



SOUTHERN FEDERATION of MODEL ENGINEERING SOCIETIES

Formed from the Federation established in 1970 by Model Engineers for Model Engineers
A Company Limited by Guarantee in England and Wales No. 9002737
www.sfmes.co.uk

Polly Young Engineer nominations + AGM in March

Merry Christmas and a Happy New Year to All



With thanks to Tony Riley of WDMES

The loco built from Lego bricks was on show at Covent Garden at Christmas time a few years ago. It is about the size of the 2 ft gauge engines on the Talyllyn Railway so someone has plenty of Lego bricks.

Lots in this edition

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www.sfmes.co.uk

Up coming Exhibitions—Hope to see you there
Ally Pally 18 to 20 January 2019
MMEX (Oldham) 23 to 24 February
Doncaster 10 to 12 May 2019

Editor: David Goyder Tel: 023 8042 1201 newslettereditor@sfmes.co.uk

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

EDITORIAL

Here we are at the end of another year and all of us comment about the flying past of time, or the time flying past.

But what has the Southern Federation done for you this year. Yes I heard that!! Not in any order, we can at least record issuing a updated MELG boiler test code. Whether you like it or not, it is the process or system that keeps boiler examination in our hands and lets us administer the compliance in the hobby. Peter continues to drive the learning with the boiler seminars for members' testers, a joint effort with the Northern Association of Model Engineers.

The SF has helped us through the changes to the GDPR regime with guidance and advice. Some people will find it useful and while very few model engineering societies will be going to prison this year, at least you have the tools to head off fines and the simple inconvenience should someone make a complaint. You can manage the situation.

The SF has been working along with our brethren in the hobby, on the replacement for the old HS 216 guidance on passenger carrying railways. This is relevant to those societies with railway operations as people tend to fall off at the wrong times and a tight

regime to handle the situation along with established risk assessments, et al, will help save your bacon! See the Wolverhampton Model mentioned later in the newsletter.

The poor old computer system that we all love to hate is going through a rethink with our new committee member Paul Naylor. This highlights the need for new talent to help the Federation. Some of us are getting old (and decrepit) so please consider offering to help. There are two roles, a board member (enough to scare any one off) and a sort of helper role where one can just help, there is lots to do.

One does not end this year without thanking Andy and Jayne (Polly Engineering) for their tremendous support for the young engineer programme. This is a long standing relationship and may it flourish more. And do not forget the Australia Trophy, see our friend Barry Glover a few pages on, awarded the Australia Medal.

Perhaps the Southern Federation has been worth it this year, its success depends on you so join in.

So may I thank all of you who have helped provide lovely material for the newsletters, it has been fun but in decrepitude, this is my last!

David Gwyder, Newsletter Editor

CHAIRMAN'S CHAT

In this bumper issue you will find articles on maritime matters and the model wheelwright society as well as the usual miniature railway orientated articles and this goes some way to showing how broad a church model engineering is. After all we should be willing and able to learn about (and learn from) areas of model engineering that we ourselves are not involved in, the possibility of learning and using the skills and ideas of our fellow model engineers must be

boundless.

It's that time of year again when some model engineers will be wondering where they can obtain a stocking to hang up large enough to take that new bit of equipment they have asked Santa for as an Xmas present. So to conclude can I wish you all a Merry Christmas and a successful model engineering New Year.

Bob Polley Chairman

Southern Federation of Model Engineering Societies

Seminars for Boiler Inspectors

For the past four years, there has been a Boiler Inspectors Seminar in the spring and autumn.

Jointly organised and sponsored by Southern Federation of Model Engineering Societies and Northern Association of Model Engineers (NAME) the seminars have visited many locations and 450+ boiler inspectors and would-be boiler inspectors have benefitted from the opportunity.

We are planning two seminars in 2019 – Manchester/ Blackburn area and South Wales – venues to be confirmed.

Those who are interested should contact Peter Squire. He can be contacted by email secretary@sfmes.co.uk, or phone 01327-342167.

Future locations are influenced by delegate interest so it would be wise to indicate your intended interest to Peter in due course.

In equal importance to the location is to find a club with sufficient premises and a desire to host future seminars, North West/ South Wales in 2019.

Peter Squire

Secretary and Boiler Seminars

Annual General Meeting 2019

Our host is Wolverhampton Model Engineering Society

In March 2019, our AGM hosts will be the Wolverhampton Society of Model Engineers. They are located in Baggeridge Country Park which gets its name from the bricks works that used to be there. This is on the A463 between Wombourne and Sedgley, signposted from the A449 and 4 miles from Wolverhampton town centre.

Their story is a delight and shows what can be done when local authorities, ME Societies and others work together. First of all they share a specially built local community centre with the country park, or is it the other way around. Whatever, they live in the building shown to the right. Their facilities are magnificent, work shops, overhead hoists and splendid equipment. You will have to come to the AGM to discover the wealth of facilities.

The Society had 'sort of squatted' in an old building on site but when the brickworks closed and the area redeveloped they suggested to the developers and the local District council that it would be more economic to build one new building and share it. There would be savings with installing utilities and services. And also the

spirit of cooperation carries forward with the club assisting the park rangers, say with a bit of welding and the rangers assist the society when they need to borrow a

digger. This society is an excellent example of what one can do in this modern age by working with various parties to create an inspired solution.

We are promised an "**AGM to Remember**", One of their members plans to provide 'some hands on' instruction on welding, yes, you can have a go even if you have never welded before, what fun!

And in a departure from the past, a buffet lunch will be provided by the Southern Fed, no charge!

The exact date is yet to be confirmed as Wolverhampton need to coordinate with the park rangers, the café staff to firm up the date. We can say "early March" for sure. Peter Squire, SF Secretary will get the date to you as soon as it is fixed. Do let him know if you plan to attend, helps with lunch planning.



Annual Subscription Renewals

This is the last newsletter before the annual Affiliation renewal fee needs to be paid - the due date is no later than 1 March 2019. Unless you have changed the size of your membership, the amount will be the same as last year and will use the same reference code and banking details.

This year we are seeking to cut down our administrative effort for the renewal process as it can be very time consuming. If you have not done so previously, please may we ask that you switch to paying by BACS or by PayPal if you already have a PayPal account. If you do not have means for electronic payment, please make a cash deposit at your local bank using the details provided in your renewal notice making sure the bank makes a record of the payment reference.

By the end of January, you will be sent by email a renewal notice confirming the amount due and the reference number for the payment. If your Society's primary contact is not on email, please consider asking another person to take that role. You can change this online by visiting the details page for your society. You can also use your society page to change the size of your membership (affects your fee) and to get a reminder of your renewal notice. We shall not be

issuing renewal notices by surface mail.

If you have not received your renewal notice by 1 February please check your spam folder. You may also create a test email by visiting your personal page and choosing to send an email to yourself. This will normally be received in an hour but sometimes may be longer as we may have to throttle sending at times to comply with web server sending policies for emails.

You will not need to contact us by mail, email or phone if you can make payment one of these ways, and your doing so will assist us greatly. If you need an invoice for your records, there will be instructions in your payment confirmation for how you can create one.

This year David Goyder has retired as Membership Secretary and we all wish to offer our sincere thanks for the role he has performed. The role is passing to Dr Paul Naylor, a new member of our committee, and the transition will occur in the new year. In the meantime I will deal with any support you may need, and as Treasurer I will continue to ensure proper record of your payments for Affiliation

Dr. Martin W Baker Hon. Treasurer

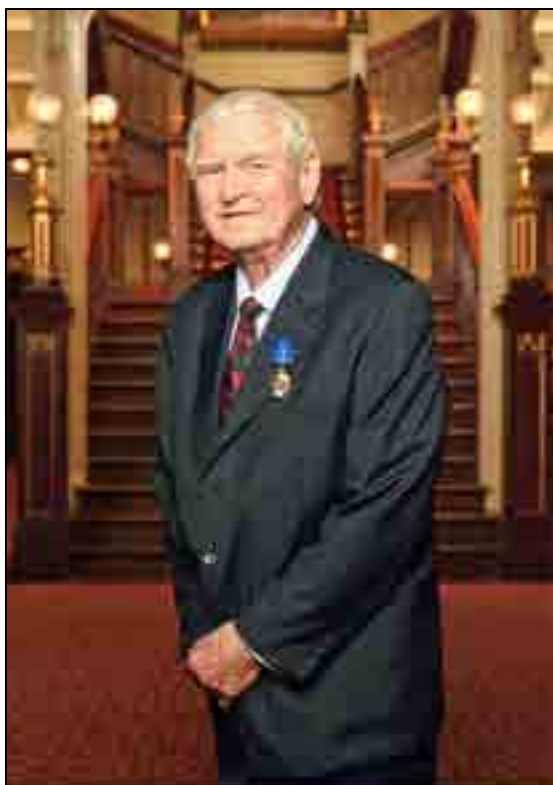
Southern Federation of Model Engineering Societies

Barry Glover OAM

The Southern Federation joins AME (Australian Model Engineering) to sincerely congratulate Barry Glover, founder and member of the Illawarra Live Steamers club at Wollongong NSW who has been awarded a medal of the Order of Australia (OAM) in the 2018 Queens Birthday Honours List.

The Citation states: For service to the veterans and their families with the Returned and Services League (RSL), NSW Branch, which includes past State Councillor, President of the Southern Metropolitan Council, Life Member and Meritorious Service Medal.

Chairman of the Illawarra Diggers Aged and Community Care Home, President of Kogarah



RSL Sub Branch and Director of the Board of Management 11 years.

Member of the Royal Artillery Association and President, 18 LAA Association for 11 years.

President of the Australian Association of Live Steamers for 26 years. Insurance Officer, Chairman of the Australian Miniature Boiler Safety Committee. Assisted in formation of AALS especially with setting up miniature boiler codes from the early 1960s. Various sub committees to official setting up of Association in 1975.

Life Member of Illawarra Live Steamers and Australian Association of Live Steamers. Held all Executive positions over some 50 years.

Barry is the driving force behind the annual presentation of exchange trophies for excellence in our hobby. While we present the Australian Association of Live Steamers Trophy in the UK at a rally hosted by a member society, in Australia, the AALS present the Southern Federation of Model Engineering Societies Great Britain Award to a deserving recipient in Australia. The 2017 winner of the Southern Federation Great Britain Award was Geradus Mol of the Canberra Sub-branch of the Model Engineers and Live Steamers' Association Maryborough Inc for his Queensland Railways PBI5. But there is more to Barry than live steaming.



Winner of 2017 Southern Federation of Model Engineering Societies Great Britain Award to Geradus Mol

Barry Glover went to war to serve his country but it's his work fighting the nation's bureaucracy that has caused him to be honoured with a Medal of the Order of Australia (OAM).

Born in Coledale, he joined the army in the 1960s and trained as an anti-aircraft gunner, serving in South Vietnam.

But with 42 years in the RSL, it's fair to say Mr Glover, who left the army with the rank of Major, has spent more time fighting for veterans after they've returned home, than he spent fighting the North Vietnamese Army.

"I came back from Vietnam tight at the end – I only had a short time over there," he said. "In the Vietnam war there wasn't any need for my battery to be shooting down planes.

Barry Glover OAM (cont'd)

"The Yanks were bombing everything from Hanoi down the Ho Chi Minh trail all the way up to Cambodia. There was never any role for us."

He started at the 9.2-inch gun battery in Wollongong, before transferring to a battery on the Sydney heads – "the best spot in the world".

Over years of training he had visited some of the most glorious parts of the coast – and lit them up with target practice.

"We'd practice at Wattamolla, we used to do a lot of it until they closed that down. We used to fire them off Bass Point, until they closed that down, too much shipping traffic. We'd go down to Jervis Bay – it was a holiday camp quite frankly."

"It was all good fun ... but it wasn't."

After Vietnam he was posted at Kogarah, and when he left the army it was that sub-branch of the RSL he joined. He is its president to this day.

Before long he was sitting on committees and being asked to take leadership positions – so he did, serving 14 years as a district of state councillor, and eventually being made a life member.

"In those days there were about 3000 members of the Kogarah sub branch," he said. "Now I'm down to 64."

"I'd always been interested in the RSL. Look at this PTSD and shell shock – I read a fair bit of military history, it occurred back in the late 1800s but it wasn't known then what it was."

"I've always fought to try and get my soldiers – that's what I call them; when I was state president I had about 6000 members. I learned where to go and who to see".

"I did everything I could to try and help people put in for their claims, and do whatever I could."

Taken from the Illawarra Mercury

-
- *The phrase "rule of thumb" is derived from an old English law which stated that you couldn't beat your wife with anything wider than your thumb.*
 - *A raisin dropped in a glass of fresh champagne will bounce up and down continuously from the bottom of the glass to the top.*
-

"Terrible Terrier" thanks to James Duncan, North Wilts Model Engineering Society

I often get calls from people who have bought locos either privately or from a dealer that aren't what they seemed to be.

This terrier is from a dealer "complete with hydraulic and steam certificates and ready to run. But the 'to do' list soon escalated . . .

The owner took it to his local track to steam it, filled the boiler and tanks with water only to find water pouring out of a pipe from one tank to the other tank, not surprising as it was just pushed in with some glue smeared around it to seal it!! And whilst investigating the leak, found some loose valve gear components.

It came to me to have that fixed and the expansion link suspension pin brackets bolted on properly but as is so often the way with these things whilst stripping it down to fix these two simple jobs properly I found a whole array of things, here are some of the more serious ones:

- No sealant in the smoke box
- Main steam pipe and blower pipe finger tight
- Smoke box not even bolted down
- Loose crank pin
- Cross head pump feed pipe only 1/8" od
- Cross head gland leaked so badly it didn't put anything in the boiler



- Soft soldered live steam pipes in the cab leaking
- Water gauge bottom nut 1/8" below the crown
- Safety valve set 10 psi below the red line to allow it to pass the accumulation test
- Half the bolts missing from the buffer beams

Now for the good news, the repairs only took a day and when I finally got to steaming it on the rolling road it ran an absolute treat and everything works great. I get the feeling who ever made it didn't finish it off as there's some rather crude finishing going on but now it's good to go and be enjoyed!

Seawork for the Marine Model Engineer

This annual show is free to visitors and is a tremendous source of information for the marine model engineer. When collecting resources to show in this newsletter, your editor was offered copies of original line drawings, technical details and possibly all that a marine model engineer could wish for. You just get in touch!

“Seawork is a 'one stop shop' for buyers, providing access to the commercial marine and workboat markets. It is the largest European commercial marine exhibition held at the prestigious Mayflower Park venue in Southampton, SO14 2AQ, United Kingdom.

For over 21 years Seawork has offered a unique combination of undercover exhibition space, open air demonstrations and floating displays.

The exhibition encompasses:

- 18,000m² of undercover space spread over two purpose built exhibition halls
- Purpose built pontoons for more than 70 vessels and floating exhibits.
- Demonstrations out on the water
- Quayside area for trailers, large exhibits and outdoor demonstrations
- Excellent conference and meeting facilities

Here are four good reasons to attend: ([Suitably adjusted for the Model Engineer](#))

1. Walk away with a head full of new ideas and concepts to help you in your job. [Hobby](#).
2. See in-depth examples of how money can be saved in workboat operations. Our packed programme of conferences, events, demos and competitions provide a productive background buzz throughout Seawork's fully occupied exhibition and display areas. [Expands one's horizons!](#)
3. Make new contacts [and obtain plans and other resources](#). - Seawork attracts over 610 exhibitors and 7600 visitors from all over the world.
4. Have a great, [free](#), day out - there is no other event like it! It is the largest international commercial maritime exhibition and business forum held at the prestigious Mayflower Park venue in Southampton. Registration for Seawork 2019 will open in February 2019

2019 DATES AND TIMES

0930 - 1730 Tuesday 11 June 2019

0930 - 1730 Wednesday 12 June 2019

0930 - 1700 Thursday 13 June 2019

Some examples of what Seawork 2018 had to offer.

HULL VANE

ENERGY SAVING, IMPROVED SEAKEEPING

The Hull Vane® is a patented fixed foil located below the stern of a ship, for fuel saving and improved seakeeping. The Hull Vane influences the stern wave pattern and creates hydrodynamic lift, which is partially oriented forward. This results in a reduction in of the ship's resistance. The performance of the Hull Vane® depends on the ship's length, speed and hull shape in the aft sections, and ranges from 5 to 15% for suitable ships. In specific cases, savings up to 20% are possible.



The Hull Vane® was invented by Dr. Ir. Pieter van Oossanen and is protected by patents in all major shipbuilding countries. Established by [Van Oossanen](#), a household name in ship optimisation, Hull Vane B.V. is operating as an independent company since 2014.

Seawork for the Marine Model Engineer (2)

A Damen Shoalbuster 2609 “Rosie”

Of all the new tugs reported in Maritime Journal it is the Damen Shoalbuster that consistently attracts attention. The reason is that since the first prototype was completed in 1995 the Shoalbuster has become an increasingly popular design that continues to evolve, often in spectacular fashion.

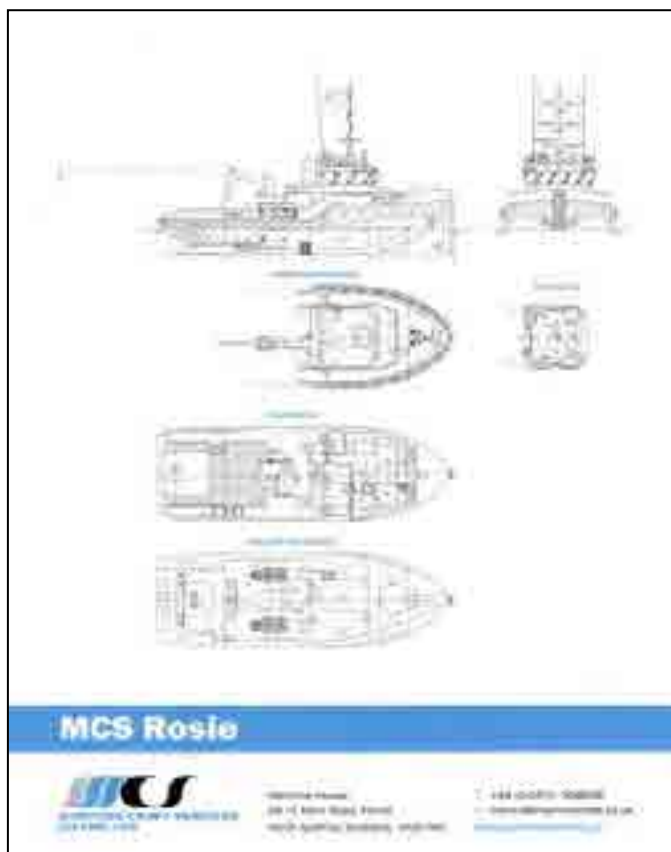


This report reinforces that view. Over a period of just a few months several examples of this popular Damen product have been delivered to their owners and each is different and noteworthy.

The Shoalbuster was originally designed and developed as a joint project between Damen Marine Services and their neighbours, the Damen Shipyard at Hardinxveld in the Netherlands. The primary aim was to produce a vessel that would enable marine contractors to operate on site in shallow waters, carry out a wide range of lifting, anchor handling and transportation services, yet also have a significant coastal towing capability. Since the introduction of the first vessel ‘Shoalbuster’, designated the Shoalbuster 2309, development has continued unabated and to date approximately 35 vessels have been built in a variety of sizes (from 19m to 32m in length) and configurations. Throughout the life of the Shoalbuster project the design process has been driven by the needs of Damen’s various clients in the dredging and marine

civil engineering business.

A real breakthrough came in 2004 with the first three tugs of a new Shoalbuster type, the 2609. Although all of the major features of the original shallow draft design were retained, the new tug had a raised foredeck, a redesigned superstructure and more power, all of which were required to enable the vessels to comply with Bureau Veritas classification and meet Dutch Shipping Inspectorate rules for ‘Unrestricted’ and GMDSS Area 3 operation. These compliances enabled the Shoalbuster 2609 to carry out all of the duties associated with a shallow draft tug but also to undertake deep sea towage operations with contracting plant. Although Shoalbusters of the original design regularly carry out coastal and short sea operations, restrictions placed on maximum distances (in some cases 60 nm) from a safe haven were no longer acceptable to some operators. Named *Amstelstroom*, *Tarka* and *Camperduin*, this first trio built to the 2609 design led to several further orders and the continuing development of seagoing variants.



Damen Fast Crew Supplier 2610



Performance

Sprint Speed 26 knots

Cruising Speed 22 knots

Accommodation

Heated and air conditioned passenger salon with suspension seats for 12 persons with work tables and UK & Euro 230v socket outlets. Galley are with all amenities and a heads compartment with shower. Crew sleeping accommodation in 3 x twin cabins
Main Engines—2 x Caterpillar C32 TTA.

Seawork for the Marine Model Engineer (3)

Eurojack 3923, purpose built monohull jack up barge

The NP 497, an EuroJack-Up 3923, is a new multi-purpose jack-up design. With a variable deck load of at least 750 tons, a moonpool of 12x4,7 meter, accommodation for max 12 persons and optional DP2, this EuroJack-Up can be used for a large variety of operations in coastal and offshore regions up to 40 meters water depth.



The first project for the Eurojack 3923 is at Hinkley Point C to construct a new 500 m marine jetty that will be used to bring materials ashore for the construction of the power station.



*The locos. Top left—Stratford (London). Top right
Modane in France, the original entrance to the Frejus tunnel
somewhere in Russia sent by a twitcher friend. Bottom left,
Middle, Syracuse, Sicily, bottom right Trento
to Italy.*

Nauticraft Marine Suspension Technology



Marine Suspension Technology

Nauti-Craft Marine Technology separates the vessel's hulls from the deck and superstructure via a 'passive reactive' interlinked hydraulic system which provides increased levels of ride comfort, control and stability. Whole body vibration (determined according to ISO 2631-1) is reduced by up to 75% compared to a conventional vessel. This provides the highest levels of protection against personnel injury, long term health effects and operational fatigue.

The Nauti-Craft deck attitude control system enables the deck to remain horizontal in rough seas. This system maintains a stable deck to facilitate a wide variety of marine operations including enhanced boat to structure or boat to boat transfers, accepting containers, crane operations, firing platforms, or any form of marine operations where a stable deck would be an advantage.

Seawork for the Marine Model Engineer (4)

Marine Model Engineers use radio (remote) control,

... and so a tug in the world's first remote commercial tow

The first commercial voyage of a remote-controlled tug took place in June 2018, with the vessel then heading to Marseille for *ITS 2018* from 25 to 29 June.

Four years after the innovative *Giano* tug concept was unveiled at ITS 2014 Hamburg, the compact first-of-its-type is preparing to tow a cargo-carrying, 10,000 dwt ocean barge on a 400 nm voyage between ports. A full crew complement will be on board the tug, but much of the vessel's operation en route will be carried out from an office in Naples.

For chief designer Dr Ugo Savona, the voyage will be the culmination of the three-phase project to bring his design to reality and the market as a ship-handling and escort tug he believes is more stable and more manoeuvrable than anything else that is currently operating. The first phase saw *Giano* built and, in 2015, take to the water. Phase two has seen extensive testing and a succession of client tug masters, skippers and pilots spending time behind the controls - quickly, according to Savona, getting to grips with its operational simplicity.

The remote-controlled commercial voyage will be the third phase, relying on what Savona refers to as 'small data' direct machine-to-machine connectivity by internet, with enhanced cyber security, rather than via



third-party servers.

Another feature built into the 24m design is in-line twin thrusters at the bow and stern - albeit an idea previously used on a tug in 1874. This maximises the tug's stability and manoeuvrability, allowing full bollard pull in any direction and athwartship bollard pull at 100 per cent power.

The result is a tug invulnerable to girting, says Savona, and one that can achieve 70 tonnes of bollard pull on all towing points with just 10 degrees of list. The tug has also been certified by Lloyd's Register as being in compliance with the new, revised IMO code covering impact stability passed at MSC 97 and coming into force on 1 January 2020.

With thanks to International Tug & OSV

... And in conclusion, marine model engineers, sail, sail safely! Container ship waiting to be pulled off!



Coal, some reflections by Julian Atkins

Anthracite is fine. it has the highest heat content when burnt compared to other coal, but requires a harder blast on the fire (or a touch of the loco steam blower, unless the loco is being worked hard) and can be difficult to light if you don't have a powerful electric blower fan and aren't used to it. UK anthracite comes from western edge of the coal seams in south wales and is pretty consistent in its quality. some seams mined were of 'soft anthracite' more akin to welsh steam coal semi bituminous coal - you might get this depending how old the stock of coal is from which ever merchant you bought it.

Anthracite wasn't used in full size due to it being the most expensive of coal and supply being insufficient for the railway's demands in years gone by.

Welsh steam coal is only available these days from the Ffros y Fran opencast site near Merthyr Tydfil, and is of variable quality depending on what bit of the site is being worked on at any one time. proper welsh steam coal is relatively light in weight, and friable, easy broken by hand, irregular, and shiny. I suppose there is a bit of an art to firing with it and different techniques are required for different types of firebox.

I've got about 3/4 ton of anthracite beans at home but don't use it on my locos as I find the smell and smoke really chokes me up badly after a day's steam up. it gets at the back of your throat and most people find it quite unpleasant.

Steam coal proper hasn't been mined on a large commercial basis in south wales since about 1991/2.

I would have said (from what my club obtained in the last few years) that the Signal Fuels stuff was soft anthracite (probably from Tower Colliery before it closed) rather than proper welsh steam coal. I wasn't that impressed with it!

Occasionally one of the private drift mines gets to a seam of good welsh steam coal and word goes around and it quickly gets 'earmarked' and purchased by those clubs in the know. However, this doesn't happen very often.

When you've used the proper stuff nothing else compares! Luckily, I've a shed full of the stuff!

Cheers,
Julian

Model Engineering and Hobbies exhibition 23rd and 24th March 2019 at The Michael Herbert Hall, South Street, Wilton SP2 0JS

This is the hospital that handled the 'Novichok' victims

Open Saturday and Sunday 10 am to 5 pm.
Free parking next to the hall. Disabled
access. Light refreshments are available with
home made cakes. The entrance fee will be £4.

After the success of the exhibitions held in 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, I decided it was worth organising another event at Wilton next year. All profits from all the show were and are donated to the stars appeal at Salisbury District hospital. We have made several thousands of pounds over the years.

Once again we are hoping to create the same high standard of exhibits as this is an invitation only event.

Hundreds of modellers across the South of England have come and supported us over the years. Trade stands associated with our hobby are always present. The 2 day event includes live steam locomotives, traction and road locos, marine modelling, horse drawn vehicles, fairground equipment (some of the finest in the country). In the last 8 events there can't be many areas of model engineering we have not invited.

All enquires can be made to Peter Parrish 01980 610346. E-mail p.parrish324@btinternet.com

Never let the papers die!



Why is an Atlantic loco called an Atlantic?

In 1887 the New York, Providence & Boston added a trailing axle to a 4-4-0 in order to spread its weight over more axles. That same year Hinkley built an experimental centre-cab 4-4-2. The AT&SF bought a similar experimental locomotive.

The ACL (Atlantic Coast Line) was interested in a locomotive with more steaming capacity than their 4-4-0s. In 1894 Baldwin designed a conventional 4-4-2 locomotive for the ACL and named it after them. Other railroads bought and called these locomotives "Atlantics". However, the Brooks Locomotive

Company gave the name "Chautauqua" to this wheel arrangement. Also, Chicago, Milwaukee, St. Paul & Pacific (The Milwaukee Road) used the name "Milwaukee" for this wheel arrangement.

With 178, the AT&SF owned the most of this wheel arrangement. However, the 4-4-2 was probably made most famous by the Milwaukee Road when they built four very large streamlined versions of this locomotive to pull the *Hiawatha*. These locomotives were the first built streamlined and were designed to cruise at 100 mph.

Why is a Mikado loco called a Mikado?

The Mikado type was the workhorse steam locomotive for the railroad industry during the 20th century and prior to the switch to diesel-electric technology. The design is often regarded as the classic American steam locomotive for this very reason. The 2-8-2 design (a blend of the 2-8-0 and 2-6-2 wheel arrangements) offered just the right amount of power, pull, and speed to be used for about any type of service, from passenger trains to freights moving over stiff grades. Additionally, they were built to both standard as well as narrow-gauge applications. While the wheel arrangement had its origins in Japan the World War II conflict resulted in a number of railroads deciding to rename their fleets to remove any association with that country. With so many Mikados manufactured over the years numerous examples remain preserved today and several of those are still operational.

The history of the Mikado type in reference to simply the wheel arrangement itself has quite an interesting history. The very first locomotive ever operated as a 2-8-2 design is said to have been an experimental built by the Lehigh Valley. The railroad took one of its 2-10-



0 Camelbacks and cut it down into a 2-8-2 with the belief that it would reduce flange wear on the rear set of drivers. While the LV went on to become one of the early pioneers of the 2-8-2 the wheel arrangement was mostly shelved within the U.S. railroad industry for the following two decades. Ten years after the LV's first experiment Baldwin Locomotive Works built a fleet of narrow-gauge (three-foot, six-inch) 2-8-2s for the Japan Railways in 1893. Hence, Mikado!

LANYON VALLEY STEAM and ELECTRIC TRAMWAY

A must for any Tram enthusiast



There was a young man who said "Damn!
I perceive with regret that I am
But a creature that moves
In predestinate grooves
I'm not even a bus, I'm a tram."

<http://trevs-tramway.blogspot.com.au/>

THE GUILD OF MODEL WHEELWRIGHTS

The Guild of Model Wheelwrights is no more. They announced this news at the Midland Model Engineering exhibition this autumn. The reason is simple, no member was willing to take on the key roles of Chair, Treasurer and Secretary. Not all is lost for those who love this part of the hobby as the Guild are being extremely kind and helpful. Most of the key information remains on their website.

All 70 editions of their inhouse magazine will be available on CD for £10.00.

All plans are being made available to all comers and the Guild's librarian, John Castle is doing this. There are a lot of plans to be found here http://www.guildofmodelwheelwrights.org/GOMW_Library_plans.htm

Perhaps the changing times are telling us that making old horse drawn waggons is not an area of the hobby that grips the average person but it seems incongruous that the Model Engineer of 20 July to 2 August No 4591 has Zahra Webb at 11 years old motorising her duck and the waggon makers fail. Can one suggest a way to link up these two branches of the hobby?

Anyway, on to some of the marvellous products of the Guild, one of our favourites has to be the "British Napoleonic Spare Wheel Carriage c1810". Made by John Castle at 1/8th scale.



Gruson's Gun Carriage c 1884 by B. P. Young



*Mark II Royal Veterinary Corps Horse Ambulance
Model 1/8th by B Simpson*



Mobile Butcher's Shop by B Simpson



**SOUTHERN FEDERATION
of
MODEL ENGINEERING SOCIETIES**

Formed from the Federation established in 1978 by Model Engineers for Model Engineers
A Company Limited by Guarantee in England and Wales No. 9062737
www.sfmes.co.uk



**Have you a young member
in your Club or Society
eligible for the**

**SOUTHERN FEDERATION
TROPHY &
POLLY MODEL ENGINEERING
PRIZE?**

The Nominee shall be no more than 24 years of age at the date of nomination.

Nomination shall be made by a Club or Society affiliated to the Southern Federation of Model Engineering Societies and the Nominee shall be an active member of that Club or Society.

The Nominee shall have demonstrated the acquisition of skills in the use of appropriate materials and metalworking hand tools and / or machinery / equipment by producing a model, other mechanical item or piece of workshop tooling associated with the hobby of model engineering, complete or part built, constructed using metalworking hand tools or equipment normally found in the home, school, Club or Society workshop.

Supervisory input and items built as apprentice pieces in a training environment are acceptable. The work shall be the nominee's own but normally acceptable commercial fittings, fixings, fastenings or other components may be used.

Visit www.sfmes.co.uk for further information and an entry form



SOUTHERN FEDERATION of MODEL ENGINEERING SOCIETIES

*Formed from the Federation established in 1970 by Model Engineers for Model Engineers
A Company Limited by Guarantee in England and Wales No. 9002737
www.sfmes.co.uk*



SOUTHERN FEDERATION TROPHY & POLLY MODEL ENGINEERING PRIZE

The committee of the Southern Federation of Model Engineering Societies acknowledges with gratitude the generous support provided by Jayne & Andy Clark of Polly Model Engineering Limited in promoting this award.

This Award is made with the aim of encouraging young persons to participate in the hobby of model engineering with particular emphasis on acquiring the relevant skills and use of appropriate materials.

While pursuance of excellence by those in their late teens and early twenties should be promoted, work by youngsters taking their first steps in the hobby of model engineering is also encouraged. Participation in club/society activities is also important.

Nominations are judged by the committee of the Southern Federation of Model Engineering Societies and approved by the proprietors of Polly Model Engineering Limited. Their decision is final.

The winner will receive a prize donated by the proprietors of Polly Model Engineering Limited and a suitably inscribed Southern Federation Trophy, which shall be retained.

The award will normally be presented at an Annual General Meeting of the Southern Federation of Model Engineering Societies at which representatives of the winner's family and Club or Society are welcome to attend.

Completed nomination forms must be sent to the SFMES Secretary, 18 Wakefield Way, Nether Heyford, Northampton NN7 3LU to arrive no later than 19 January 2016

RULES

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2. Nomination shall be made by a Club or Society affiliated to the Southern Federation of Model Engineering Societies and the Nominee shall be an active member of that Club or Society.
3. The Nominee shall have demonstrated the acquisition of skills in the use of appropriate materials and metalworking hand tools and/or machinery/equipment by producing a model, other mechanical item or piece of workshop tooling associated with the hobby of model engineering, complete or part built, constructed using metalworking hand tools or equipment normally found in the home, school, Club or Society workshop. Supervisory input and items built as apprentice pieces in a training environment are acceptable. The work shall be the nominee's own but normally acceptable commercial fittings, fixings, fastenings or other components may be used.

NOMINATION

Please supply a summary of the Nominee's relevant projects completed and/or in hand.

Please supply photographic evidence and state to what extent the Nominee's work has been completed unaided or produced under guidance - please note that supervision is acceptable.

Please supply a summary of the Nominee's involvement in Club or Society activities.

NOMINEE

Club or Society:

Signature:

Name (please print):

Date of nomination:

Age at date of nomination:

Home address:

Telephone:

Email:

SPONSOR

Club or Society:

Signature:

Name (please print):

Position held in Club or Society:

Home address:

Telephone:

Email:

A couple of items from the Midland Exhibition

We find that the exhibits at model engineering exhibitions are usually described well in the Model Engineering press and trying to do the same in the Federation newsletter usually makes us the poor cousin to the professional maga-

zines we enjoy.

On the other hand, one occasionally sees something a little different from the norm and might even be one of our favourites. So here is a small selection of exhibits that stood out for this paper at least.



Caledonian Railway 60 Class built by Richard Donovan of the Hereford Society of Model Engineers GI

The Caledonian Railway 60 Class were 4-6-0 passenger engines designed by William Pickersgill and introduced in 1916. Six were built by the Caledonian Railway at its own St Rollox works in 1916-17, and all of them passed into LMS ownership in 1923. A further twenty locomotives of a slightly modified design were built by the LMS under the auspices of George Hughes in the period 1925-1926.

The 60 Class were rugged and free steaming, but were unsophisticated and of lethargic performance for their size. Although classified as passenger locomotives by the LMS, latterly they spent much of their time on goods trains and acquired the nickname Greybacks, either in reference to their long and grimy boilers or possibly as an insult from former Glasgow and South Western Railway enginem^{en} (‘greyback’ being an old term for louse). Withdrawals began in 1944 but twenty three passed into British Railways ownership in 1948. The last locomotives were withdrawn from service in 1953, and all were scrapped.



LNWR coaches were beautiful and grand reflecting the ‘Golden Age’ of rail travel, no wonder these cars were the basis of the Royal Train as one can see at NRM York. Builder not identified.

Committee Member's role changes and Plans for the web site

In March 2018 we welcomed Dr Paul Naylor to the SF Committee. He has been examining the SF website with a view to making it more user friendly and meaningful to member societies. He is now taking on the Membership Secretary's role in the spring of 2019 and we are sure he will serve the member societies admirably.



Plans for the web site

In this day and age, computer systems and especially the internet offer so many advantages that any organisation cannot afford not to participate. A web site offers Societies the ability to reach a far larger audience than hitherto, and whether you want to attract people to ride on your railway or visit your event, or to attract new members....or just 'have a presence'.....you will find a web site a really good support mechanism. Unfortunately, you will perhaps also find it a bit of a burden too since web sites need continual maintenance and updating of information (just like notice boards etc.)!

The Southern Federation, as a national organisation, has a great opportunity to exploit the use of the web for more than just a notice board. If designed appropriately, it can allow all sorts of functionality for future support including membership transactions, sales, announcements, support, advice, promotion of the hobby and much more. You may have visited the web site. It has been in development for ten years and has an impressive functionality, but this is tempered with the need to make it more intuitive and 'user friendly'. To get to the present evolution has required much midnight oil to be burned by Martin Baker especially and some others in support and this is a great credit to the team.

Over the last decade a considerable amount of material and functionality have been added to our website. The consequence of the piecemeal additions over time is that *grew like Topsy*. We need to reassess what we have and look for ways at making this resource easier to use.

We are now entering another phase though: the development of the 'front end' visible to all visitors for

whatever reason. To get to this brave new world, we need volunteers with some computer/web site development experience and ability to support the team, ideally in a hands on manner. This can be in concept (how do we structure our information for best user experience), content (creating web pages and applications IT technical and topic area specialist) or acceptance testing. If anyone would like to join this team (whether as a committee member or not) please let Martin know. (ltmanager@sfmes.co.uk)

In order to exploit fully the opportunities that the present and future developments of the web site will allow, we need as many member clubs as possible to use it for business with the Southern Federation where feasible. Member societies can already keep up to date their registration details and contact information, can download QR codes for their Society use, track their specially qualified boiler testers, and publish events and news in the diary and they receive and disseminate accordingly the messages that are sent concerning Federation and their own activities, requirements, advice etc. Although we will continue to use telephone and letter mail if required, it does allow everyone greater efficiency if as much as possible can be achieved using email or the web site.....so your help in this would be greatly appreciated.

There are exciting new areas where we are looking to extend our services to societies, in particular providing via our website optional facilities that your own web team can embed in your websites for the benefit of your society. These include some of the existing features we use ourselves such as the diary. This will be driven according to our resources and your level of interest and may include

- skills register
- maintenance register
- risk register
- attendance register
- loco/model register
- consent (GDPR) recording and management
- railway signalling system specification writer
- events (e.g. Santa specials) end to end booking, ePayment, seat allocation and child's present management
- simple eMarketing

Dr Paul Naylor

Risk Assessment for Ground Level Passenger Carrying Track

An extremely thorough and complete model by

The Wolverhampton and District Model Engineering Society

Wolverhampton have produced a complex and thorough risk assessment system and have shared this with us. We can but show a couple of samples in the newsletter but these will give the reader a flavour. Wolverhampton have indicated they are happy to help other societies.

Introduction

The Society is committed to safe operation of its railway and has an approved Safety Policy published in its Society Handbook (Ref 1, SHB for short).

Operation of the railway is governed by the Railway Rule Book (Ref 2, RRB) that follows the guidance set out in HSE Publication HSG216 (Ref 3) and, where applicable, any subsequent emerging best practice. Overall responsibility for health and safety in the operation of the railway rests with the Officers of the Society and is overseen on operating days by an approved Person in Charge (PIC).

This risk assessment applies to the operation of the railway when giving train rides to the public at Baggeridge Country Park under the oversight of a designated PIC who is responsible for maintaining the written record of operation at the event and, via the Society Secretary, reporting any incidents to the appropriate authority.

Members of the Society operating the railway are approved by the Society as competent to carry out their allocated tasks (Ref 4) and a copy of the Competence Register (Ref 5) is included in the Running Log Book (Ref 6). The hierarchy of responsibility, the duties of Staff, and rules applicable

to those duties are set out in the Railway Rule Book. A copy of the Rule Books and the Certificate for Public Liability Insurance are included in the Running Log Book held by the Person in Charge (PIC).

The track, locomotives, rolling stock, infrastructure and grounds are subject to regular inspection and maintenance. Regular track inspection and remedial work is recorded in the Track Maintenance Log Book (Ref 7) and locomotive and rolling stock maintenance in the Rolling Stock Maintenance Log Book (Ref 8). Infrastructure and grounds maintenance is not currently recorded.

Locomotives and rolling stock are subject to a Fitness to Run examination and a track inspection is made before each running session. Track and rolling stock defects that emerge during operation are recorded in the Running Log Book by the PIC who may arrange appropriate repairs or take the offending item out of service. A 'defect board' in the workshop communicates defect to the maintenance teams.

First Aid cover is provided by Staffordshire Ranger Service in Baggeridge Country Park who also advise the Emergency Services of an appropriate access route and rendezvous point. There is a designated Air Ambulance Landing Ground. Accidents or ill health resulting from the operation of the railway are reported to the Society Secretary by the PIC who will, if required, report as required by RIDDOR (Ref 9).

Except when riding on the railway, or otherwise admitted to the site by the Society, the public are excluded from the area by fencing and are warned of the possible hazards on the site by notices (Ref 10).

A sample page from the individual risk assessments made.

Hazard or activity number	18	Danger from moving trains
Persons and/or property at risk	Society members, the general public and passengers and their property	
Nature of hazard	Injuries sustained from falling in front of, being pushed under or in front of, or being struck by, locomotives, trains or passengers. Damage to property due to impact with trains.	
Control measure	Implemented by policy/rule/s	By
General public excluded from area and track is fenced.	RRB, 8.1 to 8.6 RRB, 10.5 RRB, 13.1a	Person in charge Person in charge Station staff
Society members familiar with risk and exercise care and vigilance when trains are running	RRB, 4.2a	All members
Passengers are held in queue outside running area while awaiting ride and are only escorted onto and off of train when it is stationary in station	RRB, 13.1a	Station staff
Except at crossings and junctions tracks are separated sufficiently to ensure that passengers cannot strike those on passing train	Design and construction	—
No train movements in station area while loading or unloading passengers	RRB, 13.1 RRB, 14.2, 14.6, 14.10 RRB, 15.5, 15.6a	Station staff Driver Guard
The track used for embarking and disembarking is separated from passing trains by a fence	Design and construction	—
Set procedure used to clear trains for dispatch	RRB, 13.6 RRB, 14.2, 14.6, 14.10, 14.12 RRB, 15.5, 15.6, 15.7a	Station staff Driver Guard
Signs posted and passengers warned verbally to keep arms and legs within confines of coaches	RRB, 13.2 RRB, 4.5a	Station staff
Passengers advised to not carry bulky or valuable items with them on the train	RRB, 13.5a	Station staff
Property belonging to the Society and passengers is kept away from tracks	RRB, 13.5a	Station staff
Actions	When by	Where by
—	—	—
—	—	—
Residual risk	Severity: (Harmful)	Frequency: (Unlikely)
—	—	—

Where are these locos? *Answers on Page 8 if you can find them*



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The fattest knight at King Arthur's round table was Sir Cumference. He acquired his size from too much pi.

I thought I saw an eye-doctor on an Alaskan island, but it turned out to be an optical Aleutian.

She was only a whisky-maker, but he loved her still.

No matter how much you push the envelope, it'll still be stationery.

PUBLICATIONS AVAILABLE FROM SOUTHERN FEDERATION MES

The SFMES 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 'Southern Federation MES'

Title	From Our Stand
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Written Scheme of Examination - Pad of 50	FREE*
Small Boiler Test Certificate - Pad of 50	FREE*
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Plastic wallets to hold certificates size A5	£0.75
Ditto - Pack of 5	£3.75
HSG216 Passenger-carrying miniature railways 'Guidance on safe practice'	£3.00
Postage and packing if delivered	£4.50

David Mayall

Tel: + 44 1252 684 688

Email: davidmayall@sfmes.co.uk

Or use <http://www.sfmes.co.uk/public/?action=publicpublications>

These publications are issued free of charge to fully paid up member clubs and societies however for delivery by mail the cost of the postage, as shown, must be borne by the Club/Society placing the order.

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