

AUSTRALIAN ASSOCIATION OF LIVE STEAMERS TROPHY

2024

Hosted by Nottingham Society of Model and Experimental Engineers

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The Australian Association of Live Steamers Trophy is presented to the Federation of Model Engineering Societies to commemorate the affiliation of the two Associations for annual competition at the Federation's Autumn Rally under the following rules.

The AALS Trophy shall be awarded annually to the miniature working steam locomotive judged to be the best example of a Commonwealth prototype in any gauge between and including 2½ in. and 7¼ inch.

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.

FMES shall convene a Judging Panel comprised of the previous year's winner, a representative of FMES and a person nominated by the host society.

In the event that the Judges do not consider a required standard has been attained they may decline to award the AALS Trophy.

The winner may hold the AALS Trophy for a period of twelve months or less as directed by FMES and shall subsequently receive a suitably inscribed memento of the award bearing his or her name and a brief description of the winning locomotive.

A locomotive may only win the AALS Trophy once.

Only the owner of a locomotive is eligible to compete but may nominate a driver for the event.

If not the builder, the owner shall declare ownership and identify the builder.

Professional model engineers shall not be eligible to compete

AALS shall be informed of the outcome each year, whether or not the AALS Trophy is awarded.

A photographic record of each winner shall be prepared for AALS records.

Photographs should show the builder with the AALS Trophy and views of the locomotive.

The Judges' decision is final and no correspondence will be entered into by either FMES or AALS

Winners of AALS Trophy since 1988

Year	Winner	Club	Loco	Venue
1988	Francis Staines	Staines SME	5" Britannia	Whitchurch (Cardiff)
1989	Graham Gain	Birmingham SME	5" LTSR 4-4-2T	Canvey
1990	Ron Price	North London SME	3½" LNER A4	Peterborough
1991	Gerry Tull	SMEE	5" SR King Arthur	Worthing
1992	John Heslop	Ryedale SME	5" LNER P2	Brighouse & Halifax
1993	Martin Parham	Maidstone MES	5" LMS/BR Duchess	Frimley
1994	Robert Booth	Brighouse and Halifax	5" LSWR T3	Edinburgh
1995	David Mayall	Bracknell RS	3½" BR Std Class 4	Newport
1996	Not awarded – no eligible entry.			Ascot
1997	Andrew Breese	Worthing and District	5" LBSC 0-4-2	Fareham
1998	Roland Thomas	Merthyr Tydfil	5" LNER B1	Nottingham
1999	John Richardson	Brighouse and Halifax	5" Crampton	Cardiff
2000	Not awarded - few attended due to petrol crisis			Kinver
2001	Graham Rayner	Brighouse and Halifax	5" GCR 4-4-2	Chesterfield
2002	John Hancocks	North Wilts MES	5" GWR Hall	Hereford
2003	Bernard White	Maidstone MES	3½" Britannia	Saffron Walden
2004	John Peterson	Norwich and District	5" North London 4-4-0	Maidstone
2005	Edgar Playfoot	Maidstone MES	5" MR 4-2-2	Reading
2006	Tony Wall	Leeds SMEE	5" LNER B2	Brighouse
2007	John Cousins	Harrow and Wembley	5" BR Std Class 5	Canvey
2008	John Wilks	Crawley ME	5" GNR Sturrock Steam Tender 0-6-6-0	Bracknell
2009	Richard Linkins	Romney Marsh MES	5" BR Std Class 2	Oxford

Year	Winner	Club	Loco	Venue
2010	Alan Ruston	Birmingham SME	5" Merchant Navy	Rugby
2011	David Beale	Leeds SME	5" LMS Black 5	Nottingham
2012	Glyn Winsall	Rugby MES	5" SR/BR 2-6-0	Chelmsford
2013	Bernard Clark	Northampton SME	3 ½" Ivatt Class 4	Northampton
2014	David Kerry	Chesterfield DMES	5" BR Class 9F	Leeds
2015	Ian Roberts	Basingstoke DMES	5" GWR 0-6-0 PT	Southampton
2016	Ivan Hurst	Bracknell RS	5" SR/BR 2-6-0	Guildford
2017	Bernard White	Maidstone MES	5" Rebuilt MN	Fareham
2018	Tom Parham	Maidstone MES	5" LMS Jinty 0-6-0T	Cambridge
2019	Les Pritchard	Harlington LS	5" L&Y 0-6-0 A Class	Maidstone
2020	Rally cancelled due to Covid Pandemic			
2021	Martin Parham	Maidstone MES	5" GW 28XX	Reading
2022	David Mayall	Bracknell	5" BR Std Class 2	Sutton Coldfield
2023	Paul Norrington	Romney	5" 'Schools' Class 'Epsom	Frimley
2024	Les Brimson	North London	5" SE&CR Class L	Nottingham
2025				



Owner and builder Les Brimson













The steam reverser



Les Brimson's discourse

I started the locomotive in 1976 after completion of a Juliet 2. Wanting something a bit unusual for my second engine I came across a photograph of a SE&CR Class L showing its handsome lines and its steam operated reverser. These two features appealed to me and the locomotive was subsequently constructed over a period of 45 years.

Initially designed under the auspices of Harry Wainright, though built after Maunsell took over, twenty-one L's were constructed, ten by Borsig in Berlin and eleven by Beyer Peacock. All were delivered in second half of 1914. Borsig was not paid until after WW1, those engines were known as "Germans" by the Kent enginemen. In 1925 a batch of improved L's were built, known as class L1. The L1 is the basis of Curly's Maid of Kent which I thought I could adapt for an L. However significant differences between the two meant this was not possible. Principle features of the model are outlined below.

As per prototype the main frames taper inwards from ahead of the leading coupled wheels and taper again ahead of the cylinder block. This provides side movement clearances to the bogie wheels which allows wheels of the correct diameter to be used without fouling the main frames.

The bogie has leaf springs with equalizing beams and brass oil boxes for axle lubrication. Leading coupled wheels have coil springs and the trailing wheels have leaf springs as did the originals.

The vertically mounted steam reverser requires the weighshaft to be located below the gear center line. None of the Maid of Kent published valve gear designs (by Curly, KN Harris or Don Young) have this configuration, nor are they close to the actual layout of the Stephenson's gear used on the L's, or L1's for that matter. I had a works drawing of the gear showing the motion plate with its pivot support for unequal length rocking arms, suspension levers for the intermediate valve rods and locomotive type expansion links supported by the forward, upper, eccentric rod pins. As the weighshaft is below the gear center line the expansion link supports prop up the links unlike most Stephenson's gear designs where the links hang from the weighshaft arms. Applying the principals outlined by Don Ashton I was able to obtain equal valve events whilst maintaining the prototypical gear layout. I made a pattern for the motion plate incorporating all features of the original including lugs to support the rear end of the crosshead guide bars, four per cylinder.

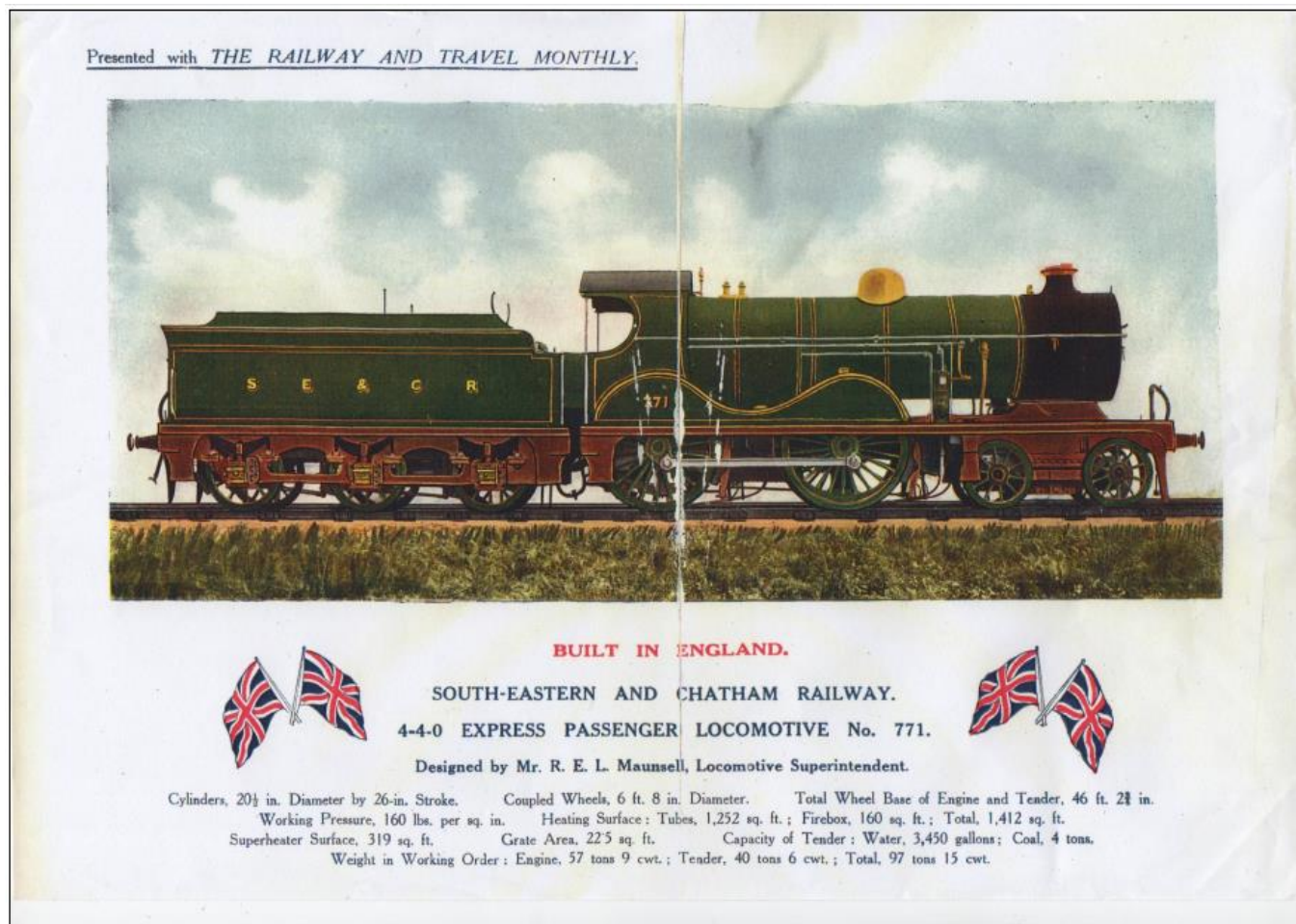
Details of the steam reverser were taken from drawings by C Roach. However, its small size caused some concern that it would not be sufficiently reliable to do its job. I therefore fitted a second one, much larger and located beneath the footplate, operated in parallel with the scale reverser on the right-hand running board. Both are operated simultaneously from the correct controls in the cab. This required head scratching to get the linkages to both without spoiling the external appearance of the visible controls. The cut off is indicated by a quadrant plate and pointer in the cab.

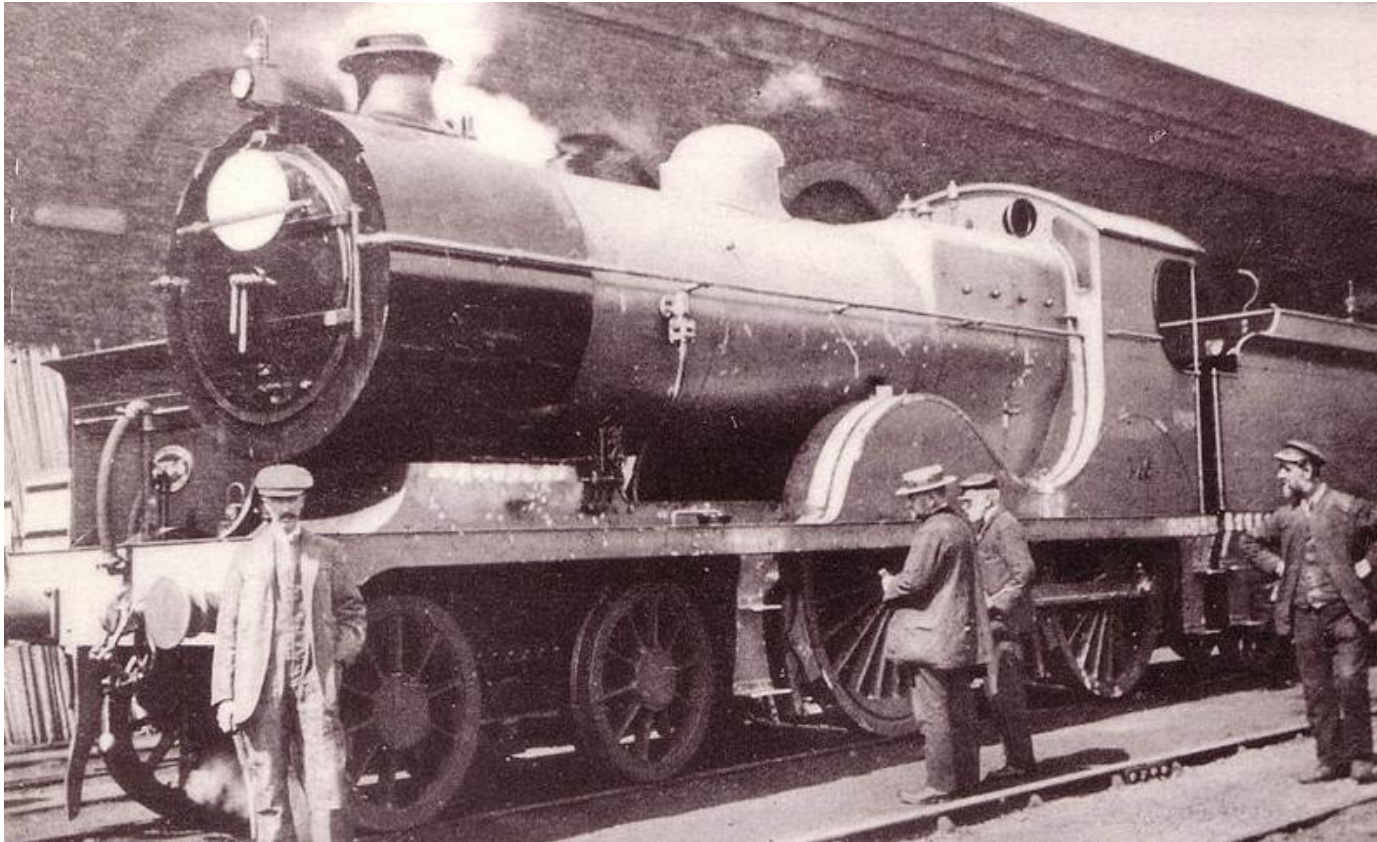
The boiler is to Maid of Kent design, though with a more representative backhead. There is no turret, steam is taken to injectors, blower and steam reverser from internal pipes commencing in the dome. Several layers of lagging were added to bring the barrel cladding up to the correct diameter.

Running boards, sand boxes, steps, splashers, cab platework, windows and buffer stocks were scaled from the works GA. The splashers and cab give the engine its characteristic lines, consequently I took a lot of time to get these looking right.

Tender is straight forward, also scaled from the works GA with flared tops and coal raves. It has quarter turn injector water valves located as prototype, correct compensated brake gear and tool boxes.

I was fortunate to find a coloured illustrated print of Class L number 771 in a 1914 edition of The Railway and Travel Monthly magazine. The livery and lining scheme is taken from that print and hence the model carries the number 771. In practice the brass dome was painted over and the copper chimney cap replaced with cast iron, but I preferred the look of the original scheme so left the dome unpainted and fitted the copper cap. The elaborate SE&CR coat-of-arms was omitted in the print of 771 and none of the L's carried it in service which saved me the headache of how to reproduce it.





Original locomotive *class* but not locomotive number: this image is free copyright.



Les receiving the AALS trophy from Bob Polley, Chairman of FMES

