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60p

BRISTOL

PROGRAMME

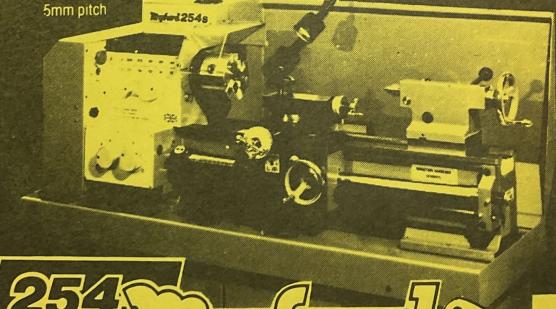


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The Sixteenth Annual INTERNATIONAL MODEL LOCOMOTIVE EFFICIENCY COMPETITION

for MARTIN EVANS CHALLENGE TROPHY

Saturday and Sunday 14th and 15th July, 1984

starting at 09.00 hrs. each day at the

ASHTON COURT TRACK, BRISTOL

Contents

Presentation of Prizes	1
BSMEE and IMLEC Officials	2
75 years of Model Engineering in Bristol	5
	11
Competitors	
Plan of Ashton Court Tracks	17
Competition Rules	18
Calculation of Results Results sheets	19
Results sheets	20
Previous Winners and their performance	26
Tievious of IMI EC	30
History of IMLEC	
Acknowledgements	32
Your Photographic Record of IMLEC '84	34

1st Prize: Cup plus £50; 2nd Prize: £25; 3rd Prize: £10; 4th Prize: 1 year's subscription of MODEL ENGINEER. A special prize will be awarded for the best 3½ in. gauge entry if not in the first four.

PRESENTATION OF PRIZES

Mr. William Bradshaw, General Manager British Rail (Western Region) will present the prizes at 7 p.m. on Sunday, 15th July, in the presence of the retiring Editor of Model Engineer, Laurie Lawrence and his successor Ted Jolliffe.

IMLEC 1984

The members of the Bristol Society of Model and Experimental Engineers take great pleasure in welcoming, once again, IMLEC competitors and supporters to their tracks at Ashton Court. We are particularly pleased to host the event this year since it is the 75th anniversary of the formation of the Society.

A very cordial working relationship between the Society and the Bristol City authorities has existed from the start and we offer a warm welcome to both our Lord Mayor and our President, Councillor Bob Wall, on this occasion. Other old friends we hope to have with us include Martin Evans - who started it all in 1968 - together with Laurie Lawrence and his successor Ted Jolliffe, we extend our best wishes to them both in their new activities!

Overseas entries, this year, included locomotives from Holland and France but unfortunately, the Netherland's entry had to be withdrawn at the last minute due to illness - we wish Heer Merlijn a speedy recovery.

BSMEE General Committee 1984

Cllr.R.W.Wall --- President
G.A.Ganley --- Vice Chairman
W.H.Bossons --- Secretary
D.J.Caseley --- Librarian
R.F.Beel --- Programme Secretary

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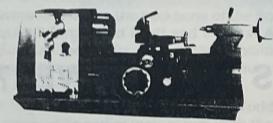
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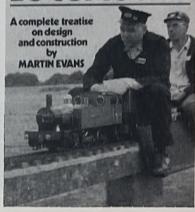
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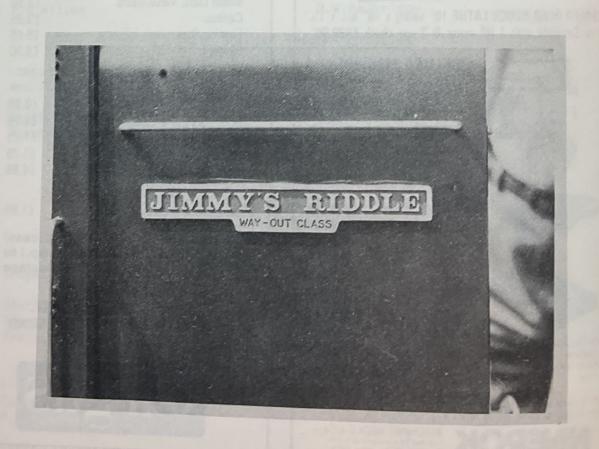
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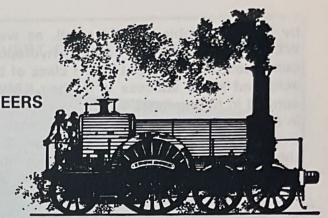




WILL 1984 GIVE US THE ANSWER?



THE BRISTOL SOCIETY OF MODEL AND EXPERIMENTAL ENGINEERS 75 YEARS OF MODELLING



Formed in 1909 the Bristol Society of Model and Experimental Engineers (BSMEE) celebrates its 75th anniversary in 1984. The formation can be readily traced to a letter from Mr. C. H. MORRISH which was published in the Model Engineer and Electrican dated November 11, 1909. However, fate played its sad part in the formation when Mr. Morrish suddenly died. The mantle was quickly passed to Mr. J. M. VAUGHAN to whom further correspondence was addressed by many who were to become the backbone of the Society during the formative years. The Society quickly organised itself and the first AGM was held in May 1910. 1913 saw the Society mount its first public exhibition at which it undertook the running of a workshop, a feature which continues to the present day.

After a lapse during the first World War the Society regrouped and quickly regained its earlier momentum with the membership reaching 40. The business was conducted along the lines of the traditional methods with the proceedings being recorded in the form of a regularly published Journal called OUR COG. The papers show that most of the meetings took the form of practical demonstrations. The programme of the days showed a wide range of interests including some of the new technologies, e.g. electricity supply and storage and wireless.

A member of the Society, Mr. G. F. CLIFTON stimulated much of the interest in wireless matters by means of demonstrations and preparation of specific designs. Experimentation into steam propulsion was very much evident during the 20's and 30's. Among this work is that undertaken by Mr. G. D. NOBLE into flash steam powered hydroplanes built under the name BULLRUSH. During speed trials in October 1922 BULLRUSH III reached a speed of 31 M.P.H. at Eastville, Bristol. A present day member and a committee member of 1923 is Mr. L. F. REDMAN. During the 1930's the boating activities contined and were supported by new members. Amongst these were Mr. A. KERSWELL and present day member Mr. R. DIXON. During this period several members began to explore other branches of the modelling activity. An example is that of Mr. L. F. Redman who spent a considerable amount of effort in developing a Universal machine tool.

Activities during WWII were dormant but with the onset of peace interest was rekindled. The prewar interest of round-the-pole hydroplane racing provided the main focus and encouragement was fothcoming from Messers Noble and Kerswell. The desire for formal competition became prevalent and the Society was represented

by Messers Noble and Kerswell, as well as new comers G. KINGTON and J. WILLIAMS, at various national hydroplane racing competitions. George Noble continued with his BULLRUSH class of boat and the Kington Williams syndicate achieved some success with their KIWI design of hydroplane. Pulse jets were applied in hydroplanes which, weighing only 3 lbs., sometimes became airborne in a spectacular way under the influence of the 4 lbf thrust of the jet. These were eventually abandoned on safety grounds. In the late 40's the Society incorporated the activities of the Bristol Model Power Boat Club. However, active interest in power boating gradually dwindled during the 50's.

The Society began negotiations with Bristol Corporation in 1946 for the provision of a locomotive track. Messrs. H. WEBB and B. PHILLIPS masterminded the discussions. Whilst the negotiations were very successful a major obstacle was encountered namely the lack of a permit to obtain the necessary raw materials. A couple of years later the idea proved successful when it was decided to use aluminium rails thus avoiding the need for a steel permit. Work started in 1949 and the Society's first track was opened at Canford Park, Westbury-on-Trym by Alderman W. H. Hennessy on 13th May, 1950. The track provided 440 ft. of continuous running in an oval form for $2\frac{1}{2}$, $3\frac{1}{2}$ and 5 in. gauge locomotives.

By the late 60's it was becoming increasingly evident that the Canford facilities were becoming too small as more ambitious projects such as 5 in. gauge Kings were built. Discussions with the Bristol Corporation ensued during which the offer of the site at Ashton Court was made and accepted. The first sod of earth was cut, in November 1971 and the track, 1,650 ft. in length, was opended in June 1973. The close relationship formed with the Corporation in the early 50's continued during the construction at Ashton as a joint venture. The track was officially opened by Alderman R. WALL, the Society's President, on June 2nd, 1973, and has provided an immense amount of enjoyment to both the Society's members and many of the public. By 1980 the number of fare-paying passengers carried rose to a peak of 17,000 and recently has averaged between 12-14,000 each year.

Since the late 1960's the Society has held two major exhibitions which have served the dual purpose of raising money and increasing the interest and membership of the Society.

That there would someday be a 7½ in. gauge track has always been taken for granted. The first tangible evidence of progress was in 1976 when a drawing was produced for planning consent. Following approval by the general committee, work started in earnest, under the guidance of the late ERIC GRIFFITHS. The work was spread over some six years with the total task being broken down into individual projects. The largest of these undertaken by a single member was the design, construction and erection of a bridge which takes the track over a man-made cutting. The track was officially opened in June '84. Throughout these later years the late maintenance of the tracks at Ashton and many thousands of Bristol children have enjoyed the fruits of his and his colleagues' efforts.



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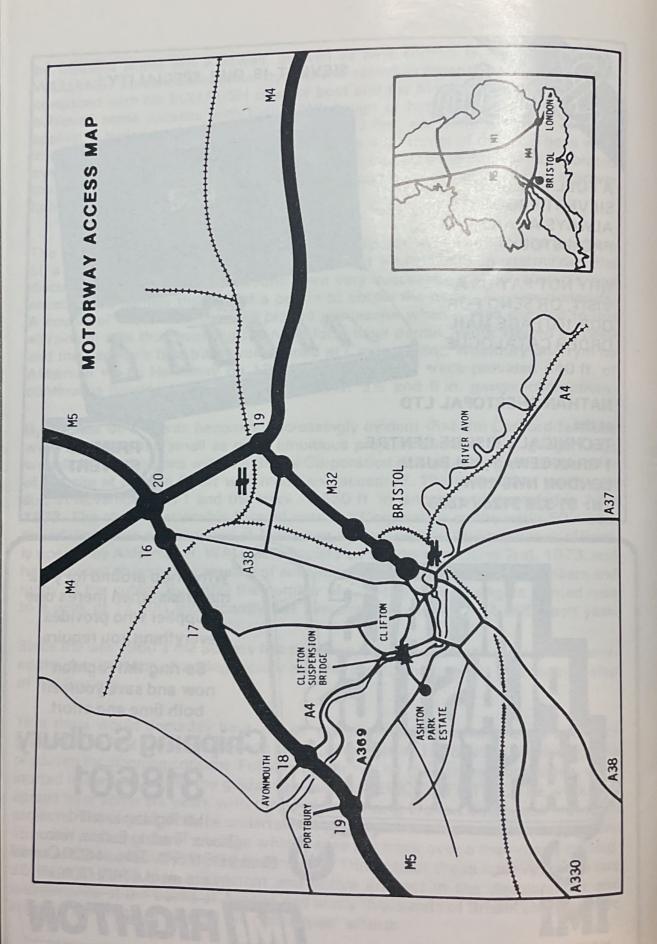
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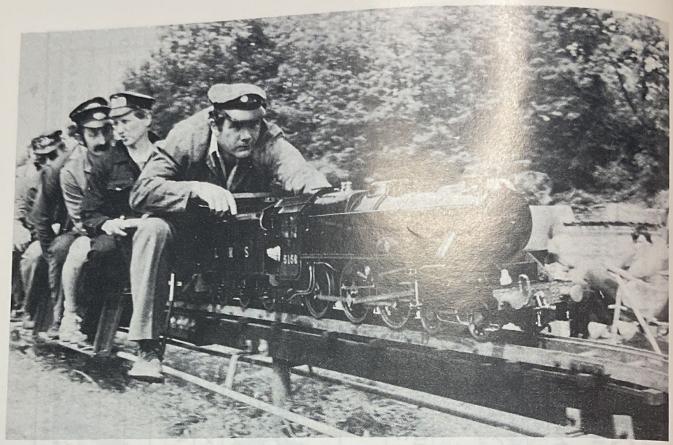
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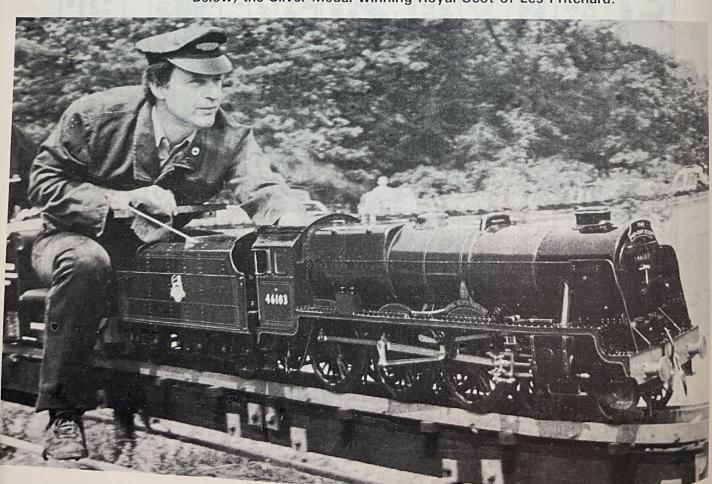
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THE L.M.S. PAGE. Above, John Edward's Black Five; it should know its own way to Bristol by now!

Below, the Silver Medal winning Royal Scot of Les Pritchard.



1984 - IMLEC ENTRIES

(Order of Receipt of Entry Form)

1. COVENTRY M.E.S. - P. A. Beavan

LNER Pacific Flying Scotsman 4-6-2 - 5 in. gauge recently fitted with "Nickel Molybdenum" steel tyres and a reduced grate area from 33 in.3 to 23 in².

2. RUGBY M.E.S. - G. D. Winsall

GWR Metro Tank 2-4-OT - 5 in. gauge originally to Martin Evans design but now includes the firebox fitted with a stainless steel arch. Working pressure is 120 psi and two injectors are used for boiler feed.

3. COLCHESTER M.E.C. - M. Collyer

GNR Nigel Gresley 2-8-0 - 5 in. gauge to Martin Evans design.

4. PRIVATE ENTRY - C. Wall

GWR 47XX 2-8-0 - 5 in. gauge.

5. LEYLAND S.M.E. - A. Howarth

LMS Royal Scot 4-6-0 - 5 in. gauge. Regulator is PTFE faced and the axle boxes have needle roller bearings.

6. BLACKBURN S.M.E. - T. Collyer

GWR 78XX Torquay Manor 4-6-0 - 5 in. gauge to Martin Evans design.

7. MAIDSTONE M.E.S. - J. Ewins

Experimental O-8-OT - 5 in. gauge containing a vertical two cylinder engine mounted on smokebox with chain drive to track wheels. Needle bearings are used throughout.

8. STROUD M.E.S. - K. Mattock

Stirling 4-2-2 - 5 in. gauge.

9. GUILDFORD M.E.S. - D. Neish

LBSC based 5 in. gauge Lion 0-4-2 tender modified according to details taken from prototype in Liverpool Museum. Bronze Medal winner at 1977 M.E. Exhibition, model has modified lubrication system as described in M.E. Number 3612 - 6 July, 1979.

10. BOURNEMOUTH AND D S.M.E. - R. Atkins

Narrow gauge Hunslet "Cloister" - 5 in. gauge. Backhead and all fittings are accurately scaled from fullsized engine and "O" rings are used extensively for sealing purposes.

- TAUNTON S.M.E. F. Dodden
 LMS Butch 2F, 0-6-OT 5 in. gauge.
- 12. WESTON-SUPER-MARE & WEST HUNTSPILL L.S. A. Newberry
 GWR 78XX Torquay Manor 4-6-0 5 in. gauge to Martin Evans
 design.
- 13. WHITCHURCH (CARDIFF) & D M.E.S. J. Edwards

 LMS Black Five 4-6-0 5 in. gauge to Don Young design.
- 14. MALDEN & D S.M.E. H. Woodford

 SR LI "Maid of Kent" 4-4-0 5 in. gauge to LBSC design. Locomotive fitted with stainless steel superheater and firebox arch and built and owned by members of Malden and D S.M.E.
- 15. WIRRAL M.E.S. H. Jones
 GWR Armstrong Goods 0-6-0 3½ in. gauge.
- 16. WESTLAND M.E.S. H. Lumb USA Practic 4-8-4 - 3½ in. gauge. Locomotive has three cylinders, Baker Valve gear and steel boiler with thermic syphons and is owned by Westland M.E.S.
- 17. PRIVATE ENTRY A. Mattock NYC J2 Class 4-6-4 Hudson 3½ in gauge. Locomotive has steel boiler, wide firebox, combustion chamber, thermic syphon and fabricated steel cylinders.
- 18. NORTH CORNWALL M.S. D. Bannister

 GNR Atlantic "Maisie" 4-4-2 3½ in. gauge to LBSC design except for modified exhaust/blast nozzle and blower and modified front bogie springing.
- CHESTERFIELD & D M.E.S. F. Eaton
 LNER Pacific "Windsor Lad" 4-6-2 5 in gauge to own design entirely fabricated and incorporates a combustion chamber with water tubes in boiler.
- 20. BIRMINGHAM S.M.E. LTD. P. Hughes LMS Jubilee "Leander" 5 XP 5690 4-6-0 - 5 in. gauge. Built to Martin Evans design with the addition of two axle driven water pumps and three separate oil feeds to the three cylinders.
- 21. PERRANPORTH M.F.S. & LISKEARD M.S. P. Care GWR 45XX Firefly 2-6-2T 5 in. gauge.

- 22. HARLINGTON LOCOMOTIVE SOCIETY L. Pritchard
 LMS Royal Scot 4-6-0 5 in. gauge. Silver Medal winner at the 1982
 M.E. Exhibition.
- 23. URMSTON & D M.E.S. LTD. D. Roberts
 Simplex 0-6-OT 5 in. gauge to Martin Evans design.
- 24. STICHTING MINIAUURSTOOM SPOORWEGEN J. Merlijn
 The entry from the Netherlands, a BR Class 7 Britannia in 5 in. gauge
 has had to be WITHDRAWN, owing to illness.
- 25. PLYMOUTH MINIATURE S.L.S. J. Goodwin

 GWR Castle "Tintagel Castle" 4-6-0 5 in. gauge with polyester lined steel tender.
- 26. CHELMSFORD S.M.E. J. Dalton

 BR Class 7 "William Wordsworth" 4-6-2 5 in. gauge fitted with combustion chamber, variable blast nozzle and roller bearings in main axles.
- 27. TIVERTON & BLUNDELLS M.E.S.
 GNR Atlantic "Maisie" 4-4-2 3½ in. gauge to LBSC design.
- 28. ANDOVER & D M.E.S. J. Turner

 Sweet Pea NG 0-4-OT "Anton" 5 in. gauge. Locomotive has Marine firebox saturated steam boiler, steel wheels, Hackworth valve gear, hydrostatic lubricators with sight glasses and was built by ten members in 1980-83.
- 29. PETERBOROUGH S.M.E. F. Winsall Hunslet NG 2-6-27 "Russell" 3½ in. gauge.
- 30. ASSOCIATION NORDISTE DES AMIS DU RAIL J. Dubois Entry from France. Simplex 0-6-OT 5 in. gauge to Martin Evans design.
- 31. S.M.E.E. P. Wardropper

 Calendonian Railway Tank "Rob Roy" 0-6-0 3½ in. gauge. Started whilst Peter was at school, in 1968 and finished (almost) in 1975. Used unpainted for some years at Beech Hurst and at M.E. Exhibitions and then stripped down and painted in time for the 1983/4 Wembley Exhibition where it won a V.H.C. Has a few "embellishments" including a stainless steel superheater extended into the firebox.

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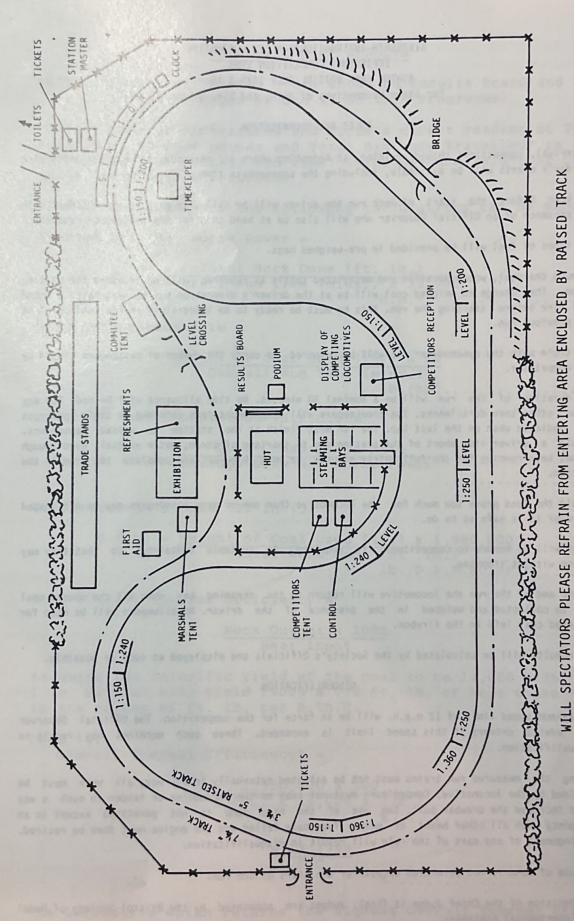
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B. S. M. E. E. TRACK LAYOUT FOR I.M. L. E. C. 1984

SIXTEENTH INTERNATIONAL MODEL LOCOMOTIVE EFFICIENCY COMPETITION 1984 ASHTON PARK BRISTOL JULY 14th & 15th For Steam Locomotives of 3½in. and 5in. gauges

RULES AND ORGANISATION

- 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.
- 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 types of fuel will be provided in pre-weighed bags.
- 4. As much charcoal, wood, paraffin and methylated spirit 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 the dynamometer car will be prepared 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 then one or more passengers may be off-loaded wherever it is safe so to do.
- 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 the 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 as soon as possible.

DISQUALIFICATION

- 11.A maximum speed limit of 12 m.p.h. will be in force for the competition. The Official Observer will advise drivers if this 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 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 engine 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 are appointed by the Bristol Society of Model and Experimental Engineers.

CALCULATION OF RESULTS

(NOTE: Parameters marked * are shown on Results Board and can be logged on Pages 10 and 11 of this Programme).

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:-

Average Draw Bar Horse Power =

Total Work Done (ft. lb.)

Overall Run Time (mins.) x 33,000

h.p.*(1)

Coal Consumption Rate =

Weight of Coal Used (lb.) x 60
Overall Run Time (mins.)
lb./hr(2)

Specific Fuel Consumption (S.F.C.) =

Coal Consumption Rate
Average Draw Bar Horse Power

Substituting (1) and (2) in (3)

S.F.C. = Weight of Coal Used (lb.) x 1,980,000

Total Work Done (ft .lb.)

lb./D.B.H.P. hr'.*(4)

Now, Overall Thermal Efficiency =

Work Output x 100% Heat Input

Assuming the calorific yield of the coal to be 14,000 B.Th.U/lb., 1 lb. of coal will yield 14000 x 778 ft. lb. of heat where 778 is the number of ft. lb. per B.Th.U.

From (4)
Overall Thermal Efficiency* =

 $\frac{1,980,000 \times 100}{\text{S.F.C.} \times 14,000 \times 778}$ $\frac{= 18.1785}{3.77.00}$ (5)

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

19

EC 1984 ASHTON COURT BRISTOL

Туре	Gauge	Wheel Arrangement	Driver	Society	Load (Adults)	Run Time (mins)
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Distance Run (ft)	Total Work (ft 1b)	Average Draw Bar (HP)	Coal Used (1b)	Specific Fuel Consumption (lb/DBHP hr)	Thermal Efficiency (%)	Final Position
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IMLEC 1984

LEC 1984 ASHTON COURT BRISTOL

Туре	Gauge	Wheel Arrangement	Driver	Society	(Adults)	Run Time
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RESULTS

SUNDAY 15TH JULY

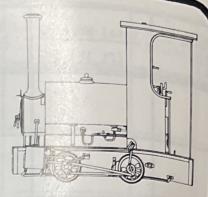
					SUNDAY 15	5TH JULY
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PREVIOUS RESULTS SUMMARY

YEAR	HOST CLUB	PLACE	EVIOUS RES	CLUB	ENGINE	GAUGE (INS.)	EFFICIENCY
1969	BIRMINGHAM S.M.E.	lst 2nd 3rd	J Drury N Spink A Bowling	Birmingham Private Entry Cheltenham	Royal Scott GWR Gooch Green Arrow	5 5 3 1	Not Quoted
1970	WHITNEY AND WEST OXFORD S.M.E.	1st 2nd 3rd 1st 3½"	L Labram P Dupen J Cousins E Kellet	Birmingham Romford Willesden & W Lon. Bristol	MR "999" "Speedy"		Not Quoted
1971	SOUTHAMPTON AND DISTRICT S.M.E.	1st 2nd 3rd 1st 3½"	A Heyden C R Amsbury G Hawkins F Morley	Newton Abbott Derby Bristol Portsmouth	GWR Dean Single GWR 51XX GWR King "Maid of Kent" 3		Not Quoted
1972	TYNESIDE S.M.E.	1st 2nd 3rd 1st 3½"	N Spink L Bennett H Reeve A Jacobs	Chesterfield Chingford Kinver & W Mid Romford	GWR 57XX GCR Director "Nigel Gresley" GWR Hall		1.06 1.05 -
1973	CHINGFORD AND DISTRICT S.M.E.	1st 2nd 3rd	W Longstaff L Labram T Arnott	S Durham Birmingham Sunderland	"Firefly"	5 5 3 1	1.6 1.58 1.47
1974	BRISTOL S.M.E.E.	1st 2nd 3rd 1st 31"	F G Winsall C R Amsbury A H Castle D Alford	Rugby Derby Worcester Bracknell	GWR 51XX Freelance	5 5 5 3 1	2.54 2.138 1.933 1.018
1975	TYNESIDE S.M.E.E.	1st 2nd 3rd	L Joyce F G Winsall D W Horsfall	Chingford Rugby Brighouse	"Nigel Gresley"	3½ 5 5	1.552 1.392 1.355
1976	KINVER AND	1st 2nd 3rd 4th	W Perret F Winsall J Coleman P Wood	Southampton Rugby Bristol Chingford	"Speedy" "Torquay Manor" SECR 'D' "Maid of Kent"	5 5 5 5	1.58 1.37 1.36 1.21
1977	CHINGFORD AND DISTRICT M.E.S.	1st 2nd 3rd 4th 1st 31"	W Perret Club Loco F A Beard B Woolston B H Dunster	Southampton Rugby Peterborough Coventry Canterbury	"Speedy" "Netta" "Eva May" "General D'Arcy" LNER A4	5 5 5 5 3 1	2.32 1.79 1.694 1.687 0.68
1978	GUILDFORD M.E.S.	1st 2nd 3rd 4th	P Wood D Pring B Perryman G Thomas	Chingford Bristol Worthing Llanelli	"Maid of Kent" "Pansy" LBSC "Gladstone" LNER Bl	5 5 5 5	1.614 1.469 1.266 1.199
1979	BRISTOL S.M.E.E.	1st 2nd 3rd 4th 1st 3½"	D Morris A Hall G Thomas M Leahy J Love	Urmston Harlington Llanelli Romford S. Africa	GNR Stirling LNER Bl [Single LNER Bl GWR Manor SAR Cl.6C	5 5 5 5 5 3	2.178 1.984 1.892 1.787 1.786
	EDFORD	lst 2nd 3rd 4th	P Wood K Moonie R Wilkinson A Hall	Private Chingford Erith Harlington	BR Cl.7 LSWR Adams Radial GWR Manor [T LNER Bl	3 1 5 5 5 5	1.378 1.231 1.209 1.167
1981	BOURNEMOUTH AND DISTRICT S.M.E.	1st 2nd 3rd 1st 3½"	P Wood R Wilkinson G Moore L Gillett	Chingford Erith Guildford Northampton	LNER J39 Torquay Manor LBSCR "Minx" SR Merchant Navy	5 5 5 3	2.419 2.133 2.018 1.641
1982	LEYLAND S.M.E.	1st 2nd 3rd 1st 3½"	R Amsbury G Moore C Summersall M Zabrocki	Derby Guildford Harrogate Rommney Marsh	GWR DeGlehn LBSCR "Minx" "Simplex" LBSCR "Mona"	5 5 5 3 1	1.506 1.329 1.181 1.166
1983	GUILDFORD M.E.S.	1st 2nd 3rd 4th 1st 31"	L Pritchard J Ewins P Wood J Etheridge D R Wilkinson	Harlington Maidstone Chingford Staines Reading	Royal Scott Experimental Hunt [0-8- Simplex Maisie	5 5	1.3583 1.2222 1.1082 1.0974 0.6345

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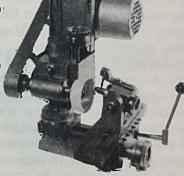
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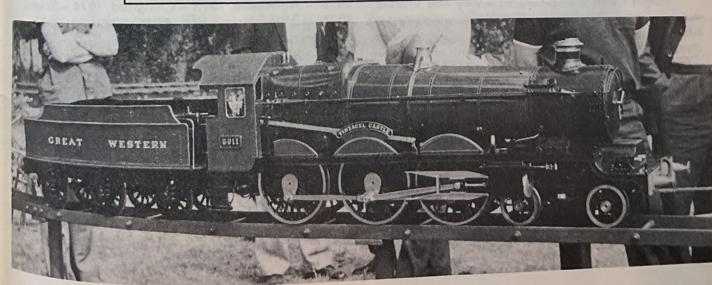
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ABOUT I.M.L.E.C.

IT WAS ABOUT 1964, that Martin Evans first had the idea that an efficiency competition might be staged for model steam locomotives. He put the idea to the late Leslie Howard, who was then Editor of *Model Engineer*. Howard was immediately enthusiastic, and very soon published the suggestion in one of his "Smoke Rings", to see what sort of response there might be. The late LBSC expressed doubts, and one or two readers thought that although there was much to be said for the proposal, the idea of having a competition might lead to ill-feeling among the competitors. Fortunately, the fears of these readers never materialised. However, nothing was done until early in 1968, when Martin Evans, who by that time had become Editor of *Model Engineer*, raised the matter again.

In view of the popularity of the 3½ in, and 5 in. gauges, and the difficulty of comparing the performance between locomotives of widely differing gauges, it was proposed that the competition should be for these gauges only. A further point was the likely availability of a track suitable for the event. Apart from the track itself, one of the biggest problems was to cope with the number of cars that might have to be accommodated, there being no idea at the time as to the number that might arrive, the idea being of course that the general public, not necessarily readers of the Model Engineer would be invited to attend. A search was then made for a Model Engineering Society with the required track and car parking space, and most important, the willingness of its members to undertake what was likely to be a considerable task. In the event, the Birmingham Society volunteered to stage the first competition on their Illshaw Heath track.

Martin Evans then produced a very fine Trophy, suitable engraved with the outline of a locomotive, which was to act as the first prize, plus a modest cheque. Prizes were also arranged for the competitors who would come in second, third and fourth. Special insurance had to be arranged to cover the event, which was scheduled for the first Sunday in July, 1969. Other matters that had to be seen to the provision were of adequate parking space, the printing of tickets (a small charge was made for admission), the provision of suitable catering — as the event was expected to last for a whole day — toilets, and in case of accidents — a squad from the St. John's Ambulance.

While the preparations were going ahead, members of the Birmingham Society, under the energetic leader. ship of Brian Hughes, built a Dynamometer Car, that could be hauled behind the competing locomotive, to record speed, drawbar pull etc., so that comparison could be made between each competitor. The coal for the competing locomotives was carefully weighed and handed to the competitors in sealed bags. At the end of the run, any coal left unburnt in tender or bunker was to be returned to the Officials and weighed, so that the amount consumed by the locomotive could be determined. It was decided to allow each competitor to choose the load he thought most suitable for his engine, and to allow him to run for 30 minutes, which with the possibility of 15 or more competitors, was as long as was thought wise. Most fortunately, the weather could not have been better, and well over 600 visitors turned up to watch the fun. At the end of an arduous day, the winner was adjudged to be the Birmingham Society's own entry — a 5 in. gauge "Royal Scot".

With the great success of the first competition, now entitled the International Model Locomotive Efficiency Competition, a second event was arranged, and with the willing cooperation of the Witney & West Oxfordshire Society, plus the permission of the Duke of Marlborough, this was held in the grounds of Blenheim Park, and was again a great success, the winner being again the Birmingham representative in the person of Len Labram with his 5 in. gauge 2-6-2T. "Firefly".

Since 1970, the Competition has gone from strength to strength; in 1971, it was held at Southampton, in 1972 — Newcastle, 1973 — Chingford, 1974 — Bristol, 1975 — Newcastle again, 1976 — Kinver, 1977 — Chingford again, 1978 — Guildford, 1979 — Bristol again, 1980 — Bedford.

It should perhaps be emphasised that I.M.L.E.C. is not a "scientific" competition — it cannot be in the time available — but it does give some idea of the prowess of the competing locomotives. It is, however, quite a stern test of the drivers; in fact many observers think that the skill of the driver counts for more than the efficiency or otherwise of the locomotives! More importantly, the competitions are great fun, and as one visitor put it — "a great Gathering of the Clans!"

(With acknowledgement to Bournemouth & District Society of Model Engineers).

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ACKNOWLEDGEMENTS

For a two-day event such as IMLEC there is a tremendous amount of unseen work to be done if the event is to run to schedule with 30 locomotives and their drivers - and their 60 temperaments and idiosyncrasies.

To look after the expected number of visitors, each day, and to try to anticipate the series of minor crises and plan escape routes also requires much hard work before and during the event. Each year the members of the host society rally round and the usual miracles, somehow, are achieved in time.

The Chiefs may decide what needs to be done but, as usual, it is the Indians who make the event the success it always has been. To attempt, therefore, to single out and name individuals is a hazardous undertaking at the best of times.

For IMLEC '84 we would like to say "Thank you" to:-

The City of Bristol Parks Department and its Manager, Alan Barber, for their willing co-operation.

Dr.Lionel Pym and the St.John Ambulance Brigade.

Mrs. Ella Griffiths for the use of the Bristol Dynamometer Car.

Birmingham Society of Model Engineers Ltd for the loan of the back-up car.

Mr.William Bradshaw for agreeing to present the awards.

The Model Engineer for the loan of photographs and much helpful advice.

Mr.Bill Guy for the P.A.system and other services.

Brunel Technical College for the loan of equipment.

Western Fuels Ltd for assistance with the coal and anthracite used.

The advertisers, whose support makes the production of the programme possible.

H.E.Iles (Central Press) Ltd for their patience in converting our "Copy" into a presentable programme.

Chris Moody for the Cover design

The Club Ladies for their planning and provision of the catering services.

The Club Members for their work before and during the event, on site and behind the scenes.

And, perhaps most important of all, the Competitors and all the Supporters, from near and far, who continue to make IMLEC the annual event we all look forward to with such pleasurable anticipation.

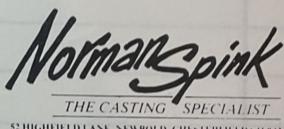
It would only be proper to include here, also, an acknowledgement to the work done, at the track, by the late John Williams. He was devoted to his "Back Garden" and many of the facilities we are enjoying at Ashton are due to his never-ending enthusiasm and sheer hard work; "Thank you" John.



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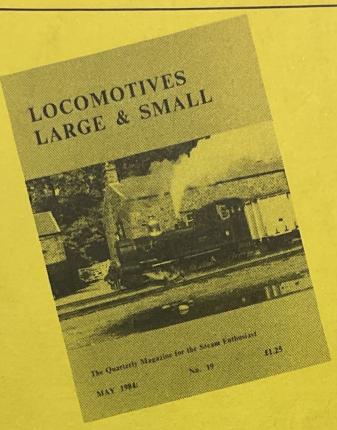
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LOCOMOTIVES LARGE & SMALL

The Quarterly Magazine for the Steam Enthusiast

Published February, May,

August and November

1984 Annual Subscription £6.40 U.K.; £6.75 Europe & Overseas (Surface Mail)

GOOD READING: Our Editor, Don Young, has been contributing to British and American publications for all of 17 years, the last 5 almost exclusively to his own LOCOMOTIVES LARGE & SMALL, and although he still marvels that his words find favour with readers, is delighted that this is so. In the current issue of LLAS (No. 19), Don is very much in the back seat, contributing Part 2 of his 5in. gauge **Doncaster** Gresley A1/A3 Class 'Pacific' series and "**Building 76026**" a full size BR Class 4 Standard 'Mogul'. Front seats are taken by Mike Casey completing his Isle of Man Locomotive No. 6 **Peveril** tale and Tony Allcock tells us of another M.E. Silver Medal winner with his "Lochs & Things," whilst Alan Rimmer continues his "**Privileged View of Steam**" by describing official testing of BR "Britannias" and LNER BI's.

LLAS has an established and international reputation for its informed content, quality of presentation and friendly style, being available by postal subscription as that way we get to know all our readers.

GOOD DESIGNS: It is now 25 years ago that Don first put pencil to tracing paper in the cause of his Designs. It is particularly pleasing to record that Don's very first design, that for the 5 in. gauge Isle of Wight Locomotive was successful for Gerry Tull in winning him the Gold Medal and Crebbin Memorial Cup for his **Totland** at the 53rd M.E. Exhibition. Later designs in the same 'super detail' mould for 5 in. gauge include the Great Central **Jersey Lilly**; L&Y representatives **Lanky** the 2-4-2 radial tank and **Aspinall** 0-6-0; LMS favourites **Black Five** and **E S Cox** the Horwich 'Crab'; and now being introduced the LNER Class A1/A3 'Pacific' **Doncaster** in celebration of the first 25 years.

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