERN FEDERATION AUTUMN RALLY REPORT

NORTHAMPTON SOCIETY OF MODEL ENGINEERS

SATURDAY SEPTEMBER 21ST 2013

According to my records it was 1997 when Northampton SME last hosted a rally for the Southern Federation, so when asked by Brian Thompson to be hosts for the 2013 Autumn Rally, a positive response was quickly returned. In the intervening 17 years the facilities at the Society home in Delapre Park, have changed considerably with extensions to both the raised track and ground level railways, and we were confident that we could provide an interesting venue for visitors. The track extensions were completed in May 2011, but it was only this season that we had completed the enlargement of the steaming bay for the ground level route that would be suitable to accommodate the number of locomotives for a rally.

Planning for the rally started about a year before the event. Our site is on the edge of the park, with access along the side of what is known as the Archery Field, which itself provides space for visitor parking. Northampton Borough Council is our landlord and also owner of the field, and is most supportive in organisations using the field for planned events. There is however a mass of form filling and risk assessments to be completed to get their agreement, but overnight use of the field for visitors with campers and caravans from Friday afternoon through to Sunday evening was agreed without difficulty. With the Sunday booked as a club meeting day, a full weekend using the site was an exciting prospect.

Talking to the ladies who feed the inner man so well on our club days, the first challenge was how many people to cater for. A buffet lunch on the Saturday, the evening barbecue and Sunday lunch all had to be purchased and prepared. I must admit that I got the Saturday lunch numbers wrong, and some frantic shopping had to be done at short notice to be able to feed everyone present! The other meals worked out about right on estimates.

The first visitor to arrive on Friday morning, almost before the site was opened, was Barry Glover, a past President of the Australian Association of Live Steamers, who had found the time to attend the rally during a tour of Europe. From mid day onwards the Travelling Steamers established their presence in the campsite and the afternoon became a social occasion to

meet and greet both old and new friends, with only a couple of visitors taking the opportunity to run on the ground level track. First visitor on the track was Brian Remnant from Romney Marsh club with his 7¼" Simplex petrol locomotive and not surprisingly he was the last to load away on the Sunday afternoon!

On the morning of the rally day a steady stream of visitors arrived and by early afternoon there were 23 visiting locomotives and 46 signed in visitors but it was disappointing that we had no visiting road vehicles. Both steaming bays were busy throughout the day, which was bright and sunny with a clear blue sky, just as we had arranged! The number of locomotives running seemed to regulate very well, everyone had the running time they wanted and no-one was asked to come off the track to make way for someone else.

Using the raised track were David and Frances Mayall with their respective Speedy and Conway locomotives, Arthur Bellamy from Leeds with his B1, Tony Wall from Leeds with a classic American 4-4-0, Adrian Landi from Romney Marsh with his Horwich Crab. Ian Jaycocks from Peterborough ran his saddle tank, Luigi Naruszewcz with his 3 ½" gauge Halton Tank, Tony Walters and Pete Maybury each with their respective GWR Manor's, Martin and Sue Parham from Maidstone with a Juliet and a Duchess, Ivan Hurst with his S&D 7F, Ralf Manwaring with his Class 47, Glyn and George Winsall with their SR "U" class 2-6-0, and on Sunday, Nicholas Gain from the Orchard line with his 4-4-2 tank loco.

Nigel Cox from Kings Llyn and District with a freelance electric shunter joined Brian Remnant on the ground level railway, which also saw John Walker with his "Marie Estelle", Jeff Summers and his Fowler dock tank, Mike Riches from Wymondham with a combination motive power set made up from his Class 73 petrol hydraulic and one of his pair of Sentinel shunters and a Metropolitan Railway "Growler" operated by Derek Alford. On Sunday Nigel Ball from Nottingham ran his recently completed Dholphur. On both days Northampton SME



Frances Mayall with Conway followed by Ivan Hurst with the 7F



Mike Riches driving the Class 73



Brian and Margaret Remnant with the Simplex

members Dennis Billington, Peter King and Bernard Clark ran their locomotives, a 7¼" freelance petrol hydraulic shunter, 7¼" "Elidir" and a 3½" gauge Mogul.

During the day, the Northampton Amateur Radio Club who had set up an aerial in the site were broadcasting as part of their 100th year celebrations. The Northampton club was established in 1913 and is one of the oldest surviving clubs in the country. The afternoon's events were mentioned on Radio Northampton and reported in the following week's local newspapers. We also had visitors from the Branch Line

SOUTHERN FEDERATION AUTUMN RALLY REPORT



Left - Life in the club pavilion

Above - Raised track steaming bays

Society, established in 1955 and widely recognised as Britain's leading amateur group for the study of railway infrastructure and history of networks and not nowadays, despite its title, just minor lines. Unlike many enthusiast groups, their emphasis is on the physical works and on operating arrangements, rather than motive power and rolling stock. One of the aspirations of members is to travel over as much railway infrastructure as possible, including sidings and loops and so after riding as passengers around the two railways a "special" was arranged to convey them from the hydraulic lift at the gate to the ground level carriage shed traverser, something which they seemed very pleased about!

The award for the owner of the loco running at the rally which had travelled the furthest to attend was awarded to Anthony Walters who had travelled with his 5" GWR Manor from Llanelli for the day, a round trip of over 430 miles. The Association of Australian Live Steamers Trophy (AALS), awarded for the best prototypical Commonwealth design engine running on the rally day was won by NSME Member Bernard Clark. A judging panel made up from last years winner, Glyn Winsall, NSME member Tony Kendall, and past AALS president Barry Glover made the choice. Barry Glover, who 30 years ago designed and donated the trophy to SFMES, made the award to Bernard.

Thank you to everyone who attended the Rally, it was a great pleasure to see you all, and thank you also to Northampton SME members who worked hard to get the site and facilities ready for the weekend and who turned up on the day to assist. Thank you especially to our ladies who



Your Editor having a steamy time

prepared and served up around 200 meals over the weekend. If you did not make it to the rally and feel that you would like to visit us next year, you will be most welcome to join us on any of our club meetings. Dates for next years events are already on our website www.nsme.co.uk then click the "Activities" tab and follow the link to Club Calendar. Continued on page 8

A NEW MODEL ENGINEERING SUPPLIER

We have been advised that there is a new Model Engineering supplier with a well recognised product going back to the days of Kennions of Hertford.

The catalogue shown covers materials, steel, brass and copper. Rivets, nuts and bolts, O rings, split pins and very much more.

Later another catalogue will be published when they have sorted out all the patterns and castings.

If you would like a copy of this catalogue please phone the number given and they will send you a copy free of charge.



SUPPLEMENT TO THE EXAMINATION & TESTING OF MINIATURE STEAM BOILERS (REVISED EDITION 2012) INCLUDING THE SAFETY OF LPG TANKS

The Supplement document has been issued for use by member Societies of the Northern Association of Model Engineers and the Southern Federation of Model Engineering Societies and is the Supplement to Boiler Test Code BTC 2012 commonly known as the Green Book. The Issue 1 August 2013 updates and replaces the document previously issued by the Northern Association of Model Engineers and all previous issues of this document should be destroyed.

Primarily the document describes a Code of Practice to ensure the Safety of Liquid Petroleum Gas (LPG) Tanks with an internal volume not exceeding 250 cubic centimetres for use with small boilers. The recording of the relevant Safeguard Test Data, for members of the Southern Federation only, is to be included on the Certificate of Annual Inspection and Steam Test for Boilers below 3.00 bar litres. This will require a minor modification to the current Certificates already issued as shown on the sample herewith. The reprint certificates already contain the modified format.

The minor changes to the Certificate are in Box B. (see form)

Repairs etc.... insert (note on the reverse)

First blank line insert
Gas Tank Serial Number. e.g.
SF 123-100123

Second blank line insert
Safeguard Test. Satisfactory.

For members who manufacture their own Gas Tanks, which will require an Initial Hydraulic Test to the prescribed test pressure related to the intended gas or mixture of gases, an appropriate Certificate of Test and Initial Inspection of a Liquid Petroleum Gas Tank will be issued by the Southern Federation through the web site for completion by

The Pressure Systems Safety Regulations 2000
Statutory Instrument 2000 No 128 Regulation 8

Certificate No.
8C

Written Scheme of Examination for a Boiler below 3 bar litres

1. **Introduction**
 - 1.1 This Written Scheme of Examination has been written in order to comply with the requirements of the Pressure Systems Safety Regulations 2000 Regulation 8
 - 1.2 All examination and testing shall be carried out in accordance with the requirements of the formally issued Boiler Test Code entitled The Examination and Testing of Miniature Steam Boilers, Boiler Test Code BTC 2012 or the latest edition relevant at the time of the test. The pressure test valves and the periodicity of test shall be in accordance with the Code and with the requirements indicated in paragraph 1.6 of the Boiler Test Code BTC2012
2. **Test Requirements**
 - 2.1 Examination and Testing shall be carried out in accordance with the requirements indicated in Section 14 of the Boiler Test Code BTC2012
3. **Boiler Material** (Boiler Inspector to delete material not used) Copper Brass
4. **Items to be examined and tested.** (Boiler Inspector to delete items not fitted)
Safety Valve SV1 Pressure Gauge PG1 Water Level Gauge WLG1 Boiler Water Feed Pump MFI
5. **Certification**
 - 5.1 This unique Written Scheme of Examination (WSE) shall be used in conjunction with the formally approved Hydraulic and Steam Test Certificate issued by the relevant Federations and Associations identified in the Code
 - 5.2 All relevant information required by the Pressure Systems Safety Regulations 2000 shall be recorded on the appropriate certificate and supporting documentation.
 - 5.3 This Written Scheme of Examination forms part of the package of documentation that shall be retained by the owner of the boiler and subsequently passed to the new owner if the boiler is sold.
 - 5.4 This Written Scheme of Examination and certification shall be retained in accordance with the requirements of the Pressure Systems Safety Regulations 2000 Regulation 14.

This Written Scheme of Examination is controlled by the Model Engineering Liaison Group whose Chairman is Mr W C Peacock CEng MInstEng. The consulting engineer (Boiler Inspector) as described in Pressure Systems Safety Regulations 2000 Regulation 8 Paragraph 1(6) for the scheme is:

Boiler Inspector Name: _____ Signature: _____ Date Prepared: _____

**CERTIFICATE OF ANNUAL INSPECTION AND STEAM TEST
FOR BOILERS BELOW 3.00 bar litres**

Name of Club/Society: _____		Number: _____																																					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Boiler Identity No.</td> <td style="width: 50%;">Box A</td> </tr> <tr> <td>Date of Construction</td> <td></td> </tr> <tr> <td>Description of model</td> <td></td> </tr> <tr> <td>Manufacturer</td> <td></td> </tr> <tr> <td>Hydraulic (Shell Test)</td> <td>psi/bar</td> </tr> <tr> <td>Test Date</td> <td></td> </tr> <tr> <td>Hydraulic (Repeat Test)</td> <td></td> </tr> <tr> <td>Test Date</td> <td></td> </tr> <tr> <td>Working Pressure</td> <td>psi/bar</td> </tr> <tr> <td>Volume of boiler .. litres</td> <td>bar litres</td> </tr> </table>	Boiler Identity No.	Box A	Date of Construction		Description of model		Manufacturer		Hydraulic (Shell Test)	psi/bar	Test Date		Hydraulic (Repeat Test)		Test Date		Working Pressure	psi/bar	Volume of boiler .. litres	bar litres	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Previous Certificate No.</td> <td style="width: 50%;">Box B</td> </tr> <tr> <td>Date of test</td> <td></td> </tr> <tr> <td>Date of expiry</td> <td></td> </tr> <tr> <td>Pressure gauge confirmed working YES/NO</td> <td></td> </tr> <tr> <td>Marked working pressure</td> <td>psi/bar</td> </tr> <tr> <td>Safety valves seen to operate</td> <td>psi/bar</td> </tr> <tr> <td>Repairs (if any) and the date by which they should be carried out (note on the reverse)</td> <td></td> </tr> <tr> <td>Gas Tank Serial Number</td> <td></td> </tr> <tr> <td>Safeguard Test</td> <td></td> </tr> </table>	Previous Certificate No.	Box B	Date of test		Date of expiry		Pressure gauge confirmed working YES/NO		Marked working pressure	psi/bar	Safety valves seen to operate	psi/bar	Repairs (if any) and the date by which they should be carried out (note on the reverse)		Gas Tank Serial Number		Safeguard Test	
Boiler Identity No.	Box A																																						
Date of Construction																																							
Description of model																																							
Manufacturer																																							
Hydraulic (Shell Test)	psi/bar																																						
Test Date																																							
Hydraulic (Repeat Test)																																							
Test Date																																							
Working Pressure	psi/bar																																						
Volume of boiler .. litres	bar litres																																						
Previous Certificate No.	Box B																																						
Date of test																																							
Date of expiry																																							
Pressure gauge confirmed working YES/NO																																							
Marked working pressure	psi/bar																																						
Safety valves seen to operate	psi/bar																																						
Repairs (if any) and the date by which they should be carried out (note on the reverse)																																							
Gas Tank Serial Number																																							
Safeguard Test																																							
Boiler Inspector (Block capitals)		Signature																																					
Witness (Block capitals)		Signature																																					
Owner (Block capitals)		Signature																																					

In signing this certificate the owner accepts that it is his/her responsibility to maintain the boiler in a safe working condition at all times. The boiler may only be used if the owner is in possession of a valid steam test certificate. THE BOILER INSPECTOR ACCEPTS NO LIABILITY IN REGARD TO THE USE AND MAINTENANCE OF THE BOILER. After its expiry, this certificate should be retained as a record.

2013 issue 01

the Society Boiler Inspector (see page 7).

Wally Pearson.

Southern Federation Safety Officer.

Note: These certificates are NOT to be sent to the Southern Federation Boiler Registrar.

SUPPLEMENT TO THE EXAMINATION & TESTING OF MINIATURE STEAM BOILERS (REVISED EDITION 2012) INCLUDING THE SAFETY OF LPG TANKS

CERTIFICATE OF INITIAL TEST AND INSPECTION OF A LIQUID PETROLEUM GAS TANK		Serial Number SFLPG-0000
Name of Club/Society:		Number:
<p style="text-align: center;">LPG TANK DETAILS</p> Gas Tank identity No. Material of construction	<p style="text-align: center;">INITIAL HYDRAULIC TEST</p> Initial Hydraulic test pressure psi/bar <small>(This pressure shall be 1.5 times the pressure of 10% for the maximum test pressure)</small> Test date:	
<p style="text-align: center;">FUEL MIXTURE</p> BUTANE % PROPANE % Working pressure at 20°C psi Volume of Gas Tank litres	<p style="text-align: center;">INITIAL SAFEGUARD TEST</p> Date of test Result of test Date of expiry	
Inspector (Block capitals)	Witness (Block capitals)	Owner (Block capitals)
.....	Signature	Signature
.....	Signature	Signature
<small>In issuing this certificate the owner accepts that it is their responsibility to ensure the LPG Tank is a safe working condition at all times. The LPG Tank may only be used if the owner is in possession of a valid test certificate. NOTE THAT THE INSPECTOR ACCEPTS NO LIABILITY IN REGARD TO THE USE AND MAINTENANCE OF THE LPG TANK. This certificate should be retained as a record.</small>		
THE SOUTHERN FEDERATION OF MODEL ENGINEERING SOCIETIES		

CERTIFICATE OF INITIAL TEST AND INSPECTION OF A LIQUID PETROLEUM GAS TANK		Serial Number SFLPG-0000 (Copy)
Name of Club/Society:		Number:
<p style="text-align: center;">LPG TANK DETAILS</p> Gas Tank identity No. Material of construction	<p style="text-align: center;">INITIAL HYDRAULIC TEST</p> Initial Hydraulic test pressure psi/bar <small>(This pressure shall be 1.5 times the pressure of 10% for the maximum test pressure)</small> Test date:	
<p style="text-align: center;">FUEL MIXTURE</p> BUTANE % PROPANE % Working pressure at 20°C psi Volume of Gas Tank litres	<p style="text-align: center;">INITIAL SAFEGUARD TEST</p> Date of test Result of test Date of expiry	
Inspector (Block capitals)	Witness (Block capitals)	Owner (Block capitals)
.....	Signature	Signature
.....	Signature	Signature
<small>In issuing this certificate the owner accepts that it is their responsibility to ensure the LPG Tank is a safe working condition at all times. The LPG Tank may only be used if the owner is in possession of a valid test certificate. NOTE THAT THE INSPECTOR ACCEPTS NO LIABILITY IN REGARD TO THE USE AND MAINTENANCE OF THE LPG TANK. This certificate should be retained as a record.</small>		
THE SOUTHERN FEDERATION OF MODEL ENGINEERING SOCIETIES		

Petroleum Gas Tanks Documentation

The Southern Federation will be despatching three copies of the Supplement to the Boiler Test Code BTC 2012 (Green Book) covering Petroleum Gas Tanks. These will be sent to the Secretary of all Clubs and Societies. Additional copies can be obtained from Brian Thompson (see page 11)

Copies of the Hydraulic Test Certificate (see above) can be downloaded from our website www.sfmes.co.uk. They are A4 in size two forms per page; the upper part is for the user/owner the lower part (copy) is for the boiler tester's record. The form is to be filled in by the inspector by either duplicate writing or by carbon copy if the form is pre-cut in half. The certificate will be issued with an incremental serial number shown as 0000 and 0000 (copy) on the certificate.

Note: These certificates are NOT to be sent to the Southern Federation Boiler Registrar.

THE ISSUE OF SMALL BOILERS AND THEIR DOCUMENTATION

1. The Examination & Testing of Miniature Steam Boilers edition 2012 (BTC 2012) Green Book.

The booklet BTC 2012 was produced by members of the Model Engineering Liaison Group (MELG) comprising the Midland Federation of Model Engineers, the Northern Association of Model Engineers, the 7¼ inch Gauge Society Ltd and the Southern Federation of Model Engineering Societies. The purpose was to provide Clubs and Societies affiliated to one of the members of the Group with a formal means of examining and certifying steam boilers owned and / or operated for hobby purposes. The contents of the BTC 2012 are applicable only to those who actually use the Test Code and the associated documentation including the Written Scheme of Examination and Test Certification which has been formally issued to the individual Club or Society. The BTC 2012 and associated documentation is not applicable to other national Associations or bodies etc. who have and use their own Test Codes and associated documentation. The MELG has no reason or authority to interfere with these arrangements.

The current version of the Test Code (BTC 2012) and associated documentation has been brought up to date such that it conforms to then Requirements of the Pressure Systems Safety Regulations (PSSR 2000), where, under certain circumstance, the Health and Safety at Work etc. Act 1974 applies. There are many reasons why this situation is applicable to a Club or Society. The Pressure Systems Safety Regulations indicates that where the 'relevant fluid' is steam the Regulations apply at 'any pressure'. This means that small boilers, irrespective of their volume, must be included. For this reason a more formal section (Section 14) has been incorporated in the BTC 2012 to comply with this requirement. An associated document has been introduced which provides a combined Written Scheme of Examination and Test Certificate (see page 6) specifically for the use of Clubs and Societies who wish to validate small boilers for their own use. Small boilers may include locomotives, marine steam plants and stationary engine boilers.

2. BTC 2012 Section 14.

Originally, in the 2008 edition of Test

Code, the testing of small boilers was indicated only as a recommendation. In the light of current advice and practice it was considered appropriate to make the testing of small boilers a requirement.

The paragraphs 14.1 to 14.4 incl. principally apply to members of model engineering Clubs and Societies who manufacture a boiler either scratch built or from a kit of parts. The initial test indicated is to prove the structural integrity of the boiler shell and the subsequent repeat test with all the relevant fittings is to prove the structural integrity of, what is now, the pressure system.

Boilers which are manufactured commercially must comply with the Requirements of the either the Pressure Equipment Regulations 1999 or the European Directive 97/23/EC. As indicated in paragraph 14.5 certificates issued by a commercial boiler manufacturer are acceptable as evidence of satisfactory hydraulic test. As a general rule these certificates do not include the results of a steam test.

The paragraph 14.6 therefore applies to all boilers, whether made commercially or privately, and is a functional test of the pressure system. On completion the Certificate of Examination is issued to the owner of the boiler. This test is repeated annually.

The paragraph 14.8 is applicable to small boilers which are little more than 'toys'.

3. Comment.

There is nothing sinister or difficult in the testing of small boilers. Many Clubs and Societies have been carrying out this testing over a number of years even though originally it was just a recommendation. The basic problem was that generally it was found that Clubs and Societies had to generate their own 'certificate' since it was not easy to use the existing documentation used for larger boilers. The current documentation package eliminates this problem as well as providing a formal Written Scheme of Examination.

4. Recent magazine editorial comments.

In the past few months there have been comments and criticisms in magazines

related to the issue of the Boiler Test Code (BTC 2012) by the Southern Federation. With reference to paragraph (1) above it must be clear that the documentation was not issued by the Southern Federation but by the Model Engineering Liaison Group (MELG) of which the Southern Federation is but a member. The MELG was also attended and represented by insurance providers Footman James, Walker Midgley and the principal supplier of insurance Royal and Sun Alliance. The documentation was approved for issue by all concerned.

The requirement to update the documentation relates to the Pressure Systems Safety Regulations (PSSR 2000) again as indicated in paragraph (1) with respect to the testing of steam boilers. It has nothing to do with the Pressure Equipment Regulations (PER 1999) which deal with the manufacture of boilers. There is no reference whatever in either of these Regulations to the product value 3bar litres, see BTC 2012 paragraph 3.11. Note the product is bar litres not bar/litres. The requirement, where applicable in PSSR 2000, applies to 'steam at any pressure'.

It has been indicated that some Club and Society boiler inspectors are applying rules to small boilers which are not indicated in the BTC 2012 Section 14. Examples of such comments follow.

- ◆ Boilers which have no means of supplying water to the boiler whilst working do not constitute a failure provided that the fuel supply is exhausted before the water is completely used.
- ◆ Under circumstances where the user is unwilling or unable for the pressure gauge to be red lined on the gauge dial an alternative is given in BTC 2012 paragraph 6.11, i.e. an immovable point on the bezel. It is however not appropriate to place the red line on the gauge glass.
- ◆ It is not mandatory for safety valves to be locked at the blow off pressure. The BTC 2012 paragraph 11.9 states that valves which are found to alter their set position during operation shall be fitted with some form of locking device . (continued page 8)

THE ISSUE OF SMALL BOILERS AND THEIR DOCUMENTATION - CONTINUATION

From page7

- ◆ The duration of the steam test is not specified in the BTC 2012. Paragraph 14.6 indicates that the boiler be steamed at the maximum firing rate of the fuel. The test shall be continued for sufficient time to allow the inspector to be satisfied that stable conditions have been attained. Whether that is two minutes or ten minutes is at the discretion of the individual inspector.

Reference has been made to the requirement for testing of gas tanks. The requirement is not new. It was introduced many years ago by the

Northern Association of Model Engineers (NAME) and issued as a supplement to the Boiler Test Code. At the time the Southern Federation did not have a similar document and simply referred users to the NAME document. During the recent process of documentation updates it was agreed that the Gas Tank testing document be updated and is currently being printed, ready for issue to all member Organisations. Consequently it must be understood that there is no difference in the documentation package viz. the Boiler Test Code, the associated documentation certification and the Gas Tank testing requirements between any of the Organisations, namely the

Southern Federation of Model Engineering Societies, the Northern Association of Model Engineers and the Midland Federation of Model Engineers.

Further information related to the development of the current Boiler Test Code and associated documentation can be found in the recorded minutes of the MELG meetings and issued in the Southern Federation Newsletter.

Wally Pearson.

Southern Federation Safety Officer.

PRESSURE GAUGE TESTING

The following article is from the City of Oxford Society of Model Engineer's magazine the 'COSME LINK' so if you own/or run a steam locomotive please read it take note.

As Boiler Tester we are often asked, "Why test pressure gauges at the steam test?" In the past, we have said that the red, blue or green books require it to make sure that the gauge is marked accurately. But at the July boiler testing session, we were witness to a frightening situation.

On testing the pressure gauge of one locomotive, with a working

pressure of 100 psi brought for steam test, against the test gauge, the locomotive gauge rose to 75 psi and stopped even though the test gauge rose to 120 psi. All Boiler Testers present were mystified as to the problem.

Had this problem not been discovered and the locomotive remained in service there could have been a serious situation. The safety valves could have been screwed down to raise the reading to 100 psi. One fears to wonder what steam pressure would have been reached before it was realised that there was a problem.

The locomotive pressure gauge was dissembled and it was found that some dirt had got into the linkage and jammed it. This was cleaned and the gauge reassembled. It was then retested against the test gauge and it read 100 psi when the test gauge read 100 psi. So it was replaced on the locomotive and the steam test carried out. The locomotive pressure gauge functioned perfectly so the Boiler Tester was able to issue an Examination Certificate.

Please pass this information on to your Boiler Inspectors and publicise this as widely as possible as it could save a very serious situation.

AUTUM RALLY (CONTINUED FROM PAGE 5)

We also have some capacity for visiting 7¼" locomotives on our public open days, so if you would like to assist with some intensive passenger hauling, please let us know in advance so that we can be discuss locomotive/rolling stock and brake system compatibility. Please use the "visit/contact" tab on the home page of the website at <http://www.nsme.co.uk>

. This year we have averaged 2200

rides each afternoon, so it is quite demanding on both drivers and locomotives!

Finally I would like to record that a number of visitors made donations over the weekend toward the event, and the SFMES President Brian Thompson also handed us a cheque from the Federation. Thank you all for your generosity and we look forward to welcoming you to our site very soon.

Peter Squire.

Chairman Northampton MES

OUR RECORDS OF YOU AND YOUR AFFILIATED ORGANISATION

In a few months it will be time for us to go through the affiliation renewal cycle. We are aware that there are still a number of errors or missing email addresses for people. If you are a registered officer of your organisation, please can you check that the data we have about you is correct. You can do this online for your own information and for all other people registered officers of your organisation.

Email will be used as the primary means for giving notice for AGM and for renewals. So if you have an account and have not been receiving any of the general news updates recently issued by email then please check that our email address for you is correct. If you can log on then this confirms that the email address we have for you is the one you want to use.

You can then try sending yourself an email – go to Members Area / My Area / My Details where you can send a test email to yourself. If it doesn't come through then there is a problem with your anti SPAM settings, either on your PC or with Your Information Service Provider.

We have emailed you all recently with News Updates and in doing so we have received a number of failed delivery notices. So please consider if this affects you particularly if you are the primary contact for your organisation.

Newsletter Records

We have harmonised our newsletter subscription records (for where people

request printed copies of the newsletter optionally in addition to electronic delivery) with the main web database. Where people are presently listed on both systems, the records on the web have taken precedence. For the future this means that there will only be one location that we keep your personal details, so if there is a change there will not be the problem of keeping separate systems in synchronisation. Preferably you can enter any change of address yourself on-line without the need to tell us directly. If you subscribe to newsletters and are not also a registered Affiliated Club Officer you can ask for a log on account to be added to your records as these are not created by default.

Boiler Tester Records

Your committee has starting looking at the overall administration burden and is now seeking to reduce everyone's workload and costs (ours and yours) to that which is the minimum necessary to comply with the law and good practice. The first step was taken at the 22nd October 2013 committee regarding the need for affiliated organisations to provide us a new schedule each of current boiler testers and to keep that schedule up to date.

Effective from this coming renewal we will no longer maintain any separate lists and you will not be asked to submit new ones with your renewal. Instead we will be extending the website section for tracking officers to include a further list for boiler testers. When this is

implemented, Spring 2014, we will be asking that you keep the list up to date yourselves.

We will also continue to ask that you provide the name of the current lead boiler tester as part of your club records on our website—the lead person does not have to be a boiler tester, although normally will be. This names the person that we should contact in the first instance regarding any boiler tests.

If you do not conduct boiler testing under our scheme, then you do not need to name anyone.

If you submit boiler test records to our Boiler Registrar and we do not have your organisation's lead boiler tester on the website, then we will not know that the boiler records are from a genuine source (and there have been cases of fraudulently issued certificates).

If you need any assistance with membership, membership information and our records please contact membershipsecretary@sfmes.co.uk or boilertesting@sfmes.co.uk as appropriate.

Martin

Dr. Martin W Baker

Mob: 07986 297498

Email: membershipsecretary@sfmes.co.uk

A WELCOME TO TWO NEW CLUBS

We would like to welcome the **Treetops Miniature Railway** to the Southern Federation of Model Engineers. They are building a ground level 5" and 7¼" gauge railway 1½ miles long at Halton Village, Aylesbury, Buckinghamshire. We wish them well with their project.

We would also like to welcome the **Lothian Miniature Road Steam Club**. They are located at Ratho, Newbridge Midlothian in Scotland.. They are a traction engine and road vehicle club.

If you want more details of these clubs please go onto our website <http://www.sfmes.co.uk> and visit the **Affiliated Clubs** tab.

PUBLICATIONS AVAILABLE FROM THE SOUTHERN FEDERATION

Availability

From our stand at rallies and exhibitions or by post from Brian Thompson.

	From Our Stand	By Post
Directory - Detailing S/Fed affiliated Clubs'/Societies' facilities.....	£3.00.....	£4.20
Examination & Testing of Miniature Steam Boilers BTC 2012 - Green Book.....	50p.....	£1.00
Pack of 5.....	£2.50.....	£3.20
Gas Tank Supplement to BTC 2012 (Green Book).....	25p.....	75p
HSG216 Passenger-carrying miniature railways 'Guidance on safe practice'.....	£3.00.....	£4.50
Boiler Test Certificates - Pad of 50.....	£5.00.....	£8.20
Written Scheme of Examination - Pad of 50.....	£7.50.....	£11.50
Small Boiler Test Certificate - Pad of 50.....	£5.00.....	£8.20
Boiler History Record Card - Pack of 10.....	£1.00.....	£2.20
Plastic wallets to hold certificates size A5.....	60p.....	90p
Pack of 5.....	£3.00.....	£4.20

Please make your cheque payable to *Southern Federation MES*; if by post please send to:

Brian Thompson
35, Rivershill,
Watton at Stone,
Hertfordshire SG14 3SD

Postal Charges

There have been increases in postal charges, please ring Brian Thompson first and he will advise you of

DIARY OF EVENTS 2014

December 13/14/15	*Model Engineer Exhibition at Sandown Park.(2013)
January 17/18/19	*Alexandra Palace Model Engineering Exhibition
February 21/22/23	*Brighton Model World
March 8	*Southern Federation Annual General Meeting (Bedford Model Engineering Society)
May 9/10/11	*Harrogate Model Engineering Exhibition
May 17/18	*Southern Federation Spring Rally - To be advised
May 31 June 1	*Vale of Aylesbury Model Engineering Society Traction Engine Rally
September 20/21	*Southern Federation Autumn Rally - Leeds Society Model Engineers

The Federation sales stand will be present at events identified thus *

Would you like your event shown in our Diary of Events? Please send details to the Newsletter Editor, e-mail address on the first page. The event should be restricted to invitation events for model engineers, NOT for public running days.