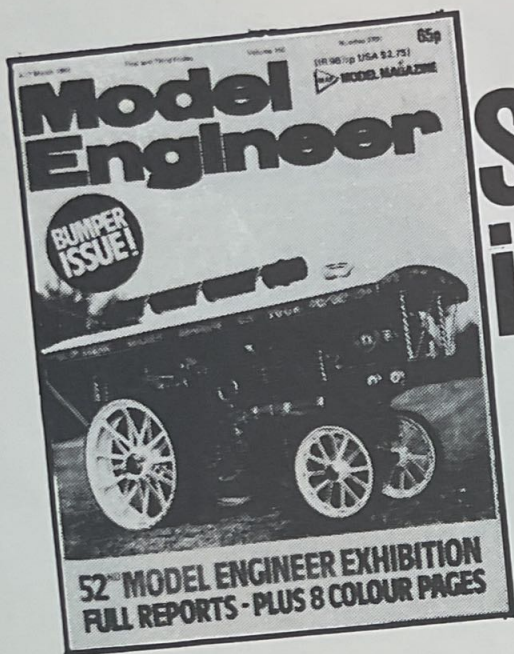


I.M.L.E.C.

1983



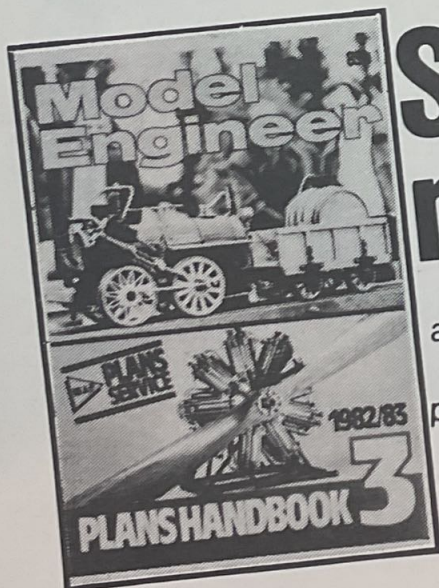
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International Model Locomotive Efficiency Competition

for the

Martin Evans Challenge Trophy

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The overall winner of the competition will receive the Challenge Trophy and £50; Second – £25; Third – £10; Fourth – One Year's Subscription to Model Engineer. A special prize will be awarded to the best 3½" gauge locomotive, if not in the first four.

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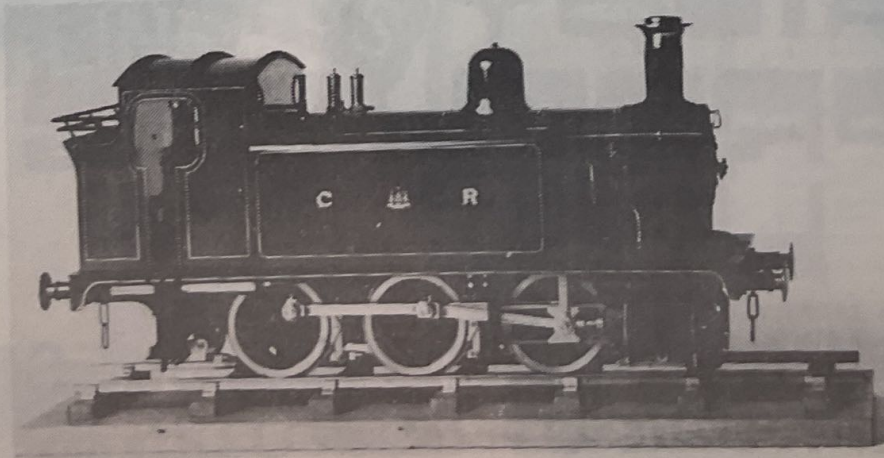
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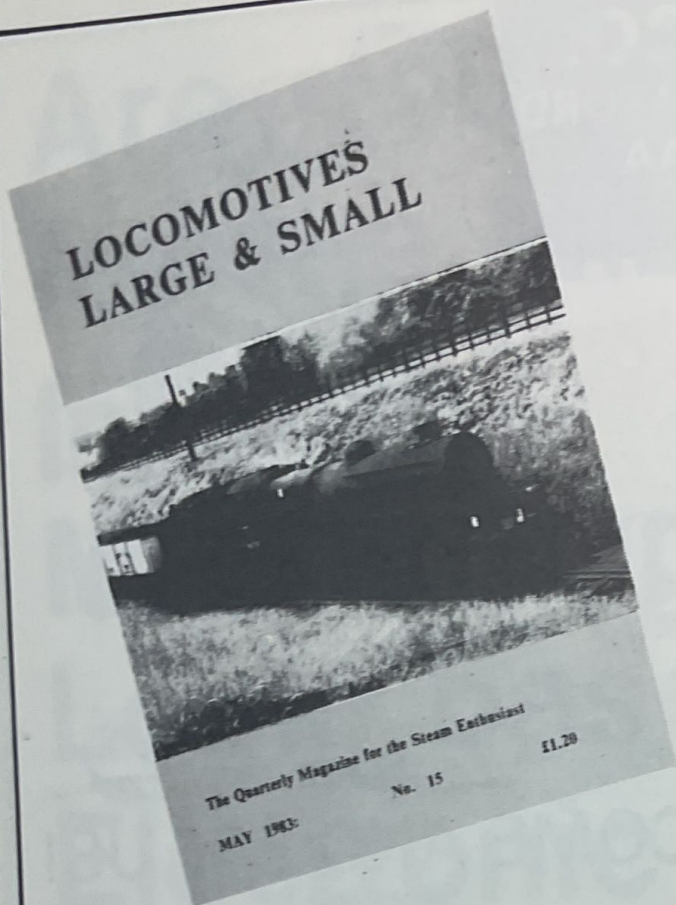
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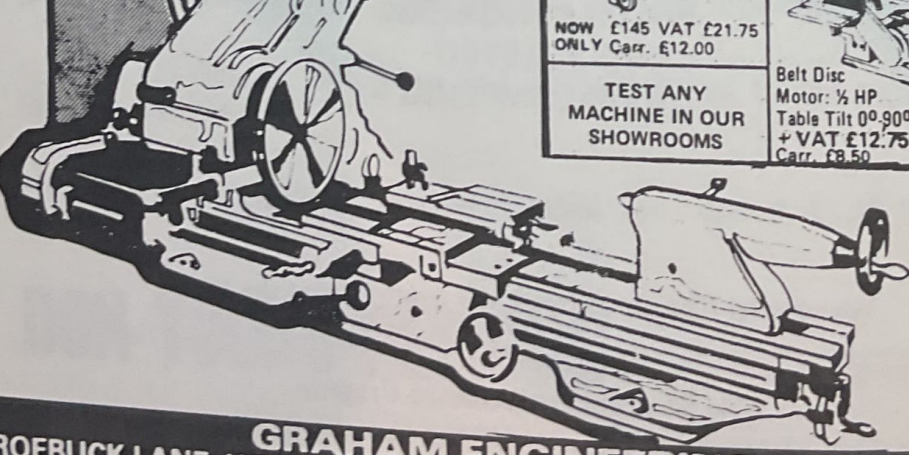
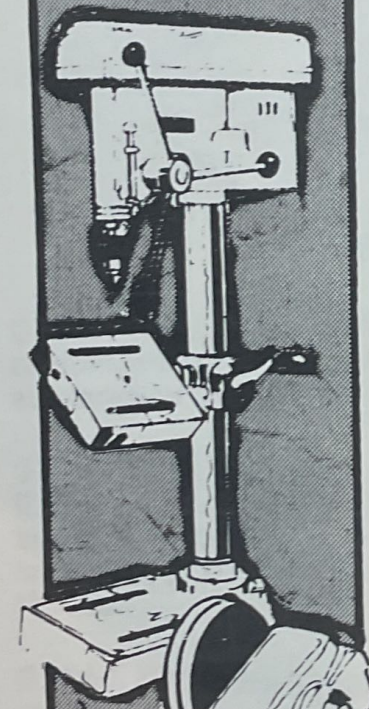
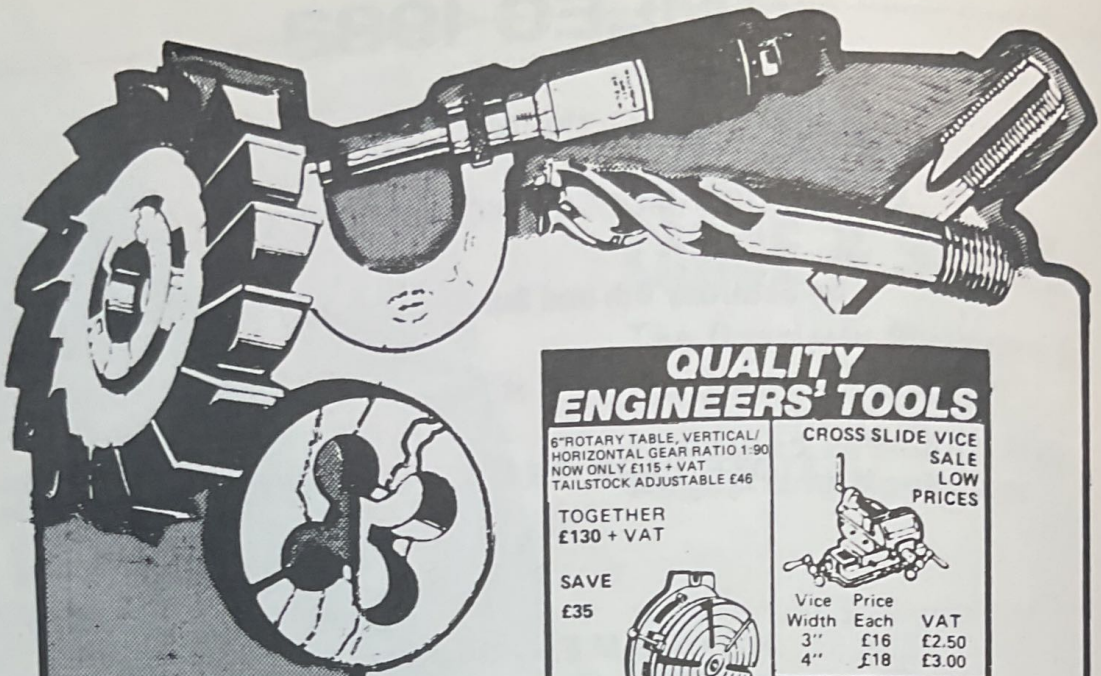
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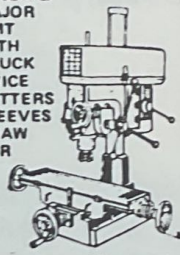


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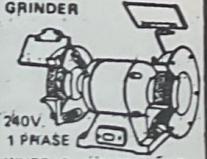
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THE GUILDFORD MODEL ENGINEERING SOCIETY

The origins of the Guildford Model Engineering Society go back to 1945 when a Model Engineering Section was formed within the Guildford Model Yacht and Power Boat Club. By 1954 the Section was strong enough to become an independent Society. The same year saw the first GMES Annual Exhibition of Members' work with train rides for children on a short up and down track.

In 1959 the Society leased five acres of land from the Guildford Borough Council on which Members built the Club House and a raised 3½" and 5" gauge track, oval in shape, and which gave a run of 640 feet. In 1976 the track was extended to make a kidney shaped layout of 1400 feet and what remained of the old layout was re-built to the new standard. Additions to the Club House included a kitchen at one end matched architecturally by a workshop at the other. The latest building project, completed in 1982, was a separate lavatory block.

In 1968 the Annual Exhibition was supplemented by what is believed to be the first Model Traction Engine Rally ever to be held as an annual event. The two shows have since been combined into a two-day event held on the third week-end in July. Once every four years this is enlarged into a week-long International Rally and the third such event is to be held in 1984. The first IMLEC to be hosted by Guildford was in 1978.

Although strongly biased towards live steam, Society interests have always been broadly based. Members of the 4m/m Section are currently building their second permanent layout in the Club House whilst their 7m/m colleagues have become well known at various Model Railway exhibitions throughout the South of England with their large and comprehensive layout. Both layouts are a popular feature at GMES Public Open Days held monthly during the Summer.

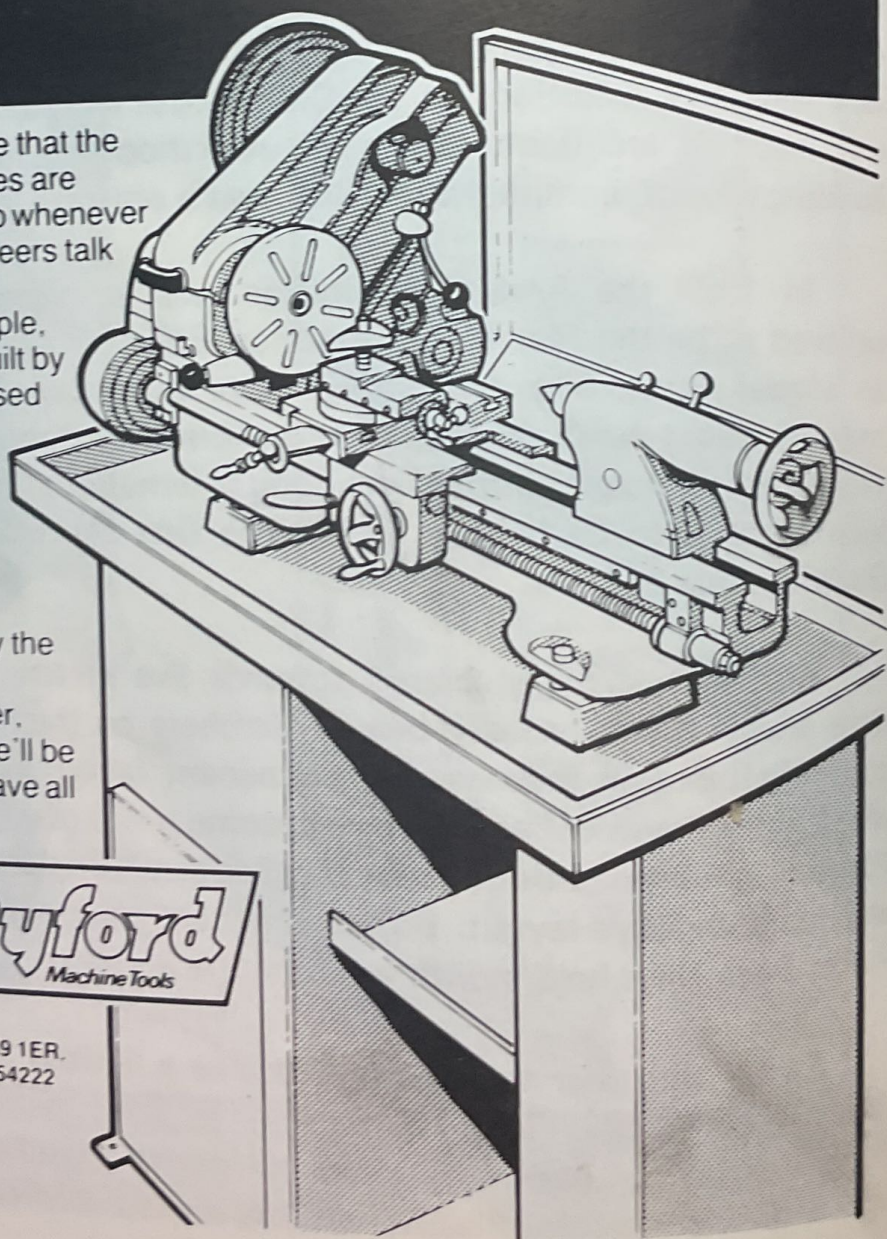
Earlier this year the Society became a limited liability company, thus offering better legal protection to their nearly two hundred Members. This will in no way affect the informality of ordinary meetings or the friendly welcome given to visitors or new Members.

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ABOUT I.M.L.E.C.

The suggestion for a Model Locomotive Efficiency Competition was first made by Martin Evans in 1964, but like many good ideas it had to mature before there was sufficient support for it to be put into effect. 'LBSC', the then acknowledged Maestro among small locomotive builders was known to be against any such competition, fearing that it would arouse ill feeling. Perhaps he had in mind his own experience when, at the 1924 Model Engineer Exhibition his coal fired 'Ayesha' was matched against the Greenly designed 'Challenger'. This contest, the highlight of the so-called 'Battle of the Boilers' resulted in a great deal of subsequent acrimony.

Be that as it may, Martin Evans kept his idea alive and, having been appointed Editor of the Model Engineer, raised the matter again in early 1968. This time he was in a position to carry the project to fruition, and the first IMLEC took place at the Birmingham Society's Illshaw Heath track in July 1969. For this event Martin Evans donated the splendid silver Challenge Cup which has been competed for annually ever since. The Birmingham Society, for their part, built a dynamometer car which has also figured in almost every competition so far.

Although IMLEC is staged as an efficiency competition for 3½" and 5" gauge coal fired locomotives, it is widely accepted that tactics and driving skill play a very large part. It is as much a test for the driver as for the engine. To steam a small loco at maximum efficiency for thirty minutes non-stop demands great judgement and skill. It is also something that very few drivers are ever called upon to do in the normal course of club running.

IMLEC is not a speed contest, neither is it a maximum load demonstration. A load is necessary to provide work for the loco and a smart pace desirable to achieve the sought after foot pounds of work. The winner is the loco which converts into useful work the greatest percentage of energy contained in the coal burned.

Because 5" gauge locos have a natural advantage over their normally smaller 3½" gauge competitors, a separate prize is offered for the best 3½" if not the outright winner. So far there is nothing in the rules to define into what category the larger 3½" 'narrow gauge' locos should be put, some of which are considerably larger and more powerful than a 5" gauge loco based on a standard gauge prototype.

As a matter of policy, IMLEC is hosted by a different club each year and an endeavour is made to cover each part of the country in turn. In the past three years the event was successively at Bedford, Bournemouth and Leyland. With the passage of time, however, it is almost inevitable that some societies should be called upon more than once. The first IMLEC to be held at Guildford was in 1978. This was, in reality, one of the first truly international contests in that locomotives were entered from South Africa and Holland as well as from all parts of the British Isles. As host for 1983, the Guildford Model Engineering Society looks forward to welcoming competitors from wherever they might come.

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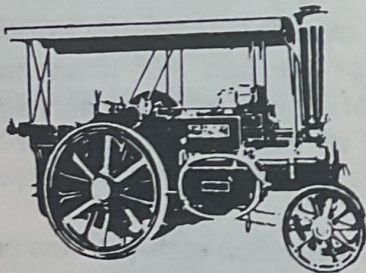
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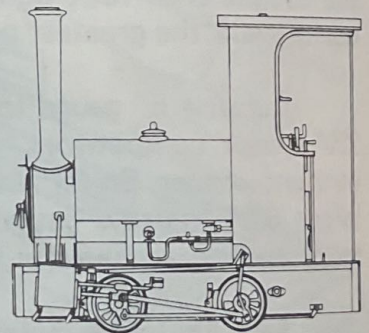
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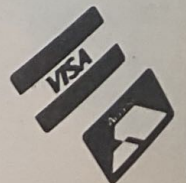
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Competition Rules and Organisation

1. On arrival, competitors should register at Reception where all necessary information concerning the day's events will be available, including the approximate time of 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 also be at hand to offer any assistance required.
3. Two sizes of anthracite will be provided in weighed 2 lb. bags.
4. As much charcoal, wood, paraffin and meths as required will be provided for raising steam. The change to weighed coal will be at the driver's discretion, but he must have a good coal fire before starting the run. This he must be ready to do immediately on the conclusion of the previous run.
5. The train with dynamometer car will be prepared at the station to carry the number of passengers chosen by the competitor.
6. The duration of the run will be a nominal 30 minutes. No time allowance will be made for any stops other than derailments. The timekeepers will keep competitors informed of their progress and indicate when on the last lap. The run must finish at the station to unload passengers. Should a driver stop short of the station due to shortage of steam, water or coal, even though he has been running for the full thirty minutes, he must 'blow-up' and complete the run to the station.
7. Should the load prove too much for the locomotive, one or more passengers may be off-loaded wherever it is safe to do so.
8. Water will be handed to competitors, as required, in suitable containers so that they may top-up without stopping.
9. At the end of the run, the locomotive will return to the steaming bay when all unused coal will be collected and weighed in the presence of the driver. No allowance will be made for unburned coal left in the firebox.
10. The results will be calculated by the Society's Officials and displayed on the notice board as soon as possible. Each driver will be handed a print-out giving complete details of his own run.

DISQUALIFICATION

11. A maximum speed limit of 12 m.p.h. will be in operation for the competition. The Official Observer will advise drivers if this speed is approached. He will give a warning if the speed limit is exceeded. Three such warnings may result in disqualification.
12. During the measured run, trains must not be assisted externally in any way; all work must be provided 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 drawbar pull. The use of the hand pump is not permitted except in an emergency when all other means of water feed have failed and the locomotive must then be retired. Infringement of any part of the rule will result in disqualification.
13. The use of sand is not permitted except for the start of the run.
14. The decision of the Chief Judge is final. Judges will be appointed by the Guildford Model Engineering Society.

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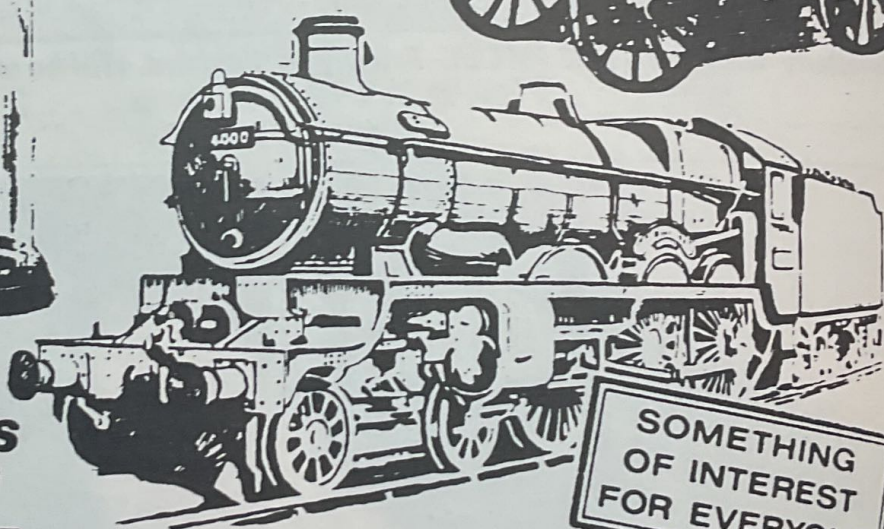
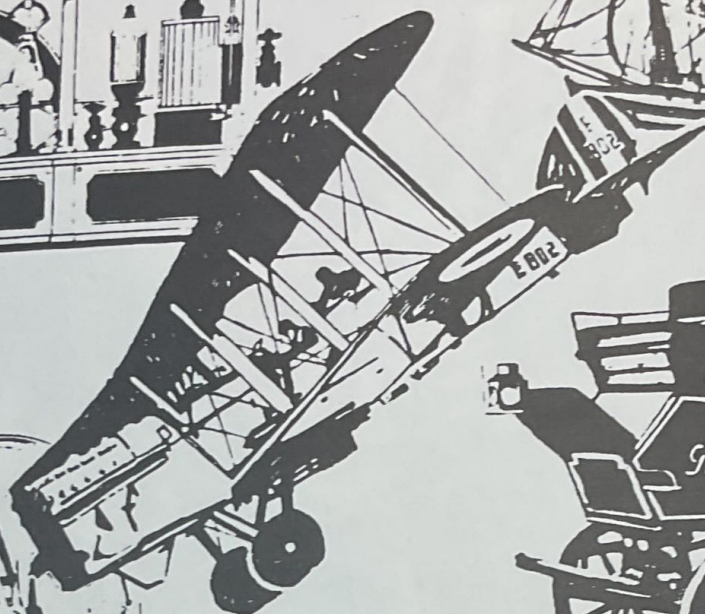
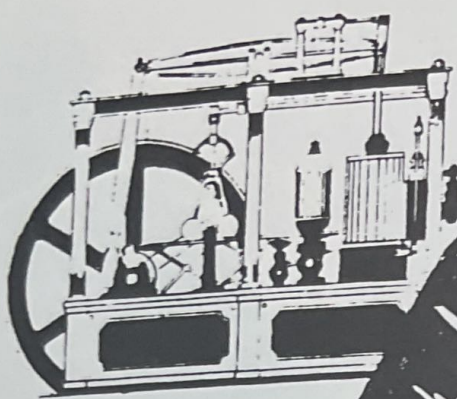
Roy Amsbury with the 1982 IMLEC Trophy at Leyland. Will he make it two years in a row?



Geoff Moore, the runner-up at Leyland with his LBSC "Minx".



M. Zabrocki of the Romney Marsh M.E.S. with his LBSC "Mona", the best of the 3½" gauge locos at Leyland last year.



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CALCULATION OF RESULTS

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

$$\text{Overall Thermal Efficiency \%} = \frac{\text{Work Output} \times 100}{\text{Heat Input}} \%$$

The calorific yield of the coal has been measured to be 14312 B.Th.U./lb. Therefore 1 lb of coal yields 14312 x 778 ft. lb. of heat where 778 is the number of ft. lb. per B.Th.U. Thus:

$$\text{Overall Thermal Efficiency \%} = \frac{\text{Total Work Done (ft. lbs.)} \times 100}{\text{Weight of Coal Used (lbs.)} \times 14312 \times 778} \%$$

The locomotive which returns the highest Overall Thermal Efficiency is the winner.

Some interesting subsidiary calculations are:

$$\text{Average Drawbar Horspower} = \frac{\text{Total Work Done (ft. lbs.)}}{\text{Overall Run Time (mins.)} \times 33,000} \quad \text{H.P.}$$

$$\text{Specific Fuel Consumption (SFC)} = \frac{\text{Weight of Coal Used (lbs.)} \times 1,980,000}{\text{Total Work Done (ft. lbs.)}} \quad \text{lbs./D.B.H.P./hr.}$$

$$\text{Average Drawbar Pull} = \frac{\text{Total Work Done (ft. lbs.)}}{\text{Total Distance Travelled (ft.)}} \quad \text{lbs.}$$

$$\text{Average Speed} = \frac{\text{Total Distance Travelled (ft.)} \times .01136}{\text{Overall Run Time (mins.)}} \quad \text{M.P.H.}$$

M
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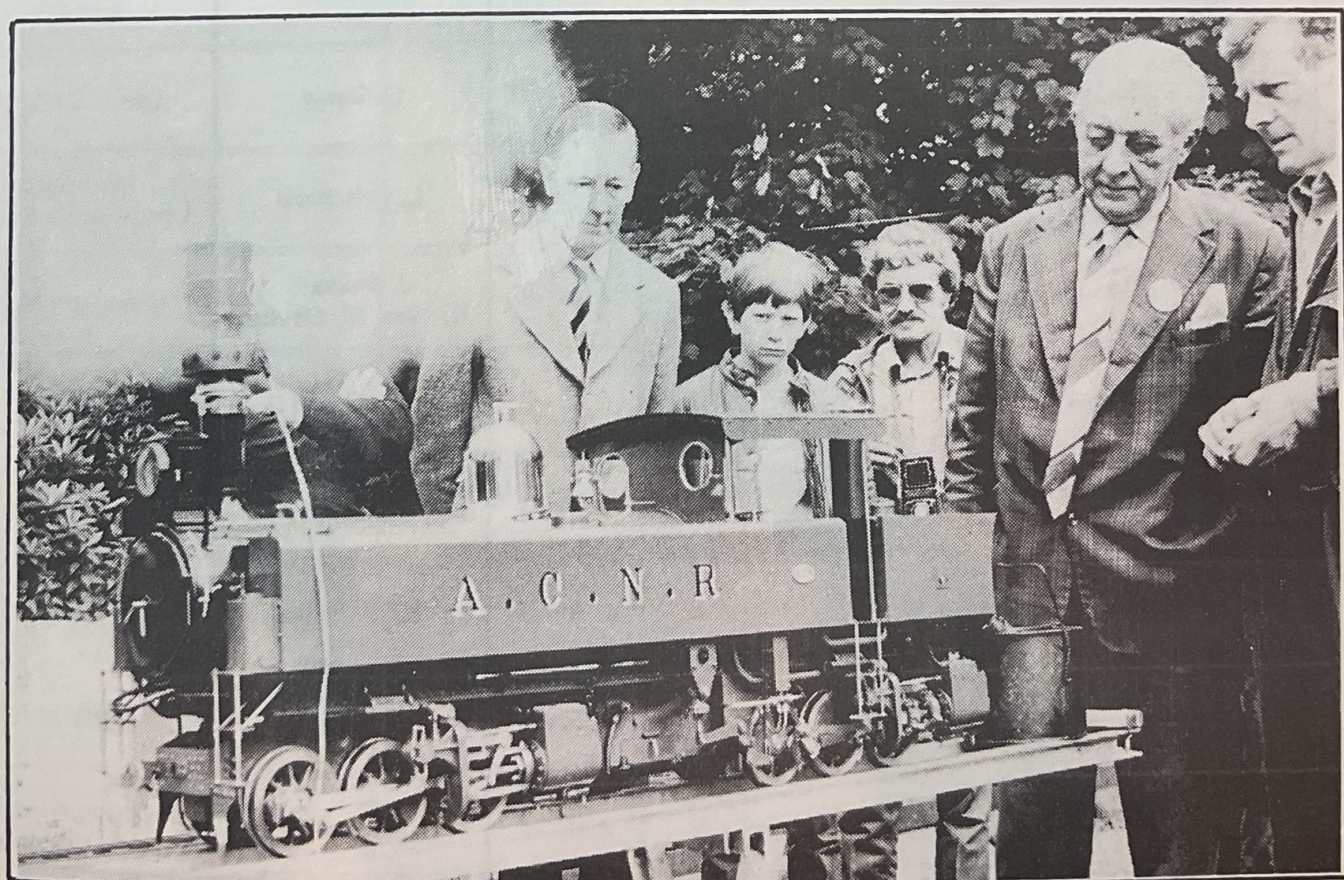
BOOKS

MAP

DRAWINGS



Percy Wood of Chingford M.E.C. with his powerful J39, the 1981 IMLEC winner.



The Chilean Nitrates narrow gauge Meyer 0-6-6-0 of John Hartup of Wigan M.E.S. on view while raising steam at Leyland last year, with Martin Evans looking on.

COMPETITORS and RESULTS SHEET

IMLEC 1983

SATURDAY 9th JULY

Run No.	LOCOMOTIVE TYPE	Gauge	Wheel Arrangement	OWNER (Driver, if different)	SOCIETY	Load (Adults)	Running Time (mins.)	Distance Run (ft.)	Total Work (ft.lbs.)	Average Drawbar H.P.	Coal Used (lbs.)	Specific Fuel Consumption (SFC) (lbs./DBHP. Hr.)	Thermal Efficiency (%)	Final Pos'n
1	GNR Atlantic "Maisie"	3½	4-4-2	D.R. Wilkinson	Reading S.M.E.									
2	LMSR Tank "Jubilee"	3½	2-6-4T	J.A. Nunn	Crawley M.E.									
3	LBSC's "Pamela" (SR Bulleid Rebuilt Pacific)	3½	4-6-2	G. Thomas	Private Entry									
4	"Simplex"	5	0-6-0T	A.D. Daniels	Stockport and District S.M.E.									
5	GWR "Lechlade Manor"	5	4-6-0	J.C. Hale	Gravesend M.M. & E.S.									
6	GWR 4575 Class Prairie Tank	5	2-6-2T	R. Blackwell (Driver, A.Blackwell)	Sutton M.E.C.									
7	GNR 01 "Nigel Gresley"	5	2-8-0	M. Collyer	Colchester S.M.E.E.									
8	GWR 1500 Class	5	0-6-0PT	D. Beale	Leeds S.M.E.E.									
9	LMSR Rebuilt Royal Scot "Royal Scots Fusilier"	5	4-6-0	L. Pritchard	Harlington Locomotive Society									
10	Freelance	5	4-4-0	J. Snazell (Driver, M. Davies)	Taunton M.E.									
11	Freelance	5	2-4-2	A. Thorp	Sussex Miniature Locomotive Society									
12	New York & Hudson River R.R.	5	4-4-0	E. Lindsey	Leyland S.M.E.									
13	GWR 45xx Tank "Firefly"	5	2-6-2T	L.F. Morley	Portsmouth M.E.S.									
14	LNER A3 Pacific "Flying Scotsman"	5	4-6-2	P. Bevan	Rugby M.E.S.									
15	BR Class 7 Pacific "Brittania"	5	4-6-2	J. Merlijn	Stichting Miniatuur Stoom, Netherlands									

COMPETITORS and

RESULTS SHEET

IMLEC 1983

SUNDAY 10th JULY

Run No.	LOCOMOTIVE TYPE	Gauge	Wheel Arrangement	OWNER (Driver, if different)	SOCIETY	Load (Adults)	Running Time (mins.)	Distance Run (ft.)	Total Work (ft. lbs.)	Average Drawbar H.P.	Coal Used (lbs.)	Specific Fuel Consumption (SFC) (lbs./DBHP. Hr.)	Thermal Efficiency (%)	Final Pos'n
16	"Simplex"	5	0-6-0T	J. Etheridge	Staines Society of M.E. & C.									
17	"Simplex"	5	0-6-0T	P.J. Care	Perranporth and Liskeard Clubs									
18	45 ton Shay	5	0-4-4-0	T.C. Childs	Bristol S.M.E.E.									
19	Henschel Contractors' Engine	5	0-4-0	W. Wagner	Damp Barn Club West Germany									
20	Experimental Model	5	0-8-0	J. Ewins	Maidstone M.E.S.									
21	LNER D49 Rebuilt Hunt Class	5	4-4-0	P. Wood	Chingford M.E.C.									
22	GWR 57xx Tank	5	0-6-0PT	A. Fisher (Driver, M. Zabrocki)	Romney Marsh M.E.S.									
23	GWR "Tintagel Castle"	5	4-6-0	J. Goodwin	Plymouth Miniature Steam Loco. Soc.									
24	LMSR Stanier "Black Five"	5	4-6-0	J. Edwards	Whitchurch (Cardiff) & District M.E.S.									
25	GWR De Glehn Atlantic Compound "President"	5	4-4-2	C.R. Amsbury	Derby S.M. & E.E.									
26	GWR "Norton Manor"	5	4-6-0	A.G. Newberry	Weston-super-Mare & W.Huntspill L.S. Soc.									
27	GWR 7200 Freight Tank	5	2-8-2T	D. Chalk	Canterbury and District M.E.S.									
28	LBSC's "Titfield Thunderbolt"	5	0-4-2	P. Taylor	Cheltenham S.M.E.									

The competition is scheduled to finish at approximately 17.00 on Sunday

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1366 0-6-0

5" Gauge

Butch 0-6-0
Chub 0-4-0
City of Truro 4-4-0
Dean Goods 0-6-0
Firefly 2-6-2
King John 4-6-0
Maid of Kent 4-4-0
Pansy 0-6-0
Peggy 0-4-0
Simplex 0-6-0
Springbok 4-6-0
Tich 0-4-0
Twin Sisters 0-6-0
2251 0-6-0
4300 2-6-0
4700 2-8-0

3½" Gauge

Britannia 4-6-2
Canterbury Lamb 0-4-0
City of Truro 4-4-0
Doris 4-6-0
Hielan Lassie 4-6-2
Iris 0-6-0
Juliet 0-4-0
Maisie 4-4-2
Miss 10-8 4-4-0
Molly 0-6-0
Petrolea 2-4-0
P.V. Baker 0-6-0
Rainhill 0-2-2
Rob Roy 0-6-0
Tich 0-4-0
Virginia 4-4-0

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2½" Gauge

Austere Ada 2-8-0
Dyak 2-6-0
Fayette 4-6-2
Olympiade 4-6-0
Purley Grange 4-6-0
Southern Maid 0-6-0

0" Gauge

Bat 4-4-0
Hertford Hall 4-6-0
Josie 4-6-4
Princess Coronation 4-6-2
Royal Scot 4-6-0
Sir Morris 4-6-2

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ABOUT THIS YEAR'S ENTRIES

No. 1. READING SOCIETY OF MODEL ENGINEERS – Dennis R. Wilkinson

GN Large Atlantic 4-4-2 in 3½G. Built to "LBSC's" words and music plus works drawings. The frames, wheels and sundry castings were bought for 30/- in 1952. The boiler has two co-axial radiant superheaters and is fed by a double acting axle pump via a feedwater heater. In 1981, at a sponsored run, the engine was in steam for 24 hours and covered 131 miles.

No. 2. CRAWLEY MODEL ENGINEERS – James A. Nunn

2-6-4T 3½G. "Jubilee" built in 1964 to Martin Evans' design but with a new and modified boiler in 1972. Mr Nunn has been a model engineer for 23 years and is a founder member of the Crawley Society.

No. 3. PRIVATE ENTRY – G. Thomas of Milford Haven

3½"G. "Pamela" 4-6-2 to "LBSC's" design as published in the *Model Engineer*. Since its completion in 1965, the loco has seen much service and is now using its third set of superheater elements and third fire grate.

No. 4. STOCKPORT & DISTRICT SOCIETY OF MODEL ENGINEERS –

A.D. (Danny) Daniels

GWR 0-6-0 PT in 5"G. This model, although externally different, is based on Martin Evans' "Simplex" design.

No. 5. GRAVESEND MODEL MARINE & ENGINEERING SOCIETY –

J.C. Hale

GWR "Lechlade Manor" 4-6-0 in 5"G. This model was built in 18 months from the Martin Evans design published in the *Model Engineer*. Mr Hale is Chairman of the Gravesend Society.

No. 6. SUTTON MODEL ENGINEERING CLUB – Roy Blackwell

GWR 4575 Class 'Prairie Tank' 2-6-2 in 5"G. Basically to Martin Evans' "Firefly" design with added detail from prototype loco at Didcot. Winner of a Bronze Medal at the 1982 M.E. Exhibition. All castings were made from Mr Blackwell's own patterns. The loco will be driven by his son, Andrew.

No. 7. COLCHESTER SOCIETY OF MODEL ENGINEERS – Michael Collyer

GN 01 Class freight engine "Nigel Gresley" 2-8-0 in 5"G. to Martin Evans' design. The model took six years to build and has been running since Easter 1982.

No. 8. LEEDS SOCIETY OF MODEL & EXPERIMENTAL ENGINEERS –

David Beale

GWR 1500 Class 0-6-0 PT in 5"G. This loco, which ran in the 1979 IMLEC at Bristol, was Mr Beale's first attempt at model engineering. It was built to "LBSC's" proportions with valve gear as described by K.N. Harris in *Model Engineer* 1.4.66. It has a stainless steel firebox arch.

No. 9. HARLINGTON LOCOMOTIVE SOCIETY – L. Pritchard

Ex LMS re-built "Royal Scots Fusilier" 4-6-0 in 5"G. The model was started in 1974 and finished for the 1982 M.E. Exhibition where it gained a Silver Medal. The only castings used were for the wheels.

No. 10. TAUNTON MODEL ENGINEERS – John Snazell

Freelance 4-4-0 in 5"G. with Baker Valve Gear.

No. 11. SUSSEX MINIATURE LOCOMOTIVE SOCIETY – Alfred Thorp

Freelance 2-4-2 locomotive in 5"G. The loco was designed by Mr Thorp when resident in Canada and originally intended for 4¾"G. In 1971 he returned to England when the design was altered to 5" gauge and 'beefed-up' to suit running at Beechurst. During the 1981 and 1982 Summer seasons the locomotive ran 382 miles.

No. 12. LEYLAND SOCIETY OF MODEL ENGINEERS – Eric C. Lindsay

NY & HRR 4-4-0 in 5"G. to design by J.G.S. Clarke of Denbigh. Mr Lindsay was Chairman of the 1982 IMLEC Committee at Leyland and started building immediately after that most successful competition. He has since moved house to Bath!

No. 13. PORTSMOUTH MODEL ENGINEERING SOCIETY – Frank Morley

GWR Small Prairie 2-6-2 T in 5"G. to Martin Evans' design with added details from works drawing and prototype. This is Mr Morley's third IMLEC. In 1971 he gained the 'Best 3½" Gauge' award with a S.R 4-4-0 and in 1979 was unplaced with a 'LBSC's' "Molly".

No. 14. RUGBY MODEL ENGINEERING SOCIETY – P. Bevan

LNER A3 Gresley Pacific "Flying Scotsman" in 5"G. Basically to Clarkson's design with modified boiler to include a combustion chamber and a single Nicholson type thermic syphon in the firebox. Mr Bevan trained at the Doncaster 'Plant' (1950-55) and had two years' experience on full size Gresley Pacifics.

No. 15. STICHTING MINIATUUR STOOM, NETHERLANDS — Jan Merlijn
BR Class 7 Pacific "Britannia" in 5"G. Built in three years, basically to Norman Spinks drawings, with added details and changed regulator design.

**No. 16. STAINES SOCIETY OF MODEL ENGINEERS & CRAFTSMEN —
Jim Etheridge**

Simplex 0-6-0 T to design by Martin Evans in 5"G. The model has been in regular use for the past 3½ years. Three times winner of Staines Society trials.

No. 17. PERRANPORTH & LISKEARD CLUBS — P.J. Care

5"G. 0-6-0 'Simplex' to Martin Evans' design. The loco is six years old and Mr Care has also built a "Pansy" and a "Firefly".

**No. 18. BRISTOL SOCIETY OF MODEL & EXPERIMENTAL ENGINEERS —
Terry C. Childs**

45 ton Shay 0-4-4-0 in 5"G. The only castings used were for cylinders; wheels being cut from cast iron bar stock.

No. 19. DAMPH-BAHN CLUB DEUTCHLAND (W.Germany) — Wilfred Wagner

Henschel Contractors Engine 0-4-0 in 5"G. Fitted with steam feed pump to builders' own design, 4 element co-axial superheater and 'live' sanding equipment.

No. 20. MAIDSTONE MODEL ENGINEERING SOCIETY — Jim Ewins

Experimental model 0-8-0 in 5"G with chain driving power unit situated in the smokebox. This loco, which is in itself a prototype, embodies many of the precepts set out by Jim Ewins in the May 1982 issue of *Engineering in Miniature*.

**No. 21. CHINGFORD & DISTRICT MODEL ENGINEERING CLUB —
Percy Wood**

5"G 4-4-0 of own design based on a supposed rebuild of an LNER 'Hunt' Class locomotive but with two cylinders. Percy has already won IMLEC twice, once at Guildford in 1978 with his "Maid of Kent" and at Bournemouth in 1981 with his LNER J39 0-6-0, both in 5" gauge.

No. 22. ROMNEY MARSH MODEL ENGINEERING SOCIETY – A. Fisher
GWR 57xx Pannier Tank 0–6–0 in 5"G. to design by "LBSC" but with modified valve gear. This is Mr Fisher's third loco.

No. 23. PLYMOUTH MINIATURE LOCOMOTIVE SOCIETY – J. Goodwin
GWR "Tintagel Castle" 4–6–0 in 5"G. This is probably the first locomotive to be completed to design of P.J. Rich. Only castings used were for wheels. Cylinders were machined from the solid.

No. 24. WHITCHURCH (CARDIFF) & DISTRICT MODEL ENGINEERING SOC.
John Edwards
LMS Stanier "Black Five" 4–6–0 in 5"G. Built entirely to Don Young's drawings, this again is one of the first of this design to be completed. The model is numbered 5156 and named "Ayrshire Yeomany".

No. 25. DERBY SOCIETY OF MODEL & EXPERIMENTAL ENGINEERS –
C.R. Amsbury
GWR De Glehn compound 4–4–2 locomotive "President" in 5"G. This model, a true 4-cylinder compound, was designed by its builder and is currently being described in the *Model Engineer*. It was the winner of the 1982 IMLEC at Leyland. The loco was also awarded the Bill Deane Memorial Trophy and a Silver Medal at the 1983 M.E. Exhibition. "President" is Roy Amsbury's fourth locomotive, all but one being built from works drawings.

No. 26. WESTON-SUPER-MARE & W.HUNTSPILL LIVE STEAM SOCIETY –
A.G. Newberry
GWR 4–6–0 "Norton Manor" in 5"G. to Martin Evans' design published in the *Model Engineer*.

No. 27. CANTERBURY & DISTRICT MODEL ENGINEERING SOCIETY –
D. Chalk
GWR 7200 Class 2–8–2 T in 5"G. Built from works drawings, this loco won the Crebbin Memorial Cup and a Silver Medal at the 1980 M.E. Exhibition and came 10th at the 1981 IMLEC at Bournemouth. Subsequent alterations have been made to blast pipe and grate.

No. 28. CHELTENHAM SOCIETY OF MODEL ENGINEERS – P. Taylor
LBSC's "Titfield Thunderbolt" 0–4–2 in 5"G. This engine is now 26 years old and has covered over 1,000 miles. Mr Taylor is Chairman of the Cheltenham Society.

GUILDFORD

MODEL ENGINEERING EXHIBITION



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16TH AND 17TH JULY 1983

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PREVIOUS RESULTS

Year	Host Club	Place	Owner	Club	Engine	Gauge (ins)	Efficiency (per cent)
1969	Birmingham S.M.E.	1st	J. Drury	Birmingham	Royal Scot	5	Not Quoted
		2nd	N. Spink	Private Entry	GWR Gooch	5	
		3rd	A. Bowling	Cheltenham	Green Arrow	3½	
1970	Whitney & West Oxford S.M.E.	1st	L. Labram	Birmingham	"Firefly"	5	Not Quoted
		2nd	P. Dupen	Romford	MR "999"	5	
		3rd	J. Cousins	Willesden & W.London	"Speedy"	5	
		1st 3½"	E. Kellet	Bristol	GWR Hall	3½	
1971	Southampton & District S.M.E.	1st	A. Heyden	Newton Abbott	GWR Dean Single	5	Not Quoted
		2nd	C.R. Amsbury	Derby	GWR 51XX	5	
		3rd	G. Hawkins	Bristol	GWR King	5	
		1st 3½"	F. Morley	Portsmouth	"Maid of Kent"	3½	
1972	Tyneside S.M.E.	1st	N. Spink	Chesterfield	GWR 57XX	5	1.06
		2nd	L. Bennett	Chingford	GCR Director	5	1.05
		3rd	H. Reeve	Kinver & W.Midland	"Nigel Gresley"	5	—
		1st 3½"	A. Jacobs	Romford	GWR Hall	3½	1.03
1973	Chingford & District M.E.C.	1st	W. Longstaff	S.Durham	LNER L1	5	1.6
		2nd	L. Labram	Birmingham	"Firefly"	5	1.58
		3rd	T. Arnott	Sunderland	"Doris"	3½	1.47
1974	Bristol S.M.E.E.	1st	F.G. Winsall	Rugby	"Nigel Gresley"	5	2.54
		2nd	C.R. Amsbury	Derby	GWR 51XX	5	2.138
		3rd	A.H. Castle	Worcester	Freelance	5	1.933
		1st 3½"	D. Alford	Bracknell	GWR K2	3½	1.018
1975	Tyneside S.M.E.E.	1st	L. Joyce	Chingford	GWR King	3½	1.552
		2nd	F.G. Winsall	Rugby	"Nigel Gresley"	5	1.392
		3rd	D.W. Horsfall	Brighouse	LSWR	5	1.355
1976	Kinver & W.Midland	1st	W. Perret	Southampton	"Speedy"	5	1.58
		2nd	F. Winsall	Rugby	"Torquay Manor"	5	1.37
		3rd	J. Coleman	Bristol	SECR 'D'	5	1.36
		4th	P. Wood	Chingford	"Maid of Kent"	5	1.21
1977	Chingford & District M.E.S.	1st	W. Perret	Southampton	"Speedy"	5	2.32
		2nd	Club Loco	Rugby	"Netta"	5	1.79
		3rd	F.A. Beard	Peterborough	"Eva May"	5	1.694
		4th	B. Woolston	Coventry	"General D'Arcy"	5	1.687
		1st 3½"	B.H. Dunster	Canterbury	LNER A4	3½	0.68
1978	Guildford Model Engineering	1st	P. Wood	Chingford	"Maid of Kent"	5	1.614
		2nd	D. Pring	Bristol	"Pansy"	5	1.469
		3rd	B. Perryman	Worthing	LBSC "Gladstone"	5	1.266
		4th	G. Thomas	Llanelli	LNER B1	5	1.99
1979	Bristol S.M.E.E.	1st	D. Morris	Urmston	GWR Stirling Single	5	2.178
		2nd	A. Hall	Harlington	LNER B1	5	1.984
		3rd	G. Thomas	Llanelli	LNER B1	5	1.892
		4th	M. Leahy	Romford	GWR Manor	5	1.787
		1st 3½"	J. Love	S. Africa	SAR C1.6C	3½	1.786
1980	Bedford M.E.S.	1st	P. Wood	Private	BR C1.7	3½	1.378
		2nd	K. Moonie	Chingford	LSWR Adams Radial T	5	1.231
		3rd	R. Wilkinson	Erith	GWR Manor	5	1.209
		4th	A. Hall	Harlington	LNER B1	5	1.167
1981	Bournemouth & District S.M.E.	1st	P. Wood	Chingford	LNER J39	5	2.419
		2nd	R. Wilkinson	Erith	Torquay Manor	5	2.133
		3rd	G. Moore	Guildford	LBSCR "Minx"	5	2.018
		1st 3½"	L. Gillett	Northampton	SR Merchant Navy	3½	1.641
1982	Leyland S.M.E.	1st	R. Amsbury	Derby	GWR De Glehn	5	1.506
		2nd	G. Moore	Guildford	LBSCR "Minx"	5	1.329
		3rd	C. Summersall	Harrogate	"Simplex"	5	1.181
		1st 3½"	M. Zabrocki	Romney Marsh	LBSCR "Mona"	3½	1.166

IMLEC 1984

BRISTOL

1984 MARKS THE 75 TH ANNIVERSARY OF THE BRISTOL SOCIETY
OF MODEL AND EXPERIMENTAL ENGINEERS.

THE SOCIETY IS BOTH HONOURED AND PROUD TO HOST THE 16 TH.
I.M.L.E.C. COMPETITION IN THIS YEAR OF CELEBRATIONS.

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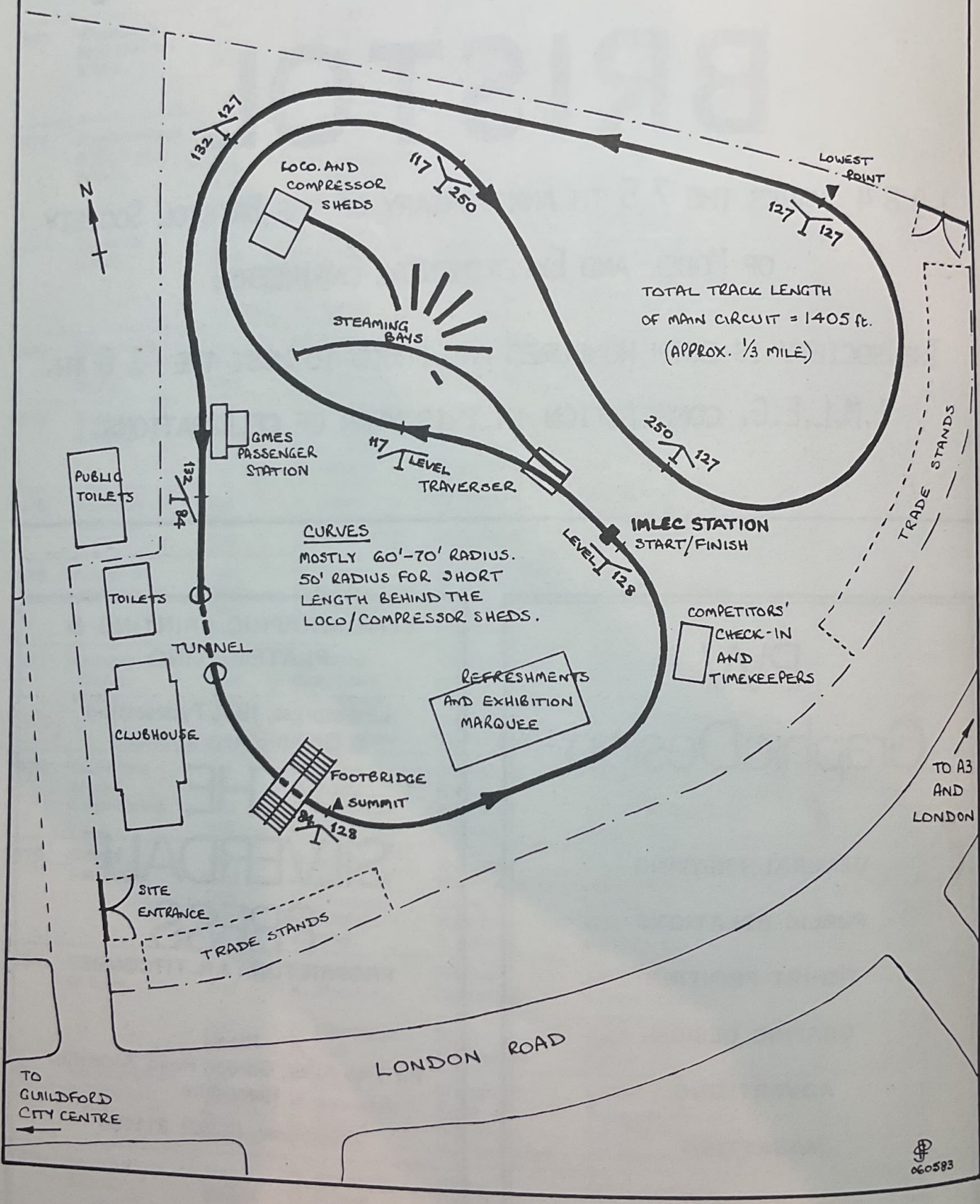
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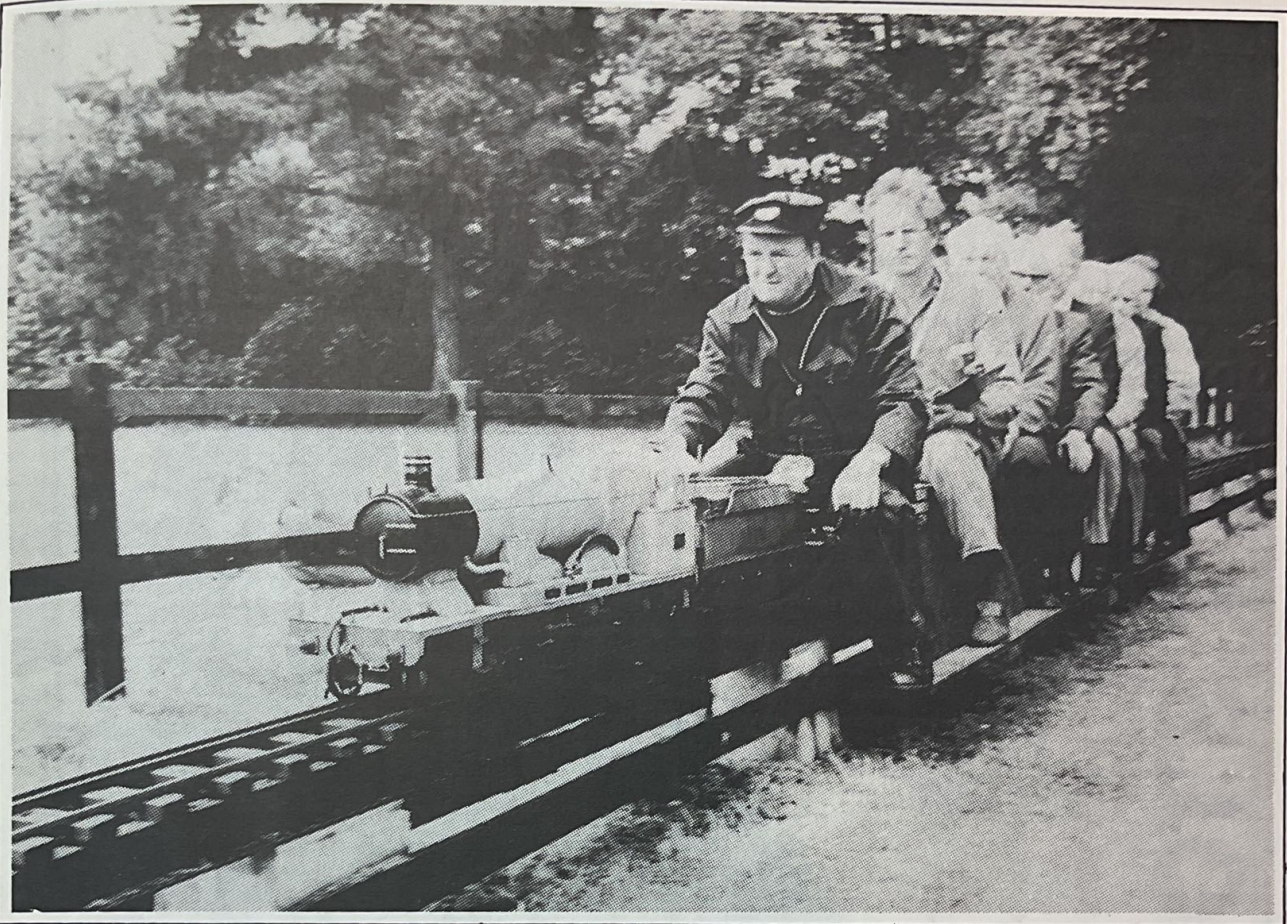
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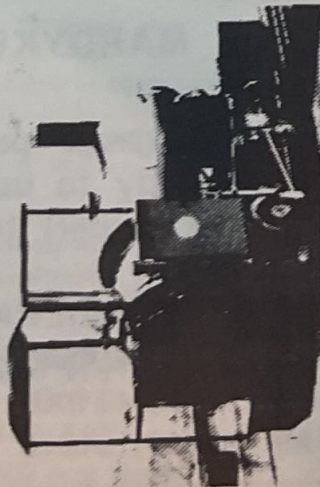
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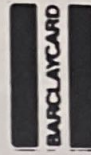
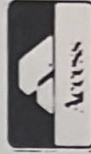
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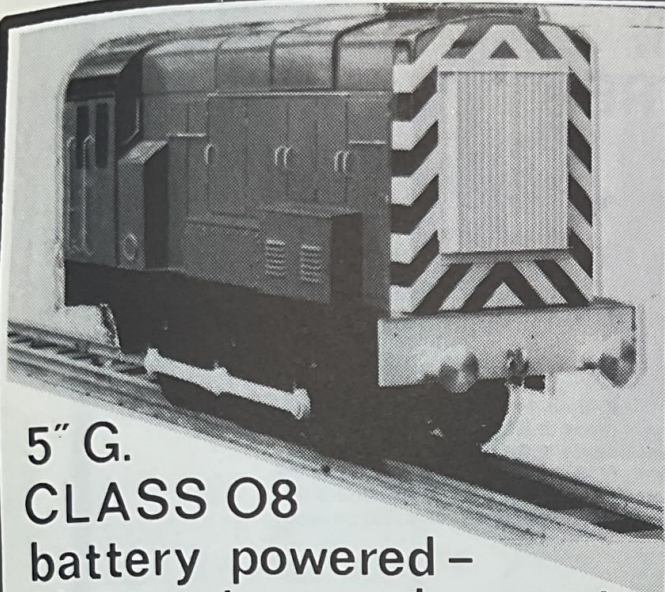


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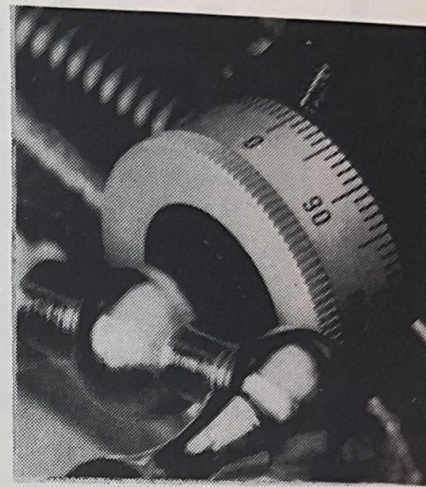
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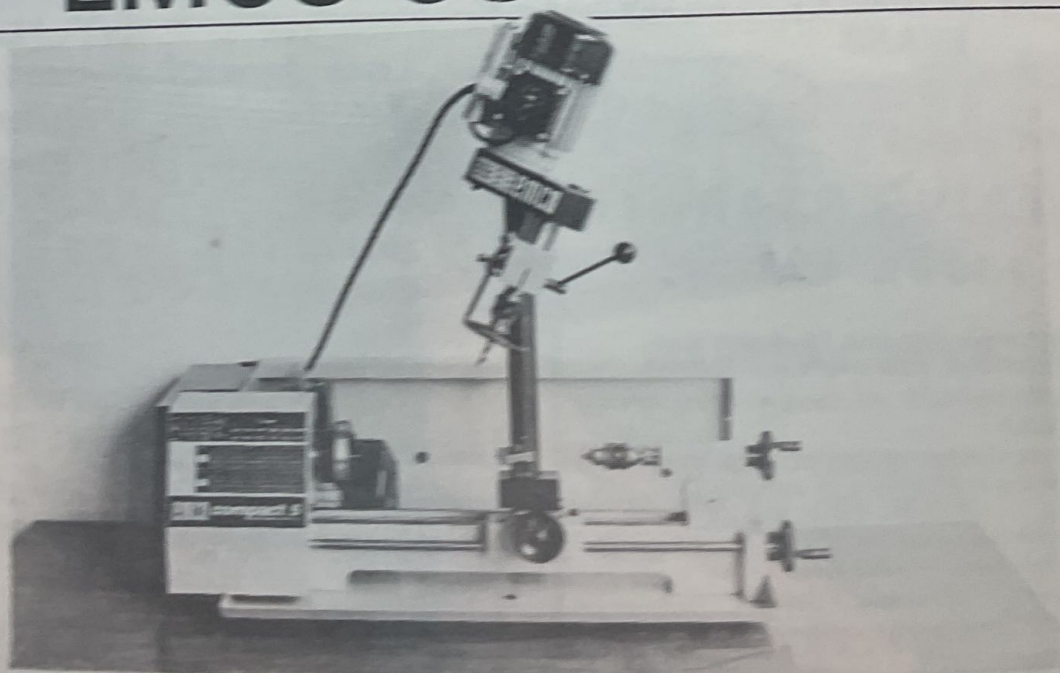
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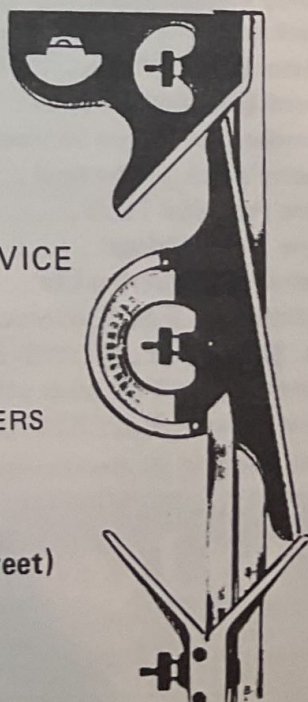
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IMLEC 1983

COMPETITORS and RESULTS SHEET

SATURDAY 9th JULY

Run No.	LOCOMOTIVE TYPE	Gauge	Wheel Arrangement	OWNER (Driver, if different)	SOCIETY	Load (Adults)	Running Time (mins.)	Distance Run (ft.)	Total Work (ft.lbs.)	Average Drawbar H.P.	Coal Used (lbs.)	Specific Fuel Consumption (SFC) (lbs./DBHP. Hr.)	Thermal Efficiency (%)	Final Pos'n
1	GNR Atlantic "Maisie"	3½	4-4-2	D.R. Wilkinson	Reading S.M.E.	4/3	30.48	12654	96905	0.096	1.52	28.027	0.6365	
2	LMSR Tank "Jubilee"	3½	2-6-4T	J.A. Nunn	Crawley M.E.				Retired					
3	LBSC's "Pamela" (SR Bulleid Rebuilt Pacific)	3½	4-6-2	G. Thomas	Private Entry				Retired					
4	"Simplex"	5	0-6-0T	A.D. Daniels	Stockport and District S.M.E.	4/4	31.23	12654	129380	0.126	3.034	46.4318	0.3889	
5	GWR "Lechlade Manor"	5	4-6-0	J.C. Hale	Gravesend M.M. & E.S.	9/7	29.46	15466	271340	0.279	3.359	24.3612	0.7299	
6	GWR 4575 Class Prairie Tank	5	2-6-2T	R. Blackwell (Driver, A.Blackwell)	Sutton M.E.C.	8	30.5	22496	431290	0.424	4.258	19.55	0.9046	
7	GNR 01 "Nigel Gresley"	5	2-8-0	M. Collyer	Colchester S.M.E.E.	7/7	31.51	12654	214060	0.206	2.371	23.785	0.746	
8	GWR 1500 Class	5	0-6-0PT	D. Beale	Leeds S.M.E.E.	7/5	31.17	19684	271510	0.264	3.129	22.82	0.7792	
9	LMSR Rebuilt Royal Scot "Royal Scots Fusilier"	5	4-6-0	L. Pritchard	Harlington Locomotive Society	10	31.69	19684	410930	0.393	2.717	13.091	1.3583	
10	Freelance	5	4-4-0	J. Shazell (Driver, M. Davies)	Taunton M.E.	9/6	30.10	15466	207890	0.209	3.658	34.843	0.504	
11	Freelance	5	2-4-2	A. Thorp	Sussex Miniature Locomotive Society	10/8	30.10	18278	364510	0.367	3.793	20.602	0.8231	
12	New York & Hudson River R.R.	5	4-4-0	E. Lindsey	Leyland S.M.E.	4	31.76	7030	72900	0.070	1.442	39.172	0.4540	
13	GWR 45xx Tank "Firefly"	5	2-6-2T	L.F. Morley	Portsmouth M.E.S.				Retired					
14	LNER A3 Pacific "Flying Scotsman"	5	4-6-2	P. Bevan	Rugby M.E.S.				Retired					
15	BR Class 7 Pacific "Brittania"	5	4-6-2	J. Merlijn	Stichting Miniature Stoom, Netherlands				Retired					

COMPETITORS and RESULTS SHEET

IMLEC 1983

SUNDAY 10th JULY

Run No.	LOCOMOTIVE TYPE	Gauge	Wheel Arrangement	OWNER (Driver, if different)	SOCIETY	Load (Adults)	Running Time (mins.)	Distance Run (ft.)	Total Work (ft. lbs.)	Average Drawbar H.P.	Coal Used (lbs.)	Specific Fuel Consumption (SFC) (lbs./DBHP. Hr.)	Thermal Efficiency (%)	Final Pos'n
16	"Simplex"	5	0-6-0T	J. Etheridge	Staines Society of M.E. & C.	5	29.89	23902	297520	0.302	2.435	16.203	1.0974	
17	"Simplex"	5	0-6-0T	P.J. Care	Perranporth and Liskeard Clubs				Rebird					
18	45 ton Shay	5	0-4-4-0	T.C. Childs	Bristol S.M.E.E.	3	31.23	16872	97440	0.095	2.918	59.285	0.2999	
19	Henschel Contractors' Engine	5	0-4-0	W. Wagner	Dampf Barn Club - West Germany	4/3	33.58	14060	278180	0.251	4.306	30.655	0.5801	
20	Experimental Model	5	0-8-0	J. Ewins	Maidstone M.E.S.	10/8	31.08	19684	379950	0.370	2.792	14.549	1.2222	
21	LNOR D49 Rebuilt Hunt Class	5	4-4-0	P. Wood	Chingford M.E.C.	8/6	29.99	18278	250660	0.253	2.830	16.046	1.1082	
22	GWR 57xx Tank	5	0-6-0PT	A. Fisher (Driver, M. Zabrocki)	Romney Marsh M.E.S.				Rebird					
23	GWR "Tintagel Castle"	5	4-6-0	J. Goodwin	Plymouth Miniature Steam Loco. Soc.				Rebird					
24	LMSR Stanier "Black Five"	5	4-6-0	J. Edwards	Whitchurch (Cardiff) & District M.E.S.	7	30.38	26714	458000	0.457	4.501	19.458	0.9139	
25	GWR De Glehn Atlantic Compound "President"	5	4-4-2	C.R. Amsbury	Derby S.M. & E.E.	5/2	29.25	12654	74490	0.098	1.857	38.916	0.4969	
26	GWR "Norton Manor"	5	4-6-0	A.G. Newberry	Weston-super-Mare & W.Huntspill L.S. Soc.	7/2	30.73	23902	361530	0.357	4.115	22.853	0.7778	
27	GWR 7200 Freight Tank	5	2-8-2T	D. Chalk	Canterbury and District M.E.S.									
28	LBSC's "Titfield Thunderbolt"	5	0-4-2	P. Taylor	Cheltenham S.M.E.									

The competition is scheduled to

finish at approximately 17.00 on Sunday.