"THE MODEL ENGINEER" EXHIBITION, 1953.

Two marine models lent by the Duke of Edinburgh are on view at "The Model Engineer" Exhibition from 19th to 29th August at the New Horticultural Hall, Westminster.

Ten of Britain's most famous ship modellers worked as a team last year on a detailed waterline model of the frigate H.M.S.Magpie, as she was under the Duke's command in the Mediterranean. Although not completed at the time it was presented to him to commemorate his opening of the exhibition and he has lent it for viewing in its finished form.

The Duke has also lent his model of Bluebottle, the International Dragon Class yacht which was the wedding present of the Island Sailing Club, I.o.W., to H.M. the Queen and the Duke.

A fine waterline model of the Royal Yacht Britannia, by Charles J. Hampshire, the famous ship modelier, is in the loan section.

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Organised by Percival Marshall Ltd., publishers of "The Model Engineer", the Exhibition comprises over 200 models made by amateur craftsmen in their own homes and entered in the National Champion-ships judged at the exhibition; the Constructional Demonstration Centre, where the arts of wood turning, metal turning, soldering, brazing, sail making, planking, blacksmithing and model aircraft construction are given and model engineers can solve their problems by obtaining expert advice; demonstration of models on the Grand Prix Car Track, the water tank, the live steam track, and the Tal-y-llyn Model Railway; the trade stands, on which tools, accessories, material, equipment and publications of value to model engineers are displayed; and the special exhibits of the Royal Air Force and the Model Engineering Societies and Clubs.

OUTSTANDING ATTRACTIONS

Fairground music accompanies the colourful scale model of a Showman's Roundabout, with galloping horses, that forms the centrepiece of the exhibition. This competition model is steam driven and is perfect in every detail. Made in his spare time by Mr. Slack of Chapel-en-le-Frith, it is valued at £1,000 and it took him 9,000 hours, spread over 9 years to make.

Grand Prix

Miniature motor racing on Grand Prix lines, with three teams of F2 cars - Ferrari, Gordini and H.W.M. - will take place regularly on the new track specially constructed for the exhibition. The track is 'L' shaped, with straights, right and left hand bends, both fast and hairpin, climbing and descending and the 13 in. long scale cars will race at actual speeds of over 30 m.p.h.

Experiments carried out at last year's exhibition proved the excitement of this great sport and resulted in modifications to the engines, clutches and steering gear of the cars made by Rex Hays of Steyning, Britain's most famous model automobile engineer. It is anticipated that new speed records for this type of model car racing will be established during the exhibition.

Water Tank

Two radio controlled motor torpedo boats, built and operated by Mr.G. Sommerhoff, of Oxford, lead the demonstrations on the water tank. These boats are fully manoeuvrable by radio control and one of them, while in the centre of the tank, will lower a launch that speeds to the side!

The Oldest Railway

The Tal-y-llyn Railway Preservation Society is showing a 7 mm. scale, 16.5 mm. gauge model of the section of the railway between Towyn Wharf and Pendre stations, which captures the atmosphere of the oldest surviving narrow gauge, steam hauled passenger carrying railway in the world. Opened in 1865, the railway still has its original locos and rolling stock and runs for 7 miles into the Welsh mountains near Cader Idris from Towyn on the Merioneth coast.

The Society of Model & Experimental Engineers is operating the live steam track, which runs the length of the hall. In addition to the fine stud of locomotives which will be running on the track a number of outstanding models will be displayed. On their stand will be shown a number of S.M.E.E. engineering projects, while visitors will be able to see the working locomotives being serviced at the far end of the hall.

PERSONALITIES

Youngest competitor ever to enter the Championships is five year old Barry Edge, of 59 Norton Park View, Sheffield, who has made a model Thames sailing barge.

Oldest competitor is 76 year old R.W.Day, of 48 Townsend Road, Ashford, Middlesex, who started modelling when 71, and has made a model Coronation Coach, with horses, riders and grooms.

Only woman competitor this year is Mrs.Irene K. Ashley, of 23 Beattyville Gardens, Ilford, a 43 year old housewife. She has entered two marquetry panels, representing model railway scenery "to improve the appearance of the cabinet in which my husband keeps his engines."

Although totally blind and deaf, Mr.A.Bartlett, of the Y.M.C.A., Great Russell Street, London W.C.l., has made a battery driven model of the Paddle Steamer S.S.Corona Queen, which can be seen in the loan section.

The boys of Cuckoo Hall Secondary Modern School, Edmonton, N.9., who are demonstrating metal work and engine construction.

COMPETITION MODELS

Land, sea and air models of all kinds have been entered from all parts of the country, from Australia and from Holland.

Railway Models.

Locomotives to L.B.S.C. designs dominate the larger gauges of 2½ in. and over in the competitions. There are a 4-6-0 L.M.S. Class 5 passenger hauling loco, from Doris; a 2-6-0 L.M.S. Class 5F, from Dyak; a 4-4-0 Southern Ll Class Maid of Kent; a Southern Pacific "rebuilt"; and the ever popular 0-4-0 tank Juliet.

In the smaller gauges are an 'O' gauge Britannia Class loco, made by B.R. sleeping car attendant; the 4-6-0 S.R. Lord Nelson Class loco "Lord Howe"; an 'OO' gauge 2-6-0 N. Class S.R. loco with two lo ton bogie passenger luggage vans; and a 4 mm. scale Bo-Bo diesel electric loco.

Rolling stock include a 4 car Pullman train with 10 ton passenger luggage van; an S.R. horse box; a 6 wheeled 3rd class brake coach in S.E.C.R. livery, c. 1890; and a 24 ton covered hopper van.

Marine Models

A working model of R.M.S. Queen Mary, which took over 1,000

hours to make at a bedroom workbench, and is valued at £350, is one of the outstanding competition models. Among the waterline models there are the cargo liner City of Port Elizabeth; the P & O Piner Strathmore; the S.S.Pacific Unity, with tugs, shown navigating the Manchester Ship Canal at the Barton Aqueduct; the Norwegian M.V. Thermopylae; the R.M.S. Orion and T.S.S. Duchess of Montrose; the cross channel steamer Maid of Orleans; H.M.S.Vanguard; and a Bristol channel Pilot Cutter of 1890.

The larger ship models include one of R.M.S.Caronia on the pin. scale, valued £200; and R.A.F. crash tender; a model of the Dutch Tug Zwarte Zee; and two M.T.B.s., one a Thorneycroft, valued £125, and the other a Vosper.

No year could pass without a first class model of H.M.S. Victory oak, with some of its deck fittings also of Victory oak. The underwater body has been sheathed with 3,400 copper plates secured with 12,000 pins - a fact indicative of the care taken by the modeller and justifying the value of £1,000 that has been placed upon it.

Other historic ships to be exhibited are the Golden Hind, modelled unusually in perspex and nylon, with such details as 75 dead eyes and 16 guns. This model took 12 months spare time work to carve and etch.

This year the Cutty Sark appears as she was when rigged as a barquentine, when she had been bought by the Portuguese and renamed the Ferreira. She also appears under full sail in a dimple bottle, with 37 sails set, including fore and main stuns'ls.

Prince, 1670, on the 1/72nd scale, will bring memories to visitors to earlier exhibitions, for this entry was used to show ship modelling in the demonstration centre in 1951 and 1952.

Youngest competitor ever to enter for these national championships is 5 year old Barry Edge, of Sheffield, who has made a Thames sailing barge. His model will be in the "under 16" class.

Three of the most experienced ship modellers have concentrated this year on boats. F.A.A.Pariser has entered two - a Nelson period whale boat and launch, with a section of ship to show the method of mounting. A.E.Field has entered a carvel built yawl and a clinker built beach boat. G.H.Draper has made three open boats of the Royal Navy - an 1800 barge, a 1911 gig and a 1913 galley - all elegant open boats which, during the widely separated periods, were reserved for use by Flag Officers and Captains of large warships.

Models of world record holding hydroplanes in competition are current holder Slo-Mo-Shun IV, with a speed of 178.497 m.p.h., and Bluebird II, Sir Malcolm Campbell's famous boat.

Both flying and non-flying scale models have been entered for the competition sections organised by the Society of Model Aeronautical Engineers.

Flying scale models include the Polish PZL 37 bomber; the Grumman G22 Gulfhawk (as flown in the 1938 Daily Express Air Show) and F9F Panther, as well as a 'Bearcat' and a 'Tigercat'; a Boeing P 26A; a Fairey Firefly; an R.E. 8 of 1919; a Gloster G.A.5 Javelin; and a Westland Lysander. De Havilland's are well represented with a D.H. 82 Tiger Moth, a D.H. 110, a D.H.C 2 Beaver and a D.H. 2 of 1914; there are a Miles Gemini, a Sopwith Pup, a Vought F7U Cutlass, a Fairchild 24W, a Vickers FB9 Gunbus, a Bleriot II, a Cessna C-34 Airmaster, and a Chrislea Skyjeep C.H.3.

The non-flying scale models, too, show the wide range of interest of aircraft modellers. There are an F.E. 2D, a Focke Wulf 190 A3 and a 190 D-12; Bristol's are represented by a F2B Brisfit and

a Beaufighter Fl; Fairey's by Topsy Junior and a Firefly; Douglas by a D.C.5 of KLM; and there are a Hawker Hunter, a Westland Wagtail and a Spitfire II.

Many non-scale flying aircraft are entered. They include a direct control autogyro and, one of the most interesting competition models, a radio-controlled semi-scale Piper Super Cruiser, with a 7 ft. wing span, made by M/Sgt. C.H.Crowe, Jnr., of the U.S. Army Air Force, stationed in Britain.

Road Vehicles

So wide is the range of interests covered by model makers that a special section for "mechanically propelled road vehicles" includes such models as a jeep, with tool kit, a Fordson land utility tractor and a G.L. M7 Radar Fire Control Anti Aircraft vehicle, which is valued at £100. Then there is a model comprising the vehicles and equipment of 6 H.A.A. Bty. 27 H.A.A. Regt. R.A., as stationed in Hong Kong - 16 vehicles, 4 motor cycles, 4 guns and 2 pieces of radar equipment.

Other interesting models to be exhibited include a 1934 3.3 French Grand Prix type Bugatti, a 6 wheel platform type Sentinel lorry and an 8 wheel end tipper Foden lorry.

Radio Control

Entries in the competition section include a radio controlled Walton type cruiser, designed for tank demonstrations and to show the possibilities of radio control at reasonable cost. This model has controls over rudder, motor, anchor, winch and hooter.

Geebaa 11, a radio controlled auxiliary sloop, valued £100, is a model of a typical family week-ender, with controls over the rudder, motor, sails and sheets.

A fifteen year old schoolboy has entered a radio controlled electric launch with a 2 valve single channel carrier operated transmitter. Another entry is a wireless control apparatus for model ships, to work on the 27 mc/s control band, which has perspex boxes to protect the equipment from damage by spray.

Architectural Models

There are models of The Old Bridge over the avon near Melksham, wilts, which took 80 hours to build; a group of shops; The Market Place, Dursley; a Swiss chalet; and St. Mary Magdalene Church, Norwich, which has been made in matchsticks and balsa wood. The smaller gauge model railway enthusiasts always take a great deal of care over their scenery, and entries include a 4 mm. scale model of Market Norton station buildings, c. 1905, and 7 mm. scale terrace of houses.

Engineering Models

One of the world's smallest vertical engines, with a $\frac{3}{8}$ x $\frac{3}{8}$ bore, which measures only 2 in. x 2 in. x 2 in. and weighs only 4 ounces, is among the competition entries, with a 6 N.H.P. table engine of the type made a hundred years ago by Robert Napier of Glasgow. This required two years of research and is valued at £100. Another model of an historic engine is that of the Grasshopper, 1861, which will be competing with a horizontal stationary steam engine typical of the light engines used for driving industrial plant at the end of the last century.

Tools and workshop appliances

Model engineers frequently have specialist requirement which

cause them to design and make their own equipment, which they exhibit for the interest of their colleagues. Sometimes their interest is caught by an unusual tool or machine which they feel worth modelling. This year there is a power-driven hacksaw, built from scrap and off-cuts. In the later stages of construction a mock up was made which enabled the machine to cut some of its own components. contrast there are interchangeable toolposts of simple manufacture, with integral height setting gauge, made from junk cadged from a blacksmith; a topslide for shaping bevels made for producing 'one off' pairs of bevel gears for rail track cars; a lathe milling attachment; a 4" rotary machine table; a drilling machine; and a dial gauge with fittings for use on surface gauge, machine tools or for clamping to work. Clocks Probably the outstanding entry in the horological section is the battery driven wall or pedestal clock, valued £250, every part of both movement and case having been made in seven months spare time. In competition with this will be an Eureka electric clock and a clock in the form of a church porch. General A model of the Royal Coach of State, 1/16th size, which took 600 hours to make, i valued at £175. This will be compared with a model by a 76 year old who took up modelling when 71 and describes his entry as "The Coronation Coach, with horses, riders and grooms". Th contrast there are the historic models of the Royal Mail Coach of 1837 and a stage coach with horses and crew. Farm wagons the relies ented by an Oxfordshire wagon, one eighth scale, a favourite type of wagon for generations but now fast disappearing. This model was made by a 75 year old wheelwright, whose family have been making full sized wagons of the type for over a century. With Compliments From The Press Officer, "The Model Engineer" Exhibition. New Horticultural Hall, Tate Gallery 0240 Westminster, S.W.1. 5 -