



# NEWSLETTER

April 2024

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## Editorial

Well, we're already through the first four months of this year. Easter is behind us as is the FMES AGM. In my part of the world the weather has not been particularly encouraging for the outdoor activities of model engineering but will hopefully improve from now on.

This newsletter reports on the AGM held at Boscombe Down Aviation Museum. A central part of the AGM was the presentation of the Federation Trophy and Polly Model Engineering Prize reported in the following pages.

A date for your diaries is Saturday 31<sup>st</sup> August which will be the FMES Annual Rally, this year to be held at Nottingham Society of Model and Experimental Engineers. The article included gives an introduction to the competitions being held on that day and a comprehensive description of the range of facilities available to the Rally at Nottingham. We hope as many as possible will take advantage of them on that day.

In this issue I have included a piece written by Tony Roscoe and his interest in IC engines. Tony approached us on the FMES stand at the Midland show last year and kindly agreed to write for the newsletter. It would be very welcome if that prompts others, young or old, to submit something of their model engineering activities or experiences that we could print in future newsletters.

*Tony Lee*

## Chairman's Chat

Our hobby is not static, it never has been, Victorian and Edwardian model engineers would I'm sure recognise the skills that we use today that they used in their time. But they would probably be amazed at the equipment now available, the techniques we use and the range of models we build. We must not forget the old skills but at the same time be open to new ideas, skills, techniques, etc.

The FMES should be no exception to this and thus it continues to develop its website as the main means of communication with not just affiliated clubs and their members but with members of the public who may be wondering what model engineering is all about and/or considering taking up our hobby.

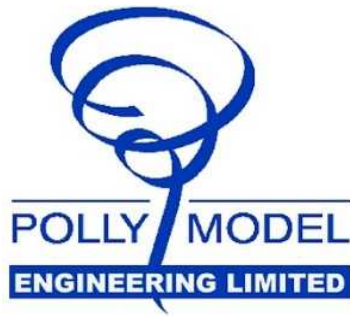
This does not mean the FMES has given up or intends to give up what could be viewed as an old skill, in other words attending exhibitions, rallies and visiting clubs, far from it, but it does mean that we will be continuing to develop and use the up to date technique of communicating via the website as well.

As I write this my own track at home is waterlogged and the boating pond in the centre of the track is full to overflowing and I'm sure that many club facilities are in a similar situation meaning that loco running, sailing, etc if not delayed is currently minimal. Let us hope that the weather improves and "normal service" can resume, so can I wish you a drier summer season and above all pleasure from our hobby.

*Bob Polley*



Carlisle Station  
Nov 2022



## *Federation Trophy & Polly Model Engineering Prize 2023 competition*

The recent AGM held at Boscombe Down Aviation Museum on 2<sup>nd</sup> March 2024 was, as usual, also the venue for awarding the annual prizes to Young Engineers who entered the competition.

Paul Naylor introduced the entrants and Matt and Julia Thomas from Polly Model Engineering Limited to accompany our Chairman Bob Polley in awarding the prizes.

The short list for this year's Federation Award included three nominees: James Knight of Hereford Society of Model Engineers, Kieran O'Sullivan of Southampton Society of Model Engineers and Spencer Priddy of Portsmouth Model Engineering Society.

Unfortunately, James was unable to be at the AGM, but we were delighted to welcome Kieran with his Mum, Katie and Spencer with his Mum, Julie and Dad, Stuart.

Members of the Federation Committee were unanimous in the decision to award the winners prize to James for his progress in Model Engineering over the last 4 years in developing his skills in the design and construction of his 0-4-0 locomotive and his wide-ranging contribution to his club activities. James will receive the 2024 Federation Trophy, £100 Federation cash prize, and a £100 Polly Model Engineering Ltd. voucher at a date to be arranged.



Bob, Matt and Julia presented Spencer with his Highly Commended certificate, £50 Polly Model Engineering Ltd. Voucher and £50 Federation cash prize.



Bob, Matt and Julia then presented Kieran with his Commended certificate, £40 Polly Model Engineering Ltd. voucher and £40 Federation cash prize.

We wish all our young engineers continued pleasure in their model engineering activities and every success in the future.

We were very pleased to confirm with Matt and Julia that Polly Model Engineering will continue their enthusiastic support for the competition in the future. Please watch our messages and website for details of this years competition!

We will publish more details about our prize winners in a later issue!

## *Report - Annual General Meeting 2024*

We held our AGM on Saturday 2<sup>nd</sup> March 2024. Continuing our theme of moving around the country and also finding a venue with potential attraction to our engineering minded visitors, this year we met at Boscombe Down Aviation Museum.



The Museum had two hangars full of interesting airplanes and artefacts from their history as a major military aircraft testing facility. It is run by volunteers and we were very pleased to support them. We hired their meeting room and were able to offer our registered visitors museum access for free as well as an enjoyable buffet and bottomless tea and coffee.

Our day's proceedings began at 12 noon with an introduction by our Chairman Bob Polley and then moving straight into the award to the young engineers who won prizes in our Polly Model Engineering and Federation competition. This is awarded to those young engineers under 24 years of age who are able to demonstrate the development of their skills in model engineering and their contribution to the hobby through club membership. We all want to see young people coming into the hobby, so make sure you support any young engineers you know of in your clubs to consider entering the competition. This is an online process

with entries judged from a submitted portfolio undersigned by a club mentor. The winners are announced elsewhere in this newsletter.



After lunch and time to chat, we asked visitors to contribute to a workshop, this year entitled 'Insurance'. We were very pleased to have Martin Levers from Walker Midgeley with us for this and Martin spent time 'visiting' people as the workshop progressed. A report on the workshop follows. There may be a follow up to this with a chance for those not there to contribute via email, so please watch for this request!

## *Insurance Workshop*

Insurance...this is a topic that nearly all clubs have to deal with and we were interested in hearing some initial views to help us in deciding what else we might try to do to help this along. We were very pleased to have Martin Levers from Walker Midgeley with us (fresh from becoming a grandfather for the first time!) and Martin spent the time 'visiting' the tables to hear your views and comments.

We asked some questions of the audience to try to get a broad spread of feedback: an hour is not really enough time to do the topic justice but it has given us some ideas for other workshops in due course.

The first question was to identify what risks clubs insured against, and also what are NOT insured!

As expected, there was a wide range of needs for cover, the top three being buildings, public liabilities and contents in that order. Others mentioned included specific named contents (for example, locos), club member accidents either in the club and/or at home and legal costs for club officials including boiler inspectors.

Risks not insured against were more diverse and did include some comments about assuming that the overall policy was sufficient (always read the small print!). This list included weather affected events, not all buildings, vandalism, members property on site, hacking and other website risks and some others.

Once you decide to insure something, the next question is how do you work out the amount to cover? The caution with this was that generally insurance will cover the amount that you identify in total BUT will only pay a claim in full if it is considered that you have not 'under insured' to reduce the premium!

Answers here included examples from highly managed methods to a more informal approach. For example, some landlords have contractual requirements for a specified level of Public Liability insurance, or seeking rebuilding costs of buildings, itemised valuation lists of main assets, asking section leaders in the club their views, checking values through internet searches and 'what feels about right'.

We had a 'head in the lions mouth' time for comments on FMES, Walker Midgeley (including the underwriters) and their performance. This was tempered to some extent by the good fortune that some clubs had had in not having to make claims to therefore test this part of the process. The comments included:

FMES could provide some advice/information on what should be insured, what the main risks might be, anonymous feedback on claims and causes and more boiler seminars.

Walker Midgeley could support the above, maintain/improve a rapid quick response to questions and advice, introduce 'No Claims Bonuses' and (naturally) seek ways to reduce premiums.

By and large this was a positive section with some supportive comments such as 'claims dealt with satisfactorily'.

There were a few questions prompted by this and the previous section that could be of interest, so here they are with some comments from us:

Q1. 'Who covers visitors to the club from other clubs?'

*Fmes comment: The answer to this is that it is up to each club to decide, but if your club wishes to provide a visitor with your cover, you need to adopt the person as a recorded member of your club for the visit (some clubs define 'day member' or similar for this purpose for example) using whatever competency tests you deem appropriate; otherwise, you expect them to provide cover that you consider adequate for your needs by giving evidence that their club provides the cover needed. The only additional note to this is that Public Liability cover usually includes a maximum claim covered and this does vary from club to club, so check that this meets your need too. Note that this question is a little too general for a brief answer, so please refer to the guidance note at <https://fmes.org.uk/insurance/> on the website, if you can log in, for more information.*

Q2. 'If someone goes to hospital after an accident, must an insurance form be completed?'

*Fmes comment: The process for reporting and recording 'incidents' should be followed (see RIDDOR process: <https://fmes.org.uk/health-and-safety/> on the website if you can log in) regarding actions under Health and Safety. If a person went to hospital as a precaution and was not treated this would*

*not be notifiable. The insurers will wish to know, however, about all potential claims, and of course a claim may arise from, for example, clothing damage where medical intervention is not applicable, or an incident where someone was not treated medically and therefore not notifiable but had later treatment outside the notice of the club as well as those treated at the time.*

Q3. 'If there are warning signs posted, does this remove club liability?'

*Fmes comment: The role of notices and other mitigations is to reduce the risk and hence the liability. If the club thinks that signage is an adequate response to an identified risk (or maybe it is the only practicable solution) then this will contribute to reducing the liability but it is unlikely to eliminate it. For example, what if a person cannot read, or the sign is dirty or not prominent? So, signage might assist in defending a case but it might not eliminate a liability.*

Q4. 'Should a train always have a guard? What is liability if there isn't one?'

*Fmes comment: Again, this is down to the requirements for safe operation defined as a result of the clubs own risk assessment. If the club has recognised the need for a guard for reasons of safety then there must always be one: however, again, it is very difficult to do something and eliminate a liability, risk mitigation is about reducing risk and hence reducing liability.*

These questions led nicely to the last section, which was to identify some basic methods of reducing risks under some of the categories of insurance. Time being limited, this was necessarily brief, but the interesting comments included the following across all risks:

Regular and recorded track and other important maintenance, use of PPE as stipulated in club rules, always two or more people present, staff training - with records - including drivers, visible operating procedures, 'fit to run' checks and records – eg of rolling stock etc., risk assessments for everything – safeguarding/terrorism etc. too, define/specify officers and boiler inspectors and that they are competent, use CCTV to support record keeping, have and keep club rules, ensure continuity of processes as people change, have a 'track marshall' or 'operating manager' etc as the person responsible as co-ordinator of activities during events, open days etc., have suitable training/reminders for members, check and maintain boiler certificates and insurance is relevant for visitors.

The discussions provided some good thoughts for further activities and information to support clubs: we may be sending out some questions for clubs to complete, the result of which may support advantageous changes to the insurance policy. If you or your club receives a request for this, we would greatly appreciate your completion and return of it as it may assist all clubs to get benefit.

We set out to hold these workshops at the AGM for general interest and they can produce some very useful feedback. If you wish to participate in future ones, please arrange to come to the AGM when it is publicised.

*Paul Naylor*



## A Model Engineer of IC Engines

*Note from the Editor: The following note has been written by Tony Roscoe. We met Tony at the Midland Model Engineering Show when he visited the FMES stand. Judging by the standard of his work he is a competent model engineer but so far has failed to find a society to join that he feels shares his enthusiasm for IC engines. I am grateful to him for the following description and pictures of some of his work and hope that he is able to find some like-minded model engineers in his locality.*

I started out making a couple of Stirling engines. I have always been interested in internal combustion engines. I worked with them for over 40 years.

The first one I made was a simple single cylinder engine from a book by Philip Duclos I think. I then took a big leap in complexity and built a four cylinder engine from plans by Dale Dietrich.



When I had completed this I saw the plans for the Snow engine in a magazine. Rather than build exactly as the plans, I complicated it further by building a double version of this engine as a number of the original engines are of this configuration. This engine is about 90% complete but I got sidelined by the Austin engine. I am planning to get back on it when the Austin engine is complete as I don't tend to work on more than one engine at a time.

About 7 years ago I purchased an Austin seven car. The engine is very basic and I thought I could probably make a model of it but it soon became obvious that making one is much more difficult than maintaining the engine in the car. I did a couple of back of a fag packet drawings and managed to actually build a 1/3 ish scale model.



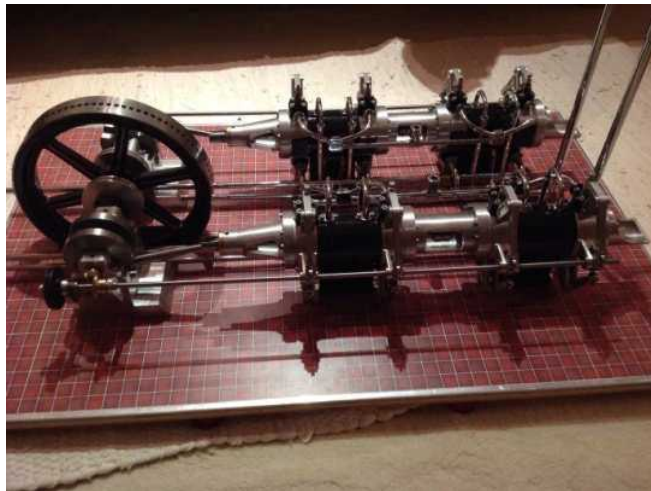
The model was mostly finished when I took early retirement from work. I got busy with other things and the engine was left for about 18 months. I kept looking at it, thinking I should try and get it running. I thought it would take a while to make it fun.

I set it up on a board and attached a toothed belt pulley on the flywheel end. This was connected to a sewing machine motor so I could spin it using the foot pedal leaving my hands free for adjustment. 20 minutes later it was running. It now needs finishing as a display.

I will send a few photo's of the build and photo's of my other engines.  
I have an old Raglan 5 inch lathe and an old Hays die master milling machine.

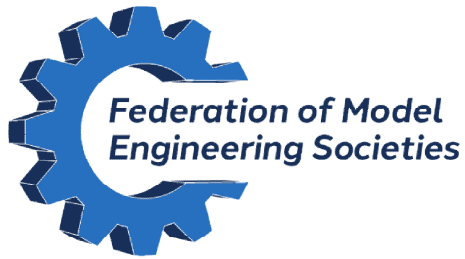
Below are a couple of links to the engines running and some photo's.

If you want any more info or pictures of the build please contact me.



<https://youtube.com/shorts/3ul7Z3comAI?si=xpz9G5xDiOSSz8V9>

<https://youtube.com/j0HWC7BhRc0?si=5GXJckzlarEvZyc2>



**Federation of Model Engineering Societies**  
**Annual Rally**  
**Saturday 31<sup>st</sup> August 2024**  
**Hosted by the**  
**Nottingham Society of Model and Experimental Engineers**

This year's Federation rally will be hosted by the Nottingham Society of Model and Experimental Engineers at their Ruddington club headquarters on Saturday 31<sup>st</sup> August 2024. Anyone attending the rally is also invited to stay for Public Running on Sunday 1<sup>st</sup> September, steam locomotives will need to have a spark arrestor fitted for Public Running. If bringing a steam locomotive, please remember to bring a current boiler certificate. Proof of club membership and insurance certificates are required for running models for both the rally and for Public Running.



The NSMEE boasts an impressive 3½ & 5-inch dual gauge raised track with a running length of approximately 2312 feet with gradients of up to 1 in 115. A lifting table enables easy unloading of locos directly onto the raised track steaming bays which are both in the open and under cover and have 12/24v dc power, and air supplied to them. A travelator allows locos to join the main line from the steaming bays.

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There is an equally impressive 7¼ inch gauge ground-level track of approximately 3168 Feet or 0.6 Mile. The ground-level track has sidings, passing loops, and one station with 3 platforms that are regularly used during busy times. Various gradients up to a maximum of 1 in 85 provide interesting experiences for visiting locomotives. To aid the unloading of 7¼ inch locomotives into the ground-

level steaming bays a lift is used, locomotives then move into a 3-track, undercover raised track steaming bay with power and air supplies, once steamed locomotives can access the main line using a yard and turntable.



Both sets of tracks come complete with tunnels, landscaping, an extensive signalling system, and easy unloading and loading of engines to enhance the experience of driving at the NSMEE. Covered steaming bays and stations provide shelter from both rain and the summer sun enhancing both the raised and ground-level tracks. The railways signalling system adds to the realism of a fully functioning railway while at the same time providing a high level of intrinsic safety to its visiting drivers and passengers.

A garden railway, gauge 1 and 16mm, is also available at the NSMEE for visitors to enjoy. Rally attendees are more than welcome to bring along battery-powered and steam locomotives to run.





It's not all about railways, the NSMEE encourages the inclusion of traction engines in a variety of scales, static engines, internal combustion, carriages, 3D printing, and steam road vehicles, examples of which are invited to the rally in August.

The annual FMES Rally Competition award will be presented to the owner of any model, be it:-

- a locomotive of any gauge up to 7¼" gauge,
- road vehicles of any type up to 4" scale,
- clocks which will be displayed indoors,
- static marine (no pool or pond to run on)
- static aircraft (no airfield to launch from)
- any type of stationary engine running or static
- dioramas which will be displayed indoors

Entries considered will need to have been built or significantly modified by its owner. Such qualifying models will be invited to enter the FMES Rally Competition which will be judged by a member of the FMES, NSMEE, and a suitably qualified model engineer. The competition rules and FAQs can be found at [FMES Autumn Rally At Nottingham 2024 | Federation Of Model Engineering Societies](#)

As stated in the opening paragraph of this article, insurance documents will be required for all models entered and boiler certificates if steam vehicles are to be run. Such qualifying models will be invited to enter the FMES Rally Competition which will be judged by a member of the FMES, NSMEE, and a suitably qualified model engineer.

Alongside the FMES Rally Competition, there will also be an opportunity for prototypical outline locomotives to be judged in line with the Australian Association of Live Steamers (AALS) rules. Entrants will need to be a working steam locomotive of a Commonwealth prototype in any gauge between 2½ inch and 7¼ inch. The AALS competition rules and FAQ's can be found at [AALS-Rules-and-FAQs.pdf \(fmes.org.uk\)](https://fmes.org.uk/AALS-Rules-and-FAQs.pdf)



Competition for the AALS Trophy shall be open to all members of Clubs and Societies affiliated to FMES and such members may nominate their locomotive for judging. If deemed appropriate, the Judges may include other locomotives present on the day but not nominated.



The NSMEE is based at Ruddington Fields approximately 1.5 miles from Ruddington, a large village 5 miles south of Nottingham. Ruddington Fields is also at the northern end of the Great Central Railway and is the home of the Nottingham Transport Heritage Centre where they not only preserve historic vehicles, but they also show them in action. Anyone

who visits the NSMEE for the FMES rally should be able to enjoy the variety of attractions at Ruddington along with the company of like-minded enthusiastic model engineering hobbyists.

On-site there is an independent café that provides breakfast and hot/cold food throughout the day. The NSMEE will provide refreshments during the rally in the way of tea/coffee sandwiches etc. Weather permitting a BBQ will be provided at the end of the day for anyone wishing to participate.

## FMES Committee

|                  |               |
|------------------|---------------|
| President        | Brent Hudson  |
| Vice President   | Mike Chrisp   |
| Vice President   | Ivan Hurst    |
| Chairman         | Bob Polley    |
| Secretary        | Peter Squire  |
| Treasurer        | David Goyder  |
| Vice Chairman    | Paul Naylor   |
| Boiler Registrar | David Mayall  |
| Safety Officer   | Robert Walker |

Support Team: Peter Harrison, Jim Hollom, Peter Kenington, Tony Lee, Melvyn O'Connell

### INSURANCE CLAIMS AND INCIDENTS

All claims and reports of incidents should be notified in the first instance to Walker Midgley  
FEDERATION INSURANCE BUSINESS Managed by Walker Midgley Insurance Ltd

Committee members' contact details can be found on the Federation MES web site

[www.fmes.org.uk](http://www.fmes.org.uk)

## Publications Available from FMES

The FMES publications listed below are available from our stand at rallies and exhibitions or by post from David Mayall. Please make contact first by phone or email to get combined postage costs when ordering more than one item. (See note below). The figures shown here are for single items only. Please make cheques payable to 'Federation MES' or use BACS to Sort Code 20-71-82 Acct 43755967.

|  | From Our Stand |
|--|----------------|
| Examination & Testing of Miniature Steam Boilers BTC 2018 - Orange Book<br>Vol 1: 3 bar litres to 1100 bar litres; Vol 2: under 3 bar litres; Vol 3: LPG tanks under 250 ml. | Free           |
| Boiler Test Certificates - Pad of 50 .....   | FREE*          |
| Written Scheme of Examination - Pad of 50 .....  | FREE*          |
| Small Boiler Test Certificate - Pad of 50 .....  | FREE*          |
| Boiler History Record Card - Pack of 10 .....  | £3.50          |
| Plastic wallets to hold certificates size A5 .....   | £0.75          |
| HS 2020 Passenger-carrying min railways 'Guidance' post included .....   | £4.00          |

David Mayall

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\* These publications are issued free of charge to fully paid up member Clubs and Societies ONLY, and are NOT available for general sale. For delivery by mail, the cost of postage and packing is £5.00, and must be borne by the Club/Society placing the order.

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