December 49

AUSTRALIAN model HOBBIES

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NOV.-DEC.
1949

Australian Model Speed Car Champs — Speedway Stars — Galleon Plan — Wakefield Model Plan — S.A. Aeromodelling Meet.

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AUSTRALIAN Model HOBBIES

VOLUME I, No. 3. NOVEMBER - DECEMBER, 1949

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COVER PHOTO

By courtesy of Henry J. Nicholls, shows Dennis Allen, of West Essex Club, with his radio-controlled Anderson "Spit" powered "Dumbo" at the British Nationals. "Dumbo" is fitted with Mercury Cossor Radio Equipment, which is available to English Modellers (to operate without a licence) for only £12/10/-.

One of the older boys, Mr. MacDonald, of the Prospect M/A Club, launches his H.G.3 Free Flighter powered with an Australian 3 c.c. Gloplug motor. Mr. MacDonald is the senior half of a father and son team who are as keen as they come in the aeromodelling world.

STOP PRESS

Word has just been received that the 1950 Wakefield Contest will be held in Finland on July 23rd, 1950.

EDITORIAL

Apologies would, perhaps, be expected for the tardiness of this issue, but Australian Model Hobbies has had to carefully feel its way, and we are pleased to say that it has successfully passed through the most crucial period of its existence—we hope—and beginning with the January issue it is anticipated that A.M.H. will appear regularly each month.

This issue contains some articles which cannot be called "Model Hobbies," but we felt that in the case of the speedway articles, the model race car enthusiasts would be interested, and the aeromodellers in the Brabazon and air race articles.

We would be pleased to have your opinions on this type of article.

Model Speed Cars

1949 AUSTRALIAN CHAMPIONSHIPS

★ RECORD SPEED 107 M.P.H.

★ MOST SUCCESSFUL MEET HELD

Reported by A. W. Ferguson

The 1949 M-R-C-A-A Cable Nationals were run at the Sydney Society of Model Engineers grounds at Ashfield N.S.W. on October 8th, 1949. These grounds are also the headquarters of the Miniature Race Car Association of Australia.

The entries for this event were very high, with Victoria being well represented, there being members and cars racing from both clubs in that State.

On show at the meeting was the greatest display of trophies yet offered for a race car meeting yet held in Australia, 22 trophies in all, which were handed out for the Spur Gear Class, Proto class, and Home Built Proto Class.

The Meeting commenced at 10 a.m. and throughout the day we had an attendance of approximately 1,800 spectators. The weather man was very good to us, the day being a little overcast, which seemed to suit the fuels thus bringing in some very high speeds.

The whole meeting was run to a time table, and everything went off without a hitch and all officials carried out their duties well.

The Nationals were the greatest model car meeting yet held in Australia, and in my opinion, equal to anything held in America. It will be remembered for some time to come by all those who competed.

Special thanks go to the Ladies' Committee for the fine way they treated the gathering at lunch. Also many thanks to old time car man, Bob Rowe, for his good work on the Public Address System.

The first round was run after which lunch was served by the S.S.M.E. Ladies Committee.

It was in the first round that things started to happen, the ¼ mile Australian Proto record was broken with a speed of 96.77 m.p.h. by King-Marshall team car, this record was again broken during the afternoon by C. W. Ballem of Victoria with a very nice 102.2 m.p.h. Charlie Ballem also gave a very fine display of speed with his spur gear car at 104.65 m.p.h. to win the Spur Class. In the early morning on a practice run this same car turned in 107 m.p.h., and believe me it was a thrill to see it riding on one wheel at that speed. Runner-up in the Spur Class was Jack Rowles of Victoria, with a new car of his own design and build and this was its first track run.

Competitive racing ceased at 4 p.m. with the last half-hour of the meeting being granted for record attempts. Several attempts on existing records were made and both the half mile Proto and half mile Spur Australian records were broken.

RESULTS AUSTRALIAN CABLE NATIONALS

SPUR GEAR CLASS	Motor	Car	Speed	
C. W. BALLEN (Victoria)	Dooling	Avenger	104.65 m.p.h.	FIRST
W. SINCLAIR (Victoria)	Marbro.	Own	77.58 "	SECOND
J. ROULSTON (N.S.W.)	Avenger	Own	No time	—

SPECIAL EVENT Home built car—Motor Proto Class for N.S.W. membe s only.

	Motor	Car	Speed	
C. WOOD (N.S.W.)	McCoy	Avenger	73.17 m.p.h.	FIRST
W. SINCLAIR (N.S.W.)	Own	Own	72.58 "	SECOND
E. BROWN (N.S.W.)	Avenger	Own	71.42 "	THIRD

OPEN PROTO CLASS

	Car	Motor	Speed	Position	Trophy Position
C. W. BALLEM (Vic.)	Arrow	Dooling	102.2	1st	1st
KING MARSHALL (N.S.W.)	Lightning	Dooling	96.77	2nd	2nd
M. B. McDONALD (Vic.)	Dooling F	Meteor	87.37	3rd	3rd
KING MARSHALL (N.S.W.)	Lightning	Dooling	86.53	4th	—
C. WOOD (N.S.W.)	Dooling F	Own Special	84.90	5th	4th
L. MARGET (N.S.W.)	Own	Marbro. Spl.	83.33	6th	5th
W. McKINNON (N.S.W.)	Meteor	Meteor	77.58	7th	6th

The following competitors finished in this order:—

C. Wood, N.S.W.; J. Flynn, Vic.; B. Pletcher, Vic.; W. Sinclair, N.S.W.; A. Boardman, N.S.W.; E. Brown, N.S.W.; R. Laurendet, N.S.W.; A. Bartholomew, N.S.W.; P. Glading, N.S.W.; W. Sinclair, N.S.W.; W. Sinclair, N.S.W.; F. Begg, N.S.W.; G. Watson, N.S.W.; H. W. Ferguson, N.S.W.; K. Carlyon, N.S.W.; K. Berry, N.S.W.; J. Watson, N.S.W.; R. Sinclair, N.S.W.; C. Trefy, N.S.W.

The last five mentioned failed to record times.

Left: Wes Vickers, who has recorded good times with his modified Mills 1.3 c.c. engined No. 5. Speed, 36 m.p.h. Right: Doug McDonald built up this E.D. Mk.II powered car from a commercial "Wasp" kit. Speed, 34 m.p.h.

SOUTH AUSTRALIAN ENTHUSIASTS

A small private track has been constructed by Mr. A. W. F. Baker at Corunna Avenue, Colonel Light Gardens, and he will be pleased for any local Adelaide enthusiasts to contact him regarding the use of his track, and also with the idea of getting a club going. So, if you are interested, drop Mr. Baker a line.

QUEENSLAND MODEL RACE CAR CLUB

Secretary: Mr. H. Gill,
71 Vulture Street,
West End, Brisbane.

The last race meeting of our Club was a trip to Maryborough to the Hobbies and Handicraft Exhibition. Six members made the trip by plane for the weekend.

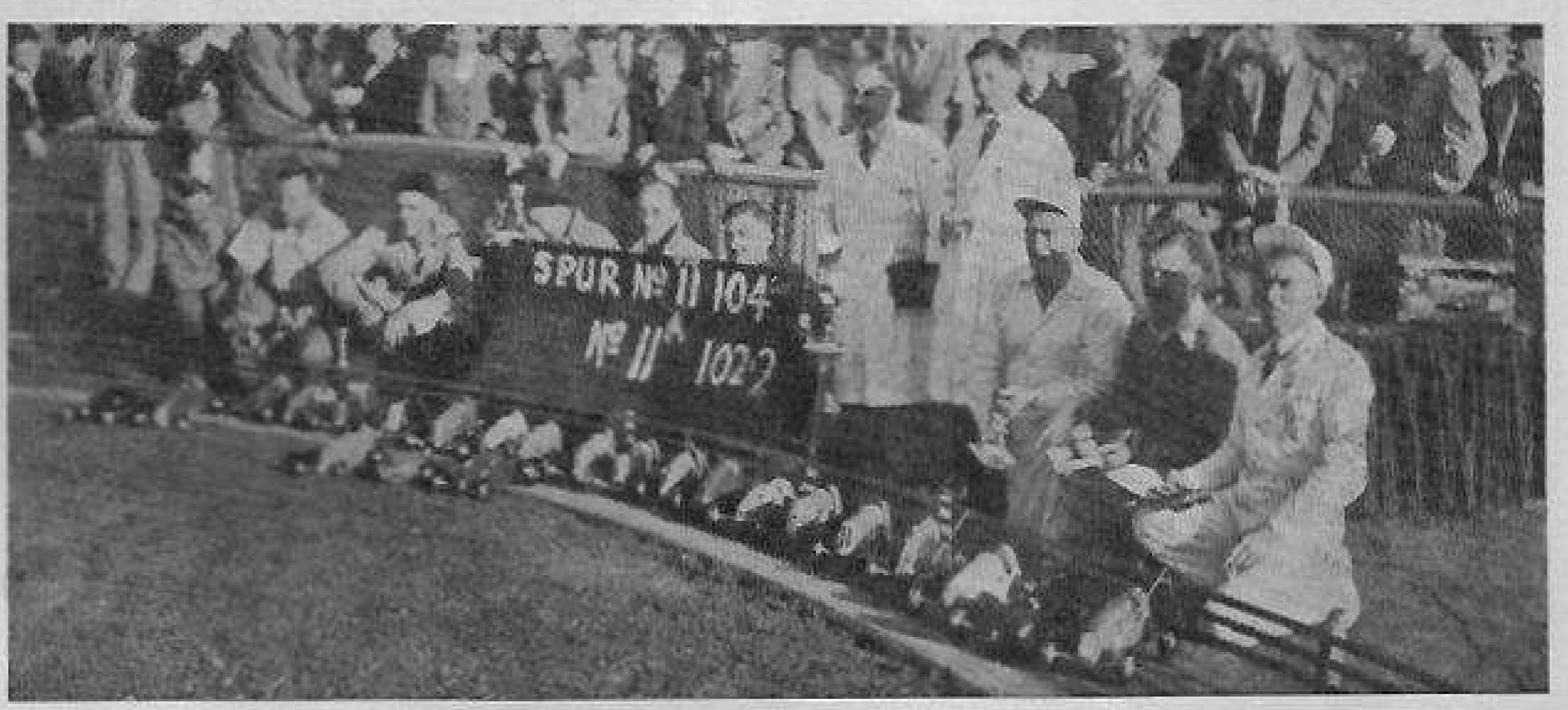
The "Telegraph" Cup was awarded to A. Hudson for the best constructed model car. He also gained second place with another model. Both cars were powered with 10 c.c. engines.

A 35 ft. diameter track was used for demonstration runs and the top speed reported was 55.5 m.p.h. by A. Hudson.

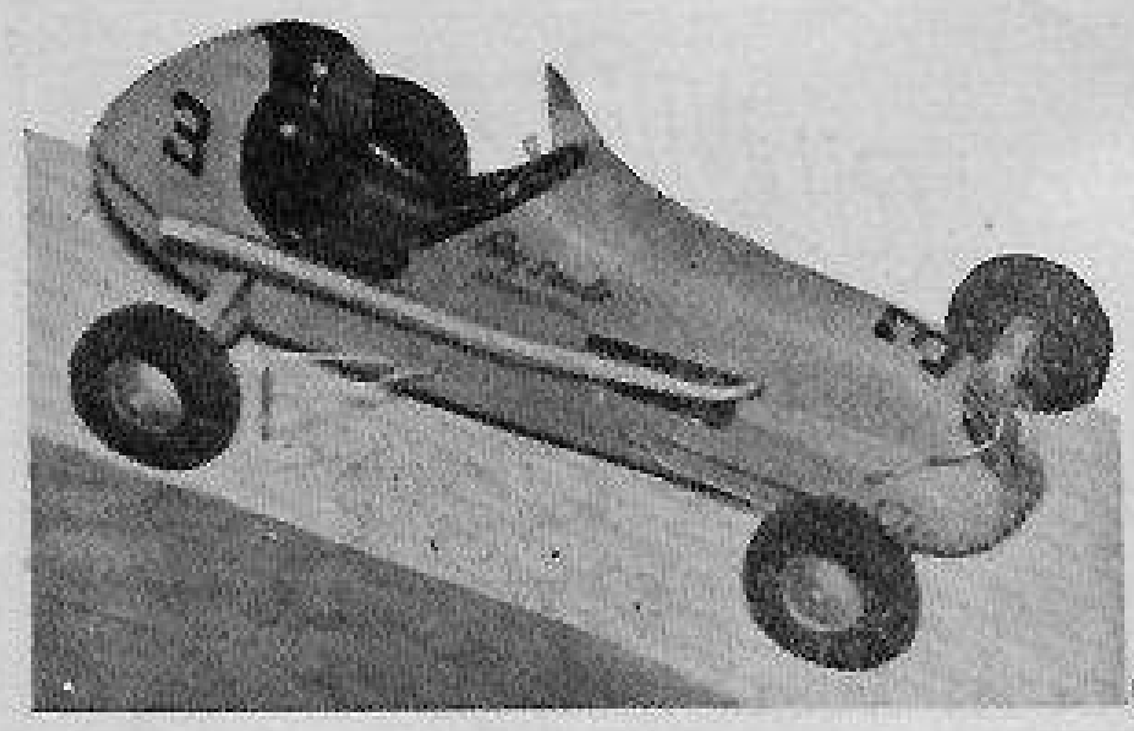
Next fastest was K. Titchett with a speed of 49.7 m.p.h. with a "Tempest" powered car.

A Wathen won the Consistency Event with a "Whirlwind" powered car, and H. Gill ran into second place with an E.D. Mk. III car built from a kit. His top speed was 33.7 m.p.h.

(Club News continued next page)



LINE-UP OF COMPETING CARS 1949 CHAMPIONSHIPS



THE GUYFORD SPECIAL

A S.A. SPEEDCAR

Car Number 3, the Guyford, built by Jack Guy, was driven firstly by Roy Sands and then by Sam Elsworthy at the Kilburn Speedway.

This car with body styling similar to that of Cal Niday's Offenhauser, was one of the most attractive cars on the S.A. track when it appeared last season with Roy Sands at the wheel.

Sands, a newcomer to speedcar racing, progressed steadily with this, an obviously fast car, but unfortunately when it appeared that he had struck top form he was involved in a crash during the 1949 20-lap Australian Championshap and the car was badly damaged.

When Number 3 appeared again it was driven by Sam Elsworthy, a well-known S.A. driver, and an old favourite from the days of the Camden Motordrome.

By now most of the car's teething troubles had been overcome, and on the few runs before the end of the season Number 3 with Sam in the cockpit was showing its expected performance, and if this combination appears this season it should be among the "topline few."

At the top of this page is illustrated a balsawood model of Number 3, the Guyford Special, built by Joe Gibbie, a speedway enthusiast.

On the accompanying plan two scales are given, so that it can be enlarged to give a suitable sized car for a range of small diesel engines. A suggested transmission arrangement is illustrated and a plywood chassis suggested.

To build a solid balsa model, first collect the necessary material: Balsa block for body, strips of heavy fire or cored solder for the exhausts, wire for the crash bars, etc., "Rubbertex" wheels, shim brass for springs, and material for axles, upholstery, etc.

Enlarge the plan to suit the size of the wheels. Mark out the side view and carve to side shape, then mark the top view on to the balsawood block, trim to this shape so as to give a square cross section and then shape to the correct rounded cross sections.

Sandpaper body smooth and give the wood several coats of aeroplane dope, then again sandpaper smooth.

Mount axles and wheels, then paint the model and allow to dry. Shape up the exhausts, crash and torsion bars and fix in place when paint job is finished and dry.

The original car is finished all cream, with black lettering, red upholstery and silver crash bars.

A great deal of fun can be had with these solid cars by weighting them with a strip of lead beneath the body and shooting them along a smooth area with a length of rubber to see which car will go the further.

CLUB NEWS—(Cont.)

RIVERSIDE MINIATURE CAR CLUB

Secretary: J. Flynn,
19 Lord Street,
Carnegie, S.E.9.
Victoria.

Track: Raleigh Road,
Maribyrnong.

Since our last report a new crash fence has been installed and in addition work is now in hand to provide a new high speed surface. A specimen of the latest American track surface was inspected recently by club members and this type of finish will be applied to the existing concrete.

We hope this will completely overcome the wheel spin problem for the faster cars and help to raise the existing records.

The diesel experts now use the track on Saturday afternoons and are putting up some excellent speeds. Wes. Vickers had the misfortune to break a con rod in the "Mills," but no doubt he will have the Bomb on the track before long.

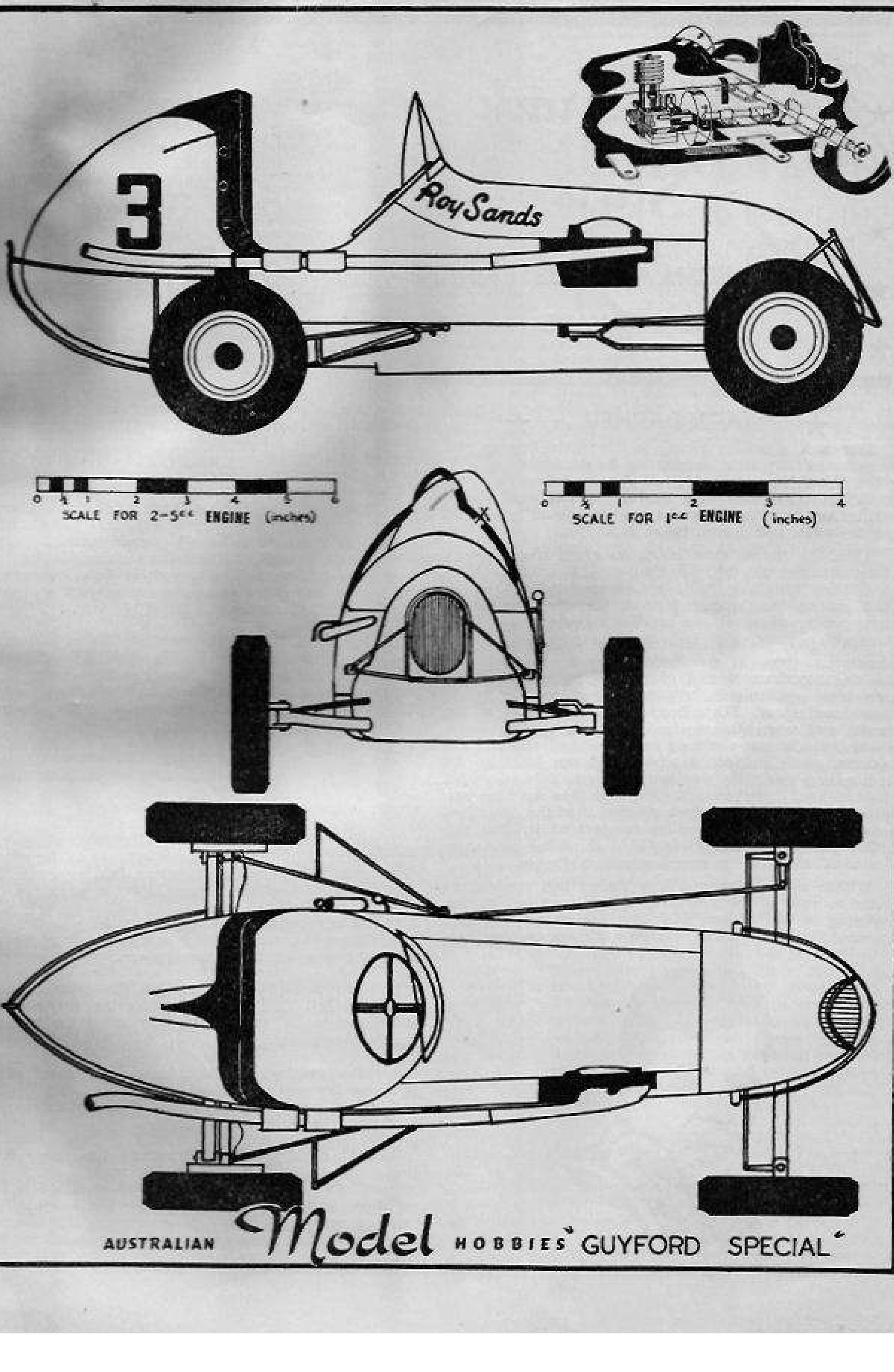
The racing season opened at Riverside on 25th September with a novelty prize event. Each contestant brought a trophy (maximum value 2/-) and of course won one, too.

In addition points were allotted for the Hoadley Cup at this meeting, and will also be allotted at each of the monthly events listed below. These meetings will take place on the last Sunday of each month and points will be given for (a) attendance, (b) reliability, (c) improvement. The trophy will be presented at the end of the season for the highest aggregate and held for one year.

PROGRAMME

1949—
September: Opening Meeting.
October: Two Car Teams Championship.
November: R.M.C.C. Club Championships and Record Attempts.
December: Christmas recess.

1950—
January: President's Cup, for complete cars only.
February: Inter-Club Challenge Meet.
March: Secretary's Cup, standing start ¼ mile.
April: Inter-Club return Meet.



AUSTRALIAN *Model* HOBBIES' GUYFORD SPECIAL

Dirt Track Stars

ON BRITISH AND AUSTRALIAN SPEEDWAYS

★ JACK PARKER ★

Dirt-track speedway racing is the most famous and popular of any sport originating in Australia.

In Great Britain nearly half a million fans cheer on their favourites each week during the speedway season, while Australia has dirt-tracks in all capital cities and at Newcastle and Paramatta in N.S.W.

This, the fastest sport ever, has given rise to many famous names, English, American and Australian. Huxley, Bluey Wilkinson, Wilbur Lameraeux, Cordy Milne, and among these comes Jack Parker, the Englishman who has remained at the top for many years.

Jack Parker, in his early twenties in 1928 when the Australians brought speedway racing to England, was on the experimental staff of B.S.A., and was directed—somewhat against his will—to report on the newly introduced sport. High Beech was the location of the track, and when Jack arrived with his touring motor cycle outfit, it was not long before he had removed the sidecar, partly stripped his bike, and was lined up for a handicap race. He won two heats and finished second in the final from scratch. Although his machine was blackened with cinders Jack decided that the sport had something and he wished to be part of it. For this effort Jack's prizemoney was £5, and no one was more surprised than he on receiving such a cheque.

Within a few moments, Jack Parker had received an offer to race at the new Wimbledon track, which was opening a week later, with the opportunity to race against Vic Huxley, who was then the outstanding Australian star, whose spectacular riding had not been seen previously in England. Jack thought that he must be rather good to be matched against the star Huxley, but with so little experience Jack was no match for the topliner.

In his report to his employers, he stated that he thought the sport would grow, and that he wished to remain in London to watch developments. B.S.A., obviously impressed with speedway racing, built a private track at Birmingham, on which Jack Parker spent much time and did a great deal of experimenting, and in effect he had a private track of his own.

He left B.S.A. and made speedway his main interest, and soon gained revenge for his early defeats, beating Huxley in the Individual Championships Series. From then on, Jack remained at the top and still leads England. This year he should lead the team to oppose Australia for the tests to be held there.

The cost of equipment for his 1949 season was £600, and many hours each week are necessary in his workshop to keep Jack's three bikes and five engines in the condition essential to a top-class rider.

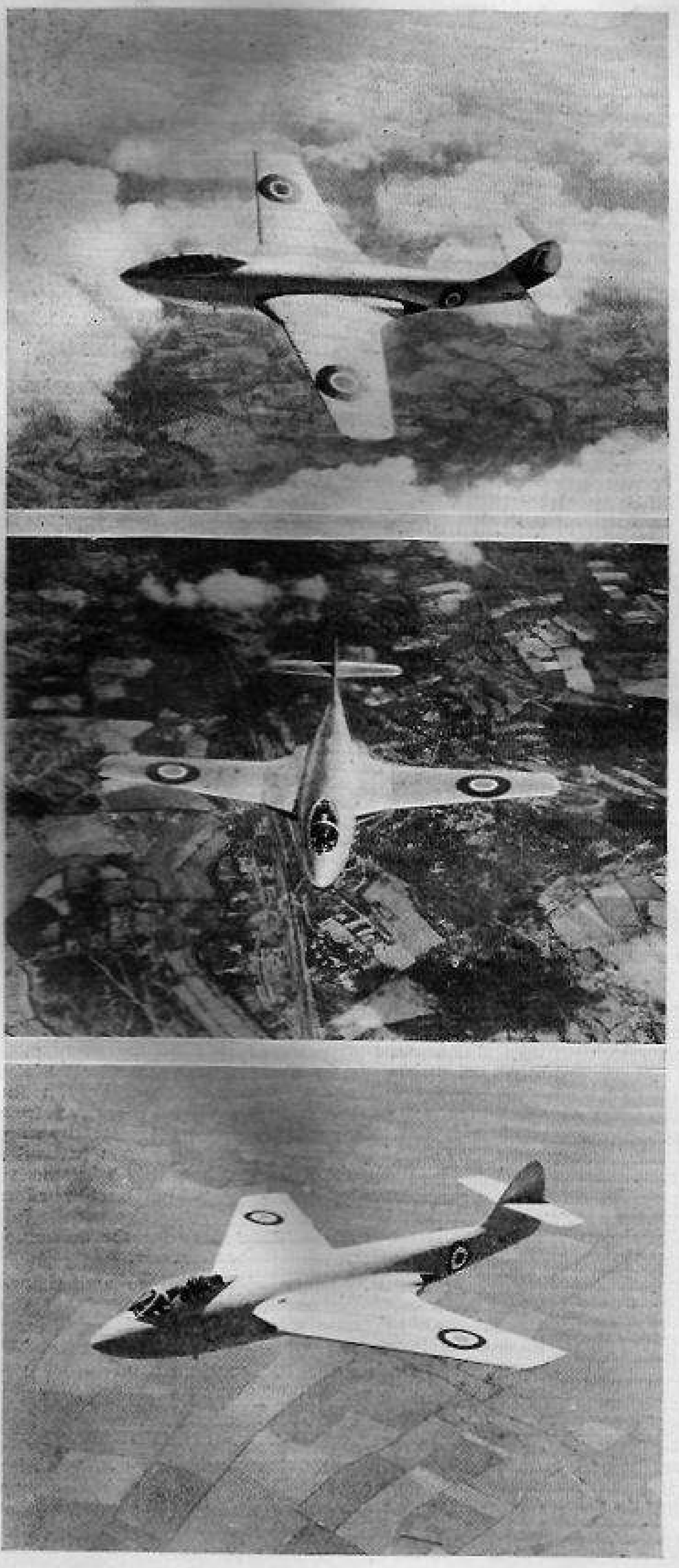
Regularly Jack says that he will retire, and he gives a great deal of interest and encouragement to the younger riders who will follow his footsteps, but he warns them that a lot of hard work goes into the game.

When only seven, Jack began breaking limbs, both arms when he threw his younger brother Norman from the path of an oncoming car.

Most popular of all the English dirt-trackers, he has captained Bell Vue Manchester since the war, also England's test teams, and he is chairman of the Speedway Riders' Association.

Speedway racing, possibly the noisiest sport of all, has been frowned upon both in Australia and England, and often promotors have had difficulty in securing tracks in the built-up areas.

In 1949, the 21st year since organised speedway racing began in England, they have 33 tracks, occupied by almost half a million each week and even a fair rider on these tracks can earn £1,000 for the season, and a topliner perhaps £6,000; £40 per meeting is the average for a good first division man, but expenses are high and take up to 60 per cent. of this money.



THE FASTEST AIR RACE FLOWN

HIGH SPEED EVENT IN BRITAIN'S NATIONAL AIR RACES

Most aeromodellers are familiar with the names Thompson Trophy and Goodyear Races—each an event in the American National Air Races, which are widely publicised in U.S. magazines—but few realise that this year Britain staged National Air Races at Birmingham, one of which proved to be the fastest race ever flown.

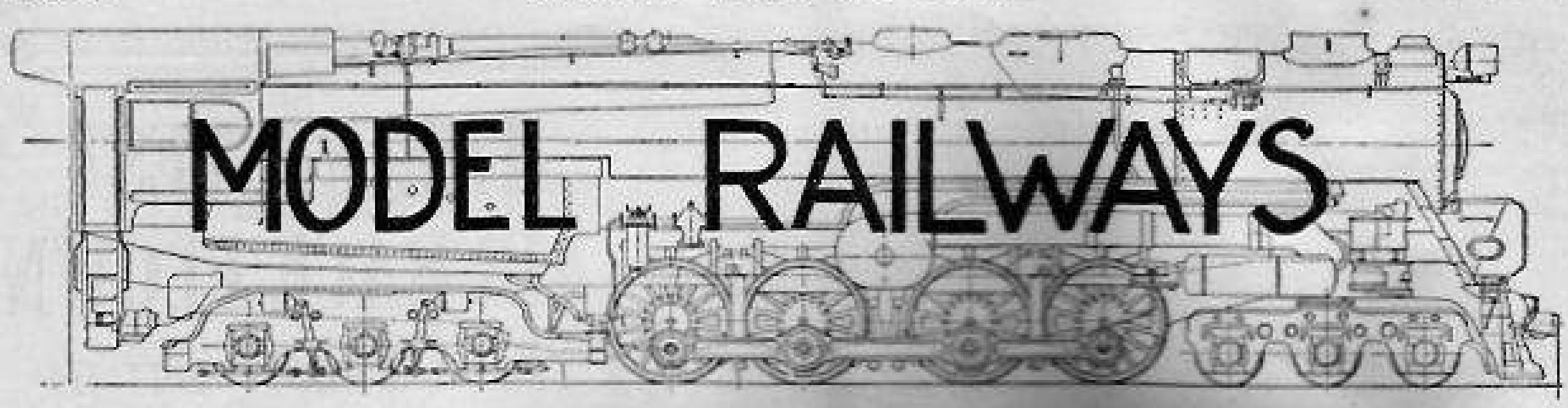
Squadron Leader Trevor Wade flew a Hawker P1040 at the average speed of 510 m.p.h. to win, with the fastest lap speed of 562½ m.p.h. The later Hawker ship, the swept back wing P1052, was the favoured entry, but was withdrawn before the race.

The well-known G/C Cunnigham, piloting a de Havilland Vampire, finished in second place flying from a handicap of 47 seconds before the Hawker P1040. The average speed of the Vampire was 470 m.p.h.

De Havilland's other entry, the experimental DH108, the design of which is unorthodox, being a heavily swept-back flying wing fitted with a pod similar in appearance to the Vampire fuselage. The DH108 is the plane Geoffercy De Havilland was testing when he was killed some time ago, and since then D.H. staff have progressed with the design. The DH108 competing in the Air Races averaged 488 m.p.h., in spite of a great deal of ill luck, and raced from scratch 20 seconds behind the Hawker P1040, which suggests that the time spent on this unusual jet design has resulted in a really hot ship and when Britain again attempts the air speed record, the DH108 could well be the plane for the job.

Britain's leadership in jets is undisputed among the people who know, but unfortunately, little publicity is given to her achievements, and it is with this thought we are preparing an article on the latest jet powered commercial planes now being flown and developed in England, and which may well be the means of returning Britain to the undisputed leader in commercial aviation.

Top: Hawker P1040 jet fighter which won the high-speed event. Centre: Front view of the P1040. Bottom: The P1052, faster development of P1040, chief difference being the swept-back wing.



TASMANIAN TRAIN CARRIAGES

Here are the plans for the construction of two Tasmanian passenger carriages.

The body of this car is made of wood and cardboard and the bogies can be purchased from your Model Shop, or you can remove the bogies from an old car and then mount the car on scraps of wood along the side of your tracks so that the car can function as temporary housing, a coffee stall, or some other such building.

To build the car you will need quarter inch spruce or similar wood for the floor, some dowelling for vacuum brake cylinders, and some suitable cardboard or millimetre aircraft ply wood for sides, and half inch balsa to carve to shape for the roof. (For double 00 quarter inch roofing) some celluloid for windows.

First scale up the drawing to suit the gauge rail you are using, and when satisfied that this is correct commence construction. Beneath the car are the usual battery boxes, air tanks, and other parts, and can be cemented to the spruce flooring if these parts are to be fitted.

Cut the two sides from the cardboard or mm. ply. Then draw the windows in pencil on the outside. Lay out both sides in the same manner. Cut out the windows with a single edged razor blade. The window sashes, doors, and remaining details where necessary, can be added by cementing strips of suitable cardboard in place. Next cut from hard quarter inch balsa the two ends of the car and build up the four sides. Cement all joins well and set aside to dry. Now carve the roof to shape from the balsa strip. Sandpaper smooth and fill with several coats of shellac, sandpapering between coats.

When the sides have dried thoroughly to the floor and ends place braces inside the car to keep the walls straight. Carefully sandpaper the carriage.

Place your bogies in the correct position and bolt in place. Be sure that they swivel enough so that your car will be able to take the curves. The concertina ends (diaphragms) can either be bought from your Model Shop or made from a piece of soft balsa in which indentations have been made with a pencil.

After putting the finishing touches to the model, you can commence painting. It is a good idea to apply a coat of thinned shellac to the whole body, then after it is dry sandpaper smooth, and apply paint.

The roof and trucks should be painted black and the body dark green.

The last step is to cement the celluloid windows in place. Cut a strip of green paper quarter inch wide and glue it along the top of the windows to act as sun blinds.

Now, either cement, or screw on the roof with large screws from beneath. When your car is finished paint it with a coating of dull varnish. This will protect the finish and conceal the edges of any decals (transfers).

CAN YOU HELP MR. DINGLE?

Mascot, N.S.W.

Dear Sir,

Firstly, I wish to congratulate all those concerned in the production of the first issues of "Australian Model Hobbies." These issues have been interesting and I, surely like many others, look to the future for much useful information and interest.

A problem, with which, at the moment, I am making little progress, is one of the main reasons for the writing of this letter. Perhaps I may be able to enlist your aid.

Now I am making plans for an "O" Gauge railway on which I hope to begin work in the near future. It is to be an outdoor layout and the track is to be laid on a concrete embankment which is to be of a minimum height of three feet above ground level. The maximum area to be covered by the railway should be about twenty by forty feet. I am unable to come to a final decision as to whether the track will be fed by twenty volts alternating current or twenty-four volts direct current, as there seems to be plenty of support for both. Twenty volts a.c. can be very easily obtained by means of a transformer; and I understand that a.c. is more capable of covering a long distance without voltage drop than is the case with direct current. Twenty volts a.c. also is a standard supply, which cannot be said for twenty-four volts d.c. This would make it possible for my locomotives to work on other layouts, or for visiting enthusiasts to operate locomotives on my track.

Twenty-four volts d.c. would have to be drawn from a generator with an output of 200 watts driven by a half horse motor (I hope) supplied from the power mains. Unfortunately this would provide more difficulties and chances for breakdown than the former transformation. Relay magnets and solenoids for changing points, etc., could be far more easily made for d.c. than for a.c. and they would only occupy about two-thirds of the space. I should think this would also apply to motors both traction and otherwise. In the making of motors the stators could be machined from solid stock and this would surely be of great advantage when they are to be made one at a time for a particular purpose. I think that it would follow that a locomotive of a given size would have a greater tractive effort when powered by d.c. than by a.c. provided full advantage is taken of available space for the accommodation of the driving unit in either case.

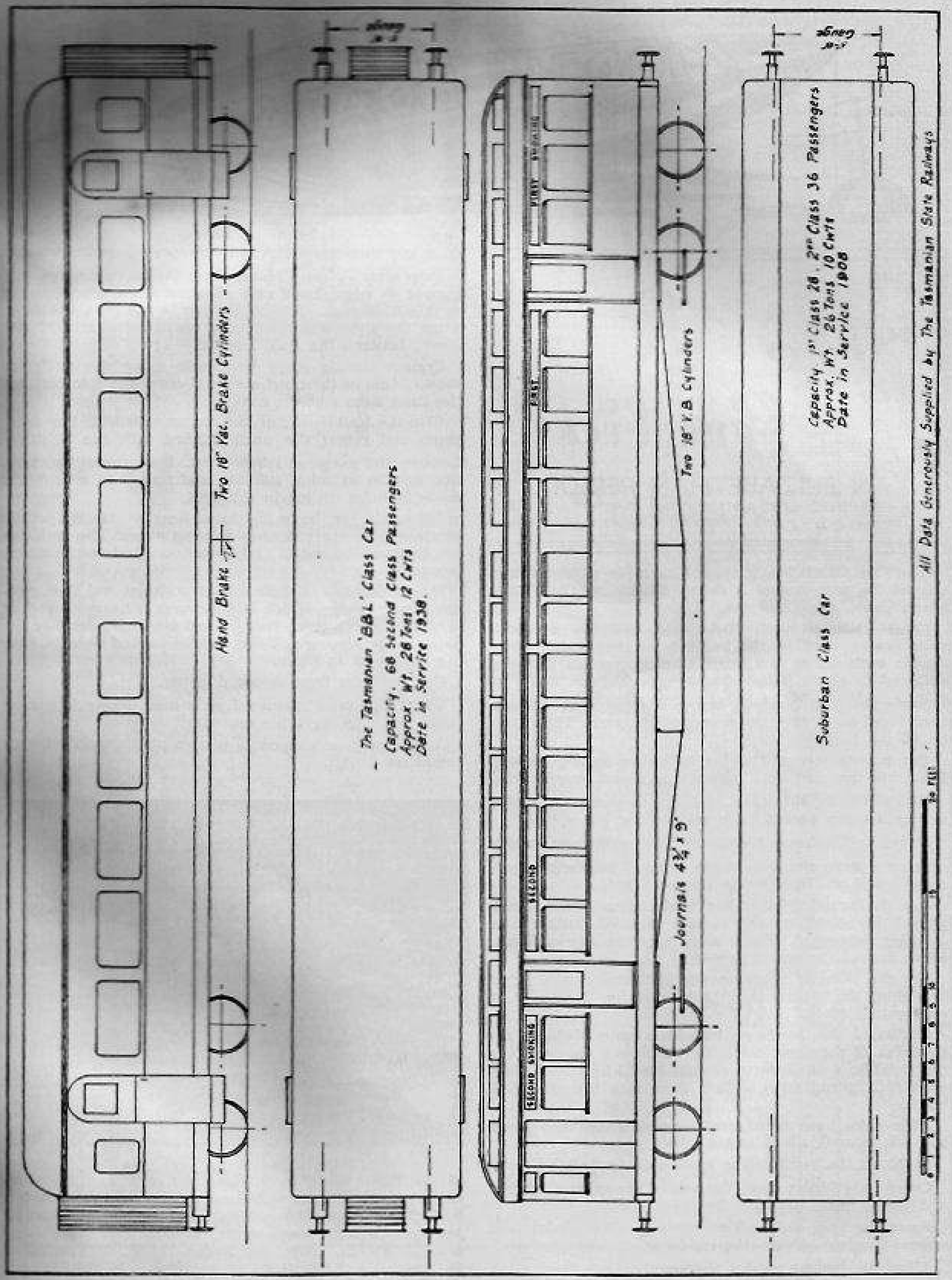
Well, those are the facts as I see them and I hope that I have made the position clear. Hoping that you may be able to throw some light on this problem, I shall leave it at that for now.

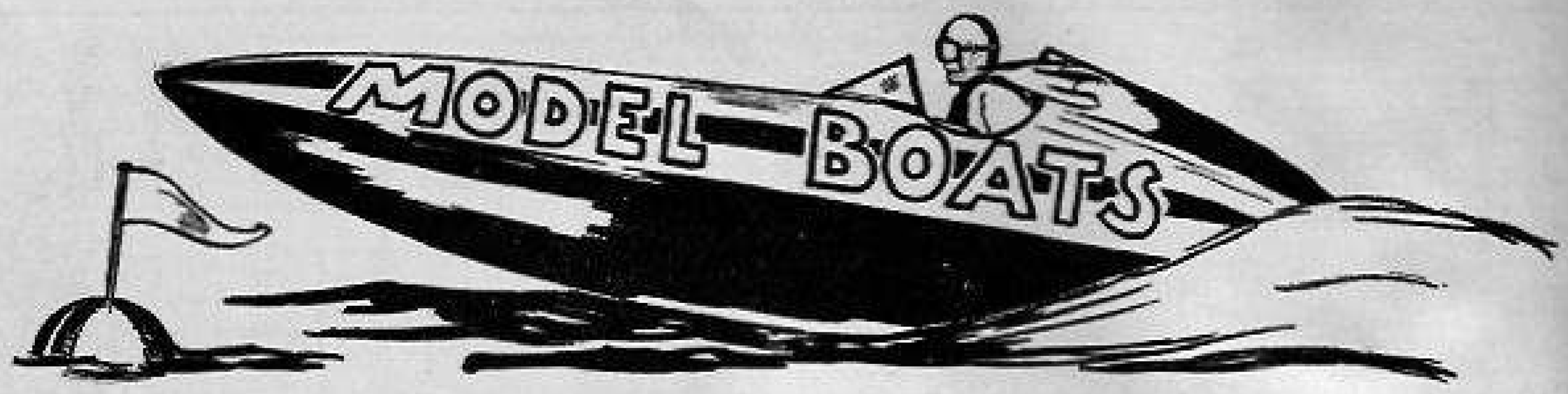
With best wishes for the continued success of the new magazine.

Yours sincerely,

JOHN DINGLE.

(Mr. Dingle's letter has been published with the idea that some of our readers may be able to give him some advice. Any letters received will be forwarded to him. Ed.)


Hand Brake
Two 18" Vac. Brake Cylinders
Tasmanian 'BBL' Class Car
Capacity, 68 Second Class Passengers
Approx. Wt. 26 Tons 12 Cwts
Date in Service 1938.
Two 18" V.B. Cylinders
Journals 4½" x 9"
Capacity 1st Class 28, 2nd Class 36 Passengers
Approx. Wt. 26 Tons 10 Cwts
Date in Service 1908
Suburban Class Car
All Data Generously Supplied by The Tasmanian State Railways



THE

"De Gratia"

AN ELIZABETHAN PERIOD GALLEON

The "De Gratia" is a typical example of the man-o-war of the period, and is rather similar to the "Santa Maria" sailed by Columbus.

Construction is mostly balsawood, and no elaborate tools are required in the building of the model, which can be built either as a small, interest piece or the plan enlarged to give a larger display model.

Study the plan carefully before starting work on your model and check over the necessary materials. Then carry on in the following steps:—

Cut out the top view of the hull after tracing the outline from the plan with carbon paper and pencil.

Trace out the side view, and cut to shape. A coping saw or a sharp pocket knife will do the job.

Shape hull to correct contours and sandpaper smooth.

Cut the stern and bow blocks from ½" balsawood sheet, cement and pin in place on the solid hull.

Cut the actual sides of the model from either 1 mm. aircraft ply wood, suitable smooth surfaced cardboard or $\frac{1}{16}$"sheet balsawood. These sides finish in line with the lower line of the buttressing.

Pin the sides in place on the hull and run a pencil line along the bottom of the sides marking their position on the hull block.

Cut along the line so made, with a razor blade, to the thickness of the sheet side. Now from the top cut away the wood so as to form a rabbet, into which the sheet sides will fit and form a flush joint with the solid hull block.

After sides have been fitted, cement them into place, and pin securely whilst cement dries.

Build up the overhanging prow with scrap balsa sheet.

Cut from ½" balsa sheet the rear of the galleon, cement and pin in place between the sheet sides.

Form the keel and rudder from ⅛" sheet balsa and cement in place. Mount the rudder on two headless pins.

Allow all cement to dry thoroughly and then sandpaper entire model, apply two coats of model aeroplane dope and then again lightly sandpaper the model smooth.

Strip some $\frac{1}{16}$" or ⅛" balsa sheet into square strips, and cement an edge (hand rail) all around the top of model as shown on plan. The edging can be cut from the sheet, when the strip will not bend sufficiently around the curves between the deck heights.

Cement similar strips lengthwise along the model as shown. One of these strips should cover the join between the sheet sides and the hull.

Give the hull a coat of lacquer, smooth with fine sandpaper and repeat this until satisfied with the finish.

Shape the masts and booms etc. from dowelling, knitting needles or other suitable materials, and mount the masts in holes drilled in the deck.

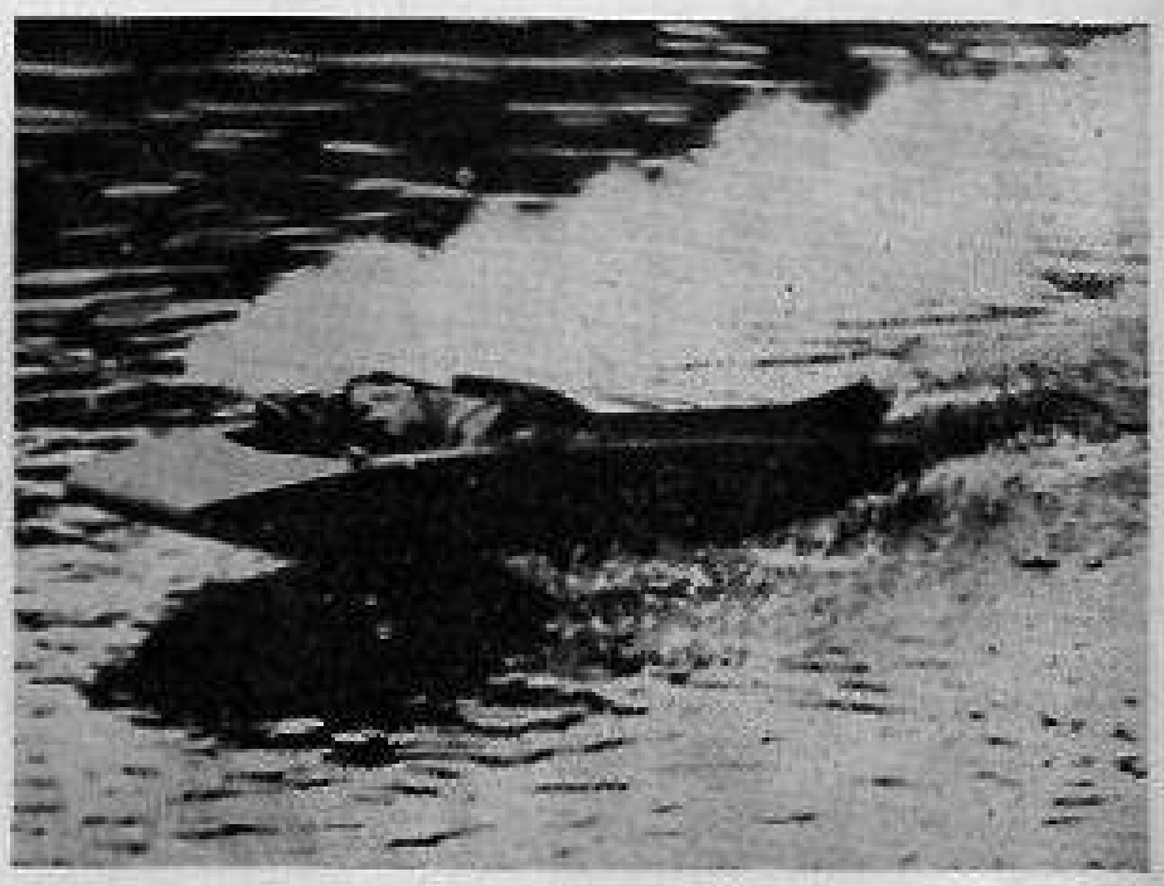
The sails can be made from heavily starched calico parchment or heavy tracing drawing paper. The emblems are outlined in indian ink and coloured with poster colours.

Mount the sails in their correct positions and then commence the rigging which is done with a heavy thread or very fine fishing line. Pins pushed into hull simplify the fixing of the rigging and they can be pushed right in after the rigging is in place.

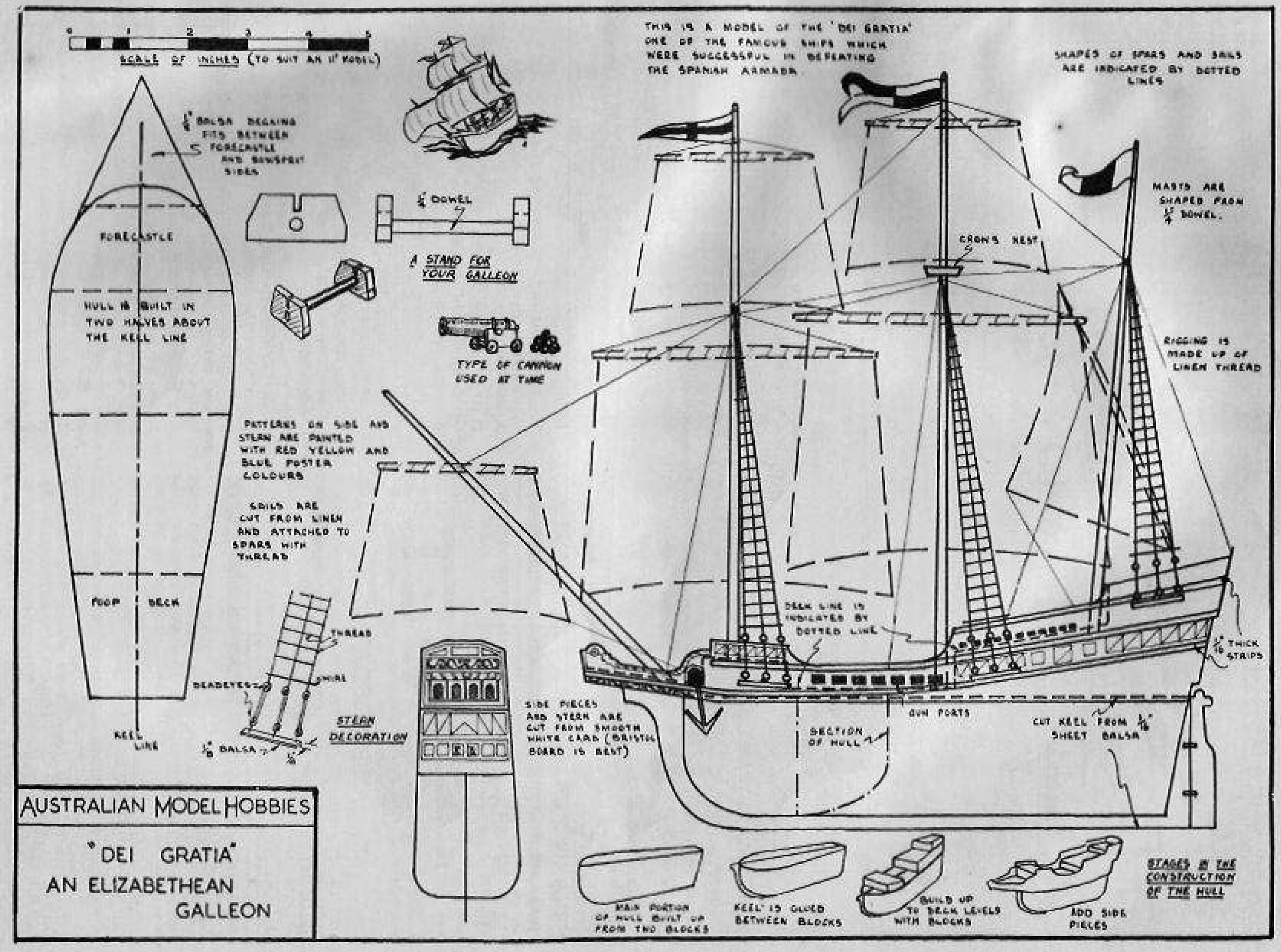
Cut the flags from coloured paper.

The "De Gratia" mounted on a blue mirror is a most novel and effective table centre.

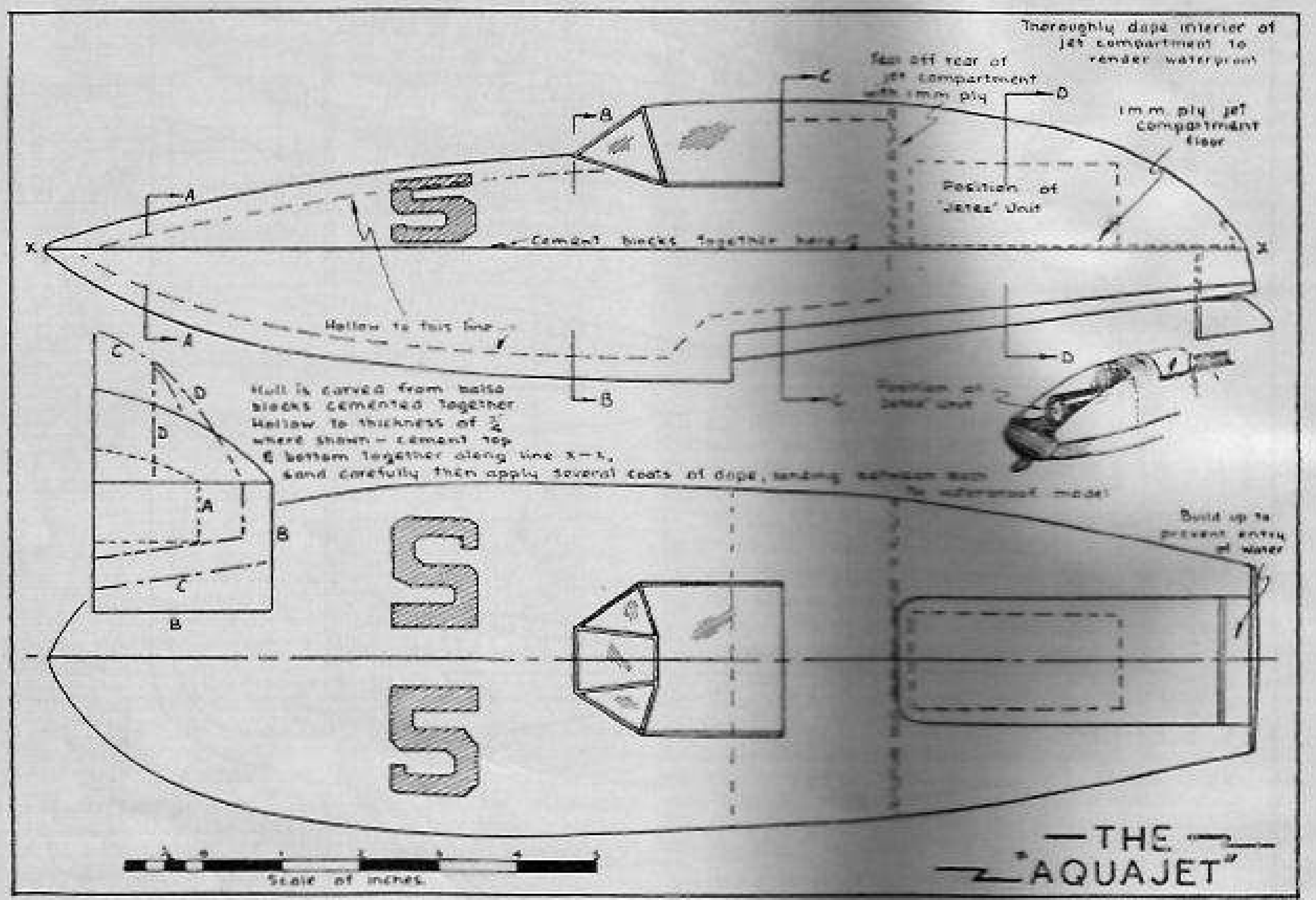
A.M.H. will be pleased to receive photographs of your completed model.



Model flash steam hydroplane designed and built by Cliff Guy, of Wanganui, N.Z. Engine weight, 3½ pounds; boiler and lamps, 7 pounds. Total weight, 18 pounds. Engine is a twin single acting uniflow type with overhead admission. Bore and stroke 11/16". R.P.M. with 3½" prop. are 8,000-10,000 at a pressure of 300 lbs. per sq. in. Speed, over 30 m.p.h.


SCALE OF INCHES (TO SUIT AN 11" MODEL)
THIS IS A MODEL OF THE 'DEI GRATIA' ONE OF THE FAMOUS SHIPS WHICH WERE SUCCESSFUL IN DEFEATING THE SPANISH ARMADA
SHAPES OF SPARS AND SAILS ARE INDICATED BY DOTTED LINES
MASTS ARE SHAPED FROM 1/2" DOWEL.
RIGGING IS MADE UP OF LINEN THREAD
CROW'S NEST
1/4" BALSA DECKING FITS BETWEEN FORECASTLE AND QUARTER DECK SIDES
FORECASTLE
HULL IS BUILT IN TWO HALVES ABOUT THE KEEL LINE
1/2" DOWEL
A STAND FOR YOUR GALLEON
TYPE OF CANNON USED AT TIME
PATTERNS ON SIDE AND STERN ARE PAINTED WITH RED YELLOW AND BLUE POSTER COLOURS
SAILS ARE CUT FROM LINEN AND ATTACHED TO SPARS WITH THREAD
POOP
DECK
KEEL LINE
THREAD
DEADEYES
WIRE
1/8" BALSA
STERN DECORATION
SIDE PIECES AND STERN ARE CUT FROM SMOOTH WHITE CARD (BRISTOL BOARD IS BEST)
DECK LINE IS INDICATED BY DOTTED LINE
SECTION OF HULL
GUN PORTS
1/16" THICK STRIPS
CUT KEEL FROM 1/8" SHEET BALSA
MAIN PORTION OF HULL BUILT UP FROM TWO BLOCKS
KEEL IS GLUED BETWEEN BLOCKS
BUILD UP TO DECK LEVELS WITH BLOCKS
ADD SIDE PIECES
STAGES IN THE CONSTRUCTION OF THE HULL
AUSTRALIAN MODEL HOBBIES
"DEI GRATIA"
AN ELIZABETHEAN GALLEON

BUILD THIS JET SPEEDBOAT



THE

AQUAJET

SPEEDBOAT

POWERED BY "JETEX"—CO_2 BULB OR ROCKET

Inspired by the jet powered "Blue Bird" high-speed boat raced by the late Sir Malcolm Campbell, the "Aquajet" is an easily built model designed to be fitted with a "Jetex" motor or a soda syphon "Sparklet" bulb, which are obtainable from hardware stores.

An interesting point is that Sir Malcolm's son has removed the jet engine from the record holding "Blue Bird" and has refitted its former piston type aeroplane engine, with which the record was established by his father. The jet caused the "Blue Bird" to snake at high speeds, making it impossible to realise the full power of the jet engine.

The attempts made by Donald Campbell only a few weeks ago fell short, by only a small margin, of his father's record.

Further attempts on this occasion were prevented by gearbox failure, but it is anticipated that future attempts will prove successful.

The scale shown on the plan is for the 350 Jetex unit. If a smaller motor is to be fitted, reduce the scale by half for a Jetex 100 or a Sparklet bulb, resulting in a model approximately 10" long.

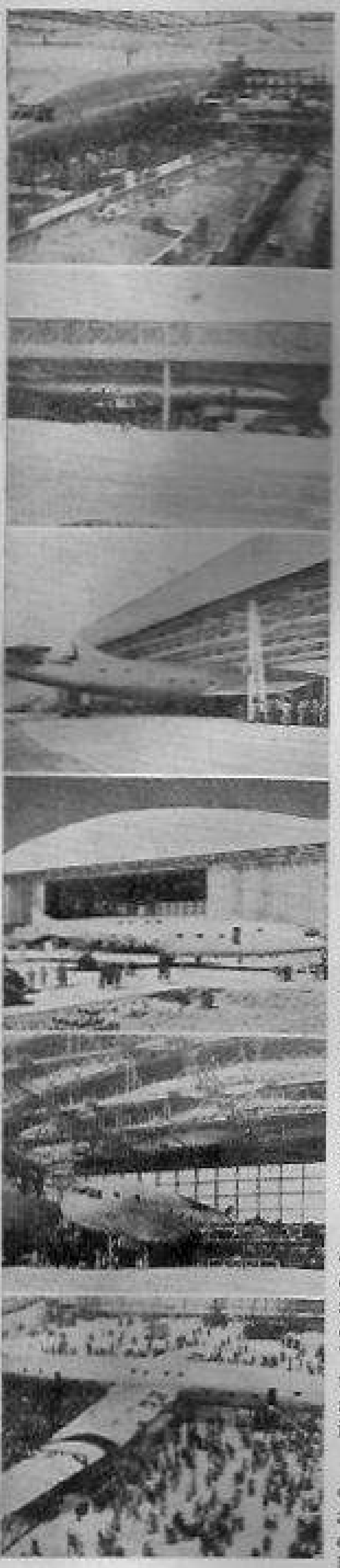
Enlarge the plan to the desired size, check the constructional details and the size of the necessary blocks of balsawood.

The plan is intended mainly as an idea for the modeller to develop and therefore much of the detail depends upon the builder.

The hull is made up from two blocks cemented together along the centre line. The decking can be built up in several ways, the most simple being two blocks hollowed in a similar manner to the hull.

Ballast is necessary to stabilise the model, because of the extreme buoyancy of balsawood. This ballast is formed from a piece of sheet lead ½" wide and 3" long, which is cemented into the underside of the hull at point "B."

To fill the grain of the wood before painting, give the whole model several coats of aeroplane dope, allowing each to dry and sandpapering between each coat. When a smooth finish is attained lacquer the model in your chosen colour scheme.



The "Bristol" Brabazon was first conceived in December, 1942, when a Government Committee under the Chairmanship of Lord Brabazon was set up to consider specifications for aircraft needed to meet British post-war civil aviation requirements.

The Committee recommended the development of five different types. At one end of the scale was the small feeder-line or taxi aircraft; at the other, the huge 130-ton "Bristol" Brabazon I, largest civil land-plane in the world and the most ambitious project ever attempted by the British aircraft industry.

Designed specifically as a trans-oceanic air-liner to provide fast travel for a large number of passengers at one time, the Brabazon is primarily intended for the B.O.A.C. non-stop London/New York service and as such will set standards in comfort and amenities hitherto unknown in the history of air transport.

The aircraft is a fully pressurised, high altitude, long-range monoplane with a wing span of 230 ft., almost twice that of Britain's largest bomber, the Avro Lincoln. The wing comprises three sections; a centre section or inner wing and two outboard panels or outer wings. Extending completely through the fuselage, the inner wing has a span of 100 ft. and a maximum depth of 6 ft. 6 in. The two outboard panels, each 65 ft. long, contain the flexible fireproof tanks which carry the full fuel load of 13,500 gallons. Wing area (gross) is 5,317 sq. ft.; the fuselage is 177 ft. long with a maximum diameter of 16 ft. 9 ins.; span of the tail-plane is 75 ft.; height over rudder, 50 ft.

Passenger and crew accommodation is arranged mainly on one deck with a half deck rise over the wing for a dining saloon, lounge bar, kitchen and servery. Baggage and mail holds are below the two main cabin decks; dressing rooms and toilets below the dining saloon. The bullion room and the crew's sleeping quarters, rest room and toilet—entirely separate from the passenger accommodation—are forward of the front cabin and immediately aft of the cockpit and flight deck.

Pressurised to maintain an equivalent cabin altitude of 8,000 ft. while flying at 25,000 ft., humidified and air-conditioned to permit maximum comfort under all conditions of flight, the Brabazon when in service will be furnished to carry 100 passengers by day or night, with a flight crew of seven, and five stewards.

With an all-up weight of 290,000 lb. the Mk. I aircraft will have an initial operating ceiling of 25,000 ft., increasing as fuel is consumed; a maximum level speed of 300 m.p.h. at 25,000 ft.; a recommended economical cruising speed of 250 m.p.h. at 25,000 ft.; and a rate of climb of 750 ft. per minute. Carrying a full fuel load, the aircraft will have a still-air range of 5,500 statute miles, required over the London/New York route

(Continued on page 15)

Strip photos show Britain's mighty Brabazon Air Liner during many stages of construction.

B.B. WASHER

SHEET NOSE WITH ⅛"

RUBBER BAND

APPROX WING POSITION

DOUBLE COVER FUSELAGE WITH JAP TISSUE

SUGGESTED FOLDING UNDERCART

HARD ⅛" SQUARE

TAILPLANE RIB ⅛" SHEET

⅛" SHEET

⅛" SQUARE

COVER CENTRE SECTION WITH ⅛" SHEET

¼"×⅛" SPRUCE SPAR

⅜"×⅛" TRAILING EDGE

POWER 16 STRANDS ¼"×⅛" ENGLISH DUNLOP 48" LONG - TENSIONED.

DIHEDRAL SET-UP

A C A

2¼"

1¾"

4"

14"

PROPELLOR BLANK DETAIL

FREEWHEEL CLUTCH

WASHER

⅛" TUBE

BRASS SHEET

⅛" WIRE

⅛" PLYWOOD REINF

⅛" SHEET

¼" AL. TUBE BAMBOO DOWEL

TAILPLANE INCIDENCE IS ZERO

⅛"×⅛"

1½" DIAMETER ⅛" PLY

FACE WITH ⅛" PLY

PLAN FUSELAGE OUTLINE

STREAMLINE RIBS

SHAPE & GLUE TO STAB

FIN CONSTRUCTION — ALL ⅛" BALSA

WING RIBS ARE NOTCHED INTO TRAILING EDGE

MAIN SPAR IS SPRUCE

⅛" □

T.E. ⅛"×⅛"

⅛" SHEET

⅛"×⅛" SPAR

WING INCIDENCE

HALF WING PLAN

ALL WING RIBS ARE ⅛" SHEET

⅛" SHEET COVER CENTRE SECTION

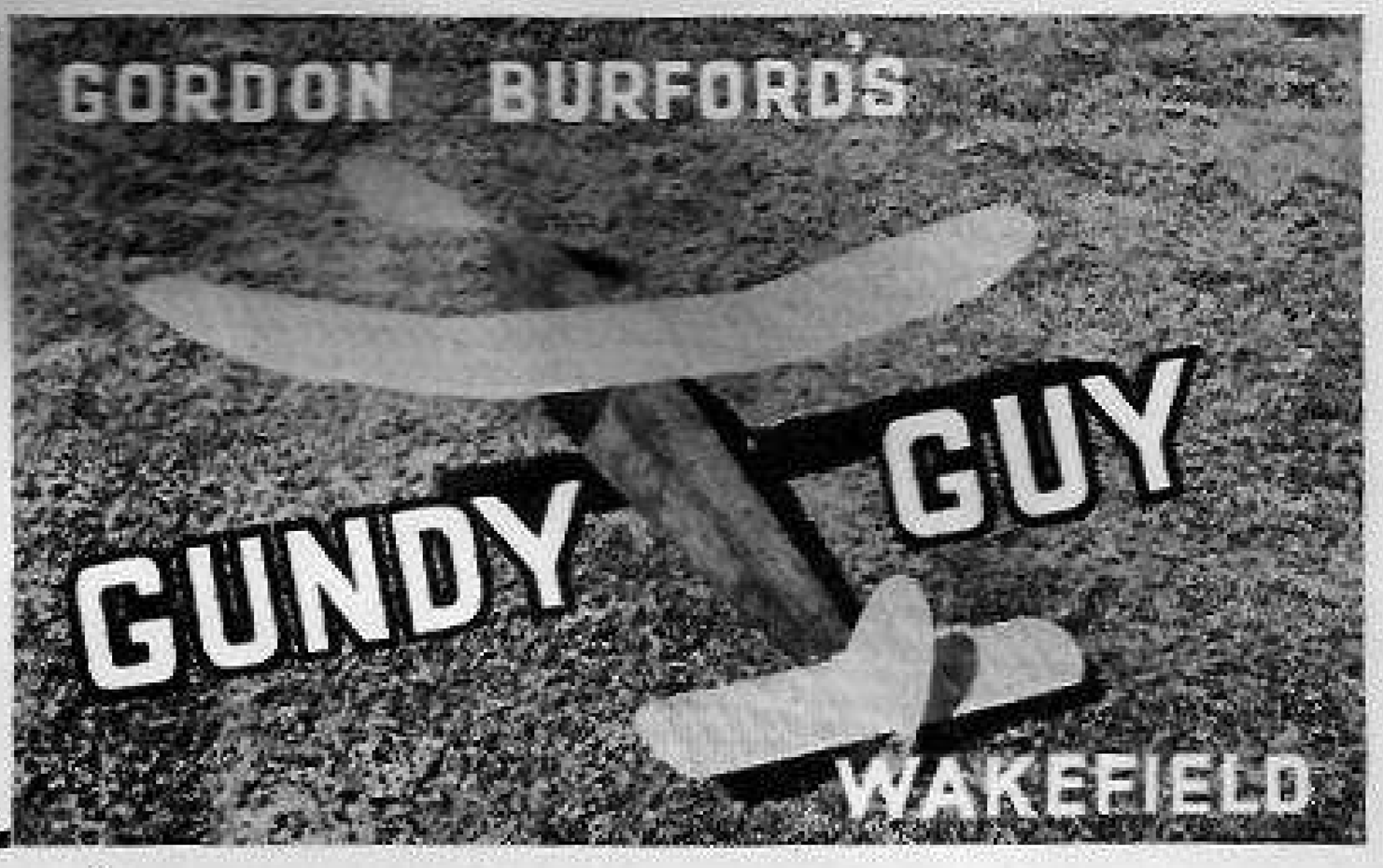
14" A 7" C

AUSTRALIAN Model HOBBIES

"GUNDY GUY"

SCALE OF INCHES

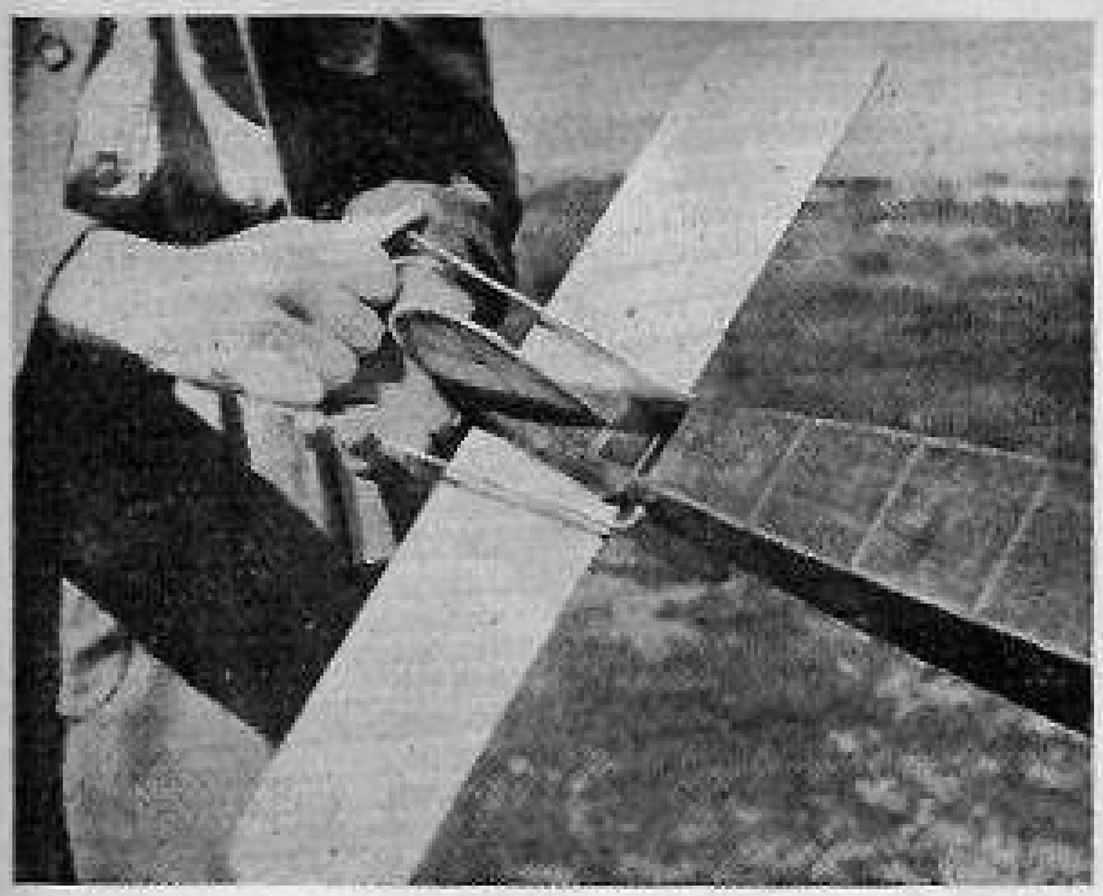
- A RUGGED MODEL
- FOR THE
- NEWCOMER TO
- WAKEFIELD FLYING



The 1949 Wakefield is past, and so thoughts turn to next year's event and to the type of model to build, with the hope of perhaps gaining a place on the Australian team to be sent to compete in Finland, and for the first time, bring the most coveted of all aeromodelling trophies to Australia.

The Gundy Guy is not a progressive design, rather is is a model as simple as a Wakefield can be, with the emphasis on simplicity and reliability, combined with a creditable performance.

This years winner could hardly have been a more simple model and although it was equipped with return gears in the rear of the fuselage the motor was wound to only 1,200 turns for the contest, which is far below the maximum made possible by the gears, and well within the possibilities of a Wakefield motor without gears.



Winding attachment is formed from ⅛" steel wire and slides in dural tubing used as the peg retaining rubber motor.

Flying skill is probably lacking more so than the ability to build a high performance Wakefield, and this was Gordon Burford's conclusion when the Gundy Guy was designed. His aim was a model with which he could again learn to fly, for although before the war Gordon was tops in both indoor and outdoor rubber flying, he found that after a break of almost 10 years a lot had been forgotten and the invaluable "know how" a little rusty.

Regularly flying the Gundy Guy each week-end for many months has given him the brushing up he found he needed, and also has proven the model to be ideal for the job, and its performance impressive enough to convince him that his entry in the S.A. Eliminations for the Australian Wakefield will be this model with the modifications shown on the plan.

The construction is quite orthodox and fully explained in the plan. Spruce spar 1/16" x ¼" is used in the wing and if spruce is not available substitute very hard ⅛" balsa. The longerons are also spruce, but these too can be made of very hard ¼" balsa.

The fuselage is double covered. First a layer of silk (rag) tissue and then Jap tissue.

Most important with a high-powered rubber model is a suitable winder which allows the modeller to get the maximum number of turns into the model in the minimum time. Make certain that your winder has suitable leverage on the handle and also that a winding attachment for holding the model, as in the photo, is used.

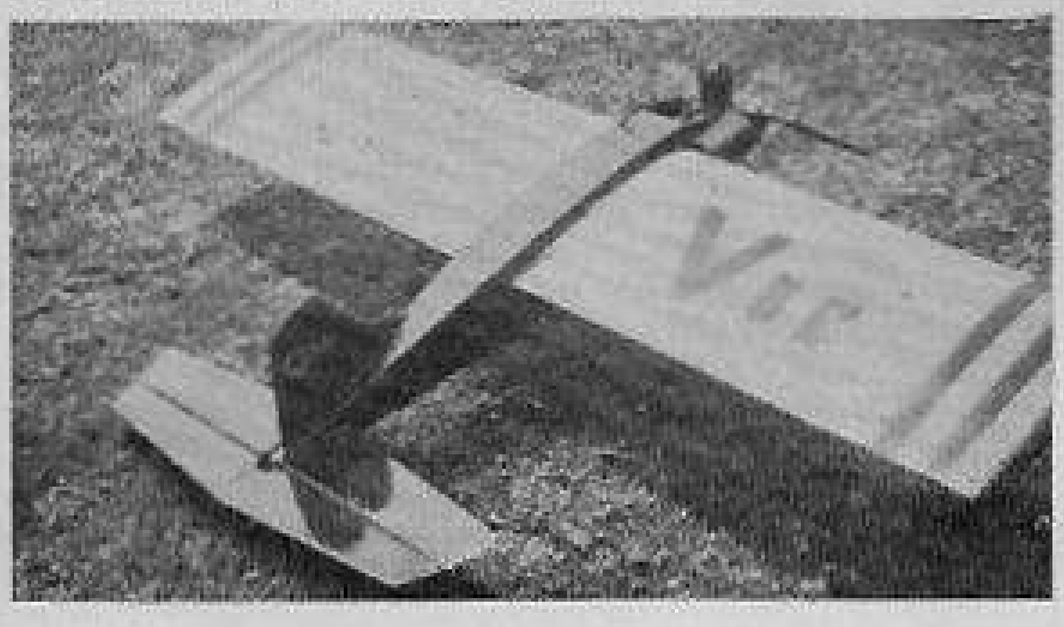
BRISTOL BRABAZON—(Cont.)

to allow for adverse headwinds consistently encountered in the west-bound direction at operating altitudes of 20,000 ft. and above.

The Mk. I, however, is not expected to go into regular airline service. Considerable research has necessarily to be undertaken with an aircraft of such gigantic size and it is probable that this first aircraft will be retained solely for flight development.

The Brabazon I is powered by eight "Bristol" Centaurus XX 18-cylinder, air-cooled, sleeve-valve radial engines, each giving take-off power of more than 2,500 b.h.p. The engines, completely enclosed in the inner wing, are arranged in pairs driving 16 ft. diameter contra-rotating, three-bladed wooden Rotol propellers. Each propeller is self-contained with its own constant speed, feathering and pitch-reversing mechanism, the latter for braking the aircraft on landing. The Mk. I, however, will be the only aircraft of this type to be fitted with reciprocating engines. The Mk. II series, or production aircraft, will be powered by eight "Bristol" Proteus propeller turbines of considerably higher power and will, therefore, attain correspondingly increased performance.

CONDUCTED BY THE SOUTH AUSTRALIAN ASSOCIATED AEROMODELLERS



These contests were arranged as a prelude to the big show—the 1950 Australian Nationals to be flown next Easter in Victoria. The South Australian Associated Aeromodellers conducted the meet and provided all the trophies from Club funds excepting a motor donated by Model Aircraft Industries, and a clock by John Martin & Co. Ltd.

As no interstate aeromodellers had previously visited South Australia for a contest, the local chaps were very keen, and regarded these contests as the first big show organised here.

After many months of feverish activity both in building models and organising for the contest the lads were most disappointed when Sunday, 9th October, dawned with a heavy overcast sky, almost continuous rain and gale warnings in the meteorological forecasts. Nevertheless the Free Flight Contests scheduled for the Sunday got under way in what could not have been worse weather.

The modellers were reluctant to get their models into the air, but after waiting until 11.30 when it was apparent that the weather was not improving, Wally Reeve decided to launch his Bantam-powered free-flighter. Surrounded by dubious modellers he started his motor, rested his model on the malthoid take-off strip, waited for a lull in the wind and then successfully got his model into the air. Wally's model was unorthodox for contest flying, as it was a low wing job with a lifting fuselage fitted with mono-wheel undercarriage and a twin rudder tailplane.

The stability shown by this arrangement was surprising.

Ray Harwood, of Victoria, of whom we had heard much of his terrific performances, was next on the line, but suffered with a run of bad luck with his model, which had apparently lost its trim in the long journey from Melbourne to Adelaide.

Such a high performance model as Ray's requires very critical adjustment and all of the South Australia lads were as disappointed as Ray must have been when he failed to get his model into the air. This Westerner, an American design, is at present considered the highest

Top: Malcolm Sharpe with his Wakefield, first in open rubber. Centre: Allan Lim Joon's outstanding speed model, McCoy 49 powered. Bottom: Tony Farnham's Ohlson 60 powered stunter, consolation first.

The most unfortunate man at the meet, Allan King (Vic.) with his "Tempest" powered model before and after.

performer in Australian Free Flight Gas Models, and Ray is expected to offer a major threat in the Free Flight event in next year's Nationals.

Jack Black (S.A.), flying a high pylon Zipper type model powered with a French 5 c.c. Comete motor, next got his model well under way in a workmanlike manner to record the first good time of the day.

Immediately following came Bill Evans flying an Amco 3.5 powered model and recorded the same flight time as Jack; following was Rex Meyers' Vulture powered Super Hatchet, but although the model got away well, it failed to gain much altitude, owing to too tight a spiral. Allan King, who had test flown his large Tempest powered model during the week, decided to add extra side thrust in an attempt to gain a tight spiral climb, but unfortunately the adjustment proved excessive and Allan's model came to grief (as will be seen by photograph).

We understand that he has decided against very large free flighters and is concentrating on an Eta 29 powered model for the Nationals next year. A half-size Valkyrie powered by a G.B. was flown next by Kevin Green, but suffered from fuel trouble in the steep climb. Many other models included Super Hatchets by Hartley Young and D. Doolan, a ten foot original McCoy 49 powered pylon model by Neil Evans, a Banshee Mills powered by Len Buck and a flock of small pylon models were kept on the ground because of the terrible conditions. Of the 38 entrants in the free flight gas event, about 30 arrived on the field but less than a dozen risked their models.

The weather worsened around lunch time and the only flying that was done for an hour or so was with hand launched gliders and a couple of flights with sailplanes, which proved very tricky on the tow-line and in most cases folded their wings. Tony Farnam, of Victoria, handled his small job well to register top time. Gordon Burford flying a simple Wakefield type model recorded the first time in the Open Rubber Contest and would probably have been the winner had not his rubber broken, wrecking the model when winding for his third official flight. Allan King again suffered when he folded his Wakefield wing when attempting to launch his model. Malcolm Sharpe, also flying a Wakefield, won this event.

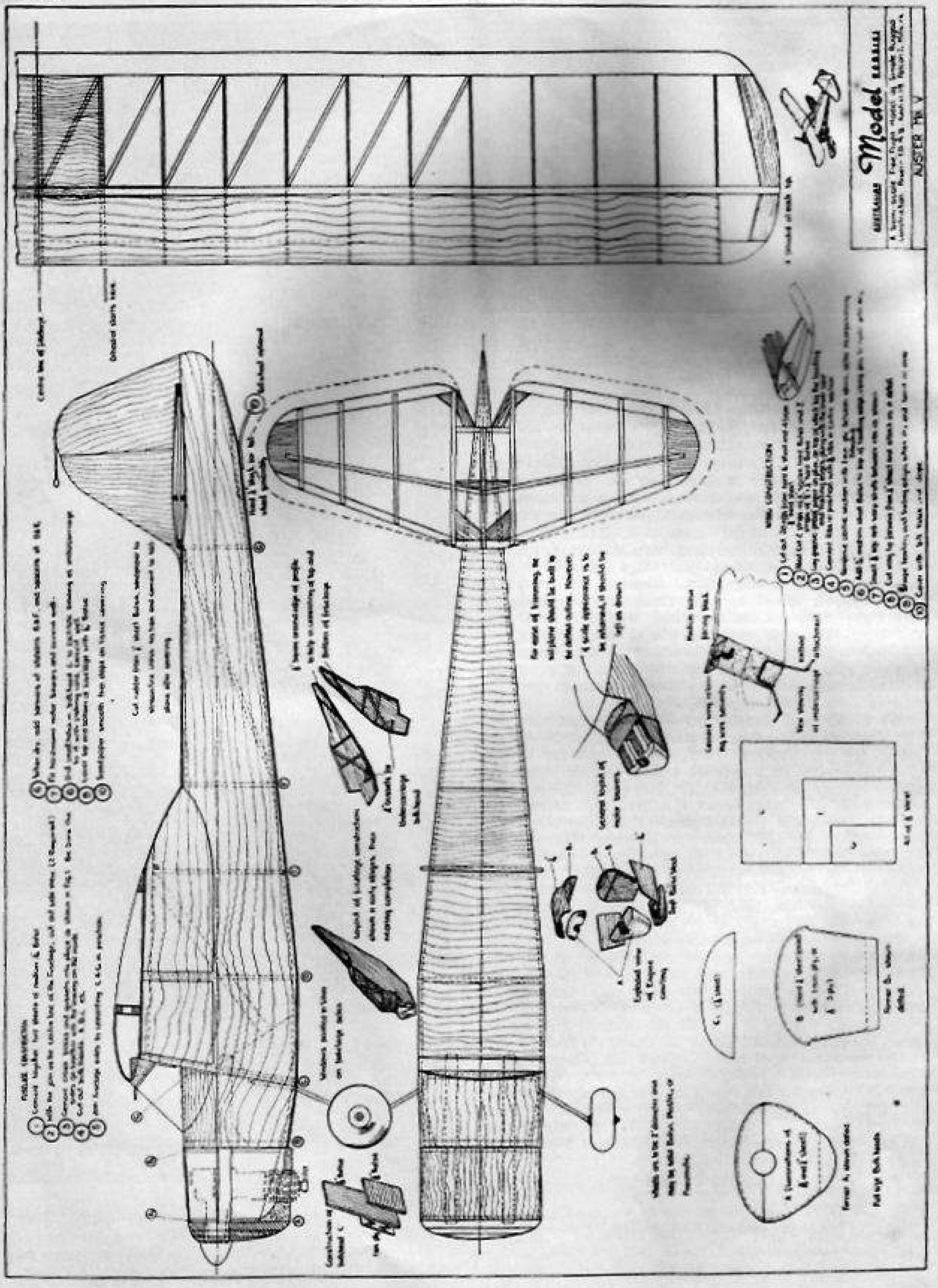
(Continued on page 27)

Top: Jack Black (S.A.) placed first in free flight, modified "Toreador" design powered by French 5 c.c. Comete.

Next: 2nd placegetter, Bill Evans (S.A.), original design. Amco 3.5 c.c.

3rd: Wally Reeve (S.A.), own low-wing design. Power, "Bantam" 199.

Lower photo shows top Victorian Free Flighter Ray Harwood with his McCoy 49 in the "Westerner."

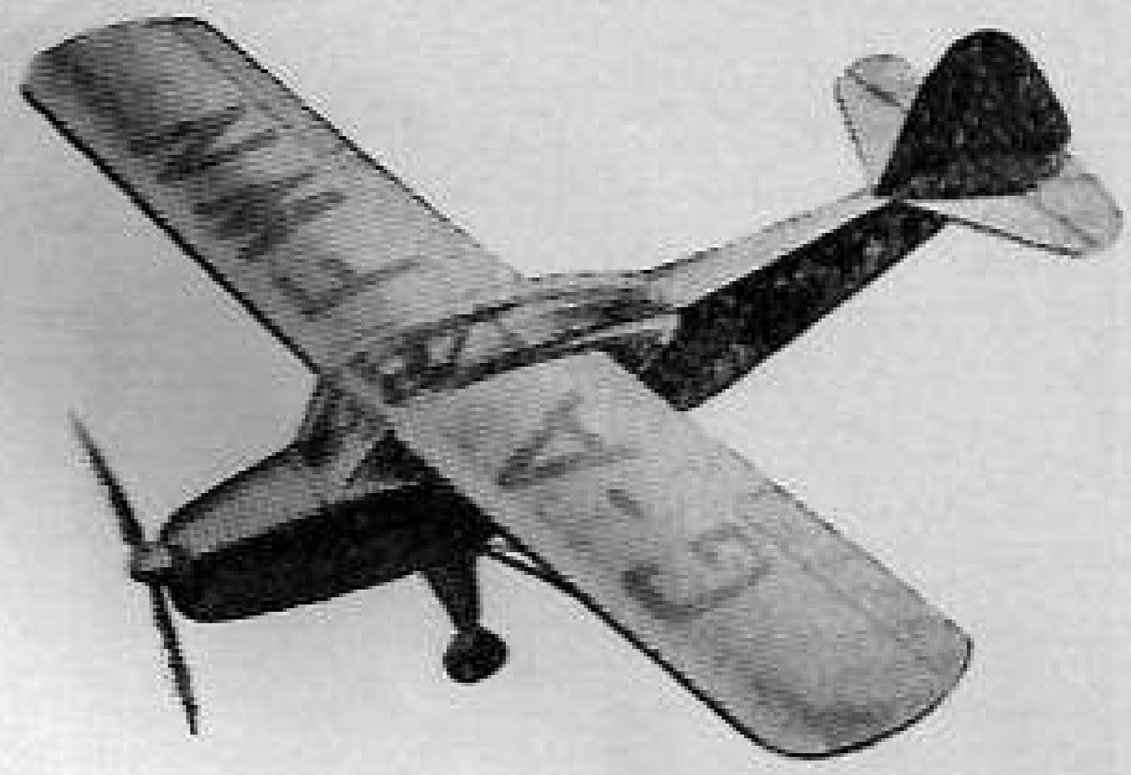

Model
AUSTER Mk V

A SEMI-SCALE

Auster Avis

SPORT FLYER FOR SMALL DIESELS

1.9-2.5 c.c.



The Auster "Avis" is a 4/seat Civil aircraft for the business man and the charter operator. The machine powered by the reliable 145 h.p. De Havilland Gipsy Major 10 engine. The old standards of light aircraft design where a passenger had to be either a dwarf or a contortionist to even enter the cabin has been swept aside in the "Avis." Drawing upon their experience in the construction of welded steel tube aircraft, Auster's have engineered the fusclage of this new machine to give utmost freedom to the occupant. Their experiences have enabled them to produce a 4-door cabin aircraft, which is as easy to enter as a car. Once inside, the passenger will find no tubes on which to bump his head and no fittings to tear his clothes. It cannot be too strongly emphasised that Auster's have broken away from structural convention whilst retaining all the Auster attributes of safety and reliability.

First, the aircraft has been designed so that it is not necessary to restrict its use in any way since there is not the slightest risk of producing an unsafe combination of loads. The machine is easy to handle and is possibly the most vice-free aircraft at present flying. The fact that the machine has been flown over a centre of gravity range of 21 per cent. of the wing chord, whereas on most other aircraft of this type 15 per cent. is considered very good. Even at these extremes which are considerably in access of any that can be produced in normal use, there is no indication that the aircraft is reaching the limits of stable centre of gravity travel.

As a freighter, the rear seat and rear seat supports can be removed to leave an entirely clear floor with accommodation for approximately 730 lbs. of merchandise in addition to the weight of the pilot and the fuel for a range of 500 miles.

There is approximately 75 cu. ft. of space available for this merchandise and long flat loads up to six feet six inches in length and longer in special cases can be accommodated.

Inside the aircraft thought has been given to the possible use of the aircraft as a 2-seat trainer, and for this reason all controls have been centralised so that they are readily available to all pilots. The flaps are manually controlled from a lever situated in the centre of the cabin roof and these have an automatic trim compensation to relieve the pilot of excessive stick loads when the flaps are lowered.

The plan here presented of the Auster as a smart little sport flier to be powered by any of the smaller diesels offers an ideal type of pleasing proportions.

The construction is sturdy and the semi-scale appearance is reasonably close to the full size aircraft.

We found that adjustment was simplified by fitting the larger tail plane as dotted on the plan and suggest that if it is your first power model to fit the larger stabiliser.

The construction, although it cannot be called over simple, is quite straight forward and offers rigid surfaces and a sturdy fuselage which should give many hours flying time. Study the plan carefully before commencing building and make sure that all steps in construction are understood.

NEWSREEL

Bryan Marsh (March in some English magazines), a member of the famous Auckland Model Aero Club which has been in operation since 1928, is well known in aero-modelling circles because of his creditable performances in the two post-war Wakefield contests. Last year in America his model placed second, and this year in England he gained seventh place. Bryan is shown in the top photo holding his own designed flying boat, which is quite a consistent performer powered with a .078" Peperell. The Auckland Club has produced some well known aeromodellers such as Vernon Grey, also Ray Allen, both of whom attended the first Australian Nationals in 1938.

Our second photo shows another well known Wakefield modeller, Irwin Frost, of Goulburn, N.S.W. Irwin sent a model to the 1948 Wakefield contest in the U.S.A., and was fortunate enough to have it flown by the U.S. National Champion of that year, Frank Cummings. Frank did a terrific job repairing the model several times and flew it to quite a good placing. Unfortunately this year Irwin was not a member of the Australian Wakefield team, but next year's eliminations should see him trying hard. The speed model shown is a Tempest powered Newberger design, with aluminium covered wings and contrasts to Irwin's usual Wakefield type model.

Jim Leighton, a well known pre-war modeller, is one of the most capable of the Sydney enthusiasts. Usually the happy type, Jim believes that "right shall be done" and only when he is engrossed in seeing that right is done does he lose his smile. An ardent indoor builder, he is keen to see this type of flying get going again, and he should be now trying out microfilm solutions, sorting wood and thinking seriously about the indoor events in the 1950 Nationals (photo 3).

The photo in the bottom left hand corner of the page shows what is probably the most successful Australian model helicopter, held by its builder, Allan Lim Joon, one of Australia's most versatile builders. At the top in controline speed, Wakefield, and he dabbles in most other types. Allan's top speed to date is 124 m.p.h. with a McCoy 49.

CLUB NEWS

A ROUND-UP OF AEROMODELLING

(All Clubs are invited to send in club news and photos for publication on these pages.)

QUEENSLAND

Rockhampton

Sec., Mr. T. Phillipson, 214 West Street, Rockhampton. The Rockhampton Aeromodellers Club is holding what they hope will be a well attended meet on 10th and 11th December. All types of models are catered for and entry forms can be obtained from the secretary.

Toowoomba

Recently the combined Aerobods, Yacht and Speed boat boys staged a gala day at our local pool. Invitations were issued to other clubs and 15 lads journeyed up from Brisbane. The weather was bad, but the meet was a financial success as we had a total take of £45. I mention this figure as an example of what organised clubs can do in the way of finances. (Other clubs take note.—Ed.)

Since the amalgamation of several smaller clubs to form the "Toowoomba Society of Model Engineers" we are much stronger in every way.

Brisbane

A free flight group has recently been organised by the secretary of the Q.M.A.A., Harry Butler. Bill Weekes' sailplane flight at the Queensland Championships has been recognised as an Australian record. The time was 31 min. O.O.S. F.A.I. rules.

Double-Double-Ucontrol Club

Will Weekes, Weter Weaver, Won West, Wick Wrogerson, and Wussel Watson Wills are the foundation members, and are fairly active controliners, but things are not going too well, although improvement seems to be on the way. A home-made jet of Watson-Wills has been successfully flown, and Russel is now flying a 5 c.c. diesel powered DeBolt Bipe. Bill Weekes is also with two wings and finding the biplane very successful. Some of our lads will be down for the Nationals and the pocket is rather bare in anticipation of the trip.

NEW SOUTH WALES

M.A.A. of N.S.W.

Many changes have taken place here in the past weeks. The various suburban clubs are growing steadily and we feel that aeromodelling is now firmly established in N.S.W. Our State champs are being held in December.

A.A.L.M.F.D. of N.S.W.

Our affiliation with the M.A.A. of N.S.W. has at last been accepted and we hope that at long last all is well. The Kerr Division of the A.A.L. recently held a contest on the Doonside Airstrip, and it turned out to be an excellent show. The A.A.L. Championships will be held on 4th December.

VICTORIA

E.S.M.A.C.

Norm Bell makes an interesting point. He says, "While flying at the Glenelg Oval we had the opportunity to experiment with fuels in Allan Lim Joon's speed models. Allen had two models each powered with Mac 49's. First few flights were with straight methonal/castor mixture and the speeds were between 108 and 112 m.p.h. Next 25% nitro propane was added and the speed went up to 115 m.p.h."

Sixteen E.S.M.A.C. members visited S.A. for the recent meet, and apart from a couple of incidents—one being the loss of Tony Farnam's Ensign camera (any news of this will be appreciated.—Ed.) and the other the breaking of a trailer's drawbar on the way home in pouring rain—all of the lads voted the meet as a good one.

SOUTH AUSTRALIA

Western Aeromodellers Club

Although a new club, we are making fair progress and several of the lads are turning in good flight patterns with their stuntwagons. The Kinsman twins are notable for their progress with stunt models.

Prospect M.A.C.

Free flight still predominates in our club, although Ivan Stacey is being tempted with controliners and Geoff Willesdon still turns the pages. Mr. MacDonald and his son are very active in this group and help the transport problem of the club somewhat with their trailer.

Glenelg F.C.

Lennie Buck is "Banshee" happy, but the glide of the more orthodox models has him worried. In a recent free flight contest he was just beaten by Malcolm Sharpe flying an original design powered with an Elfin. Neil Evans has his 10-footer flying after many months of building. Vic Tullet also has been turning in some good times. The combat flying of controliners has caught on and has resulted in surprisingly few prangs.

Woodville M.A.C.

Bill Fisher has his 10 c.c. glo-plug motor going well in a controliner, and manages to scare most people at times, including himself. Jack Black, our President, may shortly be transferred interstate and his help and advice will be missed in the club.

WEST AUSTRALIA

Ken Salter has recently returned to W.A. modelling circles, and his presence will be appreciated. Our next annual competitions will be held on the 4th and 5th of March and judging by the enthusiasm a record number of entries is expected. Interstate entries are welcome.

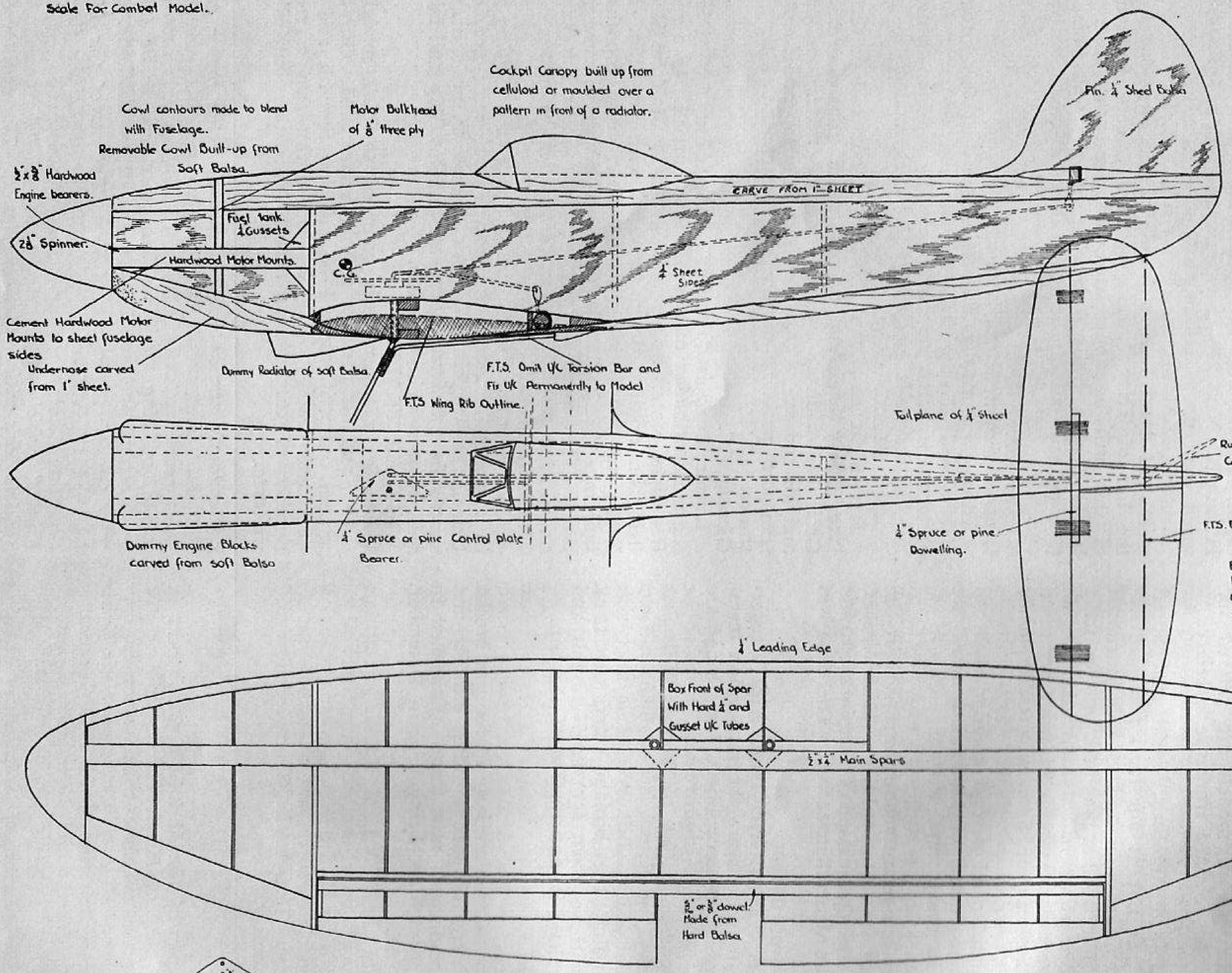
PHOTOS

Harry Butler, secretary of the M.A.A. of Q., is next in the lower line of photos. He is shown holding the remains of his Fugitive sailplane which spun in over what the Brisbane boys call a spin area on their flying field at Wacol. The organisation of the 1949 Queensland Champs was left to Harry, and their success was no doubt largely responsible to his efforts.

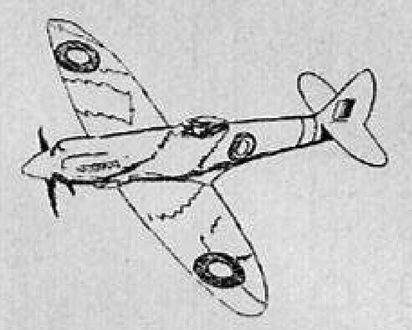
Next photo is of Bill Evans, of S.A., with his high performance free flight model. The performance was probably there if the height was available, but the model continuously ran out of altitude, with the motor going flat out. The model was far too critical. A small pylon was eventually fitted, the tailplane area increased, and after being modified flew quite well to be placed second in the October contest in Adelaide.

The last photo is one of Don Watson, of the Maryborough Club, Queensland, with the model he flew in the State Champs. It is a Don McGovern design "Flea Flight," which appeared in Model "Airplane" News (which deals with model aeroplanes). The country clubs in Queensland are growing and should soon show the southern States a few pointers.

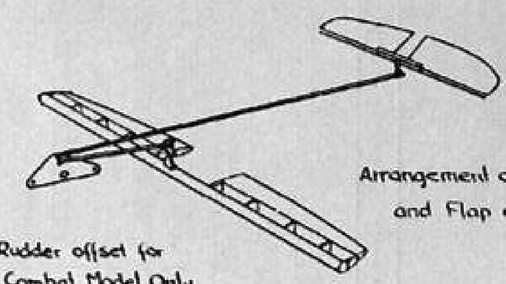
Scale For Combat Model.



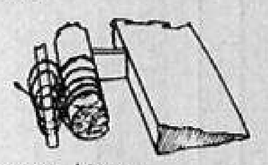
Scale for F.T.S. Model.



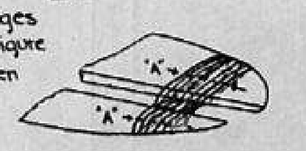
Flap Arrangement for Combat Model Only.

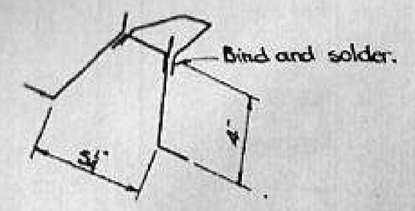


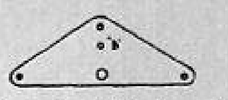
Arrangement of Elevator and Flap control.



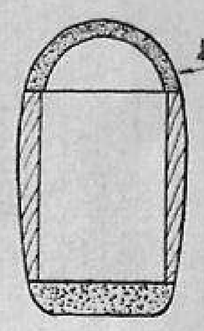
For Flap and Elevator hinges bind with thread in a Figure 8 fashion as shown, then glue to surfaces, when dry, cut away at "A"



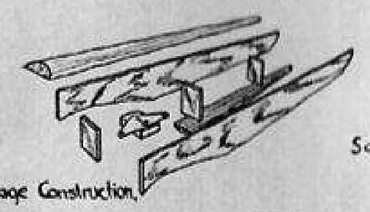


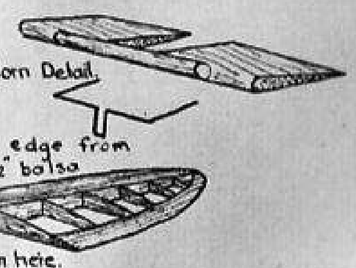


Combat Control plate Layout
For Team Speed, use hole 'A' for control rod.



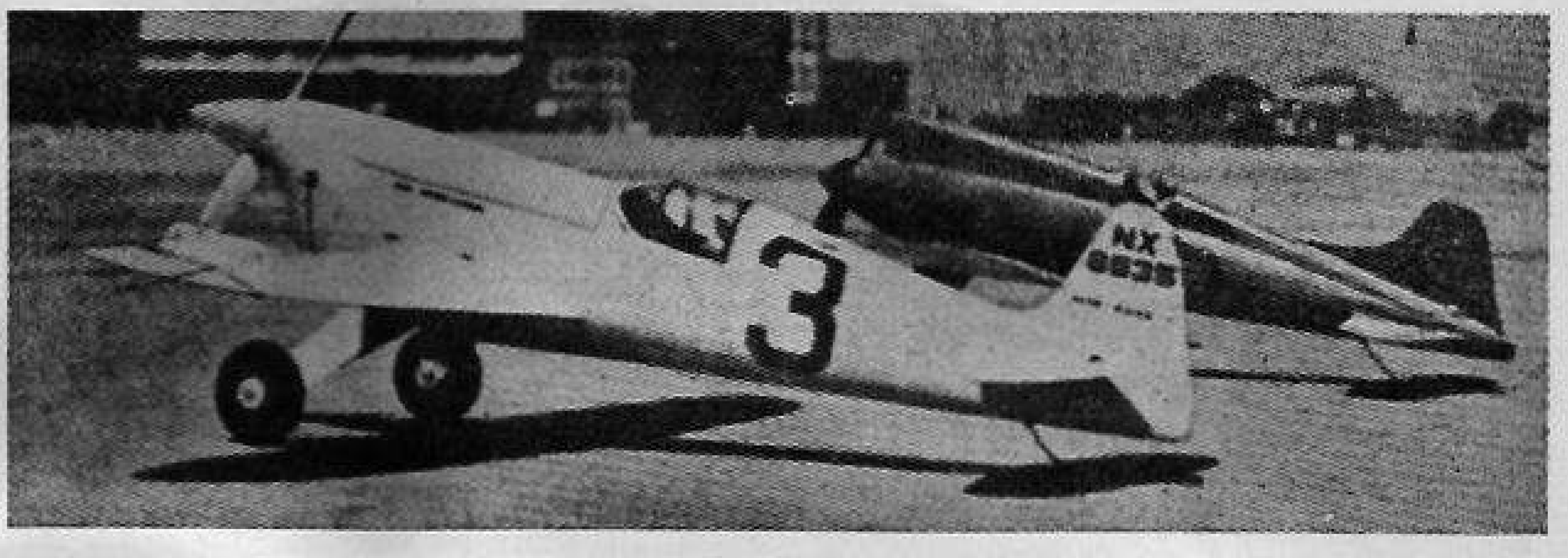
Section of Fuselage at Leading Edge of Wing showing rounding of Box-type construction.





AUSTRALIAN Model HOBBIES

SPITFIRE MK 22



SCALE TEAM SPEED

Team speed racing, along with combat flying, offers the control-line enthusiasts a really competitive sport.

The present suggested rules—patterned on U.S.A. rules—leave a good deal to be desired, particularly the matter of fuel tank size. At present the duration of motor run is limited by the fuel tank capacity. Benefit from skill of being able to obtain a longer motor run with the same fuel allowance as other competitors, is the fewer number of refuelling stops.

This, I think, is wrong, as the main object of the team speed racing—to my mind—is to provide a class of control-line flying for the modeller who has not the time, the desire, or the ability which top-class speed or stunt flying necessitates.

Fuel consumption of a motor may be important, but to give a competitor an advantage because of the low consumption of his particular motor seems wrong, particularly when various types of motors are not readily available, and there are few who have the equipment and knowledge to design and construct a special motor for this type of event (giving these few quite an advantage over the shop-purchased motor), immediately making it a specialists' event and hence the tendency should be avoided.

I suggest that any size *fuel* tank be permited, but that a *specified number of refuelling stops must be made* according to the length of the race.

Rules as now framed favour the "Good Year" type racer, but I suggest changing them to favour a *scale model*—perhaps not true scale, but one that is readily recognisable as a model of a full size aircraft, and finished in appropriate colouring.

The latitude in design would result in unlimited types of aircraft from which to build, whereas the "Good Year" type racers allow only little variation.

Steel lines, as all control-line flyers are aware, need considerable care, and although many eyebrows will be raised, I suggest that cord lines be made compulsory, then in a case of tangled lines no harm is done to the lines, and cord would not have to be discarded as would steel lines if they had become entangled with another competitor's model or lines.

Safety precautions could be policed to make the cord line as safe as steel.

The Spitfire is one of the world's most famous war fighters, and this is the aircraft presented this month as a teamSpeed Scale Controliner, or a Combat Stunt Model.

The plans show two scales and methods of construction so that either type of model can be made. For team speed an "ETA" 29 or a similar speed motor and for a combat stunt model a 5 c.c. diesel are recommended. The heading photo shows two of the first American Team Speedsters built by members of the F.A.S.T. Club.

Heading photo shows well-known English modeller Ron Moulton checking a competitor in a recent contest.—Photo by courtesy Henry J. Nicholls.

Control-line flying needs new ideas to hold its interest, and the latest and the most exciting effort is combat flying (ask Monty).

The usual type stunt model is used with a 12 ft. coloured streamer attached to the rudder. Two or more planes in the same circle and then the models attack each other, attempting to chew off the streamer with their propellers.

No manoeuvres are barred and with three in a circle it is the fastest game on earth.

Cord lines are recommended.

Plans for a special combat ship will be given in next issue.

Control-line comments will attempt to give a general picture each month of the activities of control-liners on both ends of the "String."

WESTERN AUSTRALIA

Quite some progress has been made recently recently and some of the lads are doing the first few pages of "THE BOOK" and although one of the driving forces of the "thing on the string" crowd, Bill Wornley, has returned to the United States, the locals are keen to turn over a few more pages. Several K. & B. Torpedos are in circulation and most of the diesels.

QUEENSLAND

Peter Weavers flying—or was—a diesel powered De Bolt Stuntwaggon, but finds it tricky in a wind.

Bill Weckes has added a wing and flies a Wombat biplane through the works.

Both Peter and Bill are up to the vertical eight stage—up to, not past it. Seaweed Wyles should be chasing them closely, but the remainder are far behind, and so any threat from Queensland should only come from one of these three. Power plants are mostly 5 c.c. diesels in stunt. Speed is way behind. Only Bill Weckes, with a Tempest powered Little Rock has so far been seen with a REAL? speed job.

NEW SOUTH WALES

Here, stunt flying seems to be in a very deep rut! Clive Wheatley can apparently make a model perform, but most of the others are Dead Ducks, Bohmbs, or whatever you prefer. Admittedly the screaming glo-plug motors make a noise, but in contests you don't get points for noise.

The models to be seen in Centennial Park are too sluggish—with VERY few exceptions. The models are more at fault than the operator, for they just could not be stunted. Most models are fited with glo-plug or petrol motors and fly at around 40-55 m.p.h. Propeller design, model design-weight, motor performance, type of motor—which is at fault?

SPEED

Unlike stunt, speed flying in N.S.W. is at a fairly high level, in the case of the topliners. Jack Finneran flying a Dooling, Tony Marden McCoy 49, and Bill Marden with his own motor, the Marden 65, are all flying about the 120 m.p.h. mark. Harold Stevenson (Marden 65), Neil Cottee (Special Rotary Valve Atwood Triumph) regularly passing 100 m.p.h. In addition to these, there are Jimmy Leighton (one of Australia's few competent indoor modellers), and others with the smaller motors performing well.

TEAM SPEED

During our flying day in August the first true team speed races were run and although the boys were new at this type of flying, its possibilities were obvious. Harold Stevenson's home-made motor proved to be a terrific advantage as its fuel consumption was about quarter that of the others flying.

VICTORIA

In some cases the same applies in Victoria as in New South Wales. The wrong set-up, although some of the lesser lights are doing quite good jobs with the small diesels (this also applies to N.S.W.) and Monty Tyrrell and Tony Farnam are striving to reach the top in stunt, but could they too be on the wrong track? The type of model popular in Victoria and New South Wales for the big motors is the Zilch style, and although very attractive, *are they EASY to stunt*, compared with the shorter coupled models such as the De Bolt Stuntwaggon?

Recently Monty (ex Anderson Spitfire) Tyrrell flew a Stuntwaggon powered with a 5 c.c. diesel and appeared far more happy so equipped, than with the Spitfire. Monty's hand-launched take-off into inverted surprised all concerned.

SPEED

The acknowledged leader in Victoria is Allan Lim Joon, who, with an occasional hand from Ted Gregory, is probably Australia's most consistent high-speed flier.

Ted is flying a Tempest powered job which promises to be outstanding in Class D.

Norm. Bell (Eta 29) is forging ahead, as is Jim Connell, with his Tempest powered model.

SOUTH AUSTRALIA

Adelaide, of course, is the home of the diesel enthusiasts and they appear to be geting results, and if a National Competition was held right now a lot of South Australian men would be in the top dozen or so.

SCORE SHEET

_____

FLIGHT

	1	2	3
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
Total			

BEST FLIGHT

_____

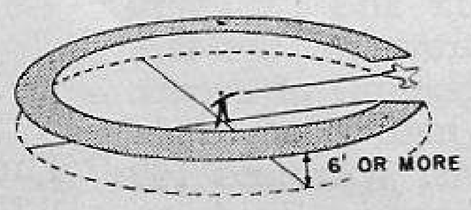
CONTESTANT .....

EVENT .....

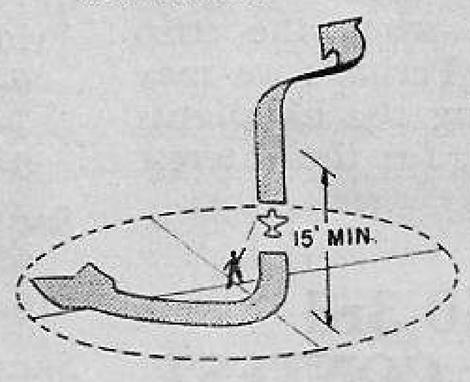
	Maximum Points
1. Starting	5
2. Take-Off	5
3. Level Flight	5
4. Climb	10
5. Dive	10
6. Wing-Over	15
7. Consecutive Inside Loops	30
8. Consecutive Outside Loops	30
9. Inverted Flight	30
10. Horizontal Figure Eight	40
11. Vertical Figure Eight	40
12. Overhead Figure Eight	40
13. Square Loop	40
14. Special Stunts or Maneuvers Limit 3	45
(Must be an aerodynamic or mechanical maneuver of the model itself, not a stunt of the contestant alone.)	
15. Landing	15

Key to illustrations—Screen indicates top of model seen and Black indicates bottom of model seen

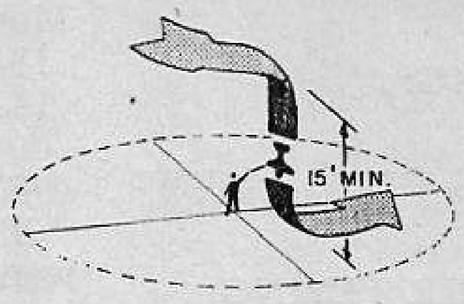
3. **LEVEL FLIGHT.** (2 laps at 6-ft. altitude)



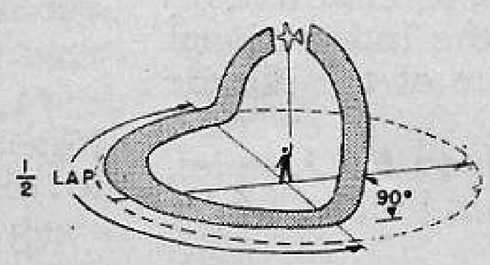
4. **CLIMB.** (At least 15 feet measured vertically with a precise change of direction into and out of maneuver)



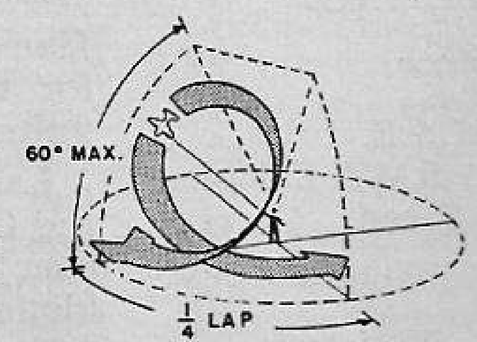
5. **DIVE.** (At least 15 feet measured vertically, with a precise change of direction into and out of maneuver)



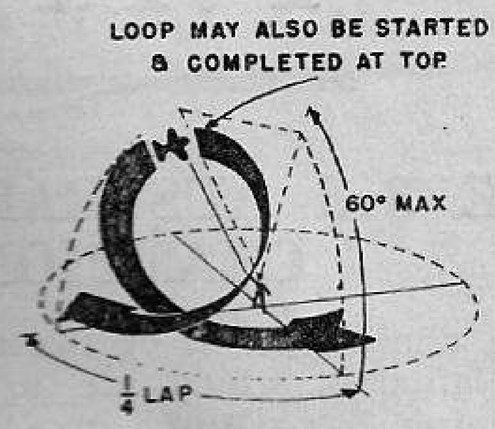
6. **WING-OVER.** (Vertical climb and dive with model passing directly over flyer's head, cutting the ground circle in half)



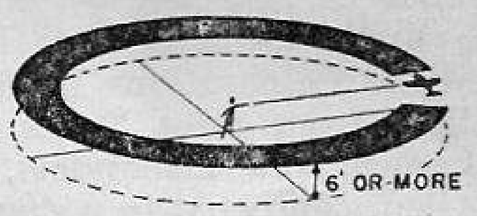
7. **CONSECUTIVE INSIDE LOOPS.** (Entire series should be done within ¼ lap with control lines at angle of 60° or less to the ground at all times during maneuver)



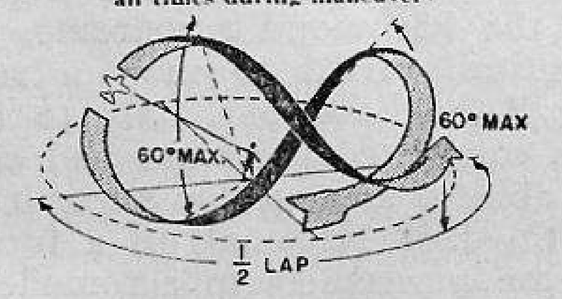
8. **CONSECUTIVE OUTSIDE LOOPS.** (Entire series should be done within ¼ lap with control line at an agle of 60° or less to the ground at all times during maneuver. Loops may be entered from inverted or normal flight, so long as complete loops are made)



9. **INVERTED FLIGHT.** (Must start and end with model in normal upright position. Flight direction must be opposite to that of take-off. Model should be flown at a 6-foot altitude)

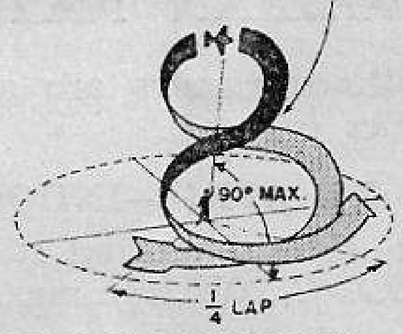


10. **HORIZONTAL FIGURE EIGHT.** (Should be done within ½ lap, with control lines at an angle of 60° or less to the ground at all times during maneuver)

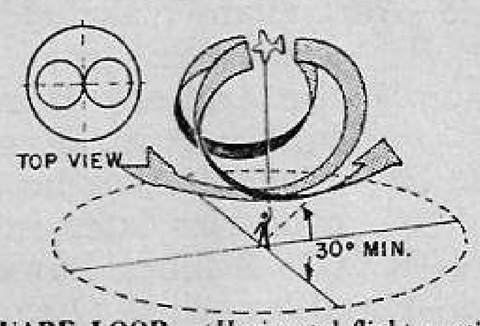


11. **VERTICAL FIGURE EIGHT.** (Control lines should not exceed an angle of more than 90° to the ground)

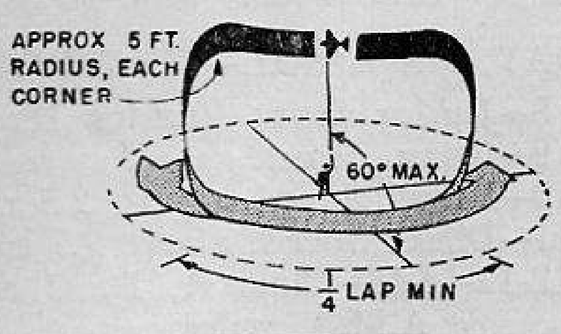
MANEUVER MAY ALSO BE STARTED
& COMPLETED AT CENTER OF FIGURE



12. **OVERHEAD FIGURE EIGHT.** (Center of figure to be directly over flyer's head. Control lines should not be at less than a 30° angle to the ground at any time during maneuver)



13. **SQUARE LOOP.** (Horizontal flight portion of maneuver should consume at least ¼ lap. Corners should have a radius of approximately 5 feet. Angle of control lines to ground should not exceed 60° at any time during maneuver)



14. **SPECIAL MANEUVERS.** (Must be described in detail to judges prior to flight)

Copies of this sheet are available to Clubs. Write, The Editor.

THE

NATS

1950

THE 3rd AUSTRALIAN NATIONAL CHAMPIONSHIPS

The announcement of the rules for the second post-war Nationals, which are to be held next Easter in Melbourne, has resulted in a great deal of interest and planning. Most of the enthusiastic modellers are already under way with their building programme, for what should be the biggest aeromodelling show staged in Australia.

The first Nationals were held as part of the Sesqui-Centennial Celebrations in Sydney in 1938, when aeromodellers from most States of Australia and two very well known New Zealanders, Vernon Grey and the late Ray Allen, competed in a complete programme of events. Oldtimers, such as Les Annesley, who had a lot to do with this meet, must hold fond memories. (Around 100 of the large pre-war free flight models were lined up on the Richmond aerodrome, whilst some of the chaps frantically tried to mow a runway in the long grass for R.O.G. take-offs, only to find that when the strip was completed the wind had changed. Perhaps we may be able to arrange for an article covering the highlights of the 1938 Nationals in a future issue, for the interest of the newcomers to aeromodelling.)

RULES FOR THE 1950 3rd AUSTRALIAN NATIONAL CONTEST

The following rules are announced as this issue of A.M.H. goes to press.

FRIDAY, 7th APRIL—INDOOR FLYING:

Event 1—Hand-launched stick.
2—R.O.G., fuselage maximum wing area 150 square inches.

SATURDAY, 8th APRIL AT RESERVOIR FLYING FIELD:

Event 3—Australian Wakefield Trophy, competed for by a six-man team from each State. This or the Anthony Horden will act as eliminations for the Australian team for the International Wakefield, to be flown in one of the Nordic countries later in the year.
4—R.O.G. Rubber Powered Models to F.A.I. rules.
5—Hand-launched Open Rubber for juniors under 18 years old.
6—Towline Sailplanes. F.A.I. rules.
7—Hand-launched Gliders (chuck), six throws, high time wins.

SUNDAY, 9th APRIL—CONTROLINE FLYING:

8—Junior Stunt (under 18 years old).
9—Open Stunt.
10—Diesel Speed, up to 2.5 c.c. S.M.A.E. rules.
11—Diesel Speed, above 2.5 to 5 c.c. S.M.A.E. Rules.
12-13-14-15—Class A, B, C and D Speed. Current A.M.A. rules.
16—Jet Speed. A.M.A. rules.
17—Flying Scale, rules as for 1948 Nationals.
18—Team Speed Championship, distance 10 miles. One team and a reserve from each State. F.A.S.T. Club rules.

MONDAY, 10th APRIL—FREE FLIGHT AT RESERVOIR:

19—Power Models, engine capacity up to 3.5 c.c. R.O.G.
20—Power Models, engine capacity over 3.5 c.c. R.O.G. Power loading 8 ounces per c.c. Ratio system timing. Average of three flights. Maximum flight time, 5 minutes.
21—Precision Payload, special rules.
22—Anthony Horden, Wakefield contest.

F.A.I. rules call for a wing loading of 3.93 ounces per square foot of total supporting surfaces (wing plus tail). Minimum fuselage cross section area to be equal to the area of the total supporting surfaces divided by 80 for rubber models, and 100 for sailplanes. The allowable towline length for sailplanes is 100 metres (328 ft.). This length may include one metre of rubber.

Copies of the full rules should be in the hands of each State secretary and clubs can contact them for full information.

NEW ZEALAND

New Zealand National Championship Programme

Thursday, 29th December—
1—Hand-launched stick models.
2—Towline gliders.
3-4-5—Class 1, 2, 3, Controline speed.

Friday, 30th December—
6—Fuselage rubber R.O.G.
7—Hand-launched glider.
8—Free-flight power, R.O.G., 20 second engine run.

Saturday, 31st December—
9—Controline stunt (aerobatic).
10—Controline prototype.

Sunday, 1st January, 1950—
11—Indoor R.T.P., Class "A" R.O.G.
12—Indoor open free-flight.

Monday, 2nd January—
13—Wakefield.
14—Free-flight gas aggregate payload event.

Auckland Model Aero Club

This club was founded in 1928. One of its members won the American Moffet Trophy in 1936. This member, Vernon Grey, is well known to enthusiasts throughout the world, and other members of the Auckland Club have been prominent in international competitions since the war. Bryan Marsh, whose photo appears on another page, is one of these. There is a likelihood of some modellers going over for the Australian Nationals.

(A.M.H. will be most pleased to receive news of New Zealanders and hope that some of them are able to make the trip here next Easter.—Ed.)

All N.Z. aeromodellers are shaking the dust off their old models and burning the midnight oil turning out new winners for the Nationals, which will be flown this year at Rukuhia Aerodrome, Hamilton, N.Z. The Nationals are being run under the auspices of the N.Z. Model Aeronautical Association Inc., and the host club, Hamilton M.A.C., is very busy getting all things ready for the expected inrush. Over 100 modellers have definitely booked in and about another 100 are expected.

Last year there was a bit of talk over the fact that the Champion of Champions Trophy was given for points over all contests, and that meant that one must go along loaded to the "gunwales" with models in order to get a chance of this coveted trophy. This year it can be won with four models, some of which can be double banked in the Starred Classes that count for this trophy.

NEW ZEALAND—(Cont.)

Holder Angus Macdonald will be going down, and although he has been heard murmuring that he hasn't had much time to make models this year, it is sure he will be well in the race.

Most of last year's champions in their respective classes will be there and ready to defend and hold if they can.

In the gas classes, stunt and speed control liners are expected to be much more numerous, and of course the Wakefield will be a popular class. Brian Marsh, who has done so well overseas with his Wakefield, will undoubtedly be a starter, and, just as surely, a finisher in a good place.

Dunedin Club continues to give a good deal of time to semi-scale and scale model control liners. They consider, and we agree, that a stunt ship can be well made, good looking, and to scale as well. They don't like "sawn off runts" and maybe they have something, too!

1949 CHAMPS

Continued from page 17

At the conclusion of flying on the Sunday an informal dinner was arranged for the contestants, despite the fact that liquid refreshments were restricted to light cider and lemonade, and the somewhat damp and disgruntled crowd were soon in bright spirits beating out rhythm to Monty (camping out) Tyrrell's boogie on the piano. During the evening many fervent prayers were uttered with the hope of a fine day on the morrow.

CONTROL-LINE CONTESTS NEXT DAY

The impossible had happened and Monday was a bright, sunny day with little wind.

The entries for the Control-line events—excepting speed—were high with about thirty in each of the stunt events. Speed, although lacking in numbers, was certainly a highlight of the day.

Having previously atended several interstate Control-line Meets, Boyd Felstead, Bill Evans, with the help of Gordon Burford, worked out what they thought would be an almost fool-proof system. A fixed flight pattern was set to an order so as control-lines would be uncrossed immediately after they had been crossed.

A loud speaker was situated a few feet away from the competitor's feet and the manoeuvres called to him in order. Two judges then rated the stunt to be excellent, good, fair or not achieved, and a recorder jotted down the points accordingly.

Although some doubt was expressed regarding this system before the contest, at its conclusion the competitors were unanimous in their praise.

So as to use the one set of judges for all competitors, and to keep the contest moving at a fairly fast pace, immediately the competitor had completed his flight pattern he was asked to vacate the circle by walking, with his model still in the air, to the far side of the oval so as to allow the next flier to perform his flight pattern in the same stunt circle. An eye was kept on the displaced competitor until his model landed, for landing points. If the flier did not wish to do the manoeuvre called to him over the amplifier he would signal to the judges by raising his hand, and the next stunt would be called to him.

The championship stunt contest was won by Jack Black flying an orthodox looking stunt model powered with his own 10 c.c. glo-plug motor. Gordon Burford was second, flying a De Bolt Stunt Waggon powered with a 5 c.c. G.B. diesel. Both Jack and Gordon were dogged with ill-luck during the contest and must be complimented on their performances when considering this. The winner's machine had elevator trouble and Jack flew it vertically into the ground from a wingover on his first official flight. Repairs were effected, but even so, the models performed below par. Gordon Burford's main trouble began because of his control-lines clinging together, which caused his model to crash, tearing off a wing. This was replaced with the help of a few tubes of glue, some tissue and numerous pins, but control-line clinging continued to worry him.

Rex Meyers, third placegetter, would have been much further up in the placings but for his omission of consecutive outside loops, vertical eight, and a special manoeuvre. Although only sixteen years old, Rex, with the keenness of a teenager, has put many hours into practice flying, and is one of the most consistent control-line fliers in South Australia. He was flying a model designed by Gordon Burford and powered with a 5 c.c. diesel.

Monty Tyrrell, unfortunately wrecked his Super Zilch, Spitfire powered Stunter early in the day. Tony Farnam, also of Victoria, was fortunate in having a spare model when he wrecked his stunter, which allowed him to complete his official flights.

The Consolation Aerobatic Event was won by Tony Farnam, with Monty Tyrrell second.

A semi-scale contest in which the majority of points were awarded for workmanship, was won by Bill Brimblecombe, whose workmanship is certainly outstanding, and he is also capable of a good stunt performance.

At intervals during the day combat flying took place and outstanding were Monty Tyrrell, flying a borrowed stunt-waggon, Gordon Burford, Rex Meyers, and Bill Brimblecombe. Three models flew in the same circle at once, each having a coloured streamer attached to their fin, the idea being for each pilot to attempt to cut the other's streamer with his propeller. The competitor making the most strikes was considered the winner. This proved to be the most exciting event of the day and to see three fast stunt models careering about the sky was most spectacular, and was greatly appreciated by the large crowd of over three thousand people.

SPEED CHAMPIONSHIP

Entries in the speed contest were somewhat disappointing, as none came from New South Wales.

It had been hoped to see Tony Marden competing with Allan Lim Joon, as both of these modellers are flying the same type of engine and are regularly approaching the 120 m.p.h. mark, and in one case Allan achieved the Australian record of 124 m.p.h.

On the day of the contest he recorded the highest speeds—111 m.p.h., 112 m.p.h., and 116 m.p.h.

Also operating in the speed circle were Norm Bell, with an Eta 29, and Jim Connell with a Tempest powered model. Keith Hearn flew a dynajet powered model, but neither Jack Black nor Bill Evans got their jets into the air.

The versatility of Allan Lim Joon was displayed once more during the afternoon when he recorded a time of one minute thirteen seconds with a free flight helicopter.

Considerable time was spent in the preparation of the speed circle, which was closely mowed immediately before the contest, resulting in an almost perfect surface.

We feel that much was learned from these contests which were arranged as a forerunner to the Australian Nationals to be held in Melbourne next Easter, and although because of bad weather the free flight events were not all to be desired, the control-line day equalled any contest previously seen in Australia, and new ideas were tried which may be of use for the Nationals.

Scale Models

I appear to be stuck with the reputation of being the most rabid, incurable, uncompromising, unreasonable, one-eyed and vociferous partisan of this ugly duckling of the model world in Australia, particularly in the field of model aircraft and railroads.

Any of the interstate contestants who witnessed my lamentable performance at the 1948 Nationals will doubtless wonder why I don't practice what I preach. Well, I hope to in the 1950 Show, but if I don't' I am certain someone will. That is: Fly and maybe even stunt what is practically an exhibition scale model that does not draw on the imagination of the beholder to eliminate that monstrous cylinder from rearing its ugly head through the cowling for a start.

I can hear my fellow scale enthusiasts screaming already, but if you will bear with me a little I should like to present a few thoughts for your consideration.

First let us take the spectator point of view, on which the expansion of public interest in our hobby is dependent. I have read in several overseas publications recently and also have observed at our own meetings, a greater interest in the flying of scale models than any other type. Don't forget that a man who can stunt can also stunt a scale job provided he has chosen a suitable prototype. One of the earliest scale models flown C/L in Sydney was a Fokker DR.1 triplane built and flown by Clive Wheatley. It was the Belle of the Ball at every meet for the period of its first life, some two years. Mills powered originally, it is now being rebuilt to take a different motor.

Even now, I am still hearing people who have at one time or another attended a flying day, or some other demonstration, say: "So you build model planes, eh! I saw them being flown at Centennial Park once. There was a bloke there with a model triplane, a German job. By gosh! He was good. He looped the loop and everything." I've heard this not once but time and again.

When on the ground in the "pits," you invariably find a larger group of admiring onlookers around the scale models than any other type. Why? Because it is a true miniature aircraft. People love the realistic.

From the builders' angle, scale models are the logical end to stunt flying as evidence by such top rankers as America's "Madman" Yates and other at the last U.S. Nationals. Having attained the ability to do everything in the book with a stunt model, what could equal the aesthetic pleasure and satisfaction of putting a perfect replica of a full sized aircraft through its paces and to end up with the undercarriage trundling over the slight bumps in the ground, on scale acting shock absorbers after a perfect landing? I have experienced the latter thrill myself with my Phalz D.12. (Yes, I really did get the motor to go for more than half a lap in the end.)

Now I would like to present what I think would be a possible solution to what I feel is an anomaly of the game.

To begin with, make the scale event a feature of contests instead of just a cryptic postscript in the list of proceedings. Secondly, make it a worthwhile show in regard to prizes to offset the additional labour and research involved in building the models. I think the separate class system should be introduced. If it is good enough for speed work then why not scale, too? The ultimate aim should be the near perfect scale model that can hold its own with any model on the exhibition table. For the benefit of those who already have models built or prefer to model an unsuitable prototype, or cannot afford a motor powerful enough to fly a model sufficiently large to facilitate complete cowling, I think the existing rules as used at the 1948 Nationals are adequate. However, what is needed is a class to encourage the finest craftsmen in the art of scale model building. This would make, in my opinion, one of the finest international events imaginable. It should not be impossible to interest someone in the field of International Aeronautics in sponsoring a contest on

the order of the Wakefield Trophy for the world's best scale model aircraft. After all we call our hobby model flying, but how many of us actually build *model* aircraft?

The experienced flier who refuses to build at least one decent scale job, if and when there are some worthwhile laurels to be won, to me, is admitting that he has not the ability or the patience to really *model* aircraft.

There is no reason why Australia should not be able to lead the world to a still more refined degree of expression in this most fascinating hobby. No country has the edge on time nor craftsmanship, and I am sure that the best man must win as the element of luck, so important in most other types of International events, is greatly minimised. We must make a start at home—however, this would give us the highest competitive standard of scale work in the world.

I have found that a .29" or larger and even in some cases a .23" will power a great many prototypes if they are built to 1⅛" = 1' up to 1⅜" = 1' without having any non-scale appendages in view on the model. This makes for a job of about 36" to 40" odd for protos. of around 30' span. My .36 McCoy powered D.12 has a span of about 37" and has power to burn.

If you think this makes too many classes in contests, the existing rules class, i.e. up to 25% cylinder visible, could be both Junior and Senior in one, with special awards for outstanding junior efforts, or be classed entirely as a Junior Section. After all a senior model builder should be able to hold his own on the stricter ruling and also afford a slightly larger motor than the small diesel to which the youngsters are generally restricted owing to lack of funds.

The judging of such a competition as I envisage, should be the same as for exhibition scale work with the addition of points for flight, take off, and landing, etc. The flight characteristics should be as close to scale as possible, to, which would add another interesting aspect to the contest.

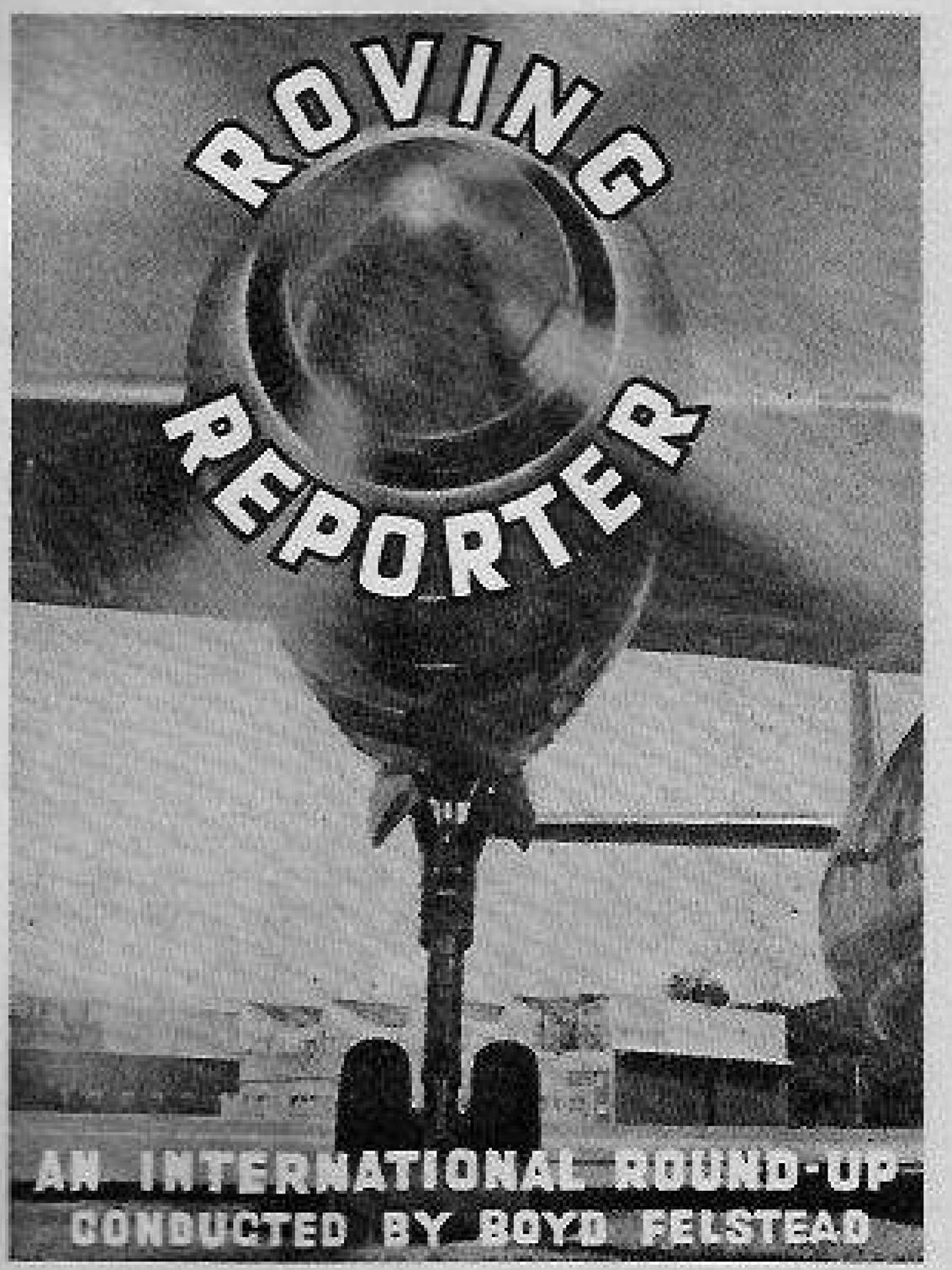
If you have been able to wade this far through my babblings, I hope your interest will be strong enough to make you express your views to your local meetings and even more important to the directors of next year's Championships, both State and National, or at least to write them to this column where others may hear what you think, too. Abuse me if you want to, but make an effort to get some more appreciation of scale work. Remember, you don't have to build scale yourself to realise that a higher standard of work is a desirable thing for the hobby in general. If you can build a good speed job or a respectable Wakefield there is no reason why you can't do an equally good scale job if you will just interpret the plans accurately and spend a little time.

Yours with my undercarriage well retracted,

(Signed) E. B. RYAN.

NEXT ISSUE—

Dethermalizers
Combat Controliner
Contest Free Flighter
Speedbolt Controliner
Guided Missiles
Model Railways
Victorian M/A Champs.



Many pre-war builders remember *Carl Goldberg's* American free-flight kits—Zipper, Mercury and Sailplane—all of which became noted as pylon jobs with terrific climb and flat glide. Now he has produced a new free-flight kit (unusual in these days of control line kits) which bears the name of the "Cumulus," a 54" high wing model which is said to embody all the latest refinements, incldng a "pop-up tail" dethermaliser.

As well as controline team racing, the American boys are trying combat tactics, where two models, each equipped with 10-ft. long streamers, fly in the one circle. The idea is to chop off the other fellow's streamers with your own prop, and the one landing with the most streamers left is adjudged the winner.

The 4th Annual Air Show and Model Flying Fair, sponsored by the New York Mirror, was held in fine weather at the Grumman Airfield, Long Island, N.Y., on 6th June. Many thousands watched the events. More entries were received this year in the radio-control event, and for the second year in succession Fran McElwee won, with the same model he flew in 1948. (He built a new model for this year's event but it crashed on a trial flight a few days before the 1949 show.)

The Mirror Meet this year included "Class ½A" for the increasingly popular small motors. This class was listed both in free flight and stunt divisions.

Vernon Grey, of Auckland, New Zealand, paid a visit to America recently, and while there set a new indoor world record. Details of this fine performance are awaited.

Don Brockman, from England, who flew *Ron Warring's* Wakefield to a first place at this year's Irish Nationals, reports that he has tried some Pirelli (Italian) rubber. It is 1/8" x 1/24" and is said to be superior to any other rubber produced so far. As regards Wake-

field models, the English boys do not think that a one-blade prop will absorb all the motor power if more than 2 ozs. of rubber are used. Also, as they prefer to have contest models uncritical to trim, folding props are generally not used on shoulder wing jobs as these have been found to be rather tricky.

At the 1949 Wakefield at Cranfield, reports say that the Australian models had the best glide of any.

Winner of the Open Stunt event at the British Nationals this year used a "Yulon 30." This 5 c.c. motor weighs 5½ ozs. and is said to be a really hot motor.

At the British Nationals (June 5-6) were seen 42 radio-control entries, 25 of which were able to compete on the day. Winner was *Chuck Doughty*, member of the British 1948 Wakefield team. He used a 6-ft. span "Stentorian," Mercury-Cossor equipment, and power by a Forster 29. Control was by Rudevator. He performed a spin and loop under control to win. Three makes of radio-control sets are available in Great Britain.

Dick Schumacher, of West Coast, U.S.A., has a new Wakefield weighing 8½ ozs., an Elmic timer and 4 ozs. of rubber. With 14 strands of Dunlop, motor run is 1 minute 20 seconds. He uses castor oil as rubber lubricant.

Many of the American boys are somwhat displeased at the restriction on over 25 year olds at this year's Plymouth meet.

Reports from England say that jet speeds of 185 and 187 m.p.h. have been obtained and that 200 m.p.h. is not out of the question.

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Railways in Australia

A magazine all about trains, of particular interest to Model Railway enthusiasts. Available Hobby Stores, or from the publishers, Traction Publications, 29 Seymour Grove, Brighton Beach, S.E.5, Victoria.

MAIL BOX

Mornington, Vic.

Dear Sir,

Needless to say, I think your effort a very fine one and wish you the best of luck.

I cannot agree, however, with the remarks about rules (page 15 July). I have not noticed any disadvantages suffered by models with small motors. In fact, every contest I have seen for the last couple of years has been won by a skeeter powered job made of tissue and matchsticks. You suggest a power loading of 100 ounces per 10 c.c.'s, but I doubt if any 10 c.c. motor will give anything like contest winning performance with a model weighing 6¼ pounds.

I feel sure it would need a kick as well as a heavy shove to make a 6 pound model take off.

After many years of keen contest flying I am of the opinion that power loading is wrong, and will tend to bring about the "hotting-up" technique for motors and the use of high explosive fuels in an effort to get greater power per c.c. of displacement. I would prefer to see wing loading at 1 pound per square foot, and no power loading rules.

Then it would be possible to get thrilling performance and rocket-like climb with even a FEEBLE OLD PETROL motor, simply by keeping down the size of the model. It would throw added emphasis on design for stability.

A. G. HULL.

(Mr. Hull's opinions of the ideal contest model is the extreme opposite to my own expressed in the article mentioned, which dealt with a model having 510 square inch wing area, weighing 20 ounces and was powered with an Arden 199—approximately 3½ c.c.. This design built by other modellers and powered with E D MK III, and flying with an all-up weight of 25 ounces—10 ounces per c.c.—has quite a lively climb, plus a good glide W.W.E. Further opinions on the power loading/wing loading rules would be appreciated from readers.—Ed.)

Glen Iris, Vic.

Dear Sir,

In your September issue it was stated that many clubs were disappointed at the delay in the announcing of the 1950 National rules.

As Vice-President of the V.M.A.A., I would like to explain why it was not possible to publish them earlier.

Planning began as soon as the Australian Wakefield Contests had passed and after many arduous meetings the first draft plan was sent out in July.

Two months elapsed before replies had been received from the various States, in which time more meetings had been held.

The final list has now been prepared and should shortly be available as an entry form.

JIM FULLARTON.

(The rules for the 1950 Australian National Contests appear on another page. As they are now drafted the rules seem to agree with popular opinion as to what they should be and most aeromodellers will realise the difficulty in drafting a set of rules to please all.—Ed.)

The following letter was published in the October issue of the American magazine "Air Trails" and is reprinted here without comment.

It's darker in Australia than it is at night.—So writes Walter M. Albert, aeronautical engineering student at Melbourne Technical College, of the model aviation picture there—No decent gas engines, no "Air Trails," no nothing.

WALTER M. ALBERT.

Welsley Lodge,
South Warrendyte,
Victoria, Aust.

(The 1949 Wakefield added a new nation to the list of Wakefield winners.

Eltila, of Finland, flying his ten years' old model, finally recorded top time in one of the most closely fought Wakefield contests.

Unfortunately, considerable criticism has been levelled at the Society of Model Aeronautical Engineers who conducted the meeting by Australian aeromodellers over the treatment of our models in England.

Below is printed a complete explanation concerning the Australian models flown proxy.

Most of the reasons listed seem quite reasonable, and the actions of the S.M.A.E.—particularly the willingness to return our models at a cost of £60 sterling, without any assurance of this money being returned to them—leaves very litle to be adversely criticised by Australian modellers. Congratulations and thanks are more the desserts of the S.M.A.E.—Ed.)

The Managing Editor,
Australian Model Hobbies,
3 Percival Street,
Glenelg, South Australia.

Dear Sir,

I am surprised to learn that criticisms have been voiced amongst Australian aeromodellers regarding the handling of your Wakefield entries, and as similar criticisms have also been levelled in England (obviously by the uninformed), the following remarks may serve to reassure your readers.

In the first place no definite system has ever been laid down to accommodate the proxy flying of models, and undoubtedly (following this year's experience) this is an angle which will have to be thoroughly gone into to avoid similar happenings in the future.

Briefly the history is as follows: On arrival in this country the models (and this does not apply solely to Australian entries) were subject of extremely irksome negotiation with Customs and Excise, these goods being something entirely outside their ordinary scope of business! After a great deal of phoning, visits and other representations the Customs finally released the models, but only after the Society had lodged a very substantial cash deposit against their guaranteed deportation from this country!

At the present moment *I understand the Society is now faced with a request of nearly £60 freightage dues to get the models back to Australia, and naturally the officials are wondering whether your members would be prepared to meet such a charge.* It would appear from my somewhat limited knowledge that *your authorities* in their *anxiety to get the models over here failed to make any provision for their return,* but I presume this matter is now being attended to following correspondence between the two bodies.

Now regarding proxy flying, which I believe is a further sore point, I would ask your members to carefully consider the following aspects of this vexed question.

The organisers of such a meeting as the Wakefield are duty bound to do their best for competitors who are unable to attend personally, and in the case of the 1949 event the Council adopted the procedure of selecting proxy fliers from the finalists in our own Elimination Trials who just failed to make the actual team. You will appreciate that by adopting this method only modellers who had proved their abilities with Wakefield models were considered, as all these men had earned their way to the final eliminating trial by means of earlier eliminator meetings held in districts. We were thus assured that no member of the British team got there by means of an odd lucky flight, as obviously the chances of this occurring at two separate contests is very remote.

The position was therefore that the top finishers in our own trials were selected to act as proxy fliers, and I can assure you that in every case these chaps did a really fine job of work, this opinion being borne out by all other officials from the various countries.

Here we come to what is probably the most vexed question of the lot, i.e., when should models be handed to their respective proxies? In order to meet the above-mentioned conditions of selecting the best men for the job, obviously these were not confined to any one town or district, and the Society was faced with the problem of either distributing single models to all parts of the country (with the attendant risk of damage in transit) or retaining the models and handing the lot over at an appointed date.

A further big snag was the question—what would be the position should a proxy flier lose the model whilst testing? Obviously the entrant would not be too pleased at having missed the contest!

The council therefore decided—wisely or otherwise—that the best method of meeting all requirements was to hand the models over to designated proxies on arrival at Cranfield on the evening of Friday, 29th July. This gave the chaps a chance to unpack and study the models during that evening, and the whole of Saturday for test flying, in this way ensuring that no proxy flown model was given an unfair advantage by early arrival over those which only arived just in time. Further the risk of loss attendant on continued test flying was reduced to a reasonable minimum.

This procedure was waived in one case, that being Lim Joon's model which was handed over to Jimmy Tangney after representation to the Society. This procedure was adopted as Tangney had been definitely appointed by Lim Joon as his proxy flier—the only competitor to adopt this procedure.

I trust the above explanation gives your chaps a better picture of events, and would close with one personal remark on the subject of proxy flying. It is possible that a competitor may be in constant touch with a modeller in the country where a contest is to be held and duly appoint him as his proxy in a contest. However, the officials may know that the individual appointed is entirely unsuited for the purpose owing to his lack of experience in contest flying or with the special type of model involved. What is to be done in such a situation? My solution would be that whilst a competitor has every right to appoint his own proxy this must be subject to the approval of the organising officials, who should exercise their discretion relevant to their knowledge of the appointee's ability.

I welcome your readers' correspondence on this subject in order to fully iron out any doubts still remaining in their minds, and thank you for this opportunity of at least attempting to put the matter right.

Yours truly,

(Signed) C. S. RUSHBROOKE,

Editor,

"Aero Modeller."

IN MEMORIAM

MODEL AERONAUTICAL ASSOCIATION OF AUSTRALIA

Twelve months ago a Federal Secretary was elected and initial steps made towards a truly Australia-wide representative organisation of aeromodellers.

Aeromodelling in Australia was in a position to go ahead and develop along organised lines.

A year has passed and our sporting hobby has grown considerably, but yet there seems a lack of willingness to get aeromodelling rolling on National lines, and some States appear to be responsible for a lot of petty bickering, and refuse to realise that they are just part of an organisation, an essential part of course, in that they must support the Federal body and work for it, unless our title becomes a fact.

Model Aircraft Organisation in Australia

Federal Governing Council:

The Model Aeronautical Association of Australia

Secretary: M. G. McSPEDDEN (A.C.A., Aust.)

195 Elizabeth Street, Sydney,

New South Wales

State Councils:

New South Wales:

The Model Aeronautical Association of N.S.W.

Secretary: J. B. SCOTT,

Box 2278, G.P.O., Sydney

This Association holds flying meetings each second Sunday of the month in Centennial Park, and a general meeting in the A.F.A. Clubrooms, George Street, Sydney, on each following Monday night.

Queensland:

The Model Aeronautical Association of Queensland

Secretary: PETER WEAVER,

c/o. 350 Queen Street, Brisbane.

Australian MODEL Hobbies has heard very little from Brisbane of local activities.

South Australia:

The South Australian Associated Aeromodellers

Secretary: BOYD N. FELSTEAD,

71 Watson Avenue, Toorak Gardens

Flying meetings—Controline: Colley Terrace, Glenelg, on the first Sunday of each month and all other types each other Sunday on the West Beach Aerodrome.

Victoria:

Victorian Model Aeronautical Association

Secretary: R. A. ROSE,

Railway Terrace, Laverton

Separate flying meetings are held by member clubs each week-end in addition to feature contests arranged by the V.M.A.A.

West Australian Model Aeronautical Association:

Tasmanian Aeromodellers Association:

Little has been received from the organisations in these States and news would be appreciated.

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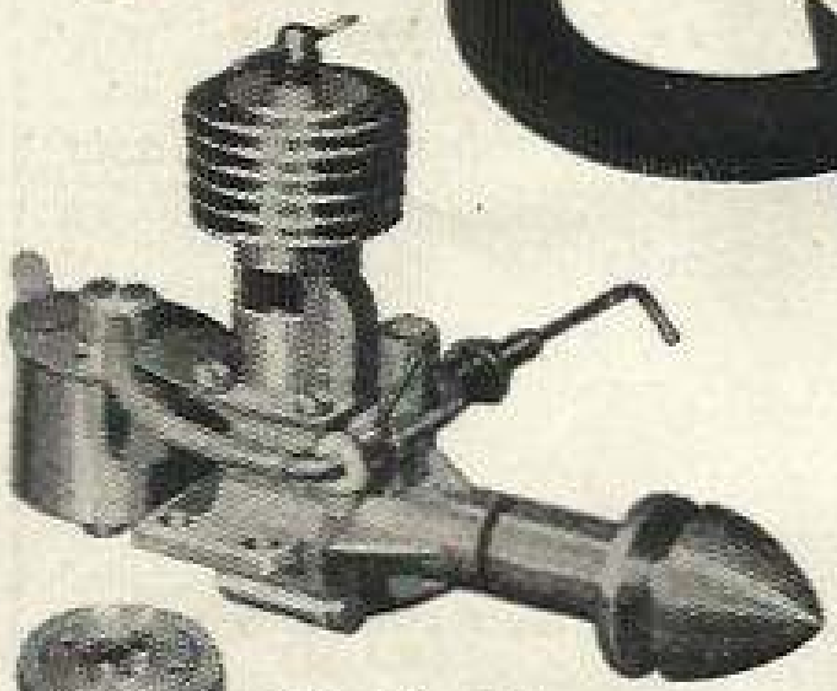

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