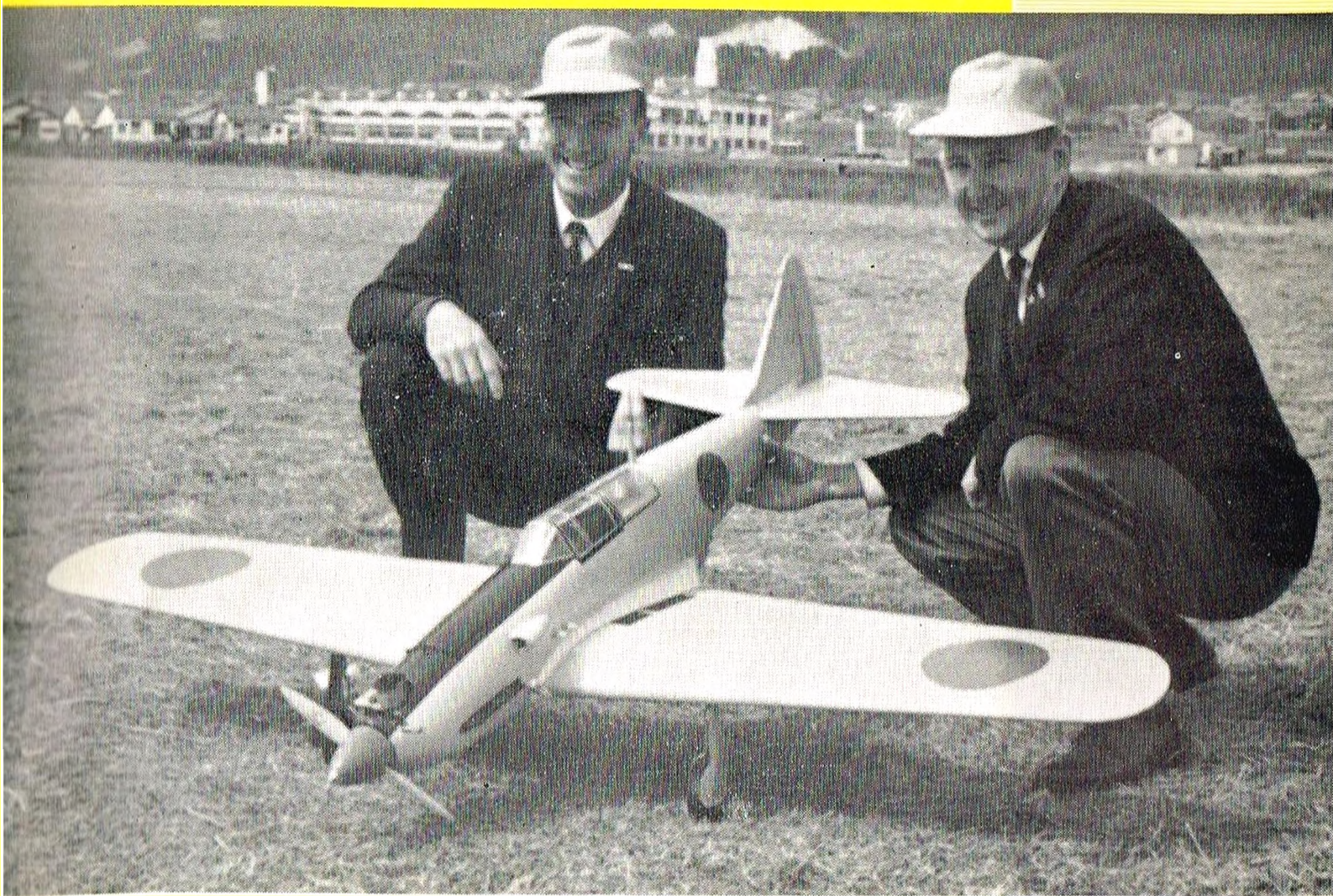


Model News

AUSTRALIAN and NEW ZEALAND MODELLING

July–August
1965

REGISTERED AT THE G.P.O.
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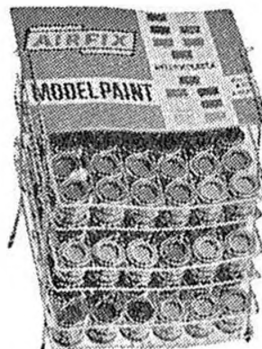
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MODEL NEWS

Vol. 9 No. 3

Published Bi-Monthly

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Edited by ADRIAN BRYANT

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NEXT ISSUE SEPTEMBER-OCTOBER

Editorial deadline 1st of month prior to month of issue.

Advertising deadline 25th of month prior to month of issue.

COVER STORY

Keith Hearn and Tony Farnan with Beautiful Kawasaki Hien, built by Mr. Mitsumi, President of Mt. Hiet P/C Club. Flew beautifully with Max 50 R/C and O.S. Superhet gear.

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News and Views

T/R FLIERS REJECT SILENCERS

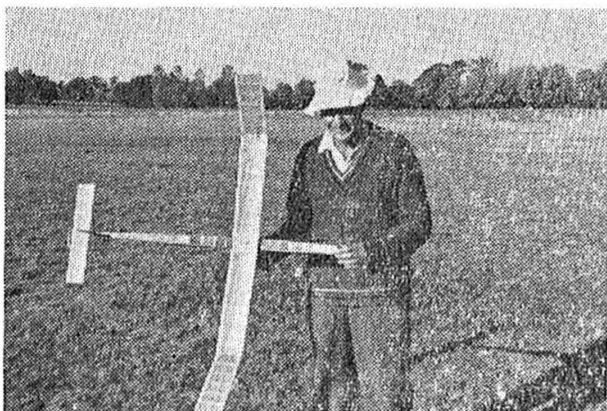
The introduction of silencers by the V.M.A.A. for certain competition classes has had some rather unfortunate results in Victorian team-racing circles, mainly in class 2. Several top teams are refusing to fly in competitions for which silencers are required, and as a result several events have had to be abandoned because of lack of entries. In fact, of the three "silenced" class 2 races on the calendar since the beginning of the year (when silencers were first made compulsory) only the State Champs attracted enough entries to actually be flown.

What did this race show? Firstly, as expected, the silencers did knock a bit off performance, but everyone was affected and there was nothing unfair in this. Starting from cold seemed a little more difficult than usual, but was as easy as ever once the motor was hot, as shown by the number of one and two flick pitstops performed. Mainly, however, it is evident that nobody has yet developed a silenced model to any great performance level, and as a result it is easier to win this class now than ever before — quite a change since last year, when it was probably our most keenly contested event.

At this stage it is impossible to say how long this state of affairs is going to last. Given time, modellers might come to accept silencers as a necessity rather than a nuisance. But in the meantime many fliers are doing their darndest to avoid using them at all. Several proposals ranging from sensible to ridiculous, have been put to the V.M.A.A. and it will be interesting to see if anything comes of these.

1965-66 NATIONALS TO BE HELD AT CANBERRA

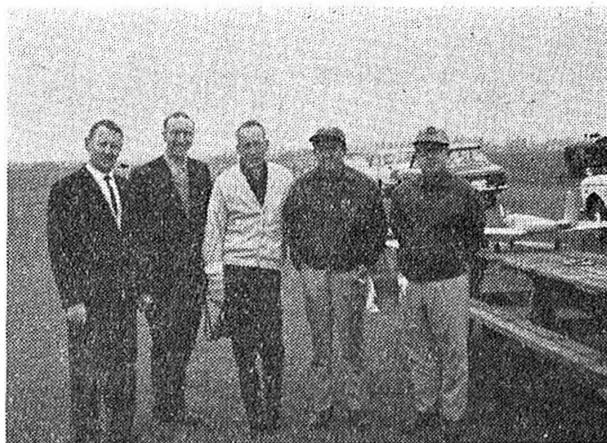
The Canberra M.F.C. presented a portfolio proposing Canberra as the site of the 1965-66 Nationals. Highlights of the proposal were as follows: Accommodation and control-line flying at the Showgrounds, room for five 80 foot radius circles, an arena and an additional 5 circles in other parts of the Showground. The free flight area approx. 1 mile square is adjacent to the Showground. An alternative free flight area is available 8 miles away on the opposite side of town. The Showground is available for a rental of £5 per day with additional charges for water and electricity. Plenty of camping space is available and dormitory type accommodation in the pavillions can be provided. Meals can be provided on the site. Free television and radio coverage of the contest has been guaranteed.



Arthur Butler and his open rubber winner at the recent N.S.W. State championships. An outstanding Free Flight competitor for more than a decade. Arthur once again won the N.S.W. Champion of Champions.

The Victorian Scene

We feel that aeromodelling is at an all time lousy low in Victoria. What's to blame? The bull sessions (and can aeromodellers talk) have brought up all the old whipping boys. The officials, noise, lack of flying sites, too many rules, scattered instead of concentrated state championships as in Victoria and all the rest. It's a dog chasing it's tail. All have a bearing but here's a thought. Kids come into it, as teen-agers; a big percentage go out of it, as men a small minority of those teenagers come back to it, the other men take up radio control anyhow. So, there are too many counter attractions for the big



East — West — South. Tony Farnan (Aust.) Keith Hearn (Aust.) Bob Dunham (U.S.A.) Yuri Oki (Japan) and Mr. Toyoda (Japan). Photograph taken at the All National Radio Control Championships in Japan.

market of the teenager. They are there and have to be faced out for them with the keen zeal that stay in it can't we work out something to make it more attractive and worthwhile?

One of the first would be to give every event a reasonable standard by dropping most events! ! Some contests are a joke they have so few entries and the more events we have the more officials we need and the more time we need to run events that in the main are not worth running anyhow. We feel that State Championships and Nationals should be what the names suggest. State Championships and National Championships. None of this fly and get a prize jazz.

Here's a thought to kick around. Controline: Keep FAI stunt, FAI Team Speed, Class 2 Team Speed, the three classes and dump the rest. If combat is kept list it as an unofficial event. In free flight keep FAI power, open power, A1 and A2 sailplane, Wakefield. Dump the rest. If hurl glider and scramble are flown list them as unofficial events. Have a flying scale event that includes controline and free flight. Qualifying flights will carry no points so it's just a scale event and even then make it a magazine type contest anyhow. This combined ukie-ff event could be classed as official. In Radio have multi, single and scale. The radio guys could maybe work out a handicap system in scale so multi and single could compete together on some reasonable basis. What's the stewing pot consist of? About 14 events. Each should in theory have a much better entry list and a helluva lot of officials should be around with all these other jokes dumped.

We seem to have too many events just because somebody wants to fly in them. For a joke six of us should build rise off water indoor jet powered ornithopter canard types, front up with them, and I bet we could conn an event being listed for it. The modelling popul-

Continued on Page 33.

1965 N.S.W. State Championships

From Dave Hegarty

This makes no attempt at giving a complete account of the State Championships, but is simply an account of some of the aspects of the free flight competition as viewed through the eyes of a competitor who was very busy competing. Results are shown elsewhere.

1. WAKEFIELD: This event showed some of the best built and best trimmed models seen for a long time and was probably the hardest competition to win of the whole competition.

Flying started at 6.30 a.m. and 1st round times showed little difference, average being about 2 min. 11 secs. without thermals. Art Cooper, Ray Murray, Mick May, and Jack Cavanagh all broke motors trying for the extra turns, while Jack and Ray missed the first round after arriving late.

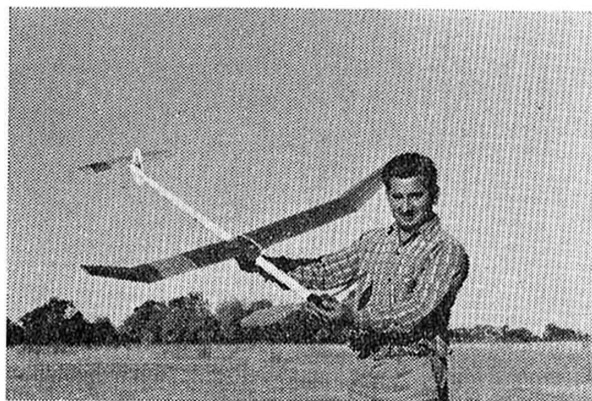
Propellor assemblies on all models were real works of art, and the models, mostly original designs were superbly constructed.

A2 GLIDER: Towing techniques were mostly at fault here. Most models were dropped into cold air currents during some of the rounds, and little attempt at thermal hunting was made with the exception of Dave Hegarty who ran right out of the field and up a nearby hill, after crossing a busy road before releasing.

Ray Murray and Les Fahey tangled lines on tow, resulting in the demolition of Ray's model. Les went on to place second after losing his plane on its last flight. Roy Somersby placed third after a hasty repair of a smashed wing, while Mick May, Joe Kelly, Allen Edwards and Geoff Ward all wrecked their models in attempting to complete their flights.

F.A.I. POWER: This event proved to be a farce with Art Butler being a clear-cut winner with his Tee Dee powered own design. The only other fliers were Art Cooper and Roy Somersby, each trying to hold their wrecked models together long enough to put in an official flight. "Coon" ended up colliding with a greyhound trainer who had paused to watch and Roy gave up after mending the broken fuselage for the fourth time. Ian Roach wrecked his entry the previous evening trying to trim in the wind. No other entries were noted.

A1 GLIDER: A well fought competition this, which started early in the morning and showed that this model type is increasing in popularity. Juniors were prominent here and a wide variety of designs was seen. Les Fahey lost his model as also did the winner Dave Hegarty. Many competitors lost valuable height by using heavy nylon line, one competition having 60 lb. breaking strain



Arthur Cooper, with his latest Wakefield Model. A lot more interest was shown in Wakefield this year.

fishing line. The winner used a 4 lb nylon line and was able to cast off directly overhead every time.

CHUCK GLIDER: Advertised to begin at 6. o'clock to avoid the influence of thermals and luck, this contest dragged on into the morning, giving unfair advantage to the late comers. Juniors flying borrowed models was the common thing, while many models showed lack of finish and partly dried glue as evidence of hasty, last minute construction. The winner came out with four models tucked under his arm, while second place-getter Ray Murray nearly broke his arm, throwing without adequate warm up. Les Fahey has joined the ranks of the retired chuck glider throwers, having injured his shoulder in a competition. Joe Kelly of Maitland was fourth, and hopes to move in to the the money soon.

OPEN RUBBER: Arthur Butler was his magnificent best in this event. Three maxes in cold windy conditions proved what a champion this man really is. Surprisingly, Allen Edwards, Flying his Wakefield, could not cope with the wind. Jack Cavanagh, with propellor hub turned from solid aluminium and hidden tension springs and roller races and thrust bearings, broke his propellor blades and was unable to fly.

Junior rubber models by Greg Fahey and Yenda Kynock were a delight to see in both flight and construction.

OPEN POWER: Gales and bitter winds, ice and frost made this another farce. No one wanted to fly, and held back until after five o'clock in the vain hope that the wind would drop.

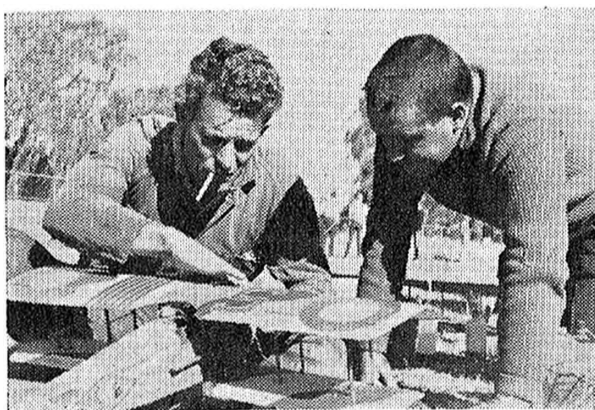
At five every one tried to fit in three flights with a mad conglomeration of timers, modellers and spectators milling around. Art Cooper's model was demolished by an over inquisitive spectator, while Art Butler's model smashed a wing after a normal landing. One good flight would have won this event and the junior from Macquarie who won deserves credit. Most people kept their aircraft for the Nats.



Alan Edwards with his unusual entry in the Wakefield Championship. Alan won the Wakefield but failed in open Rubber.

JETEX: Of seven entrants, only three managed to record official times in this event. Art Butler tried to fly a big 350 design but crashed and had to rely on his tried 200 model to win second place. Roy Somersby burnt the side out of his 350 motor and had to use a Jetmaster design which just doesn't run long enough. Dave Hegarty's old faithful 200 powered model, built in 1959, won. This model has won the State Championships four times, the Australian Nationals twice, and the Cumberland Championships twice. It has also been lost once and caught fire twice, but still turns in maxes regularly.

SCRAMBLE: What a shambles this was. Despite the valiant efforts of Ivor Stowe to instruct the timers and officials this event was a mess of confused people milling around together.



Les Fahey and the C/L Scale Winner Allen Talbot working on the Magnificent SPAD.

One place-getter was timed by a young lad, using a 30 second watch, who had never before handled a stop watch, while people were coaxed from near and far to act as time-keepers.

Spectators and contestants mingled together throughout the competition many being struck by flying models. We are thankful that no one suffered injury, with credit going to the N.S.W.A. of A. for banning all motors over 1½ c.c.

Never before has such a disgraceful heap of junk been assembled before the public gaze to advertise this finest of hobbies. Broken, oil-soaked, unpainted, tattered pieces of wreckage, tied, strapped, glued and flung together to make an unsightly parody of a model were to be seen everywhere.



Dave Hegarty and his winning A/2 Sailplane. Roplano.

The impression made on the spectators must have been a very poor one for, of the models entered, less than six were well built and worth labelling as model aircraft. The Association should seriously consider examining all scramble entries, and refusing to accept which appear to be unsafe, poorly constructed, or improper in any way.

To sum up as far as free flight is concerned, the decentralized Championships was no different to those held in previous years, except that the competitors had to drive further and were much colder.

There were few country contestants present, and the late nights and lack of sleep deprived many modellers of the energy to go forth to compete. Their models lay unflown in the tents whilst the competitors nursed sore heads and wished they were back home. Not a good way to enjoy a hobby surely.

DAVE HEGARTY,

TRY AN AIRPROP RADIO CONTROLLED HYDROPLANE

By R. G. de Chastle

As a newcomer to boating, the plans and information offered are purely as a basis for a starting point in this relatively new and fascinating branch of modelling.

Being a dyed in the wool aeromodeller for over 25 years, I usually refer to boats having a "sharp end or blunt end", however I must confess that this form of Radio Control has a lot of advantages over R/C aircraft. One being that loss of signal or malfunction of equipment usually results in at the most, a ducking to retrieve the wayward model. Hurried rebuilding of a model for the following weekend is a thing of the past.

Back to the model. Construction is very simple. First step is to cut the pylon mounts from either $\frac{1}{4}$ " ply or 1/8" dural, leaving them a little longer than necessary for trimming to the correct length when fitting the motor. Three bulkheads "A", two formers to the outline of the fuselage (sorry, hull), and a back part "B". These are assembled as a basic frame as per illustration, and all edges sanded or planed square. The rudder post is next affixed and rudder linkages connected. The pylon is affixed inside the formers with araldite, then pieces of 1/8" sheet balsa glued across the top of the frame. When this is set $\frac{1}{4}$ " balsa or 1/16" ply is glued across the bottom of the frame. Top and bottom outlines are then marked, and the plan view cut to shape. Sand the edges with a large sanding block, and sheet the sides with 1/8" balsa, grain set vertically. A false decking is built to form a cockpit. Cut out portion of the top for a hatch, and make a hatch cover out of 1/8" ply about $\frac{1}{8}$ " larger than the opening. To ensure a waterproof seal of the hatch, glue a continuous strip of bicycle valve rubber around the edge of the hatch. This will compress when the hatch cover is screwed down.

The power plant in my hydro is a Eta Mk. 11. diesel driving a Tornado 10/4 nylon prop. trimmed to about $7\frac{1}{2}$ " diameter. The motor is mounted inverted to keep the C/G low.

Rudder control is effected by a unimite servo, although any single servo could be connected up in a variety of manners to give the same sequence of control as in aircraft.



Bruce de Chastel with his father's Amphibious Hydriplane powered with an Eta 15 Pixie 27 mc. radio gear and Climax unimite servo.

Two requirements I have found are essential for reliable operation. One is complete waterproofing of the hull and equipment, the other is a regular check for corrosion of working parts, particularly servo circuit boards. I have found it better not to enclose the batteries in foam packing, as this can become moist, and will most certainly cause a heavy leakage of current through short circuiting. My receiver is enclosed in a heavy rubber balloon, and tied around the wiring harness.

I expect shortly to indulge in timed circuit racing, and possibly two at a time team racing, and remember, if you want the cleanest feet in your radio club, build yourself a R/C hydro.

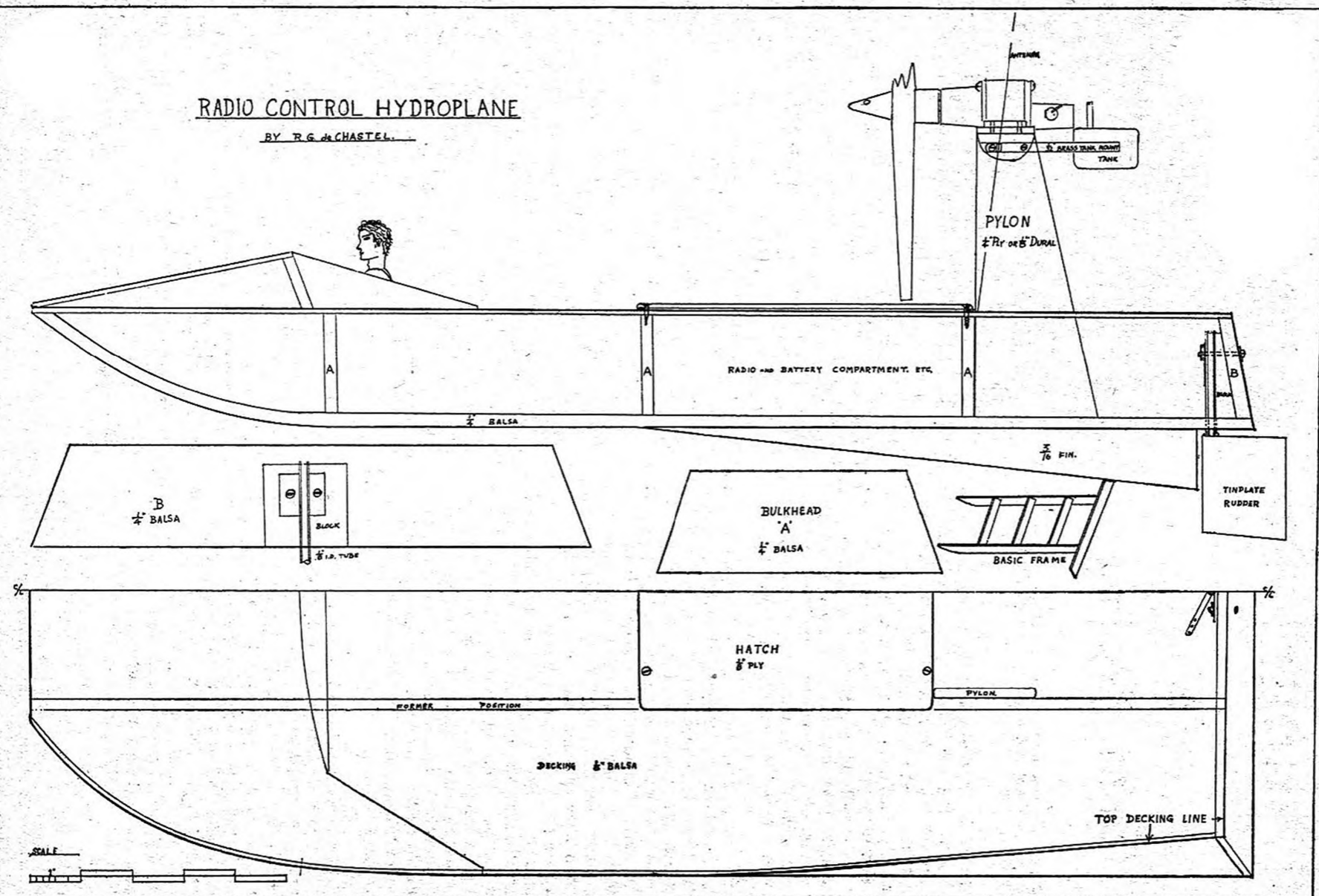
Aero Modellers

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**FLY AWAY
from
POWER LINES**

RADIO CONTROL HYDROPLANE

BY R. G. CHASTEL



All About Pans

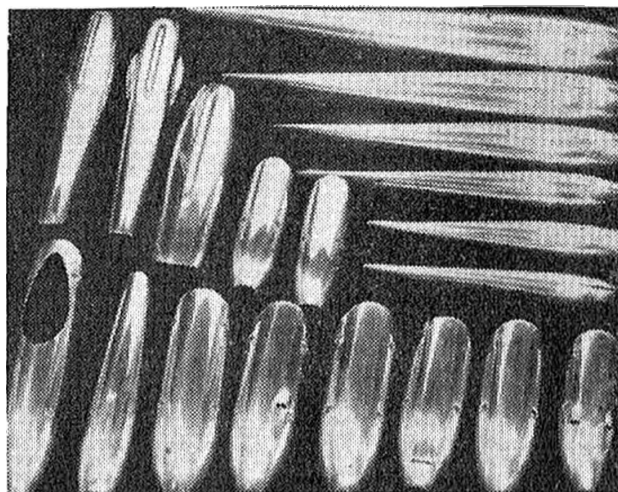
for Team Racing and Speed Models

Speed flyers the world over have long favoured mounting their motors on metal pans, but the widespread use of pans on teamracers is a comparatively recent development, in this country at least. A pan is nothing more than a cast metal shell forming part of the aircraft fuselage. The motor and fuel tank are screwed onto the pan, resulting in a very rigid and compact unit which is then mounted on the main body of the plane remaining easily detachable to provide access to the engine and tank should they need attention.

Making a home-made pan is well within the average modeller's capabilities, but requires a lot of work. It is first necessary to carve a pattern out of wood (not balsa!) to the shape desired of the necessary pan, making it slightly bigger all round to allow contraction of the metal when it cools from the liquid form. You then take this pattern to a foundry that does aluminium casting where they make a sand mould from your pattern and fill it with molten metal. Aluminium or magnesium (or alloys of the two) are usually used on account of their lightness, but aluminium is most popular as it is not as brittle as magnesium, and maintains a polished surface better. Fibreglass, too, was tried as a pan making material a few years ago but was never really successful, probably because it does not conduct excess heat away from the engine crankcase as well as metal.

The casting is quite rough when it is removed from the mould, which means that cleaning and polishing the outside is a major operation that will take several hours unless you have power polishing and buffing equipment available. After the worst of the bumps have been filed off you attack the surface with wet and dry sandpaper used wet, gradually changing to finer and finer grades. A very good job can be done in this way, and by the time you reach 600 grade paper the surface should be very smooth, only needing light buffing to bring up a real professional shine.

It is fairly obvious that using a commercially made pan will save a lot of time. There is a wide range now available to choose from, and it is a simple matter to re-work them to suit your individual taste.



Mounting the motor is an important job that will have to be tackled even with a commercial pan, as the motor hold-down lugs are usually left blank so that different makes of motors can be mounted in the pan. Firstly, see that the motor fits easily into the pan and rests only on the mounting lugs, not on the crankcase, screws, propdriver etc. as is often the case. File, grind, or scrape metal from the pan if necessary to achieve this. Then glue the motor in the pan with a squirt of balsa cement under each mounting lug; this holds the motor in place while the position for screw holes is marked on the pan, but is weak enough to allow easy removal of the motor. Starting each bolt hole with the largest drill that will fit through the motor lug holes is a good way of marking out. The motor is then removed, and the holes drilled to the required depth using a drill to suit the tap you are going to use.

When a tap is screwed into the hole it cuts the screw thread as it goes. It should be screwed out every few turns to clear the chips formed and be kept wet with kerosene or Penetrene to produce a good smooth thread. It is a good idea to practise on a few holes in a bit of scrap aluminium before attempting to do the pan if you have never tried tapping before.

Drills, taps and a small wrench for holding them can be bought for a few shillings at any big hardware shop, such as Mc Phersons, and will last for all pans the average modeller is ever likely to use. A "bottoming tap" is used for tapping blind holes, and a "Taper tap" for holes open at both ends. For mounting engines it is often impossible to drill deep enough to give the screws a good grip without breaking through the outside of the pan, but sometimes you can get away with blind holes, especially with tank mountings. When this is possible it will save filling in the outside ends of the holes with netallic cement to make the pan look pretty again!

Mounting pilots and cockpits on teamrace pans presents no problems if you use Araldite glue, as this sticks well to metal and resists the heat well. To avoid making a mess with too much glue in the wrong places it is a good idea to hold the cockpit in position on the pan with weights etc, then apply small dabs of glue around the joint and allow to set. The weights can then be removed and a smooth fillet of glue rubbed around the joint without fear of the cockpit shifting about. A coat of paint over the Araldite will keep it protected from fuel.

For mounting the pan on the model either a hardwood crutch can be used or an arrangement of plywood-faced bearers provided. In the case of speed models there is often no need for any special arrangements as the fuselage may be carved from hardwood anyway. Nuts are embedded in the fuselage to enable the pan to be bolted down in teamracers, whilst speed models usually carry bolts in the upper fuselage screwing into holes tapped directly in the pan. The only requirement is that the whole arrangement is firm and rigid, and this is usually easy to attain. If any trouble is experienced with vibration, it may indicate that a longer pan, or one having more mounting bolts is needed.

The type of pan you use depends a lot on personal preference, but experience indicates that some competition classes do favour the use of a particular type. In 10 c.c. speed, for instance, there is plenty of horsepower available to carry around a bit of extra weight, and the full length pan with internal stiffening ribs such as the Pomadi SP/1 helps in building a tough, vibration-free model. 5 c.c. speed seems to favour full length and half length pans just about equally, but in the F.A.I. class the half pan (as used on Wisniewski's K & B powered World Champion model) is almost universal. This is because F.A.I. models are usually made pretty long for stability, and a pan of this length would be quite heavy.

Weight considerations dictate the use of half pans on teamracers too, although there is still much variation in length some being very short and held down with only 2 bolts, whilst others are longer, with 4 hold-downs. The long ones as used on the very popular "Miss FAI" offer greater cooling and a more rigid motor mount, but when the short pans start matching these features with airscoops for crankcase cooling, and extra mounting bolts in front of the motor lugs as on the World Champion "Fresco" design, the choice seems to boil down mainly to personal preference again. This is just as well, as it would be a terrible thing if all teamracers looked alike.

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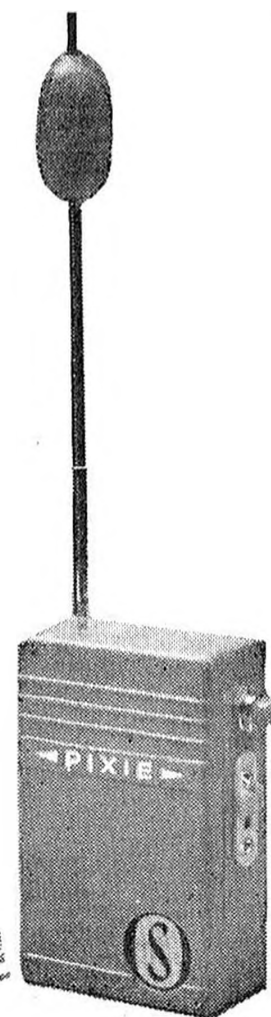
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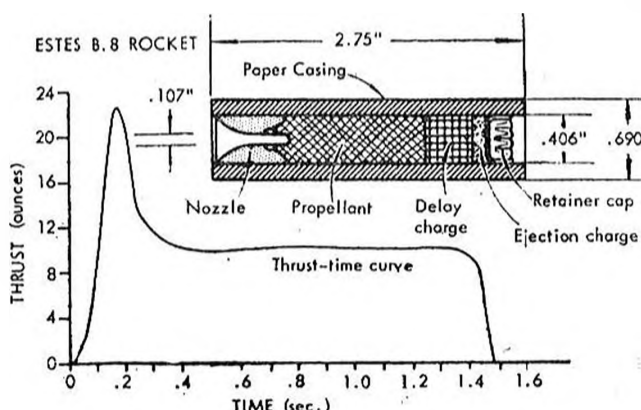
MODEL ROCKET ENGINES

By Chris Vine

All of the engines sold by Model Rocket Industries have been approved for official use in NRCA Sanctioned Competitions. Over 23 different rocket motors are now available for contest work.

All rocket engines are classified according to the rules set forth by the NRCA. This means that each engine will have on it a letter followed by a number and then followed by a second number. The letter indicates the total impulse in pounds-seconds. The first number indicates the average thrust and the second number gives the length of the time delay before activation of the ejection charge.

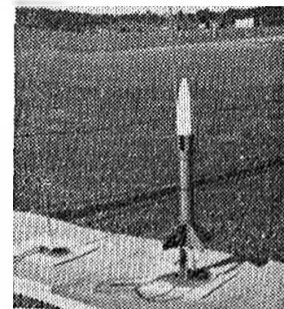
This rocket engine design and performance graph is given for educational purposes only. We believe that if you understand how your rocket engine works you are in a better position to design your rockets for specific purposes, i.e. drag races, payload events, altitude events, spot landing events, etc. We do not recommend that you attempt to build your own rocket engines.



A Series 1 rocket engine is a solid propellant type which basically has an end burning grain. There is a slight centre bore at the very tip of the nozzle end of the grain which serves two purposes. First, it provides for easy ignition, second, as you will note from the graph, it produces a high initial thrust thus stabilising your models more quickly. Data from wind tunnel effective design for rocket engines which are tests show this dual thrust level to be the most designed to propel lightweight model rockets at sub-sonic speeds.

A slow burning delay and tracking charge is ignited at the burn out of the propellant grain. This slow burning, yellow, smoke produc-

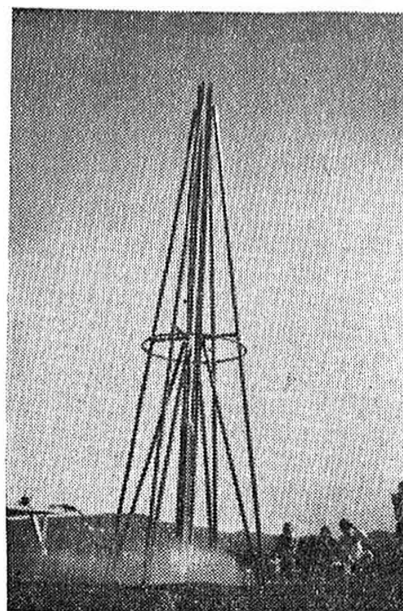
B Scale Model of the U.S. Army's Honest John, by Chris Vines.



ing charge provides no thrust, permitting the rocket to coast upward to its peak altitude. After the burn-out of the time delay charge a recovery system ejection charge is ignited which pressurises the forward end of the rocket body tube, activating the recovery system.

If you wish to attempt to build your own rocket engines "SAFELY", we recommend that you have in reserve a few thousand pounds in cash for special equipment, a college degree, a safe place to work (not a garage or basement), protective clothing and some specialised training. If you build rocket engines with less than this you may find, as many others have, that for the rest of your life you will be without a finger, eye, or arm. Our country needs live rocket scientists, and we are looking for fellows like you to fulfil this need.

We wish to thank Model Rocket Industries for the data and information for this article.



NRCAM-3

Reported by Chris Vine



Rockets being prepared on the launching pad.

"POLKOLBIN AIRSTRIP" was the site for NRCAM-3 held on Sunday, April 19th. Clear skies and a slight easterly breeze prevailed throughout the contest, which was run smoothly in accordance to the NRCA Standards and Regulations.

A Channel Three (NEWCASTLE) camera-man was present throughout the contest and filmed some fantastic shots for screening on the station's programme "ROVING EYE". The CANOPLUS SECTION supplied the range equipment for the meet. The quality of entries was much better than NRCAM-2 but some mod-rock-nuts are still experiencing difficulty in the selection of the right rocket engines, resulting in a few recovery system failures.

Out-right winner of the Contest was John Brown, runner up Chris Vine. NRCAM-4 has been set down for July 18th, in Sydney. Full particulars can be obtained by writing to, The Secretary, National Rocket Club of Australia, Post Office Box 89, Punchbowl N.S.W.

RESULTS

PARACHUTE DURATION: 1st Charles Brown; runner up Chris Vine.

RESEARCH & DEVELOPMENT: 1st John Brown; runner up Grant Eyre.

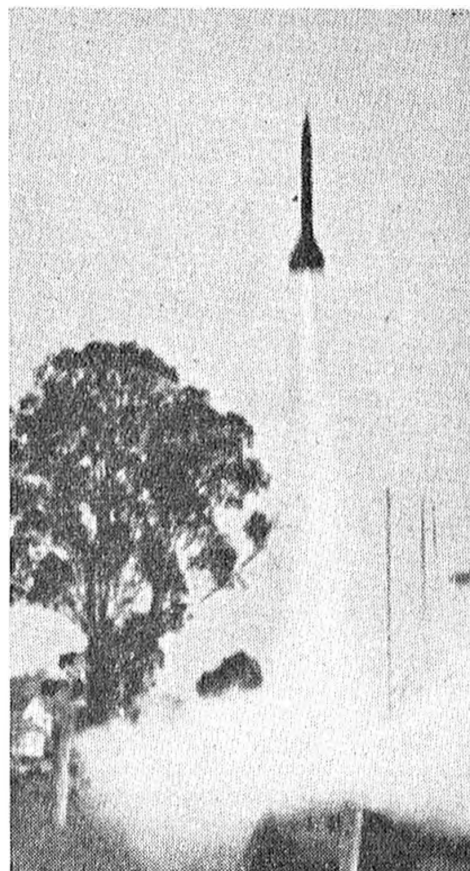
B-CLASS ALTITUDE: 1st Chris Vine (1150'); runner up Terry Ross (1020').

B-BOOST GLIDE: 1st Brian Compton (17 sec.); runner up Astrons Team (11 sec.).

B-B CLASS ALTITUDE: 1st David Davidge (1550') runner up Terry Ross (1480')

AERO-SPACE SYSTEMS: 1st Astrons Team; runner up John Brown.

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B-CLASS PAYLOAD: 1st Grant Eyre and Chris Vine (580') runner up Terry Ross (500').

OPEN ALTITUDE: 1st Astrons Team (4480') runner up Grant Eyre (3360').

B-CLASS SCALE ALTITUDE: 1st Chris Vine (Honest John 580') runner up Astrons Team (Sidewinder 200').

A-CLASS ALTITUDE: 1st Terry Ross (730'); runner up Chris Willis (700').

OPEN SCALE ALTITUDE: 1st Astrons Team (Black Brant V-A 3580').

C-B CLASS ALTITUDE: 1st Bryan Compton (1920'); runner up Chris Willis (1890').

OPEN PAYLOAD: 1st Chris Vine, (880')

"THE GOSPEL OF SPEED"

ACCORDING TO JOHN

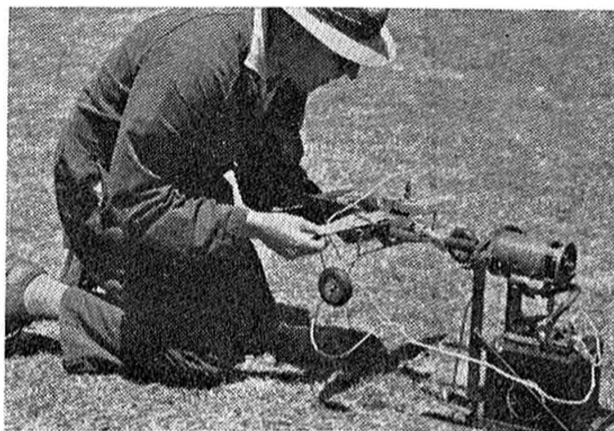
Everyone who has ever fired up an engine in a Model Aeroplane has at some time or other tried to make it go faster. This is natural enough — world accent is on power and speed or is all that advertising blurb on the air, in newspapers and on television regarding cigarettes, petrols, motor cars, aeroplanes etc. just so much wasted effort. No fellows — it is not, so get with the strength, get with the forward looking people and join in the growing band of aeromodelers, who are getting a lot of satisfaction from speed model flying.

Many of you already fly Combat, Team Speed and Free Flight and your best introduction to success is top engine performance and nowhere will you learn more about how to get those engines turning than by giving speed a whirl and there's no greater thrill than to whirl around "ye olde pylon" to the tune of a high revving engine.

Interested? So you should be — speed modelling has lots to offer and it has never been so easy to get into the "spin dizzy" caper as it is now. Equipment, fuels, plans etc. are readily available and the bogey about high price is just a myth — speed is less costly to indulge in than most other facets of our hobby. More contests are becoming available and even the N.S.W. Association like us. They traded a plowed paddock for a football field for this year's N.S.W. Championships. You see, they value the points we speed-types contribute at a Nationals.

Speed model flying gives you the choice of five different events made up of the following classes: F.A.I. Class II, Class III and A and B Proto — a wide range you must agree; in fact, perhaps we should delete a couple so as to strengthen fields in individual events. Team race chaps should perhaps look seriously at Proto and some have already done so with good effect in fact at the N.S.W. Championships Proto speed was won by a genuine team racer, so don't believe in the invincibility of monoline.

So you are sold on speed and may I suggest that as a starter you try the F.A.I. Class which as you know is the event used to determine the World Championships. These larger than average speed models are wonderfully good training in the art, in-as-much as they, like all speed models, are easy to build but have the added advantage of being very easy to fly with smooth break away from the dolly and slow landing ability. A number of excellent engines are available, fuel is a cheap Methanol Castor Oil mixture and the slow landings make for economy in the propeller section as breakages on set-down are quite low. An added advantage to beginners is that two liners are very capable of matching speeds with the monoline brigade and the



Setups such as this one are becoming more and more common place as speed continues to make a comeback in Aust.

Nationals F.A.I. speed was won this year with a biliner.

The approach I would recommend, and this approach holds good for all classes, is to make a decision on the event you wish to fly and then make up a check list of the gear needed. As most models carry the engine mounted on a metal full or half pan, you should use this as the base of your model and then build around it. Don't be too keen to design your own, but rather search back through the magazines using photos and plans to evolve your ship. In F.A.I. you should look at the Lauderdale "Dizzy Bug" plan in M.A.N. or the various Rossi plans in Aeromodeller. You have numerous engines to work with, but may I suggest you beg, borrow or buy a genuine racing type as this is the very heart of your model and an engine built to race will give you a lot more satisfaction in ruggedness, reliability and sheer speed than any so called hotted up sport type. Currently fashionable and fast are the Super Tigres — K&BR's — OSH 29R — Foxes — Eta 29 and the new Cox 15 may well be worth checking on.

Now can I get a plug in here? Like all aeromodelers I'm rather thoughtless, I meant to do something for Model News a million times, but you know how it is — so please read this Magazine from cover to cover — buy the equipment you need from its advertisers — they do carry a wide range of the best gear available in Australia. Support them and so give Model News an opportunity to reach even greater heights in covering the Australian Model Scene.

I'll be back next issue with more pertinent facts and so called secrets pertaining to speed model flying and hope to review some of the equipment available from the advertisers in subsequent issues.

REWORKING THE SUPERTIGRE 15D

By John Barr

Supertigre 15D has already enjoyed considerable success in F.A.I. team racing overseas, and now that these motors are becoming available on the Australian market, it would be a good time to take a look at some of the modifications employed to make them really sing. To anyone who reads American magazines, John Barr of the Barr-Norsikian Speed Team (B.N.S.T.) will need no introduction; for those who don't it should be sufficient to mention that B.N.S.T. have won the F.A.I. race at the American Nationals for the past two years, and race times of 4:45 are nothing out of the ordinary for them. What follows is John's description of B.N.S.T. engine preparation after 4 years of racing with Supertigres.

Disassemble engine completely with the exception of removal of the bearings from the crankcase. Clean all parts as thoroughly as possible by soaking and rinsing in a good solvent bath such as methyl alcohol or carbon tetrachloride. The ball races should not be spun violently at this time but rotated very gently. When the parts are dry and clean the fit of the shaft to the bearing should be checked. If it is not a light thumb press fit or tight sliding fit (not rattling!!) the shaft should have its diameter reduced until this fit is obtained. A lathe (or drill motor) and 400 and 600 paper can be used to make this very small adjustment. With the entire front end clean and dry (no oil) the shaft should be a free spinning fit with no detectable break away friction. One test is to rotate the crankcase slowly and observe the counterweight motionless — no tendency to follow the rotation.

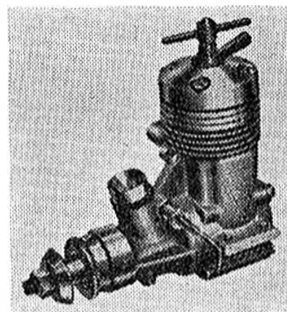
When installing bearings, they should be a drop fit when the case is hot enough to "sizzle spit". Care should be taken not to overheat the case, however. If the bearing has been pounded out or the hole otherwise too large, the bearing should be epoxy cemented in with Loctite or similar compound.

The piston should have the crown radiused with a smooth stone, and should fit loose below the ports and when clean and dry a smooth light drag above the ports.

Assembled and oiled lightly with "3 in 1" or similar, the engine should be broken in fast with an 8-3 or 8-4 prop with not less than 20% oil. The setting should be rich and compression right "on" or biased slightly on the low side. Runs should be 10cc to 30cc of fuel at a time for about 1 to 2 quarts of fuel until a lean setting can be held throughout the run without any sign of overheating.

The engine should be flown, care being taken to avoid lean or over-compressed runs. The Supertigre is not easily worn out, and only a slight deterioration in starting can be noticed with very advanced age.

Normal maintenance does not include removal



Super Tigre 15D.

of the shaft, but the piston and cylinder should be disassembled periodically and scrubbed with "Comet" or similar household cleanser, and steel wool (Brillo pad). This is done especially if any sign of carbon deposit or varnish is detected and before each contest. Be sure to put several flights on before the contest to re-seat the piston-liner.

As far as fuel goes, the mixture has been tending more toward the use of "Oliver mix". The latest BNST fuel contains no nitrobenzine, 20% oil and 2% primary amyl nitrate (ethyl corp. DB-36).

A good Supertigre should turn 12000 to 12500 r.p.m. static on a 7-6 Tornado nylon.

Modifications are small. Purging the exhaust and allowing fresh air to be drawn in during the period of sub-piston induction is important. BNST drill a .125" to .140" hole in the exhaust stock pointing directly in at the port in the liner and able to receive the blast of propwash.

Piston modifications to allow a slight increase of sub-piston induction are sometimes good for a few more r.p.m. with this modification.

A 4x28 tap run through the head will allow an Allen head screw to be used for compression adjustment, making a cleaner cowl.

The carburettor should be modified to a needle valve type. Use the Supertigre valve with the body filed to a diamond shape (.156" width across edges) or with flats filed across the edges to trade range for speed (.138" width). The needle has ratchet adjustment added for positive control. The Venturi is as illustrated below:

A well broken-in Supertigre adhering to these specifications should fly a clean model at 92-96 m.p.h. for 34-38 laps. This with solo flights and no leading. Of course weather will make a difference but on good days this performance is within reach. Competition races of about 4:45 are nothing out of the ordinary for BNST with two of their usual fast stops. Additional experience with this engine which our readers could profit by will be welcomed.

—F.A.I. News Letter

WINGS OVER THE WATER

(OR UNDER THE MUD!)

By Tony Farnan

As reported elsewhere in Model News, one of the greatest thrills I have had in model flying, was to operate seaplanes at Lake Biwa in Japan this year. Having purchased a set of floats whilst there, it was decided to Airfreight them down to Australia, so that they would be available as I reached home for immediate use.

It was interesting to note that all the Japanese modellers were flying with the one type of twin float layout, designed by the National Multi Champion Mr. Murata. These measure 33 ins. long, and the ingenious mounting system makes them adjustable to fit most multi models, such as Sultans, Safaris, Stormers and of course my Taurus.

From the photos, it is possible to see the slotted steel straps, which go over the wing dowel pegs, and are then secured with rubber bands over the top of the fuselage. Water rudders are essential, as I found, when trying a "wandering" taxi-run, with a plane not thus equipped. Actually the method is quite simple, and merely consists of connecting the dismantled steerable nosewheel bellcrank, to the rudder horns.

All up the complete float set weighed in at 1½ lbs, but in removing the conventional undercarriage and wheels, I took off 8 ozs, thus putting 1lb. on to the Taurus, which then totalled a solid 8½ lbs. To offset this, one of the recently released O.S. Max .58 R/C Engines was installed up front, fitting the same mounting holes as the Max .50.

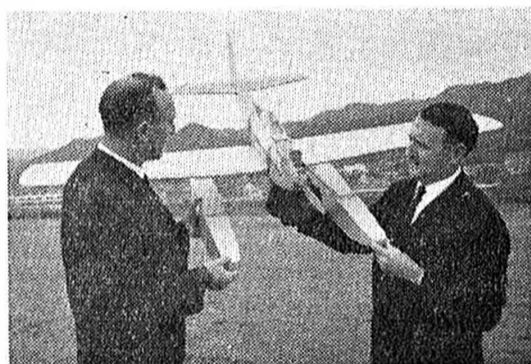
With everything ready to go, the weather in Melbourne, changed from the usual "perfect flying conditions", to a full gale which seemed to last for weeks. Rather than waste a weekend, first flotation tests and taxi-runs, were carried out on a small lake measuring approx. 35 yards long and in a 45 m.p.h. wind! Steering in the water was absolutely easy and accurate, so the plane was manoeuvred down wind and swung into the "breeze".

Of course five minutes of "boating" around on low idle, had proved too much for me, and after pulsing in full down trim, the .58 was given a burst of full power. The response was startling, as the plane jumped right on to the "step", and as I cut the engine back, was skipping along the top of the water trying to take off. It would have been airborne in 15 yards on normal trim! A mixture of delight at the plane's potential, and disappointment at the "interstate type" weather, prevailed as the ship (a good word in this case) was packed up for the next weekend.

So the great day came on Saturday 12th June, and the site chosen was the "lake" opposite

the M.A.R.C.S. flying field at Boundary Road, Footscray, Melbourne.

The water area, was actually an indentation in an otherwise level field, and whilst I had not looked at it closely over the years, I knew it must be enormous and quite



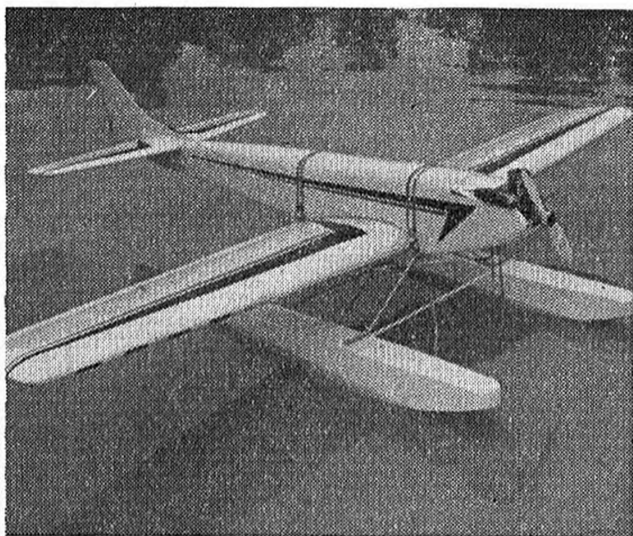
This sea plane with adjustable floats was studied carefully by Keith Hearn and Tony Farnan while visiting the HIEI R/C Club in Japan. The club flies from Lake Biwa near Osaka.

deep because "all" the freeflighters and runway radio models, had traditionally it seemed, always landed right in the middle, regardless of wind direction!

A pair of thigh length waders had been purchased to overcome this hazard, and so completely equipped, we reached the water's edge. How wrong can you be?— the "lake", in the middle of Melbourne's winter was only a puddle, about 60 yards by 50 yards! The car roof peeping above the water near its centre, suggested at least we had depth — but did we? Why were those rocks (looking like volcanoes), sticking up all over the place,

I found out on placing the plane in the water, that the "mud" was three feet deep and the water only two inches! The pantomime that followed would have delighted many, as the model on idle, would just sit with the bottom of the floats stuck in the mud. So I would squelch out with great difficulty and carry it further into the "deep water", where it would again remain stuck! To make matters worse, if I stood still beside the plane for more than four seconds, I would start to submerge —! This in technical terms is known as "the rate of sink", and there is a definite formula for calculating it in air, even water — but mud!

All this time the motor was idling away happily, with the plane looking neat and smart, whilst I floundered around like a "muddy idiot" (to use great Australian expression). Finally



Taurus with floats.

in desperation, I headed for dry land, leaving the plane in the centre, and grasping the transmitter, I "gave her the gun" regardless. Why wasn't I more brutal before? — the model leapt forward, skimmed across the water and hit a rock!

This was where my luck changed for—the better—because surprisingly the float was only scratched, and it was found that the plane could be placed on the grass! and "gunned" into the water, where on half power, a well controlled search for clear water could be carried out.

The first take-off was near perfect and the Taurus despite the drag of floats and because of the new engine, was flying faster than ever. Before landing, loops, reversals, immelmans etc., were carried out with spectacular ease; with my year old model looking like a Schneider Trophy Winner. Three minutes of inverted flying on this flight convinced all the modellers present, that multi seaplanes had "arrived"!

The landing was a "greaser" for two reasons, the most important of which, was that I landed the plane close to the transmitter in-shore, on what was really "damp mud"!

Several other flights followed going through the full stunt schedule; and pending further reports, we now claim a new Australian Spin Record of four complete turns with a seaplane!

On Monday 14th June, a public holiday, I notched up five more flights, which included an average of four touch-and-goes in each, plus a taxi run after landing which brought the plane out of the water and along the grass to the fuel bottle and battery!

On 3/4 power the model does 5 M.P.H. on land!

This particular performance sent various well known multi flyers, running off into the distance, muttering "floatplanes are the answer"! —and the smell of burning rubber during the following days, could well have been 3 inch airwheels being discarded and incinerated!

For those who might be interested in drowning their radio gear, instead of wrecking it on old fashioned earth, we suggest you contact Model News Editor, who could perhaps be persuaded to publish plans of the floats with attachment details in a future issue.

Incidentally the only protection given to the O.S. 12 channel superhet gear used, was careful sponge lining of the leading edge and wing contour fuelage sides.

Following a report that floats can be used on snow I am now searching for a suitable sub aero mountain plateau covered to a suitable depth with that other form of water. They say ski equipment is not too expensive and anyone can learn! Whether a St. Bernard can be found and trained to carry "fuel" around his neck, could be a major problem!



Tony Farnan with his Taurus now equipped with floats. O.S. 12 Channel Superhet Radio Gear and the new Max 58 R/C engine with silencer.

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Western Australian News

It may be of interest to other States that the following moves were made in 1964 to streamline our whole State Championship programme to a total of only 10 official events annually.

It was felt by some that there were too many contests each year. Many intend to duplicate themselves, and others had so few entries that the competitive standards of aeromodelling were lowered. By restricting the number of championship events we hope to get more entries, and to improve the flying and administration of each contest.

The events to be flown were chosen on the basis of average entries in each class over the past six years, and the type of model and degree of skill required in flying them.

An interesting point is that entries in Free Flight events scheduled since 1960 have been double the number received for control-line events. Last year the ratio was 4F/F to every controlline entry. However, in order to be fair to the controlline boys, for this year's championships four F/F and 4 C/L events were chosen plus two radio classes.

Our annual Champion of Champion Trophy is to be awarded on points scored over the ten selected Championship events, with 7 points for 1st place, 5 points for 2nd and 3 points for third, with all other entries one point each. Events will be spaced throughout the year, and the contest calendar will be as follows:

Feb. 14th	Chuck Glider
March 14th	Open Power Ratio
April 17th	Multi Channel Radio
May 23rd	F.A.I. Power
June 6th	A/2 Sailplane
July 4th	Single Channel Radio
August	F.A.I. Speed
September	Open Combat
October	Stunt
November	Team Race

The class of team race to be flown is to be decided annually, and this year it is likely to be F.A.I. T/R.

All classes flown in our State Championship programme are to be reviewed periodically, and the inclusion of any new class will depend on the decline in popularity of an existing event, and the following any proposed event will have.

On the surface it would appear that beginners are not being catered for. However, we feel that it is up to the beginners to improve themselves, and not for the association to lower its standards. All clubs are being urged to assist beginners wherever possible. Some now run handicap events which are



Doug Murry the well known Multi Expert from West Aust. shown here with his Cox Powered Viking in the F.A.I. event. He won this event as he has on the 3 previous occasions.

proving reasonably popular. Should any newcomer wish to compete at State level, the previous confusing number and classes of events have been eliminated. Events deducted from the State calendar can still be run by individual clubs on an interclub basis, using the old trophies if desired. Since there is only one official event on any competitive day, some clubs have adopted the policy of running a contest after the official event is over. By increasing the challenge and raising the standards of our State Championships there is added incentive for all.

Though it was thought that 1965 would only be a trial period for the new contest arrangement, it is interesting to note that for the two events so far run — chuck glider and open power ratio — the entries for one were double those of last year, and the other had an increase of 30%. Only time will tell whether this trend will continue in other events.

In brief, that is the new contest for Western Australia. Though it is sad to see events like Rubber (eventually dropped in favour of Power Ratio), Power Scramble, Scale (lack of entries) and the other classes of Speed and Team Races dropped from the official schedule, the problems of administration have certainly eased. All comments and criticisms from other States would be welcome.

W. A. CHUCK GLIDER CHAMPIONSHIP

This event was run on a 20 acre suburban playing field, and attracted a record number of competitors and spectators. Conditions were ideal, with some wind drift.

Len. Armour who, with two consecutive wins in 1963 and 1964 to his credit, and expected by all to win the trophy outright, was unlucky to lose his No. 1 model on his first flight, and as his No. 2 model was unable to catch the risers, he finally finished fourth.

Other past winners George Pappas and Doug Morrison finished 11th and 16th respectively, with Doug being unlucky to lose his best model whilst test flying.

In fact it was up to the younger generation, Michael Beilby and Mal Brunning, to show the Old Brigade how it should be done. Other newcomers to the event T. Fielding, R. Hocking and M. Borgelt were all high on the list.



Theo Merrifield flew this O.S. Max Powered F.A.I. power Lightning 7 into second place at the West Aust. Champs. A fast climbing model that will do better with more power.

PLACEGETTERS

1st Michael Beilby	180.0 seconds
2nd Mal Brunning	160.8 seconds
3rd Theo Merrifield	155.0 seconds

A Junior Chuck Glider event organised by the Midland-Guildford Club after the senior, attracted 14 entries and was won by Pappas Jr. who, to his father's chagrin, scored, better times than his old man in the senior event.

OPEN POWER RATIO MARCH 14TH

That desolate, lonely scene of many a past W.A. Freeflight event over twenty years, Lake Pinjar, was again the site for the Power Ratio event. The reeds were high and the frogs many as a small band of intrepid explorers arrived that Sunday morning. Many a car has been lost out of sight in the reeds, so that is no wonder that the recovery rate is low on this site. This day was no exception, as exactly 50% of the competing models were lost, which must be a new record of sorts.

Doug. Morrison was again unlucky on his first flight, with a 3 minute max. on a 6 second engine run, to have model blown by the stiff breeze into the surrounding bush. He has been unable to locate the model since.

Another likely winner, Michael Beilby, anxious to score well on his last flight, launched into lift, but in error switched his engine timer off. The result was a motor cut at a very great height, a ruined ratio and a lost model (miraculously found a week later).

Doug. Murray, deliberately restricting flight timer to two minutes for the first two flights to aid recovery in the breeze, plugged on steadily, and eventually came out the winner for the fourth time in a row.

Dick Gibbs again showed consistency, and came third with the same model he won a place with last year. He was another of the competitors unlucky enough to lose their model in the course of the day.

Theo. Merrifield, flying his UP-U2 canard, also restricted his first flights to 2 minutes to ensure recovery, and came second.

A Power Scramble event run by the Mercurians' M.A.C. after this event was won by promising, and very keen junior, Barry Carnaby of the same club.



Dick Gibbs with his diesel powered F.A.I. Model. This model placed third last year and third again this year.

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F.A.I. POWER

How to win at the Nats without really trying.

DO YOUR TRYING NOW.

By Ford Lloyd



Dick Gibbs, Sec. Mercurians M.A.C.,
launching for his third flight in F.A.I.
Power.

It is not possible in this or any article to lay down step by step instructions that will guarantee success — luck also plays a part with F/F models, but rather to highlight the main requirements to have a better than average chance of taking off the top prizes.

The main requirement is a consistent and reliable model, one with known and understood characteristics, so that despite weather conditions and other factors, you can be sure of good flight times.

How does one achieve a consistent model? The answer is simple; select a good design and construct it faithfully, use the most powerful engine you can lay your hands on, and then fly, fly, fly until you can adjust the model to suit all conditions. Firstly the Model.

The design requirements call for a minimum motor loading of 10.59 ozs. per c.c. motor displacement and a minimum loading of projected wing and tail areas of 4.55 ozs. per 100 sq. inches, motor capacity ranges from 0 to 25 c.c.

Most models are designed around the current crop of hot 2.5 c.c. glo-motors, but the fabulous Cox 09 can also be used with success as witness Col Stones' F.A.I. win at the last Nats with a stock unpressurized 09 and 7x4 Rev-Up prop.

There have been a great number of F.A.I. power designs published by all the well known modelling magazines, all of which in the right

hands are capable of contest winning performance, it should be noted however, that some designs are "One Off" types that only the creator seems to be able to adjust, other designs go well for everyone, beginner or expert alike, so if this is to be your first attempt at F.A.I. power, select one of the latter.

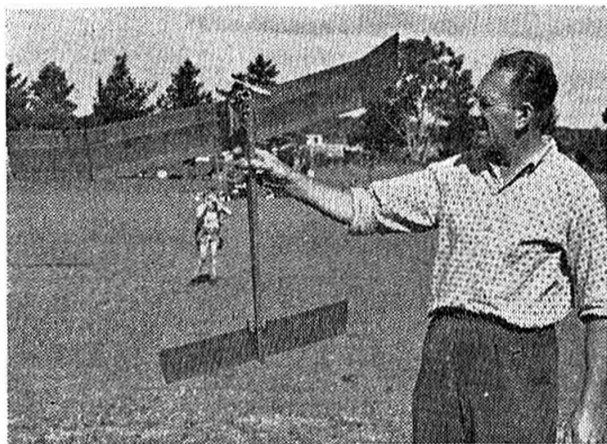
Complicated shapes and constructions should be left to the super-experts. Choose a design that is robust and straight forward and most important, one with a good contest record in many hands, designs that come readily to mind and can be recommended for 2.5 c.c. motors are; Larry Conoven's "Lucky Lindy", which was a joint winner at the 1960 World Champs, and has been a popular design since, particularly in New Zealand. The wing structure features a flat bottom wing section which is easy to build, also a full depth main spar for maximum strength, and a Warren Truss rib arrangement for good warp resistance. Coming closer to home West Australian Doug Murray won the F.A.I. event at the Strathalbyn Nats with a slightly modified "Lucky Lindy", using an underfin instead of top fins for the stabiliser.

Ed. Williams' Texan F.A.I. Ton has also been successful in a number of countries, and Victorian Ron Greaves, using this layout has placed in F.A.I. event at the last four Nationals, the only modification being a normal rib and spar structure, for it was found that the original all sheet wing was prone to crack with heavy D.T. landings.

The A.P.S. Fulteri is another design that can be strongly recommended for it won the World Championship title in 1961, powered with a stock Cox T.D. 15 motor. This is an ideal first model if it's F.A.I. honours you are after, for the structure is simple, and the finished model trims out easily.

If you feel the "High Thrust" layout is the modern trend, the Hustler or Ephemeris flown successfully by Victorian Max Nicol could suit your needs. Probably the ultimate would be Carl Goldberg's F.A.I. Viking which is now available in Australia in a very complete kit form; Using a standard kit model Norm Bell won Open Power and placed 2nd. in F.A.I. at the last Nationals.

One of the simplest and most effective models on the local scene is Pete? ECLIPSE, which has won a number of state events in Victoria, and won F.A.I. for Norm Bell at the Echuca Nats. Originally designed around the O.S. 15 Mk II, this layout can cope with the hottest motors now available, including the Cox Special Mk II and the very powerful Super Tigre G 15. Over 8 ECLIPSES have been made by some of the leading Victorian modellers, and the fact that all have proved reliable and consistent is proof of a well designed and easy to adjust model.



Ford Lloyd one of the most consistent Free Flight men in the country. In this series of articles Ford gives you an insight into what it takes to get to the top.

EDITOR'S NOTES

Plans and construction details of the Lucky Lindy, Texan F.A.I. Ton, and Ephemeris, can be had from;

Hobby Helpers, 1543 Stillwell Ave. NEW YORK. 61 N.Y.

The Palteri is in the Aeromodellers plans service and the Viking plan can be brought from Model Airplane News, 551 Fifth Avenue, NEW YORK 17 N.Y.

Having selected the design of your choice, check carefully all construction details on the plan, and then start selecting the materials. This is an important step on the road to success, for poorly made models have an annoying habit of letting you down at the crucial moment.

Make sure the wood is of the correct hardness to suit the job it has to do, for instance, tough stringy balsa for leading edges, or better still a laminate of say spruce and balsa. Remember the L.E. is usually the first part of the model to hit an obstruction; med. quarter grained for ribs, med. but soft quarter grained for trailing edges, and hard balsa or better still spruce for main spars and other highly stressed parts.

Select the wood with care, straight grained stuff is what we're after, so that no unwanted stresses will be built into the framework that cause unwanted warps later on. If the wood after being cut has a slight bow, or twist, steam well before pinning to the plan to neutralize stresses.

Make sure that all components, particularly wing and stabiliser pieces are accurately cut so that joints can be properly made and glued, preferably with a good grade P.V.A. adhesive; Avoid using too much, for P.V.A. is a synthetic

latex adhesive and does not sand cleanly. Excess cement can be removed with a damp cloth. Nitro Cellulose cement can be used if preferred on balsa to balsa joints, but remember that the familiar Balsa Cements shrink on drying, and on poorly made joints distortion can take place.

Having made up the wing, stabiliser or fuselage it is good policy to leave it pinned to the building board for at least 24 hours, then it can be un-pinned and each joint checked to ensure that it is properly cemented.

When joining up wing panels, sand carefully, all mating faces of spars, leading and trailing edges, then glue together and put aside to dry overnight. Take great care that gussets are carefully fitted and check to ensure that there are no starved joints. Remember we want a durable model so that it can be trimmed to perfection.

Having constructed the wing and stabiliser structure, sand carefully to remove any nibs of cement or high spots, so that the covering will lay smooth and present a clean aerodynamic surface.

The fuselage should be just as carefully constructed as the flying surfaces, and special attention should be given to the engine bearers or mounts, to help absorb the vibration inherent with some of the high powered 2.5 c.c. motors. All hardwood bearers and ply formers should be cemented with P.V.A. or U.F. resin, or best of all, with Epoxy cement. Balsa cement is useless on hardwoods or ply.

It is recommended that the engine bearers be faced with say, 14 gauge Dural, using Araldite adhesive, so that the engine lugs will not pull into the wood and alter the thrust line adjustments, which can be critical on a fast flying model.

To summarise, the whole aim should be to contrast the model so that the bumps and knocks that a well flown model will encounter during it's flying career, does not cause it to fall apart, and what is equally important, once established the trim will not greatly change.

Cover the wing and fuselage with silk for strength and durability. At least 4 to 6 coats of dope will be needed on the wing and fuselage, and 3 to 4 on the stabiliser, after apply transfers to the wing, not forgetting your name and address, give it one coat of Clear Dulux for added protection.

After silking and doping the fuselage to a good finish, at least 2 to 3 coats of a clear or coloured Polyurethane lacquer should be used around the engine bearers, tank and pylon area, as protection against the effects of hot glow fuels; Marine varnish can be recommended for this job, remembering also to allow the finish to harden for a few days before testing the model.

SLOT RACING CLUB FORMATION

By R. McLennan

It is extremely difficult to define when a small group of enthusiasts cease to be just a group and become what is generally termed, a club. Modelling and hobby clubs generally start in a small way, perhaps a group of 4 people meet on occasions to have fun, the group grows, people begin to hear about the hobby, and bingo, suddenly the term club comes into being. Slot Racing enthusiasts are no exception to this general rule. Once the idea of a club is perpetuated troubles seem to begin. I hope that this article will point out some of the pit falls.

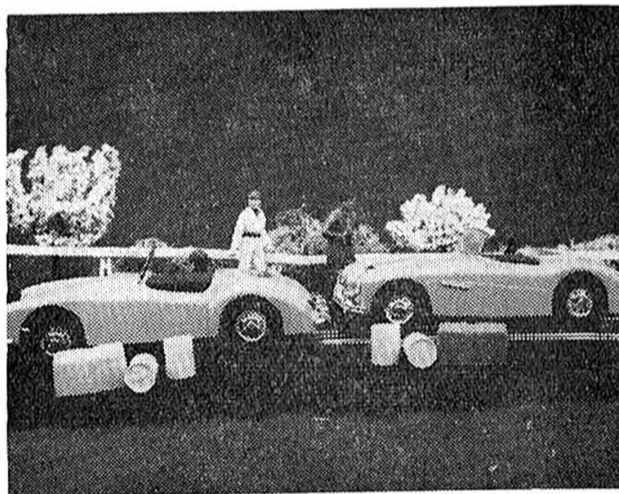
In the past, very few clubs have started with anything more than a home track, usually of the commercial type, laid out in someone's garage or lounge. The South Australian Slot Racing Association has defined a club as a group of six or more enthusiasts, if you've a better one, lets have it. As the numbers grow, organization of club meetings becomes of prime importance, suddenly we just stop "belting" around, we want to devise some system of determining a winner on the night. People begin to use their ingenuity, all sorts of cars, shapes and sizes, begin to appear on the scene, some form of car standards for sizes etc. become evident and a necessity. Perhaps a new member arrives with a brand new model, places it on the circuit and succeeds in going in the reverse direction, a standard of track wiring then becomes necessary. As the numbers grow it becomes all too obvious that automatic lap counters must replace the "bod" who counts each lap on a scrap of paper. In this way we gain peace of mind and some order of sanity at the meeting. Perhaps by now, the 2 lanes you have been running on are not enough, the group turns its thoughts to bigger and better things, aided in some cases by "Mum's" persistent complaints about the carpet being worn out or by the noise. Over a period, things begin to move, people begin to think of office bearers, club names, competitions, car classifications etc. Yes, your troubles are mounting up, perhaps even to the stage where some members begin to lose interest. Other people want to join but you're over-crowded, and so other clubs form and the sport really begins to grow and expand.

I do not intend to go into the details of track wiring, counters etc. in this article, but I will, if our editor will permit me, go into club race organization and standards.

May I suggest that as soon as you can, after the initial thrill of seeing your group grow, make some attempt at formulating rules for the standards of cars, the rules of racing and the rules for competitions within your club. Believe me, you will be a better club if you do.

A club which is forming now (1965) I'm sure is better off, than those that started way back. The commercial market is almost bulging with suitable build-yourself or read-to-race kits. Don't, whatever you do, buy one of each, it's rather expensive, and I feel it far better to concentrate on one or two cars. Play around with them, experiment and thereby gain valuable developmental experience, which will stand you in good stead when you branch out. One word of advice, pay particular attention to your tyres, grind them to form a concentric tyre, either on the car or off the car, but take pity on your motor if you use sand paper and full volts.

You will always find that some one stands out above the rest, his car goes like a rocket, why? One important function of a club and its members should be to pool ideas, by doing this your club racing standards will rise, your races will get closer and in the long run you will benefit.



Most of the States of Australia, now have an Association of clubs, why not try to contact them and thereby keep abreast of what is going on in the way of rules for cars and perhaps open OR inter-club racing. I'm sure these organizations will be pleased to hear from you and will do their best to help you in the standardisation, so necessary in this sport. Please don't take the attitude that your club is the only one that is right, if you happen to be wired incorrectly isn't it better to change yours to the standard, and thereby gain from having visitors in your club.

The subject of race organizations is a difficult one, and one that would fill a whole of this issue of this magazine. I'll try and make

it as short as possible. Once you are on the rails you will find that sports and G.P. type racing will come up and eventually you will need a system of competitions for both. A basic rule for any club is to have pity on the "Competition Secretary" try and make his/her job as easy as possible, keep your system as simple as possible and common them up as much as possible — it is possible! Too many possibilities make a probable, in the long run.

It is important that each member, whether novice or experienced, gain as much racing as can be fitted into your nightly programme. After trying several methods, we found that running on a time basis was preferable to distance racing, since it allows an accurate estimate of your "mid night oil consumption". For general club racing we also found that racing in each lane prevents "hogging" a certain lane. Surely a club champion should be competent in all lanes, not just one or two. In order to stimulate interest in full size racing we adopted a similar points system to the Formula One World Drivers Series i.e. 9 points for a first, 6 points for a second 4 points for third etc. In fact, we actually call our races by their full size names — Belgium G.P., Targa Florio etc. — yes I know what you are thinking.

Our club runs what we call a tournament ladder system based on two minutes racing per lane, with all members grouped in fours — four lane circuit. All members compete against each other, (in their respective groups) points are allocated for each race position, and tallied up at the end of the series. The group winner goes up to the next group, the 4th place getter goes down a group to formulate a new ladder. Two such series give a night's racing for 28 or so members.

One of the greatest difficulties in any club is to cater for the novice who has just joined. We tend to consider the better grade of drivers which in some instances could cause a large turn over of members. We have introduced a "star rating" system involving six stars based on speeds. This has added a lot of interest and caters in a small way for the novice. Every member is trying to gain a higher star rating, the ultimate aim being to reach a "Gold Star".

To round off this discussion, don't be backward in providing trophies for your club events, the size has no bearing, it's the thought, I guess, which counts. Unfortunately, most of the work falls on to the shoulders of one or two people, try to get club spirit within your organization, create and share out the jobs to as many members as possible, a lot of helping hands is better than just the one or two. May I wish you all good racing and an easy time in Slot Racing Club Formation. —

Coming:—"Track building and its effects on a club".

BALSA

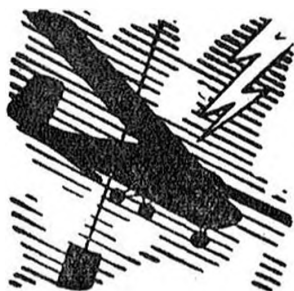


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Radio Notes



Hinode Multi 10 Channel Superhet report by leading Victorian radio flier — Mr. Gerry Enery.

"Late last year news of the forthcoming HINODE MULTI outfit prompted John Pfeifer and Tony Cincotta of The Model Dockyard to contact me and ask if I would test the new equipment out when it arrived here in Melbourne. I agreed and, consequently, when their new Test Unit arrived last month — John was on my doorstep, proudly he displayed the new unit. We adjourned to the workshop where I was completing my new "Cosmic Wind", "Little Toni" was the first Goodyear Racer I had attempted, and I was most anxious to complete her and Flight Test — but a promise is a promise, so I put her away to concentrate on testing the HINODE SUPERHET.

The next couple of evenings spent wiring up the Test Unit and the MS-100 Servos and I installed the Gear into a modified "Tauri".

TRANSMITTER CT-110: Basically this follows the generalised set-up of the majority of Ten Channel Transmitters, but with a marked resemblance to the ORBIT outfit. Incorporating five switches — On/off switch and Meter function — the T/x features all Transistorised Circuits and incorporates good components. T/x output is excellent and well in excess of normal requirements, as evident in one test for range I did, when the "Tauri" was about 500 feet up, I pushed the Antenna back into the T/x and applied simultaneous to spin her — sure enough, the model went into a spin immediately — Range and Output: excellent.

RECEIVER CR-110: Fully Transistorised circuitry incorporating a Push-Pull amplifying stage in the output system — positive action of the reed-bank and simultaneous operation of any combination of Reeds — in two groups:— Channels 1 to 4 and Channels 5 to 10.

For the technical minded, specifications for both the Transmitter and receiver are as follows:—

TRANSMITTER		CT110.
TRANSISTORS		10.
POWER SUPPLY		12.OV. either pencils or Nickel Cadmium.
CURRENT CONSUMPTION		40-50 MA Carrier rising to 70-80 MA on Signal.
SIGNAL FREQUENCY		300-600 C/s.
WORKING TEMPERATURE RANGE		-10c — +50c.
RECEIVER — CR-110:		
SUPERHETERODYNE	RELAYLESS:	
TRANSISTORS		8
POWER SUPPLY		6.OV Pencils or Nicads.
CURRENT CONSUMPTION		6MA to 50-70MA on Signal.
MATCHED SERVO		HINODE MS-100.
WORKING TEMPERATURE RANGE		-10c — +50c.

The new Hinode Multi Servo MS-100 is an extremely powerful servo suitable for any type of installation — output is by the wheel type — which allows easy alteration to the opposite throw position. Thrust is enormous — at least 5lbs of usable thrust was checked out — easily the most powerful servo I've seen so far. Installation in a model is easy, Trim set-up is simple, too, with this wheel type output.

MS-100 SERVO:

- * With Transistor Amplifier for Relayless operation.
- * Dimensions Length 74mm, width 28 mm, Height 48 mm.
- * Weight 85 grams.
- * Voltage 2x(3.0 — 4.5 volts).
- * Movement 7.8mm (5/16") each way.
- * Current Drain 90 MA — stalled — 220MA.
- * Thrust 5lbs.

SERVO can be made Trimmable simply by disconnecting two wires — Bias Battery required.

After considerable flights, I was highly impressed with the HINODE MULTI system — no vices whatsoever, ample range, and power output, even when the voltage of the Transmitter showed 10.02V.

I'm sure that the introduction of this NEW HINODE Multi Superhet will find ample followers on the Radio Control Market.

For those that have already their Multi installation and are looking for extra servos — one just couldn't go past the new HINODE MS-100 Multi Servo — I can really recommend it".

A meeting to discuss the formation of the Radio Control Sub-Committee will be held at John Marquette's office, first floor, 1001 Pacific Highway, Pymble (opp. Hotel) at 8 p.m. on 23rd. July, 1965. All modellers interested in R/C. welcome.

Fit an R.F. Monitor to Your TX from R.C.S.

It is always a tremendous help to know your transmitter is radiating R.F. when switched on, and that modulation is taking place when a key is depressed. The simplest way to achieve this is to fit an R.F. monitor into the transmitter.

This is quite easy to achieve; no special equipment is needed for setting up.

The circuit is shown in Fig. 1 and is simple in the extreme. Note that the meter is not earthed directly.

The resistance R.I. is chosen so that the meter reads nearly full-scale when the transmitter has new batteries fitted and the aerial fully extended. This reading will then fall off as the battery voltage reduces, or drop sharply by about 50% when a key is depressed, if the transmitter has switched (as opposed to transformer-coupled) modulation. A resistor of 15 or 22 K Ω is usually adequate if the meter is a 200 microamp. R.C.S. type. If less than 10K is required then you do not need an R.F. meter, you need a transmitter.

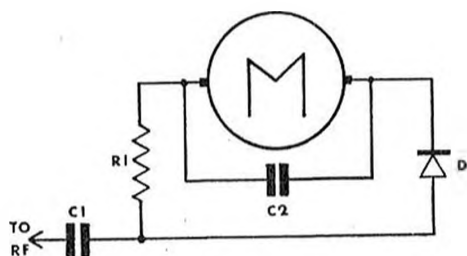


Fig. 1

The wiring is important and should be made as compact as possible; the sketch in Fig. 2 shows an ideal arrangement.

The meter should be interpreted as follows: It takes its drive by bleeding a little R.F. from the aerial. Therefore, its reading will be dependent on the radiation efficiency of the aerial. This is usually itself dependent on the position of the aerial and transmitter. If the aerial is retracted and the transmitter standing free on a surface then the radiation is likely to be poor and the meter may show a fairly high reading. With the aerial extended the meter reading should fall slightly.

But when the transmitter case is firmly grasped in the hands, with the aerial retracted, no marked change will occur, but with the aerial extended and the case held the reading will fall slightly.

Since R.F. output is very much dependent on the battery voltage, the meter reading will vary in proportion to that voltage. One quickly develops a knack for judging the state of the batteries by observation of the meter indication.

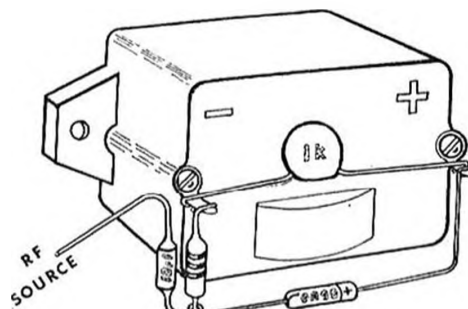
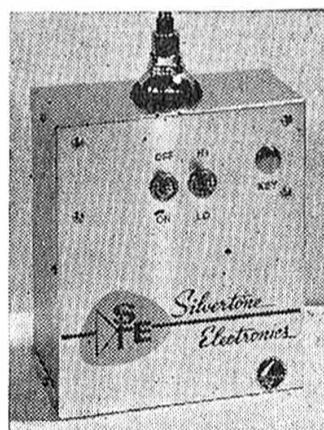


Fig. 2.

PARTS LIST FOR RF MONITOR

M — R.C.S. 200 or 400 Microammeter
D — 0A90
C.I. — 10pF
C.2. — 1,000pF
R.I. — 10-33K



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27 M/Cs, £22/5/- — 40 M/Cs, £23/5/-

SINGLE CHANNEL RX

TUBE FRONT END ensures reliable operation over a wide range of temperatures. Transistorised audio amp. for low current drain. Rock stable. Needs very little tuning. Relay suppressed for operation of motorised escapement. Out of sight range. This is the gear that placed 1st and 3rd at the 1963 Australian Nationals.

27 M/Cs, £13/16/- — 40 M/Cs, £15/15/-

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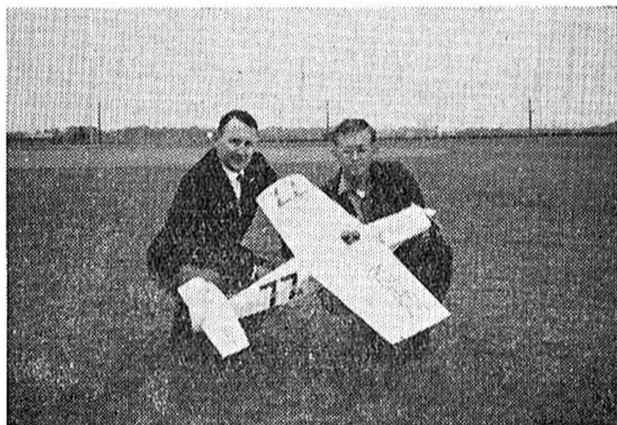
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AUSTRALIAN MODELLERS IN JAPAN

From reports reaching us from two noted Australian modellers recently returned from overseas it seems that Japan in April, is becoming a meeting place for some of the World's top radio flyers.

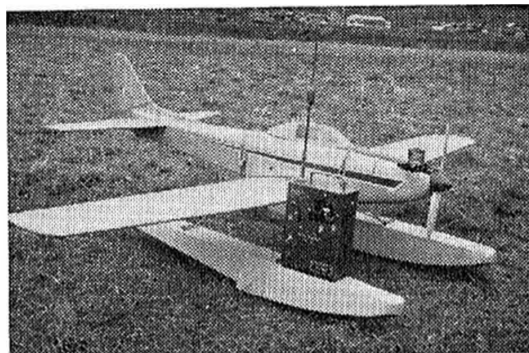
This year, Jerry Nelson and Bob Dunham, made the journey from U.S.A., with Johnny Brodbeck of K & B, who organizes the judging of the United States Pacific Air Forces Model Aeroplane Championships, held in Tokyo each year. Keith Hearn on route to Hong Kong to meet his family, and commence a World trip, and Tony Farnan, who was in Japan at the time on business, joined forces to have a real International modellers meeting, one Sunday at Tokorozawa U.S. Army Base just outside Tokyo. Last year at the same time, Tony Farnan met Ed. Kazmirsky, and saw him fly his then new series Taurus.

Other well known American modellers who have gone to Japan for approx. 10 days as judges, include Pappy De Bolt Keith Storey and Bill Weaver.



Jerry Nelson well known American R/C expert and Tony Farnan. Jerry and Bob Dunham were flown over to Japan to judge the American Pacific Air Force Model Championships.

This year, Jerry Nelson took his well known Bonzo Goodyear Racer and according to Keith and Tony, put on a fantastic display of high speed flying. This included eight point rolls and inverted flying, with a model which has a flat bottom wing section! Highlight of the meeting, which incidentally took place several days after the Armed Forces - competitions finished, was the polished and precision flying of Bob Dunham, who must be rated as possibly the World's No. 1 Multi Pilot. Bob no longer bothers to enter the competitions after winning the American Nationals some years back, but his tremendous skill is obvious, and as chief of the Orbit Organization, he can certainly demonstrate proportional single stick flying to perfection.



Mr. Mitsumi's elegant Sea Plane the R/C gear is the new OS Single Stick Proportional.

Yuji Oki one of Japan's top multi flyers flew his original design fibre glass fuselage model, through exciting manoeuvres, including instant inverted from a half loop on take off. Oki incidentally holds the Japanese spin record of 121 complete spins in the one attempt from a great height, using binoculars. We believe the unofficial World Record is now 142 spins, done in Pennsylvania U.S.A.

The American Colonel 'in charge' of the Tokorozawa Army Base, had some time ago granted land within his base to the "Japanese" Modellers, and laid down a special asphalt strip, also constructed a Club House on the site.

It was obvious from the high regard the Japanese modellers had for this American, that he had created a tremendous impression, and really "cemented" friendships in a very practical way.

Before reaching Tokyo and on another week-end, Keith Hearn and Tony Farnan, had visited the O.S. Factory in Osaka where it was found that a new three storey extension, had been added to the Radio Control Section. The O.S. Factory, is now the World's largest producer of Model Engines and Radio Control Equipment combined; and Keith Hearn, who subsequently visited all the Japanese model firms of any note, reports that the O.S. Plant was by far the most impressive and best equipped.

The two Australian visitors were guests of the Mount Hei R/C Club on the Sunday in Osaka, after being driven the 70 miles to the flying site at Lake Biwa by Mr. Ogawa in his German built Ford Taunus. Modellers present at this meeting, included Mr. Yasuo Matsumoto who has won the Japanese Multi Nationals for the past two successive years, as well as taking off the separate "float plane" title.

Mr. Matsumoto was flying a beautiful original design model, similar to a Taurus and powered by the new Max .58 R/C Engine with O.S.

Superhet 12 Channel gear. Like most of the Japanese models, his plane was equiped with a silencer.

After spending the Sunday morning at the field close to the lake, the entire club moved to the edge of lake Biwa, where Oh Ogawa had built a Dormitory Club House. This imposing three storey Chalet type building, was for the convenience of modellers who drove up on Saturdays and wanted to stay the night, to continue flying Sunday. It had sleeping accommodation for thirty enthusiasts, provided they did not mind sleeping in their natural surroundings on the floor!

Operations in the afternoon, included the viewing of some magnificent launches up to 5 ft. in length, and powered by 30 c.c. and 50 c.c. water cooled boat engines, with recoil starters. Both Keith and Tony reported that the highlight was the flying of the various seaplanes, and they have taken movies of these events with the promise, that clubs may have the loan of them in Australia. Tony Farnan flew two floatplanes and commented that this was a tremendous experience. It must have been quite a strain on the Japanese owners of the planes too, not knowing if their models were going to be buried, or in that case—drowned.

The most interesting gear being used by the club members, was the new O.S. Multi Single Stick Analog Proportional Equipment.



Mr. Ogawa, of O.S., showing his new Multi Proportional Equipment to Keith Hearn.

As can be seen from the photos, this is really impressive gear, and Tony who flew with it, reported exceptionally smooth control. Details to hand with this report, state that the design and development has been completed for some time, and recent tests have covered exhaustive flight checks, combined with various transmitter case layout designs, for ease of operation. The equipment is superhet on five bands with "fail-safe" system, where all controls go to neutral, and the engine drops to idle.

An extra R.F. amplifier stage has been designed into the receiver, more than comparative American Sets, to give extremely high selectivity and particularly complete resistance to outside noise. The receiver operates off 5 volts and the transmitter 10 volts.

Tests in the technical development section of the O.S. factory have subjected the gear to —15 degrees F and up to plus 140 degrees F. with perfect results. The transmitter is reported to have outstanding power output giving exceptional range, and all controls are simultaneous. From what Keith Hearn could see, the performance of the gear in the air lived up to all claims; and of particular interest were the O.S. proportional Servos, which had been developed especially for the equipment, and used strangely enough, a German Electric motor.

Also present and in unexpected use, was a new O.S. Single Channel Superhet Proportional Outfit, with proportional rudder control and trimmable motor. All this equipment will reach Australia in 1965; and already another new outfit; the O.S. Superhet Single Channel Transmitter and Receiver has reached this Country, with the new single channel electric escapements.

The members of the Mt. Hei Club were typical of modellers throughout Japan, where Radio Control Flying is progressing rapidly. They produced some very fine models, and the light weight of their planes, could perhaps have been attributed to the unusual method of covering the wings — tissue first, then silk — giving a really tough finish, requiring less dope.

Also of interest was the amount of foreign equipment seen in Tokyo and Osaka, evidently introduced by the American experts visiting over recent years. Keith Hearn noted that whilst 80% of the radio equipment was O.S. Superhet, 10% was surprisingly Orbit, with the other 10% spilt into individual other brands. Similarly motors in this better-than-average modeller class, showed that a small percentage of Super Tigres, Vecos and Mercos had joined their Japanese contemporaries.

With Japan only 13 hours flying time from Sydney, we might one day, see some of these Japanese modellers with their "international" models, competing in Australia!

CONTROL LINE

July 25th, Combat; 2.5 Combat; Scale; — Deagon.

August 8th Snr. Stunt; Jnr. Stunt; Novice Stunt; (under 14 years — up to 2.5 c.c.) Speed, F.A.I., II & III. — Petrie Paper Mills (APM).

August 22nd Team Race — F.A.I., Half A & B; Team Race — C — Petrie Paper Mills (APM).

Sept. 5th, Proto — A & B; Rat Race — Classes A & B (to Queensland Rules) — Petrie Paper Mills (APM).

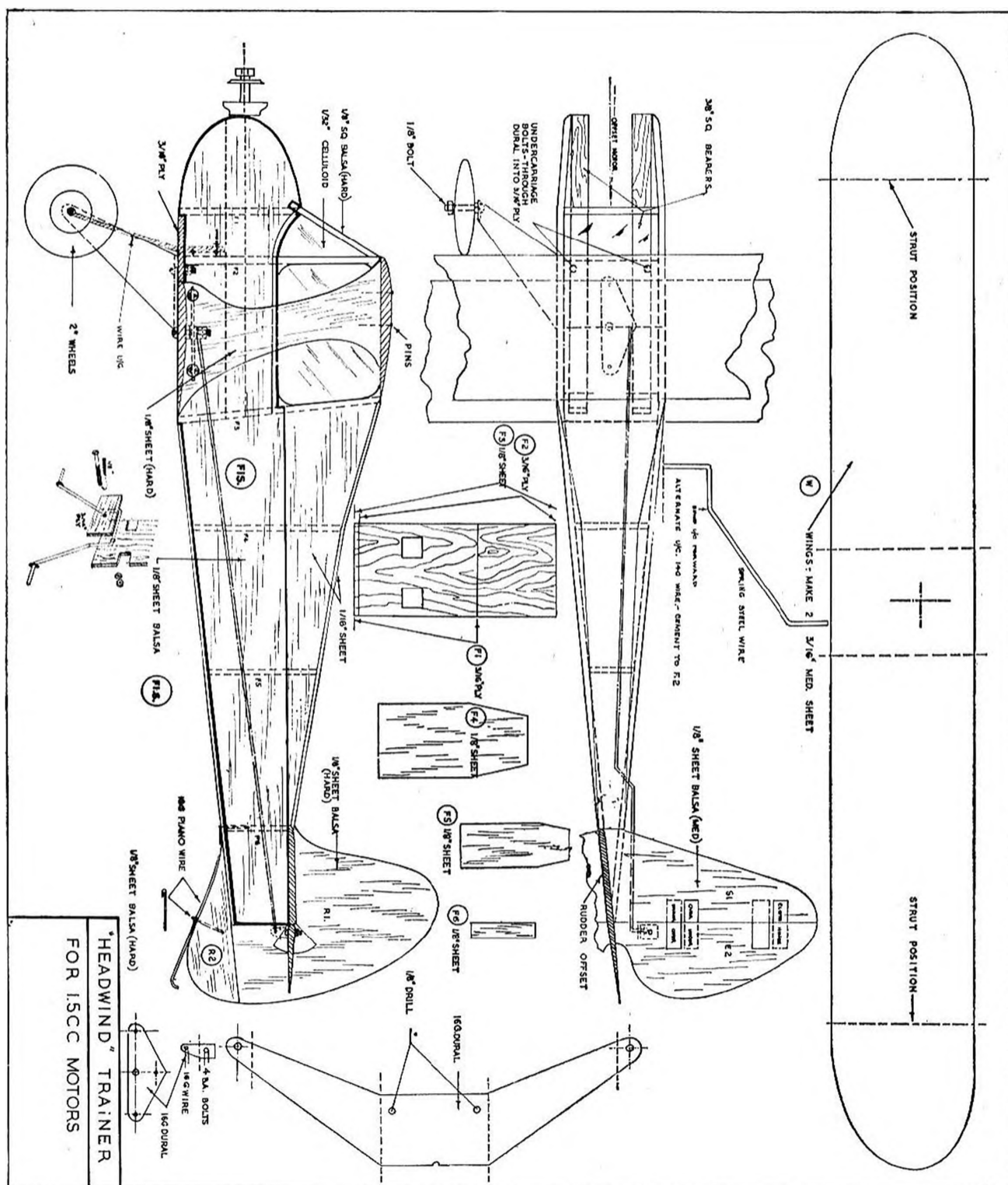
Prizes presentation B.P. Australia, 5th Floor M.L.C. Building, Adelaide & Edward Streets, Brisbane on Friday 24th September 1965.

RULES CHANGES:

Combat: 4 mins. flight. Undercarriage optional on all models. 2 models permitted provided processed together. Models must be clearly marked with M.A.A.Q. Number at time of processing.

Radio Scale: As per Scale rules. Any type radio. Qual. flight 1 min. Normal pattern.

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TRADE TALK

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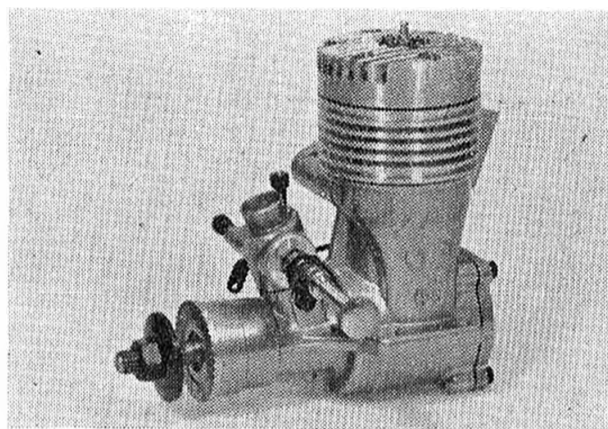
O.S.

For shopkeepers who did not know and Beginners who will be delighted, the O.S. PET 11c.c. ENGINE, which is the top selling motor in the O.S. Range, is retailing this year for the new reduced price of 59/6. This engine has proved itself over the years as a really reliable glo motor, and long wearing features not found in any similar engines, include a bronze bushed conrod.

Peter Chin has just reported that his test of the new MAX .40 R/C ENGINE selling at £13/9/6, shows this engine delivers the outstanding power of over .70 B.H.P. at 13,500 R.P.M. on a 10x6 propeller with perfect idling response.

He claims this to be an ideal goodyear racer motor which will take some equalling. Like all the new O.S. R/C engines it has a thick leaded steel drop-in liner and heavily counter-balanced crankshaft, giving exceptionally smooth vibration-free running.

The Editor will publish in **TRADE TALK** details of new products, services, accessories and any information concerning the Model Trade. The necessary information for inclusion in the next issue should reach Model News as soon as possible after the appearance of this edition.



The new O.S. MAX. R/C 58.

O.S. DISTRIBUTORS have just received stocks of the new MAX .58 R/C ENGINE.

This will retail at £16/9/6, and represents exceptional value at this price for a 10 c.c. type ring engine. Features include crankshaft supported by front needle roller bearings and rear ball bearings, the outstanding long wearing feature of a gudgeon pin the same diameter as the crank pin, two oil holes in conrod bearings and enormous internal piston shoulders for added support and long wear. This engine is the same weight as the Max .50 and fits the same bearer holes.

With the boom in radio flying, these Multi-Speed Engines have been specially developed for perfect idling, maximum fuel draw, high power and vibration free running.

The new Max .58 R/C Special is an improvement on the popular Max .50 R/C, and has a newly designed alloy piston with rings, with extra large gudgeon pin and matching lightweight conrod, with a large "little end" featuring two oil holes. The piston inside the gudgeon pin holes has specially built up "shoulders".

With modern 10 c.c. type R/C engines, O.S. regard design for long wearing as most important, as nowadays R/C engines secure far more non-stop use than ever before. The Max .58 also features a heavily counter-balanced shaft, supported at the front by needle roller bearings and at the rear by high speed ball bearings.

CLUB NOTES



1/4 scale Tri Pacer powered with .59 Fox motor. The radio gear is 12 channel Simul and is home built. Steerable nose wheel and brakes. Built and flown by Noel Phillips and Jim Hesliheen.

VICTORIAN TEAM RACE CHAMPIONSHIPS

The Victorian State Champs. TR events were flown over Easter this year at Warrnambool on Victoria's South West Coast. With a constant gale and frequent rain squalls blowing in straight off the sea, reliability rather than speed was the essential factor, and performances were not particularly brilliant.

Finalists in F.A.I. turned out to be;

1. Lawson-Sinclair. Eta II; 2. Wilson-James, Mod. Oliver; 3. Bertina-Kidd, Edmonds Eta III; most of whom are better known in class 2 circles. Geoff Lawson and Graham Sinclair's time in heats was 4:58, the first time a Victorian had bettered five minutes for 10 km. In the 200 lap final the positions were reversed with Bertina-Kidd's 50 lapper Startiger first, one quarter-lap ahead of Lawson-Sinclair. Wilson-James ran into the circle.

Pilots were quite unable to land their models where they wanted them because of the wind, making it a familiar sight to see pit men dashing from one side to the other.

The Class 2 race was flown with silencers, which have been compulsory on all big engines in this State since the beginning of the year.

Hans Bertina and David Kidd with Tony Fry tagging along as battery boy had no trouble winning this event as well, using an Eta 29 powered own design model similar to the one with which they established the time 6:23 record on the same ground exactly 12 months ago.

The day after the State champs, another series of races was held for the Western Districts Titles. Same place, same weather, same winners. Lawson-Sinclair has had enough of the weather in fact, and withdrew from F.A.I., so the finalists also included Van Meurs-Bee, Oliver. Wilson-James had a nice solo run in one of the heats to record 4:57, and B-K managed 5:20, their best 10 km. time to date.

Wilson-James built up a fair lead in the final again, until they ran in again, leaving B-K in a winning position with Van Meurs-Bee remarkably short laps. Tuning the Olivers seemed to be a problem, incidentally, as they were both burping and spluttering even at their fastest. Time for the 200 laps was a slow 11:58 of which no one was very proud.

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9th Eastern Districts Championships

Sunday, 19th Sept.: Team racing 1/2 A, F.A.I. B Class and magazine scale

Sunday, 26th Sept.: 2.5 Junior Combat, open Combat up to .40 c.c. and also open 2.5

Sunday, 10th Oct.: Stunt and Speed Classes:—F.A.I. Class 2, Class 3, Proto Classes 1 & 2

Entry forms available shortly

SPEED DAY, JULY 11th

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For further information contact the SECRETARY,
Tony Hill, Esq., Sydney Telephone No. 74 5538

Eastern Districts M.A.C.

Held at Centennial Park, Sydney.

Weather was warm and calm in the morning, but blew up like a gale and cold in the afternoon. But all the "fellas" were in good spirit and enjoying themselves. We were up against a strong contingent from the Ryde Club who made a good mark on the results, but Eastern Districts aim to get revenge in a future visit to the Ryde Club.

There were four contests namely; 1/2 A Team Race, F.A.I. Team Race, Australia Class Combat, and F.A.I. 2.5 Combat. Team Race was flown in the morning and Combat after lunch, and that Combat was hectic, one had to fight wind and opponent.

Mr. L. Brown, our President, turned up with no models, so we decided he would run all the contests, and he did a good job too. Contest started at 11.00 a.m. and did not finish until 5.09 p.m.

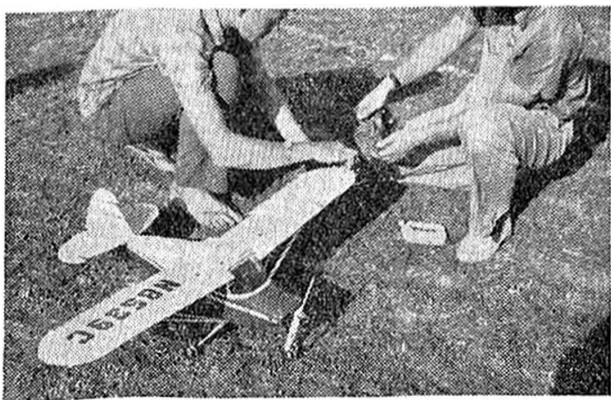
The surprise of the day was the support in F.A.I. Combat 2.5 c.c. where there were 9 entries after only a short notice of running it. But our Club is trying hard to establish this class for a variety of advantages. Anyway to get on with the results;

F.A.I. TEAM RACE: 1st. S. Sherlock, Ryde, 2nd. B. East, East Dist.

1/2 A TEAM RACE: 1st. B. East, East Dist. 2nd. B. Smith, Ryde. 3rd. P. Watts, Ryde.

AUST. CLASS COMBAT: 1st. S. Sherlock, Ryde. 2nd. W. Willing, Ryde.

F.A.I. COMBAT 2.5 c.c.: 1st. I. Ross, Ryde 2nd. J. McKellow, East Dist.



The Chassis of the Lotus which set the World Record for 24 hours described in our last issue.

NEWS FROM STARDUSTERS MODEL AERO CLUB

Sunday, 14th March, saw the S.M.A.C.'s Open Contest, sanctioned by the M.A.A.Q., staged at S.M.A.C.'s field at Keperra, Brisbane.

Many thanks to all members who helped in the Working B. on the Saturday before the contest.

Unfortunately the entries were poor, but this did not spoil the enthusiasm of the competitors.

The first event on the card was an attempt on the existing Queensland Speed Record. J. French, S.M.A.C., used the same model he used in the 1964 Nats in Melbourne in C. Class speed — a Macoy 60, and set a new record of 13.8 seconds. Fred Dotti, S.M.A.C., also flew in 'C.' Class but unfortunately had motor trouble and could not make an official flight. The best flight of the day was put up by B. Stanbury, B.A.R.C.S., in B. Class speed. Brian had his motor really singing and put in a very good time of 13.1 seconds. In B. Class proto Bob Neilsen put in a good time of 32 seconds, but he just couldn't get the most of his Super Tigre, as he did when he took first place in the 1964 Nats.

Rat Race, Class I and II

This was the first time that an official Rat Race was held in Brisbane, and naturally everyone had a go. Eddy Masters' Model, correctly named the "Flying Tanker", flew really well — considering the fuselage was 80% tank. Bob Neilsen scooped the pool, winning Class I and II Rat Race.

Did you hear about the ardent free flyer who finally took up Control Line and surprised everyone by flying solo after only one flight (aided) and one crash? The person in question is Ralph McKellar. It's good to see members trying their hand at other events.

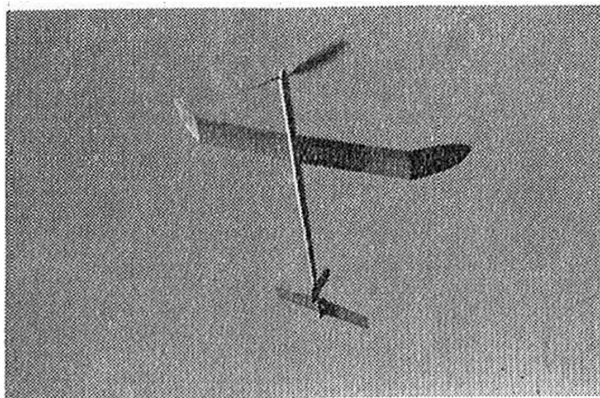
Scale has flourished in S.M.A.C. Bob Neilsen has a D.C. 3 on the building board. The writer has a half finished C/L Southern Cross, but is stuck for one item. Can anyone supply a 1/16 scale W.C.? New member, Ron Magee, has finished an Invader — a beauty!

Good to see new members rolling in five at least in the last two months. Keep up the good work members.

Happy landing
D. G. McKellar

STUNT MASTERS

During April various members of the club flew at two charity demos and a club picnic day in conjunction with the boys down South Gippsland. Nothing startling can be reported from any of the turnouts as the picnic day was marred by the heaviest rain of the year which really put a damper (no pun meant) on the proceedings. Both demos were very poorly supported. Two turned up to fly at the one at Nunawading and at Springvale only three turned up though in this instance that wasn't such a bad thing



Les Fahey's Wakefield model just launched on its third flight. Les is Australian Wakefield Champion.

on the face of it. The crowd control was non-existent and after two flights it was decided to pack up and go. There is a difference between showmanship and suicide and it was a miracle no kids were hit by models. We have never seen such a stampede of excited kids they were disappointed at us going on strike, so were we, but it gave a lesson that we should supply our own ropes and stakes as many a time the organizers of turn outs that request model planes as an attraction fail to provide enough safety precautions.

John Elliot, one of our best and most active members has now been lost to the ranks as a flier. He has completely sold out his modelling gear, even to the tin of pins, and gone in for slot racing in a big way. We hope he will still take an interest in the administrative and the judging side of things. Brian Birch hasn't been seen since the Nationals. We hear he is too busy working around the house he's just moved into with his new bride. All the best from our readers Brian and Terri. We must have the youngest junior member on record. Derry Brown (our N.S.W. rep) has a brand new son that he swears was born with a control line handle in his mitt! We hear Monty Tyrrell is making a hot little flaps only trainer powered with a wen Mac and rumour has it he intends to have his son flying solo before the said nipper's second birthday! That's the way. Get 'em young and train 'em. Wonder what Darryl Hartshorne intends doing with his brand new 'enfant? The way things are going lately it seems the club is growing by natural increases rather than migration.

(Continued from Page 5)

ation is just too small for so many different contests held over such a large area.

We like to see juniors encouraged, but juniors in the Nats are a big joke too. Look at the entries in junior events over the years. Scrub the events for juniors, fly them in the open events, and carefully earmark their performance and it will work out a junior with

four fifth places in an open series of contests is more entitled to the junior Champ. of Champs than the kid who won Junior Stunt. The records show that the junior stunt winner invariably seems to win the bigger pot.

In Melbourne the club should be scrapped. Some clubs that have only fifteen members could have fifteen different modelling interests, Who do they talk to at meetings? They bore each other at trying to keep their own views to the forefront. Most are apathetic apologies for model aeroplane clubs. Melbourne has the MARCS. Melbourne should also have a bigger stunt-scale group, a big speed group and a big free flight group. Four strong groups should accomplish more than scattered small clubs. the administration side would be easier and less top heavy and single strong forces should accomplish more than has been accomplished in the last few years. All the control line fliers in just one or two groups could possibly appropriate funds to getting their own ground by purchase or lease and to hell with perpetual flying around problem. Run it like the slot racing clubs. A fee for the period of fun to wayland expenses. It's significant that some of the slot racing clubs are thinking of closing their membership. There must be a lot of potential aeromodellers in those hobbyists. O.K.! Such and such control line group may get to the same stage so those clamouring to get in on it have to get their own ground. It must in the long run benefit all.

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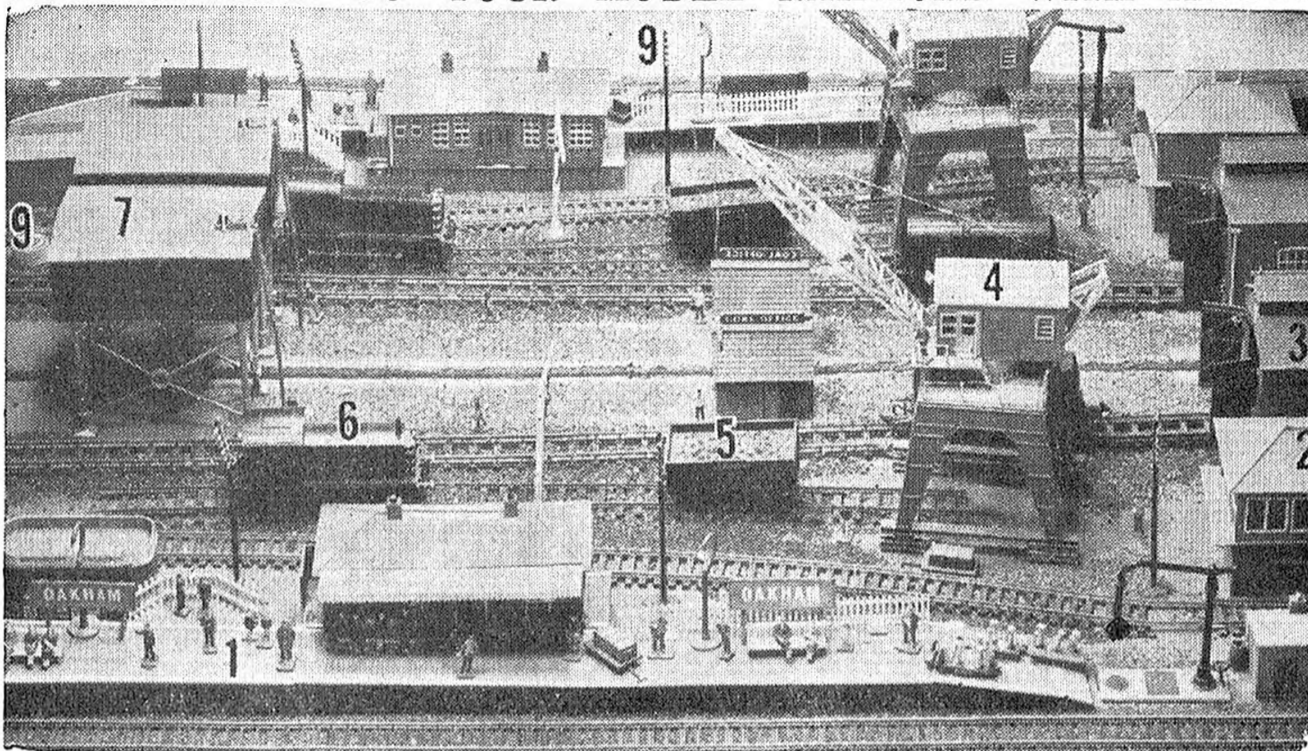
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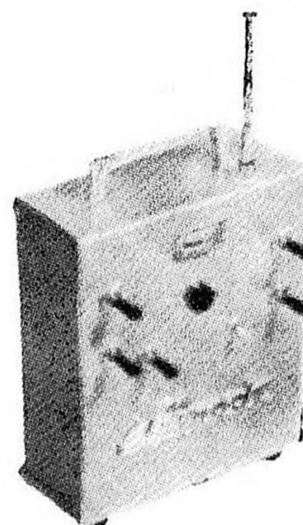


Henry
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HENRY HINODE SAYS— HINODE . . . IT'S MIGHTY!

HINODE

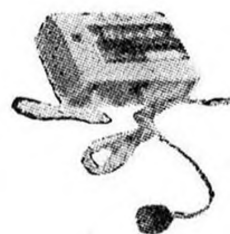
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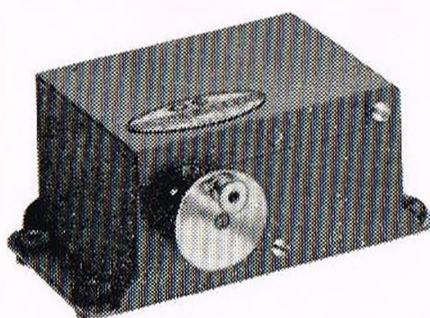
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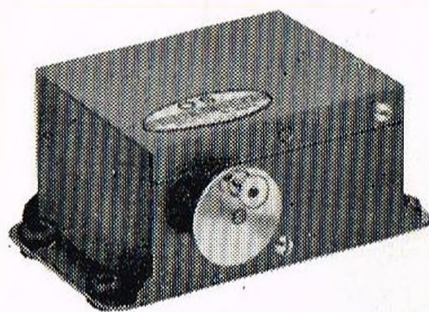
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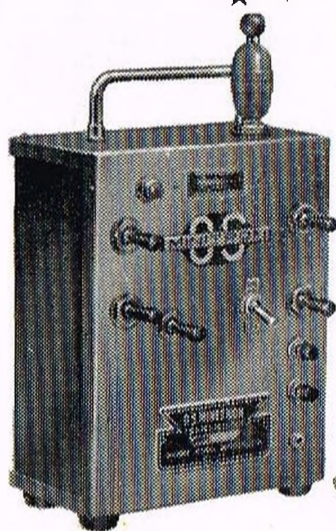
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