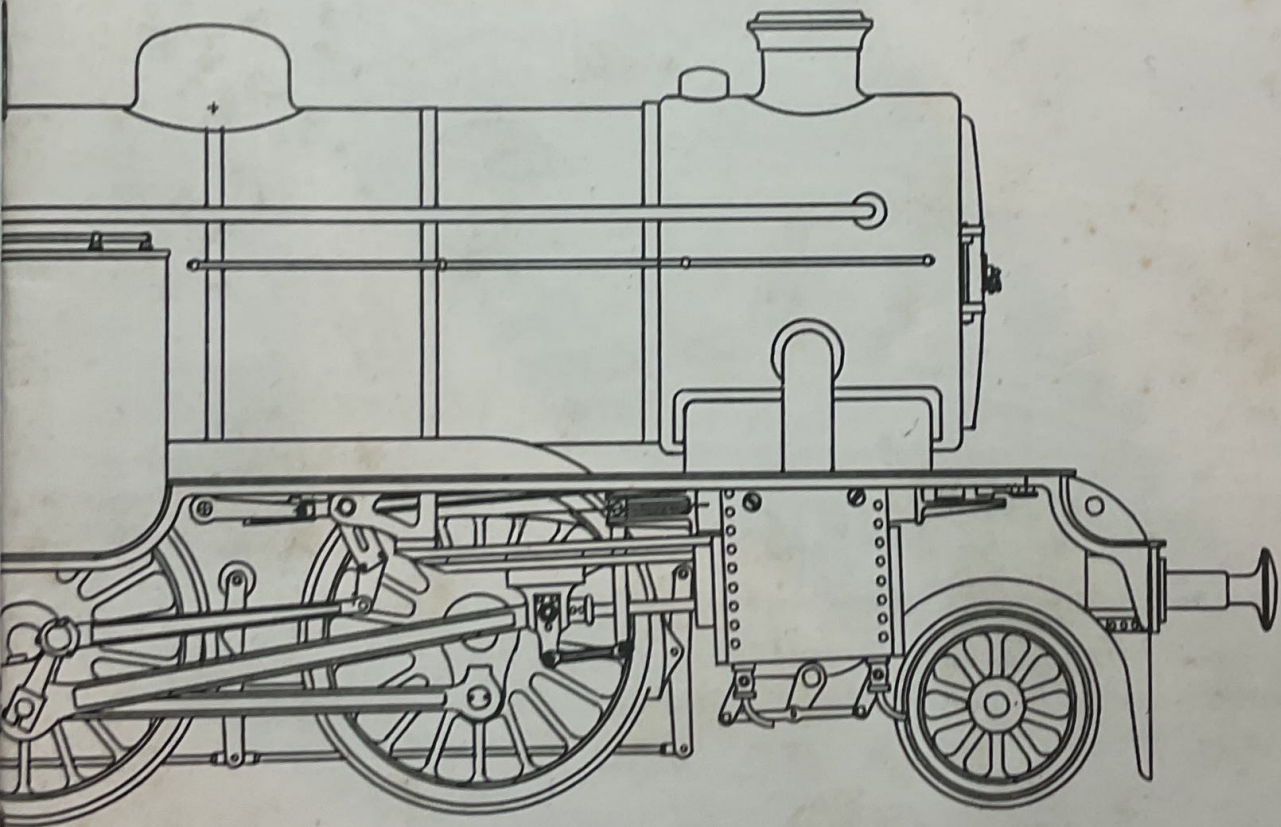


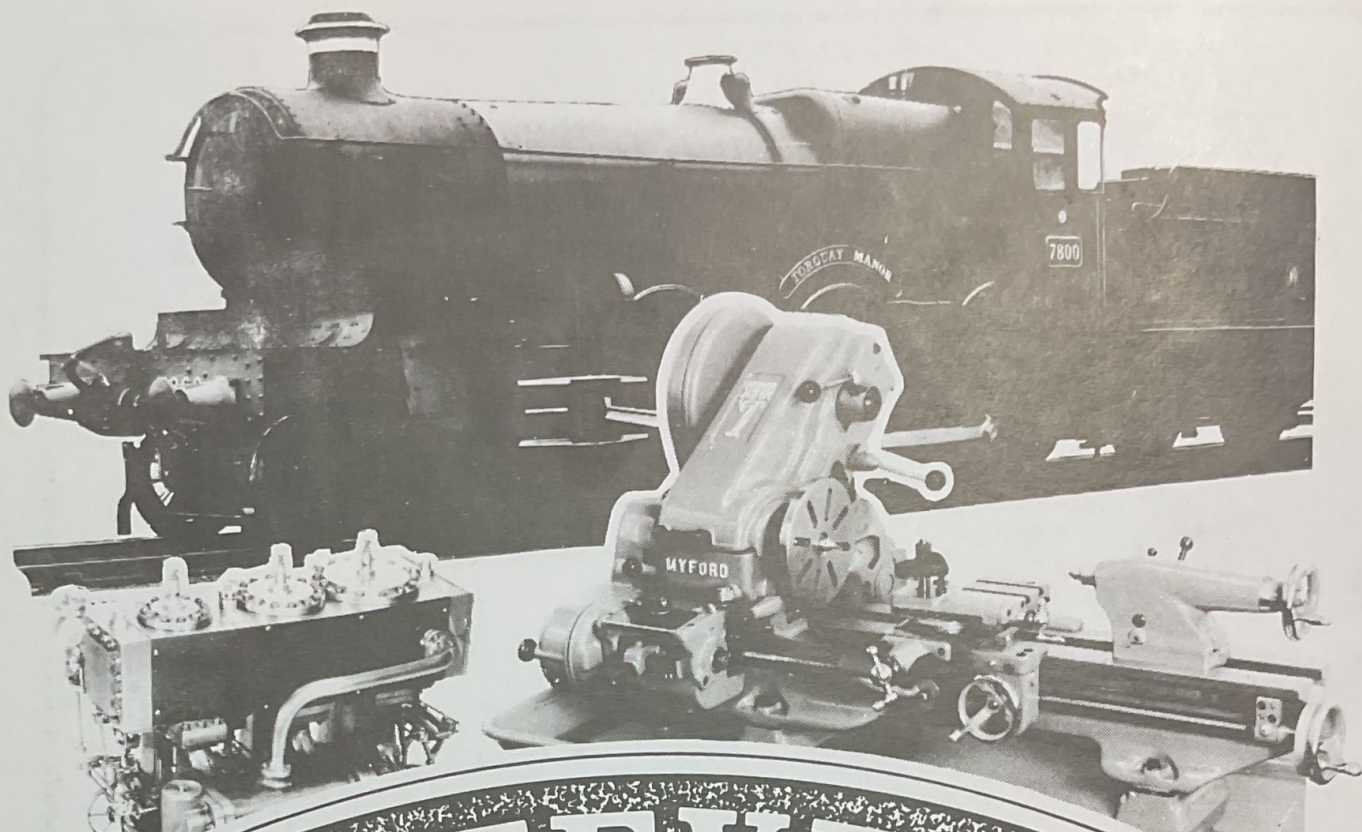
# ***I.M.L.E.C.***

## ***1990***



### ***22nd International Model Locomotive Efficiency Competition***

Guildford Model Engineering Society



# REEVES

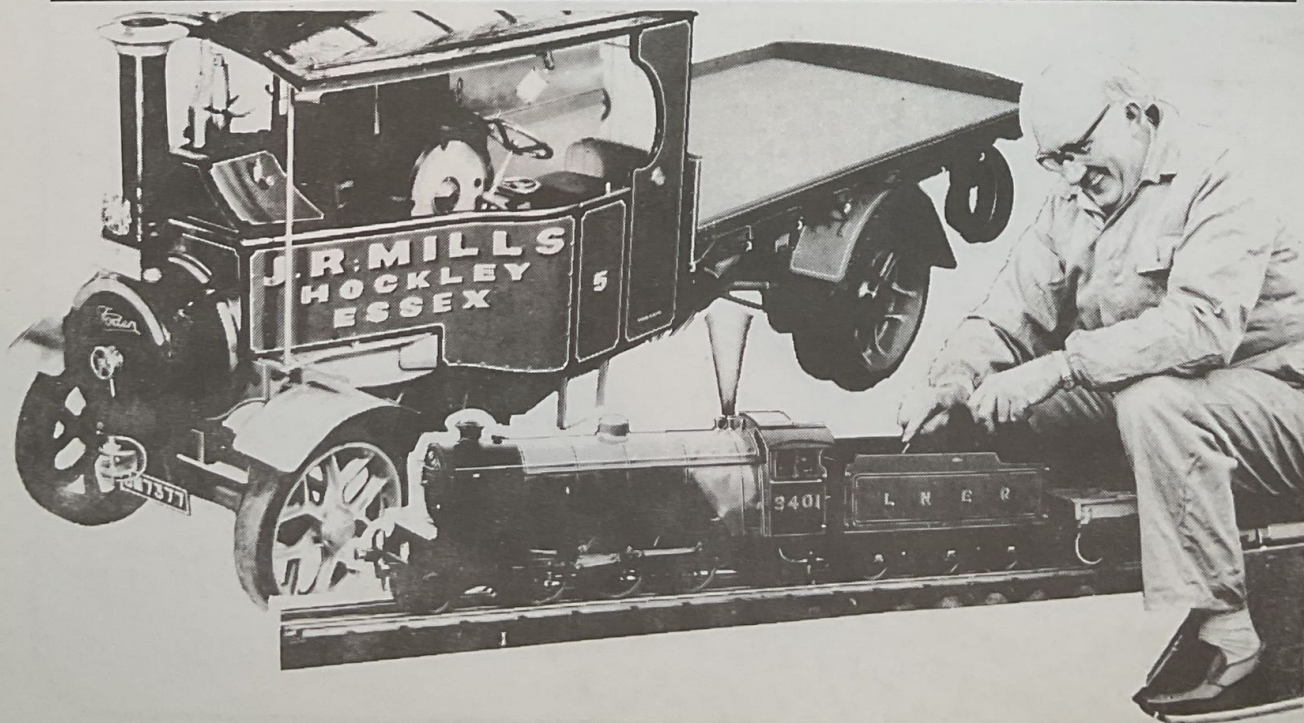
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The Twenty Second Annual

# International Model Locomotive Efficiency Competition

for the

## Martin Evans Challenge Trophy

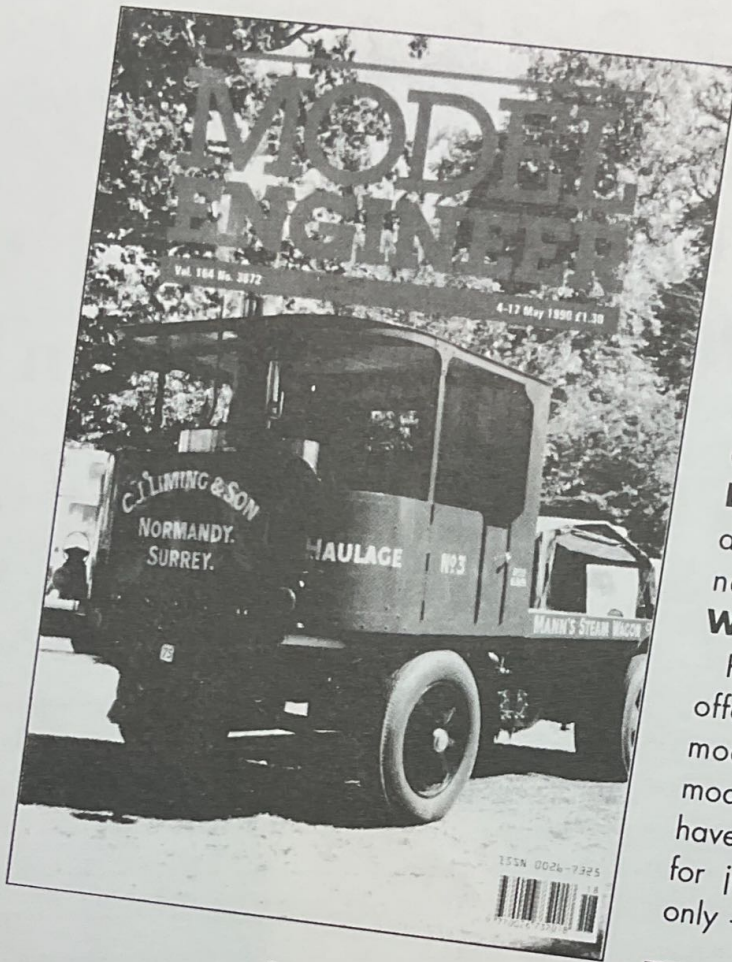
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The overall winner of the competition will receive the Challenge Trophy and £100; Second - £50; Third - £25; Fourth - £15.

A special prize will be awarded to the best 3½" gauge locomotive, if not in the first four.

### **PRESENTATION OF PRIZES**

Jim Wilson the President of the Guildford Model Engineering Society will present the prizes at the close of the competition, late on Sunday afternoon.



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# I.M.L.E.C. 1990

HOSTED BY

## The Guildford Model Engineering Society

on Saturday 15th and Sunday 16th July 1990

at

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### G.M.E.S. Officials

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Timekeepers:	DAVID NEISH, ANDREW NEISH & JOHN JONES
Shed Master:	ALAN SLATER
Station Master:	JIM WILSON
Official Observers:	RON BROYD, GEOFF MOORE, LES PRITCHARD & TERRY YOUNG
Results Board:	HAROLD WELLS
Fuel Officer:	DAVE CAMPLING

### Acknowledgements

*We should like to extend our thanks to the following for their help and assistance with this year's event:*

The Borough of Guildford Leisure and Recreation Dept. Parks Section for their continuing support.

The British Red Cross Society for first aid services.

Guildford College of Technology for the loan of technical equipment.

To the Birmingham S.M.E. for the loan of a reserve dynamometer car.

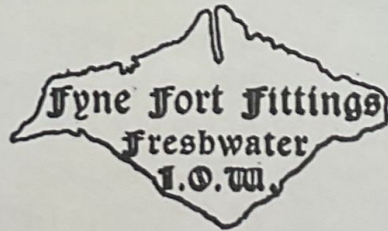
All visitors and trade stand supporters.

To all competitors without whom IMLEC could not take place.

The National Power & Environment Centre, Leatherhead, for their help in the calibration of coal samples.



Lionel Flippance seen after receiving the "Martin Evans" trophy at Leyland last year. Will Lionel be the first to win the trophy for three years in succession?



*The Steam Fittings Specialists*

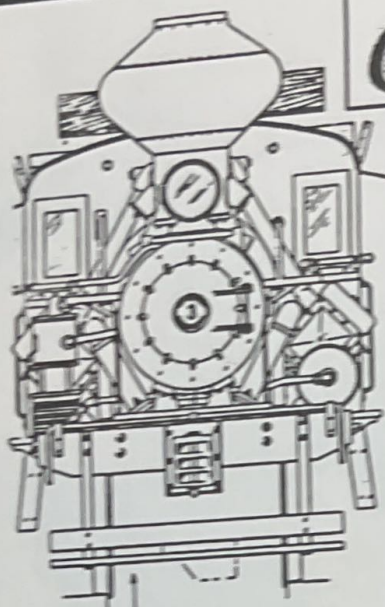
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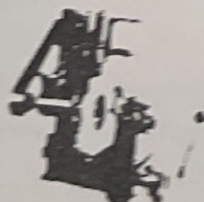
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## ABOUT I.M.L.E.C

It is now more than a quarter of a century since Martin Evans first suggested a model locomotive efficiency competition. To begin with there was little support, but when he became editor of the 'Model Engineer' Martin found himself able to carry the project through. In 1968 he donated a splendid silver Challenge Cup and the first IMLEC took place in the following July, hosted by the Birmingham Society.

What is the importance of IMLEC? Firstly it has become the major outside event in the model engineering calendar. In a friendly and relaxed setting one can see at least twenty-five of the finest 3½" and 5" gauge steam locomotives put through their paces. Secondly it is a great display of driving skill. To steam a small locomotive at maximum efficiency for a full thirty minutes demands fine judgement, great ability and not a little luck.

Who are those brave enough to enter IMLEC? All are amateurs who have built their own locomotives. They vary from the cheerful soul who dreamed of having a track to himself for a full half hour to the serious engineer who went all out to build what he expected to be a winner. To most, however, the event is an outing at which they hope to do as well as possible and to enjoy themselves whilst giving pleasure to others.

In what way has IMLEC influenced model locomotive design? Normal club events demand haulage capacity with little regard to fuel consumption. As a single design goal, this might have led to ungainly and out of scale machines. Efficiency however, demands a delicate balance between boiler and motion that can and will be contained within a scale holding gauge. No successful designer can ignore IMLEC. The slowly mounting efficiency figures are a sure indication that designers and builders have got the message and are striving to do what real life C.M.E.s did in the past.

IMLEC is not a speed contest, neither is it a maximum load demonstration. What then is the type of locomotive most likely to do well? There seems to be no set pattern. Winners have varied between Edwardian single wheelers and BR eight coupled freight locomotives. For many years it was said that a wide fire-box stood little chance, but the last two competitions have been won by a wide fire-box locomotive. Herein perhaps lies the charm of IMLEC. It remains a competition open to all comers. Entrants continue to be drawn from model engineers who first build a locomotive of their choice and then, if it goes well enough, decide to have a go at IMLEC. This surely is the true spirit of amateur competition.

Alan Jensen

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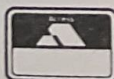
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## THE GUILDFORD MODEL ENGINEERING SOCIETY

The Guildford Model Engineering Society welcomes all competitors, friends and visitors to the 1990 IMLEC This is the third IMLEC to be held at Guildford, the previous years being 1978 and 1983 when Percy Wood and Les Pritchard were the winners, each representing the Chingford Society and Harlington S.M.E respectively.

The dynamometer car being used for this year's event was designed by the Late Ed. Pitkethly and built by members of the Guildford Model Engineering Society including Ed. himself. This remarkable vehicle is well worth further study by those interested in the technicalities of IMLEC and it is recommended that reference is made to 'Model Engineer' magazine Vol 150 20th May 1983 for full details.

The Guildford Society was formed in 1954 and has been at its present site since 1959. From humble beginnings the society now boasts a membership of over 200. This weekend the live steam faction of the club is well to the fore but there are within the society two well supported 4mm and 16mm narrow gauge railway sections. Clear evidence of their activities are to be seen by the visitor both in the club house and in the form of the fast developing outdoor scenic layout.

Guildford's Annual Model Steam Rally and Model Engineering Exhibition is considered to be one of the finest outdoor events of its kind. This year's event takes place next weekend on Saturday and Sunday the 21st and 22nd July with full trade support plus all the usual attractions such as train rides for the kiddies (of all ages!) and a first rate model engineering exhibition. A now famous feature of the Guildford Rally is the annual parade of traction engines where up to 100 models can be witnessed in steam.

Any visitors here today who may be interested in becoming a member of the Guildford M.E.S. could do no better than to contact the Hon. Sec., Mike Tattum, 26, Brockenhurst Road, Aldershot, Hants. GU11 3HH who will be only too pleased to give you details of membership.

John Jones

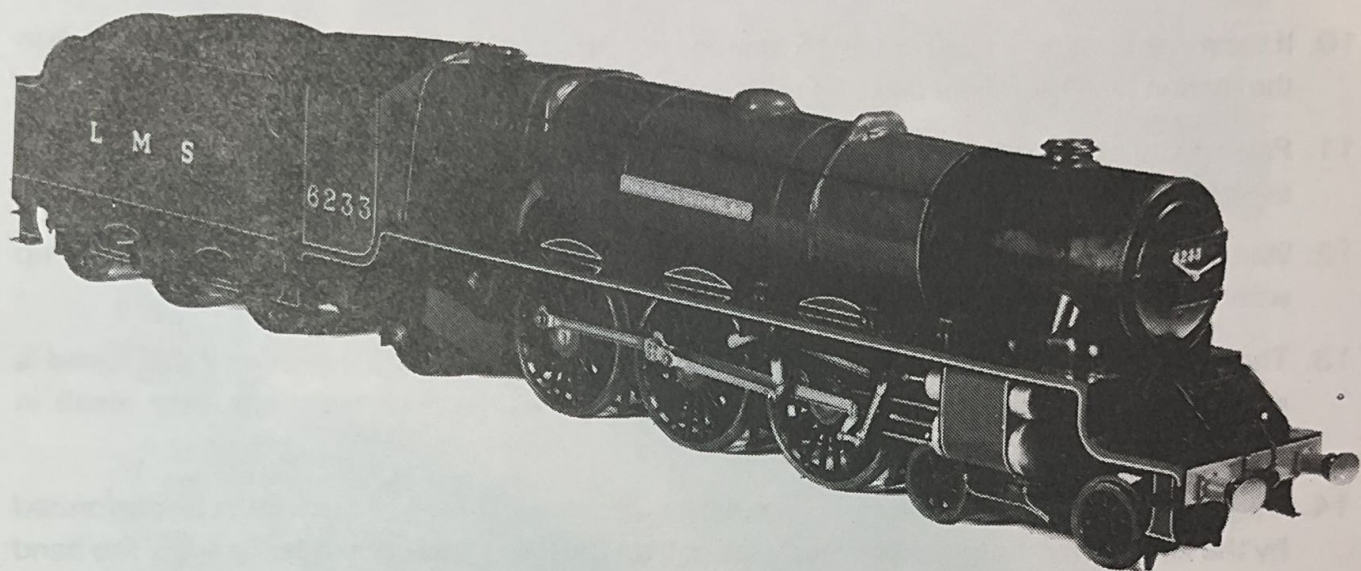
## SPECIAL ANNOUNCEMENTS

Will all visitors and competitors please note that there will be a short lunch interval on each of the running days starting between 12.30 and 1.00pm.

Also, printouts of the competition results will be on sale at 20p each from the timekeepers' caravan at the end of each running day.

### Competition rules and organisation

1. On arrival, competitors should register at reception where all necessary information concerning the day's event will be available, including the approximate time of the run.
2. One hour before the start of each run, the driver will be called to prepare his locomotive in the presence of an Official Observer who will be on hand to offer any assistance needed.
3. As much charcoal, wood and paraffin as required will be provided for raising steam. The change to coal will be at the driver's discretion, but he must have a good coal fire before starting the run. This he must be prepared to do immediately on the conclusion of the previous run.
4. To prevent undue slipping, drivers are asked to ensure that locomotive wheels etc. are free from excess oil.
5. Drivers may choose between anthracite and welsh steam coal both of which will be available in two sizes packed in 2 lb. bags.
6. The observer will provide the required number of passenger tickets which the driver may distribute. If requested at least thirty minutes before the run is due to start, the Station Master will distribute tickets to suitable passengers.
7. All passengers should be in the IMLEC station at least ten minutes before the run is due to start.
8. The duration of each run will be a nominal 30 minutes with a minimum of 25 minutes. The Timekeeper will keep competitors informed as to their progress and a bell will be rung to indicate the start of the last lap.
9. Should a driver stop short of the station due to shortage of steam, coal or water, even though the full thirty minutes has been completed, he must 'blow up' and complete the run to the station. A stop of more than eight minutes on this last lap will lead to disqualification. No time allowance will be made for stops caused by the derailment of the locomotive or for loss of power.



*A finely engineered 7<sup>1</sup>/<sub>4</sub> in. gauge model of the LMS 4-6-2 locomotive and tender No. 6233 "Duchess of Sutherland," built by H. C. Powell, 21 x 112 in. (53.5 x 284 cm.). Sold 29 April 1988 for £8,800*

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# CHRISTIE'S

10. If the run is terminated before the 25 minutes have elapsed or if the driver is unable to finish in the station area he will be deemed to have retired.
11. Passengers may be off loaded at any time during the run, but additional passengers may not be taken on once the measured run has started.
12. Water will be handed to competitors as required, in suitable containers so that they may top-up without stopping.
13. The maximum speed allowed is 10 m.p.h. The Observer will advise the driver if this speed is approached and warn him if the limit is exceeded. Three such warnings may result in disqualification.
14. During the measured run, trains must not be assisted in any way; all work must be performed by the locomotive. Competitors must not lean on the locomotive or tender or apply the hand brake in such a way as to increase the draw bar pull. The use of the hand-pump is not permitted except in the case of an emergency when the locomotive must then be retired. Infringement of any part of this rule will result in disqualification.
15. The use of working sanding gear is permitted. If the driver so desires, the station master will sand the rail ahead of the start.
16. On completion of the timed run the train will be disconnected and time, distance and work done measurements recorded. The locomotive will then run forward to the steaming bay, assisted as necessary if short of steam. All unused coal will be collected and weighed in the presence of the driver. No allowance will be made for un-burnt coal in the fire-box.
17. The results will be calculated by the Society's officials and displayed on the notice board. Each driver will be handed details of his own run.
18. The decision of the Chief Judge is final. Judges will be appointed by the Guildford Model Engineering Society.



Wilfried Wagner has brought his NG Henschel over from West Germany for this year's IMLEC.

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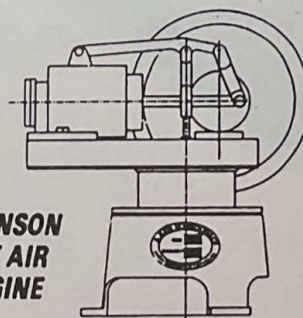
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IMLEC 1990

## COMPETITORS and RESULTS SHEET

SATURDAY 15th JULY

No	LOCOMOTIVE TYPE	Gauge	Arrangement	OWNER (Driver If Different)	SOCIETY	LOAD ADULTS	Time (Mins)	Run (Ft)	Work (Ft/Lbs)	Drawbar H.P.	Used (lbs)	Consumption (SFC) (lbs/DBHP.Hr)	Effic iency (%)	Pos'n
1	GWR PRAIRIE TANK	5"	2-6-2T	P. LARKIN K. PARKER	MALDEN									
2	TORQUAY MANOR	5"	4-6-0	G. BURLINGTON	SUTTON									
3	SIMPLEX	5"	0-6-0T	D. WILLIAMS B. MILTON	BRISTOL									
4	ANDREW BARCLAY	5"	0-4-0T	R.W.EDMONDSON	TAUNTON									
5	GWR CLASS 93XX	5"	2-6-0	P. WILLEY	PRIVATE									
6	EARLY AMERICAN	5"	4-4-0	P. VOLLBRECHT G. GOLIGHTLY	LLANELLI									
7	NG HENSCHEL	5"	0-4-0T	W. WAGNER	GERMANY									
8	SR MAID OF KENT	5"	4-4-0	J.RODWAY	NEWPORT									
9	BOSTON & ALBANY	5"	4-6-6T	A.MATTOCK	WESTLAND									
10	"SWEET PEA"	5"	0-4-0T	B.REMNANT	ROMNEY MARSH									
11	BR CLASS 9F	5"	2-10-0	R.TYLER M.LEAHY	ROMFORD									
12	GWR DEAN GOODS	5"	0-6-0	J.CASHMORE	BIRMINGHAM									





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## CALCULATION OF RESULTS

The dynamometer car measures and gives readings of Total Work Done in foot pounds and Total Distance Travelled in feet. In addition, the Overall Run Time (minutes) and Weight of Coal (lbs) are recorded. From these parameters the following calculations can be made.

Overall Thermal Efficiency % =

$$\frac{\text{Work Output} \times 100}{\text{Heat Input}}$$

Competitors have the choice of either anthracite or welsh steam coal, the calorific yields of which have been measured.

The number of ft/lb. per B.T.U. is 778 Thus:

Overall Thermal Efficiency % =

$$\frac{\text{Total Work Done} \times 100}{\text{Weight of Coal Used} \times \text{Cal. Value} \times 778}$$

The locomotive that returns the highest efficiency is the winner.

Some interesting subsidiary calculations are:

Average Draw-bar Horse Power =

$$\frac{\text{Total Work Done (ft.lb.)}}{\text{Overall Run Time (Mins.)} \times 33000}$$

Coal Consumption Rate =

$$\frac{\text{Weight of Coal Used (lb.)} \times 60}{\text{Overall Run Time (Mins.)}}$$

Specific Fuel Consumption =

$$\frac{\text{Coal Consumption Rate}}{\text{Average Draw Bar Horse Power}}$$

Average Draw-bar Pull =

$$\frac{\text{Total Work Done}}{\text{Total Distance Travelled}}$$

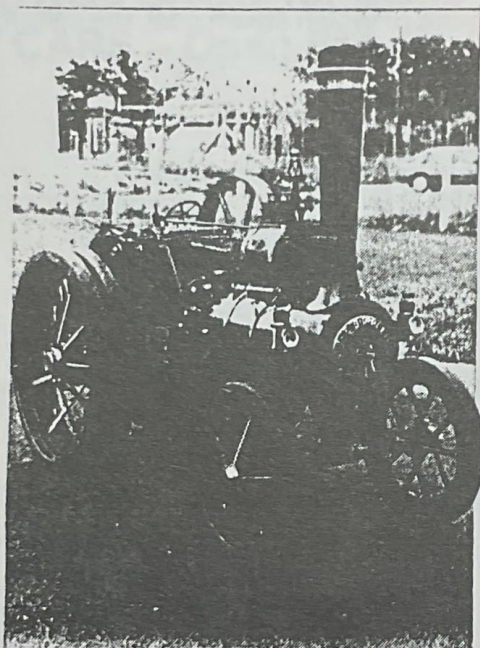
Note! The calorific value of the coal being used by competitors has been calibrated as follows;

Anthracite = BTU's/lb.

Welsh Steam Coal = BTU's/lb.

Exact figures of calorific values are as displayed on the results board.

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## DETAILS OF THIS YEAR'S COMPETITORS

**Run No. 1 - PETER LARKIN**, sponsored by the Malden Society, has entered his 5" gauge 2-6-2T GWR small 'Prairie Tank' locomotive built to Martin Evans' design but with steel tyres to all wheels. The model took eight years to build including boiler and patterns for all castings. It has been a regular passenger hauler since 1978. The loco will be driven by **KEN PARKER**.

**Run No. 2 - GEOFF BURLINGTON** represents the Sutton MEC and is probably the senior competitor at nearly eighty years of age. His 5" gauge 'Torquay Manor', completed in 1986, took 3½ years to build and still runs in polished brass finish. Two years ago, Geoff won acclaim when the Manor successfully completed four laps of the Guildford track as a runaway engine after breaking loose from its driving trolley. Geoff is currently building a 5" gauge Prairie Tank to the highly detailed Reeves' design. (Loco grate area = 21 sq.ins.)

**Run No. 3 - DAVID WILLIAMS** of the Bristol Society has entered his 0-6-OT 'Simplex' built to Martin Evans' design but with a 2" extension to give a better cab and bunker. The model was completed some 10 years ago since when badly worn treads have been replaced with steel tyres. The locomotive will be driven by **BARBARA MILTON**. (Loco grate area = 15.8 sq.ins.)

**Run No. 4 - R.W. (Bill) EDMONDSON** has been entered by the Taunton Model Engineers. His entry is a 5" gauge version of an 0-4-OT Andrew Barclay locomotive built in 1946 for the 2'6" gauge railway at the Proven Gasworks in Glasgow.

**Run No. 5 - PETER WILLEY** represents one of the two private entries allowed under IMLEC rules. His locomotive is a 5" gauge GWR 2-6-0 Class 93XX. The Model was constructed to Keith Wilson's drawings for a Class 43XX but with screw reverse and a Collet type cab as per the 93XX series. The locomotive was entered for the Leeds IMLEC in 1988, then representing the Newport (S. Wales) Society. (Loco grate area = 18.5 sq.ins.)

**Run No. 6 - PETER VOLLBRECHT** represents the Llanelli and District MES. His entry, an American 'Old Timer' 4-4-0 with wagon top boiler, ran in the 1987 IMLEC at Birmingham where it was placed seventh. This is Peter's third engine. Since its' completion he has built a 'Britannia', two 'Royal Scots' and a GWR 'King'. Peter's driver, **GEORGE GOLIGHTLY** is no stranger to IMLEC either; he has driven on three previous occasions but always on other people's engines. (Loco grate area = 13.1 sq.ins.)

**Run No. 7 - WILFRIED WAGNER** of West Germany is entering his 5" 0-4-OT narrow gauge Henschel 'Fabia'. This is his second IMLEC, the first being also at Guildford in 1983. The prototype locomotive was built in 1924 to a gauge of 600mm. (Just under 2 ft.) and Wilfried chose a scale of 1:5 when planning his model. The 5" gauge version is fitted with a twin cylinder Worthington boiler feed pump in addition or two injectors. It is air braked whilst a steam generator provides current for the head lamp. (Loco grate area = 16.25 sq.ins.)

**Run No. 8 - JEFFREY RODWAY** represents the Newport Model Engineers. His SR 4-4-0 finished in full passenger livery, is built to LBSC's design for the 'Maid of Kent' with Joy valve gear. Jeffrey has competed in the last four IMLECs; at Bournemouth and Birmingham with his own 'Simplex' saddle tank, and at Leeds and Leyland as driver to John Campbell's 'Superclaud' which was placed fourth at Leyland. (Loco grate area = 16.5 sq.ins.)

**Run No. 9 - TONY MATTOCK's** entry, a Boston and Albany 4-6-6T, is representing the Westland MES. Its' 7 5/8" diameter steel boiler has 20 firetubes and two superheater flues, all of copper. The locomotive came first in Bristol's last Heavy Haulage Competition with a load of 25 1/2 adults, children counting as halves. (Loco grate area = 63.75 sq.ins.)

**Run No. 10 - BRIAN REMNANT**, who represents the Romney Marsh Society has spread the building of his very much modified 0-4-OT 'Sweet Pea' over some twelve years. Modifications to the original design include outside Bremme valve gear, a 120 PSI steel boiler with expanded copper tubes, radiant superheater and a grate area of 30.5 sq.ins. In addition to his model engineering activities Brian is a fireman on the K. & S.E.R.

**Run No. 11 - ROBERT TYLER** is a member of the Romford MEC. His loco, a 5" BR Class 9F 2-10-0 'Evening Star' was completed last summer. It took Robert 7 years to complete. The parallel boiler was built by the late Maurice Furlong and is fitted with 4 radiant superheaters. Robert has built a variety of engines including a B1 and a Class 5. His current project is a GWR 'King' and a Princess single wheeler. Robert's driver is **MIKE LEAHY**, also a Romford member who drove a 5" Manor at the Bristol IMLEC where he attained 4th place. (Loco grate area = 36 sq.ins.)

**Run No. 12 - JOHN CASHMORE** was chosen to represent the Birmingham M.E.S. His locomotive, a 5" Dean Goods, is turned out as it would have been in 1910 with Belpaire firebox and fully lined green livery. Designed to be easily stripped down, the model lends itself to testing various theories re valve setting etc. It has just had its' first major overhaul after 1500 miles of hard work. The cylinder and wheel castings were made to John's own patterns.

**Run No. 13 - DAVID GREGSON's** first IMLEC was at Leeds in 1988 when he ran his 3 1/2" gauge GNR 4-4-2 'Maisie'. This year he represents the Leyland S.M.E. with his 3 1/2" gauge SR 4-6-0 S15 belonging to the King Arthur family and which won a VHC Certificate at the 1988 Northern Exhibition. The model is to Martin Evans' design, but with needle roller bearings to the driving wheels and sight feed hydrostatic cylinder lubrication. (Loco grate area = 10.9 sq.ins.)

**Run No. 14 - ARTHUR DALTON** represents the Chelmsford S.M.E. with his recently completed 'Yorkshire', a 5" gauge LNER Shire Class 4-4-0 locomotive. Castings and drawings were from Clarksons of York, but Arthur re-laid out the valve gear and designed the boiler to Jim Ewins' formulae. The third cylinder is activated by Gresley's conjugated valve gear. The two injectors are to Arthur's own design, the plate clacks are to Fred Beard's design from Model Engineer. The model took six years to build and will be driven by Arthur's son **JOHN**. (Loco grate area = 19 sq.ins.)

**Run No. 15 - EDWARD ROBERTS** represents the Swansea S.M.E. with his 5" gauge 4-6-0 'Freshford Manor' to Martin Evans' design. This is Edward's first attempt at loco building and has taken 2 1/2 years to complete. Since August 1989 it has done its' turn at regular passenger hauling at club events. 'Freshford Manor' has roller bearings on wheels and side rods. (Loco grate area = 21 sq.ins.)

**Run No. 16 - PAT CARE** of the St. Austell Model Society has built no less than six locomotives since he retired. The one entered, a 5" gauge 'Pansy' 0-6-OST with improved valve gear won the L.B.S.C. Memorial Bowl at Norwich in 1985. The boiler is made of 1/8" plate. Pat's locomotive will be driven by **A. VENNARD**, himself a model engineer (Loco grate area = 13 sq.ins.)

**Run No. 17 - GEOFFREY GREGSON** is a member of the Urmston & District M.E.S. and has entered his 5" gauge Rhodesian Railways 2-6-2 + 2-6-2 Beyer Garrett. The model was built from works drawings and is complete with hydraulically locked steam reversing gear and turbo-generated electrically lit lamps. The boiler is pressed to 120 PSI and delivers steam via flexible stainless steel hoses. The model has the unusual distinction of having its prototype still working commercially in Zimbabwe. It will be driven by son **NIGEL** who was also co-builder over the two years it took to complete.

**Run No. 18 - LARRY LOUGHBOROUGH**, a retired engineering designer, is well experienced as an IMLEC competitor. His Horwich 'Crab' was entered in 1988 and again in 1989 and came fourth at Leeds. His present loco, a 5" gauge 4-6-0 'King John' to Keith Wilson's design was acquired as an abandoned chassis in 1984 and after some years of work has emerged in its present form. The boiler and fittings are commercially made. Larry represents the Perranporth and District MES.

**Run No. 19 - KEVAN AYLING** represents the Worthing & District S.M.E. His entry is a 5" gauge 2-8-2 based on a design proposed by BR but dropped in favour of the 2-10-0 9F. Basically the model is identical to that entered by Lionel Flippance, the IMLEC winner in 1988 and 1989 except that Kevan has incorporated cannon axleboxes and Bulleid draughting. The engine took 3½ years to build and first steamed in March 1990. (Loco grate area = 47.25 sq.ins.)

**Run No. 20 - TERENCE ADDISON** is the second private entry. His locomotive is a 5" gauge 'Simplex' to Martin Evans' design. No other particulars have been given. (Grate area = 15.8 sq.ins.)

**Run No. 21 - ROBERT POTTER** represents the Carlisle Society and his locomotive is a freelance American type 'Berkshire' 2-8-4 named "Hustler". The model has roller bearings on all the wheels, Baker valve gear with Trofimov piston valves and Westinghouse type air brakes. The copper boiler, which was made commercially, has a grate area of 130 sq.ins. and a total heating surface of 9 sq.ft.

**Run No. 22 - BRIAN BAKER** is a member of the Canvey Railway and Model Engineering club. His 5" gauge GNR 2-8-0 named "Freda" is built to the Martin Evans' design for 'Nigel Gresley', but with controls extended onto the tender for ease of driving. "Freda" is Brian's third locomotive and was entered for the 1986 IMLEC at Bournemouth where she gained 7th place. Since then Brian has taken the locomotive to two overseas rallies at Leek in Holland.

**Run No. 23 - LIONEL FLIPPANCE** representing the Guildford M.E.S. is defending his title as winner of the 1988 and 1989 IMLECs'. His 5" gauge 2-8-2 locomotive is based on the proposed B.R. design that was eventually dropped in favour of the now famous 9F 2-10-0s'. Lionel's first locomotive, a 5" 'Britannia', was placed 2nd at the 1985 IMLEC at Urmston. Although similar to a Britannia, there were considerable design problems in figuring out boiler and cylinder proportions for the larger engine. Results so far seem to indicate that Lionel, a house builder by profession, has achieved a good working juxtaposition of essential design elements. (Loco grate area = 47.25 sq.ins.)

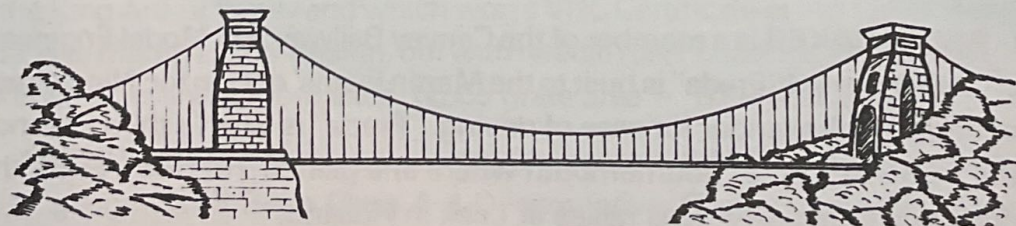


*Arthur Dalton takes his LNER Shire Class on a test run.*



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YEAR	HOST CLUB	ENGINE	GAUGE	EFF'CY	DRIVER OWNER	SOCIETY
1969	BIRMINGHAM S.M.E.	ROYAL SCOT	5"	NOT QUOTED	J.DRURY	BIRMINGHAM S.M.E.
1970	WHITNEY & W. OXFORD	"FIREFLY"	5"	NOT QUOTED	L. LABRAM	BIRMINGHAM S.M.E.
1971	SOUTHAMPTON & DISTRICT	G.W.R. DEAN SINGLE	5"	NOT QUOTED	A. HEYDEN	NEWTON ABBOTT
1972	TYNESIDE S.M.E.E.	G.W.R. 57XX	5"	1.06%	N. SPINK	CHESTERFIELD
1973	CHINGFORD & DISTRICT	L.N.E.R. L1	5"	1.60%	W. LONGSTAFF	S. DURHAM
1974	BRISTOL S.M.E.E.	"NIGEL GRESLEY"	5"	2.54%	F. WINSALL	RUGBY
1975	TYNESIDE S.M.E.E.	G.W.R. KING	3 1/2"	1.55%	L. JOYCE	CHINGFORD
1976	KINVER & W. MIDLANDS	"SPEEDY"	5"	1.58%	W. PERRET	SOUTHAMPTON
1977	CHINGFORD & DISTRICT	"SPEEDY"	5"	2.32%	W. PERRET	SOUTHAMPTON
1978	GUILDFORD M.E.S.	"MAID OF KENT"	5"	1.61%	P. WOOD	CHINGFORD
1979	BRISTOL S.M.E.E.	G.W.R. STIRLING	5"	2.17%	D. MORRIS	URMSTONE
1980	BEDFORD M.E.S.	B.R. CLASS 7	3 1/2"	1.37%	P. WOOD	PRIVATE
1981	BOURNEMOUTH & DISTRICT	L.N.E.R. J39	5"	2.41%	P. WOOD	CHINGFORD
1982	LEYLAND M.E.S.	G.W.R. de GLENN COMPOUND	5"	1.50"	R. AYMESBURY	DERBY M.E.S.
1983	GUILDFORD M.E.S.	L.M.S. ROYAL SCOT	5"	1.35%	L. PRITCHARD	HARLINGTON S.M.E.

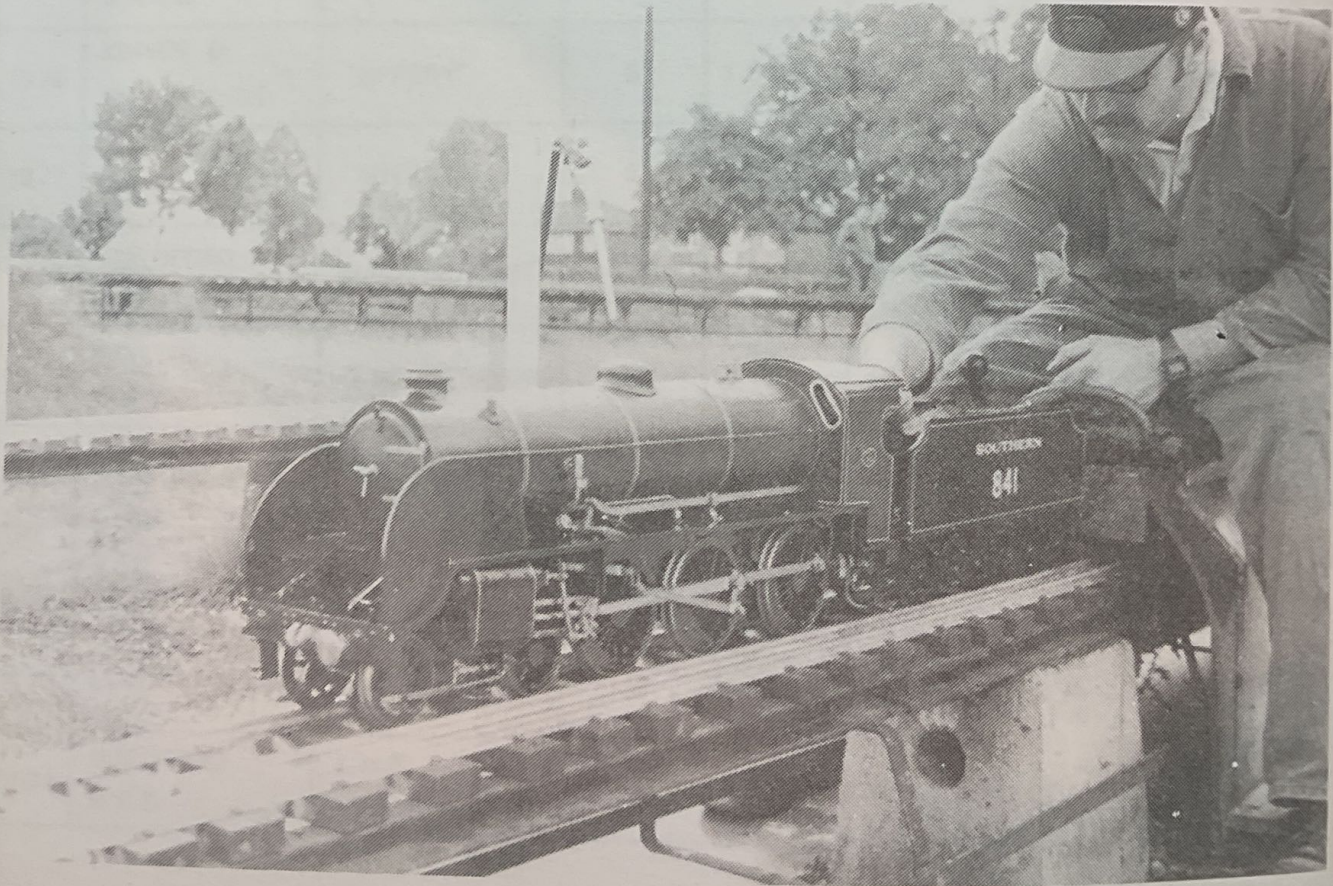
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YEAR	HOST CLUB	ENGINE	GAUGE	EFF'CY	DRIVER OWNER	SOCIETY
1984	BRISTOL S.M.E.	L.M.S. ROYAL SCOT	5"	3.66%	L. PRITCHARD	HARLINGTON S.M.E.
1985	URMSTONE M.E.S.	"NIGEL GRESLEY"	5"	1.85%	A. CROSSFIELD	PRIVATE
1986	BOURNEMOUTH D.S.M.E.	"NIGEL GRESLEY"	5"	1.64%	A. CROSSFIELD	PRIVATE
1987	BIRMINGHAM S.M.E.	ADAMS LSWR JUBILEE	5"	2.29%	K. MOONIE	CHINGFORD
1988	LEEDS S.M.E.E.	BR PROPOSED FREIGHT	5"	4.392%	L.FLIPPANCE	GUILDFORD
1989	GUILDFORD M.E.S.	BR PROPOSED FREIGHT	5"	3.317%	L.FLIPPANCE	GUILDFORD

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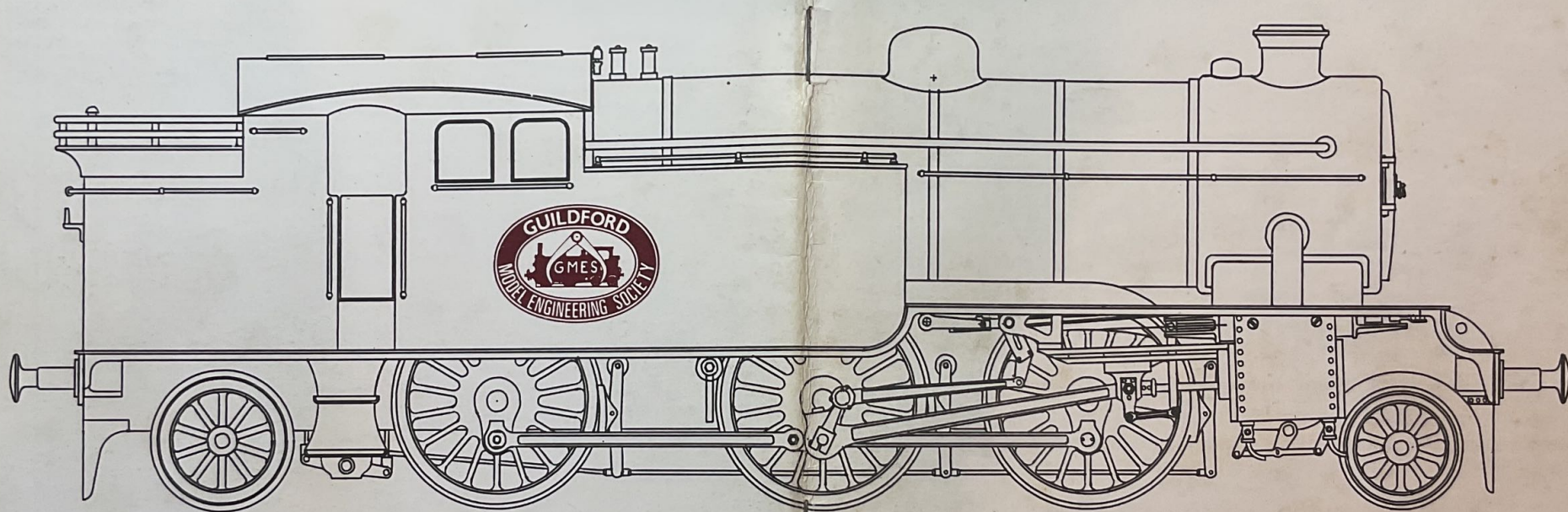
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