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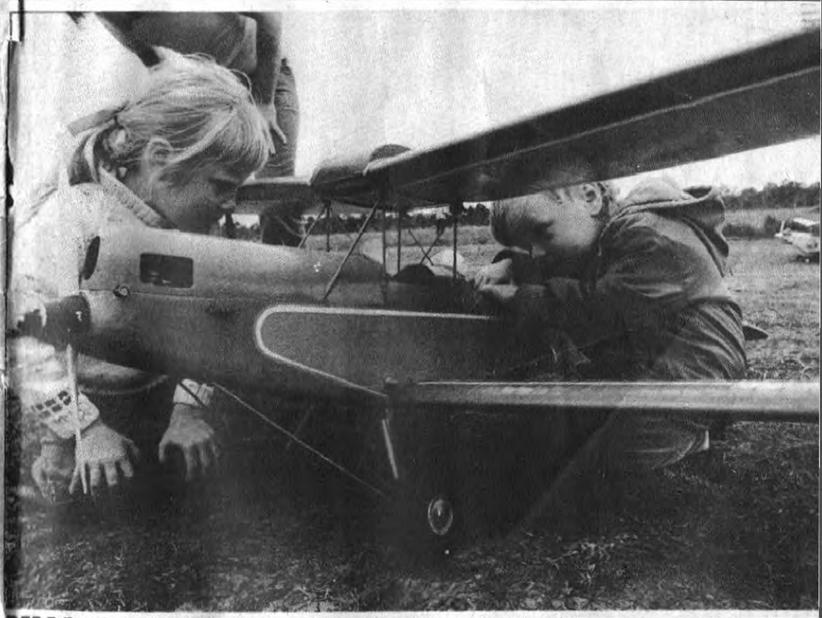
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VOL1, NO11 NOFFICIAL ORGAN OF THE MODEL BOAT CLUB OF NSW

NOVEMBER 1974



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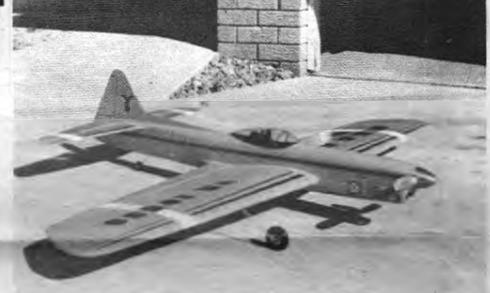
VOL.1 No. 11 (Nos. 8,9,10 DELETED)

NOVEMBER 1974

AUSTRALIAN WININTRANS TASMAN



Left: Warren Williams, Winne of Cil. serobetics, Ray Ogle and Reg Towell, the Australian agrobatics team, Photo: W. Williams.



Above: The winning aerobatic model, Warren Williams' recovered and repainted of reliable, Garb of contestants (left) and below) is indicative of chilly temperatures during contact, Photo' W. Williams,

EXTRACT FROM **NEW ZEALAND NEWSLETTER**

TRANS TASMAN CHALLENGE

One down and two to go! The first of the 1974 Trans Tasman series is now history with the Australians taking home the Kampot Challenge Trophy, Despite rather miserable weather the competition was a convincing success and was enjoyed by all who particapated.

The predictions of 'Jeremyers' that the New Zealand team would be whitewashed by the more experienced Australians were unfounded. The polish of the Aussie Stunt flyers made them convincing winners in this event but Speed went to the local boys and Team Race was a close go with the visitors taking the event by a margin of only 8.3 secs. Speed was a rather unsutasfactory event for both sides as motors refused to perform in the cold conditions but standards in both Aerobatics and Team Race were excellent.

There is no doubt that this Trans Tasman first will stimulate control-line competition in this country.

The success of the meeting must give the Katapoi Club a great deal of satisfaction. After nursing the concept along from the outset they produced that combination of organisational efficiency and unsurpassed hospitality which is the hallmark of this club, the members of which work together.

1ST TRANS TASMAN CONTROL LINE CHALLENGE

The first control line Trans Tasman challenge was initiated and hosted by the Kaipoi Club on Saturday 27th and Sunday 28th July 1974 at Kaipoi, New Zealand. The events held were FAI Speed, FAI Team Race and FAI Aerowith 3 official team members

TEAMS

Aust, Team Manager: W. Williams N.Z. Team Manager: Bill Forbes

AUSTRALIA FAI Aerobatics

NEW ZEALAND

- 1. Reg Towell
- 1. Peter Wheeler
- 2. Warren Williams 2. Bruce Turner
- 3. Ray Ogle
- 3. Allan Lawrence

FAI SPEED

- 1. Merv Bell 2 Jeff Potter
- 1. Harvey Westland
- 3. Jack Finnerhan (proxy flown)
- 2. Phil Staples 3. Rhys Jones

FAI Team Race

- 1. Oddy/Reichardt
 2. O'Brien/Bell
 3. Potter/White
 4. Turner/Westland
 2. Chrystal Staples
 3. Long Healey

Upon arrival at Christchurch Airport the Australian team was greeted by dozens of cheerful faces peering through the customs windows. Although the weather was cold and wet the welcome one of the warmest one could wish

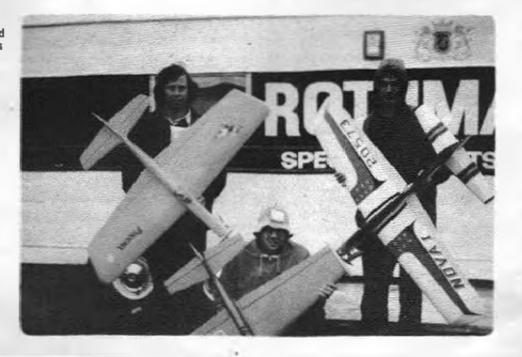
All arrangements were taken care of by the Kaiapoi Club including a greeting and free drinks with the Airport manager and having courtesy cars provided for us over the weekend by Rothmans who helped sponsor the

Due to heavy rain in New Zealand the site had been changed to the Kaiapoi School grounds at the club's field was partially covered with water. The site was beautifully prepared with four very flat circles, one for each

event with one for practice. Friday 26 was set down for prac-



Australian and New Zealand team members in front of the huge Rothmans' special events Photo: Warren Williams,



Editorial

GUEST EDITORIAL OBITUARY

RON KING --- An appreciation By Keith Hudson



Above: A smilling Ron King with his wife Shirley and children, Paul, now 11, and Gail, now ten. Ron worked from his bed for nine years, Some businessmen he contacted were unaware of his disability.

RON KING

With the quiet passing on August 16 of Ronald Frederick King at the age of forty, Australian modelling has suffered an inestimable loss. Ever since the 1948 Nationals at Bankstown Aerodrome I have had a picture in my mind of a smiling, always running 15 year old. We saw each other less often over the following years and he studied to become an Electrical Engineer, then, as with most of us, models were set aside when he married in 1960. He and Shirley built their home, and, in time, had two wonderful children, Paul, now 11, and Gail, now 10.

In 1965, this family circle was dealt a sudden severe blow. Ron was stricker, with poliomyelitis. That morning, Ron received the diligent attention of a new, relieving doctor on his very first case. This doctor applied artificial respiration whils! Ron was taken, first to one hospital, then another, 15 miles distant, where special equipment was available. Because of the vast preventative vaccine campaign, very few cases of polio were occurring, and the very comprehensive facilities were fully applied to Ron

Initially Ron was paralysed right up to his eyebrows, but therapy and medical science restored facial muscle movements and vital speech. For the next nine years, Ron lay completely immobile and totally dependent on a respirator.

At an early stage, Ron and Shuley startled the doctors by planning his return home. Shuley received special training, the doctors set out requirements and Ron planned and Shuley directed the addition to their home of a large room with a specially equipped hathroom. Ramps were built outside the house and the station wagon modified so Shirley could take Ron out.

Many organizations assisted facture of medical equipment (much of it to Ron's design). An electric typewriter and other equipment was donated and recently a service organization and a large city newspaper collected for and purchased a new. larger and more suitable vehicle, Paraplegic and handicapped organisations essisted in his rehabilitation and he began to take on work within his field, from estimating electrical contract work, to designing a circuit for a testing device for some electrical equipment. He 'drew' the circuit for his typewriter and it worked first time on assembly. For years he read newspapers from each state to gasher information on new streets for a mapping company.

Ron assisted an elderly engineer to develop a device so Ron could operate a telephone. A suction tube controls two 12 volt motors, one with a cam to lift the pms, the other turns the dial the appropriate number of clicks. The handpiece remained at his head. The telephone department approved this equipment, and visiting engineers were brought to see it.

He became Advertising Manager for Airborne, subsequently doing much of the Editorial work. In this capacity, he contacted businessmen and modellers all over Australia, some of whom got to know him quite well without realising his handicap. The local model aircraft club met at his home, with him as President. He corresponded with modellers in all states of Australia and overseas.

Despite the unusual arrangements, family life was both fruitful and happy. Early in July, however, Ron contracted a second major disease, encephalitis,

He was in a come for ten days, He showed vague signs of improvement for two weeks, then last consciousness for progressively longer periods, until he died on 16th August.

No one ever had a word of criticism of Ron. He commanded universal respect. He could communicate with people of opposing viewpoints and make his point without 'huying a fight'. He never complained, although pain and discomfort were always present.

Had it not been for the diligent attention of the medical people nine years ago, Ron would have died then. I feel sure that Shirley is grateful that they had that nine years of borrowed time, during which quite a lot of us were privileged to see what a highly intelligent and capable man can do with a great deal of courage, the support of a loving wife, and without the aid of almost all the physical resources we take for granted,

On behalf of the many Australian and overseas modellers who knew Ron, or knew of him, we offer Shirley, Paul and Gail our deepest sympathy.

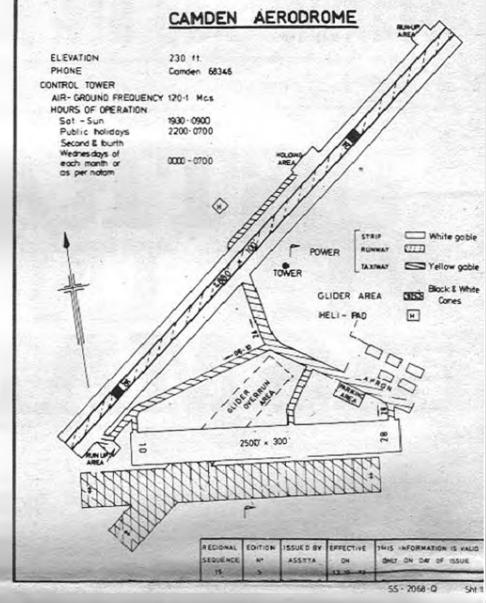
Keith Hudson.

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CLUB PUBLIC RELATIONS OFFICERS

Would-all Club PROs, aircraft, boat, railway etc., please place Modellers' Monthly on your mailing list? We would then be able to keep up on your activities via your newsletters. Acceptable passages for publication could be marked for our attention.

STOP PRESS NEWS NATS AT CAMDEN



It's official now, there are need for further rumours. The Nationals will be held on Camden Aerodrome. We are extremely grateful to the Department of Transport (Air Group) for the great treatment they have given us. We have been allotted the major section of the Aerodrome, which means that all events can be held 'under the one roof' so as to speak.

The full program is printed on page eleven of this issue. Further details may be obtained from Ken Burke (02)660-5366 (day) or 337-4311(home or Dick Everett 602-7859 (day) or 605-1564.

The rules to be used will be as per the rules book current at the time, with the exception of FAI events. These will be run to the latest FAI information available. FAI R/C events will be to the 1975 rules. Aerobatics to new schedule; glider 3 tasks; pylon, new silencer regulation and safety helmets to be worn by all participants. More on this subject in later bulletins.

At the moment Motel accommodation is readily available. We have block booked all motels in Camden with any overflow in Campbelltown, 8 miles away. If you wish to stay in a motel, please indicate on entry form and include deposit. Tariff at the moment averages \$18.00 for two bed and breakfast, \$21 to 27 for three and \$25 to \$36 for four. Children half price. One motel has limited dormitory accommodation at \$7 each bed and breakfast

Caravan and camping facilities are not so good. Camden is already booked out. There are two caravan parks at Leppington. 10 miles away the Red Mill and the Kywong Caravan Parks. This year there will be no camping facilities on the aerodrome.

For the young single guy who doesn't mind roughing it we hope to arrange for the use of a hall with ablution facilities attached, in the centre of Camden. Will accommodate up to 200 but you will need to bring your own stretcher, blow up mattress etc. Cost will only be \$5.00, for the duration.

John Marquette, Chairman 28th Nationals Committee.

28th AUSTRALIAN NATIONAL MODEL AIRCRAFT CHAMPIONSHIPS

Camden Aerodrome, Camden, N.S.W. 29th December 1974 to 4th January 1975

EVENTS C/L 2.5 Rat

Junior 2.5 Rat
Open Rat
FAI Speed
B, Speed
C, Speed
B, Proto
%A Team Race
FAI Team Race
B, Team RAce
Goodyear
Aerobatics
Junior Combat
FAI Combat
Open Combat

F/F
Wakefield
H/L Glider
A1 Sailplane
A2 Sailplane
Open Rubber
Indoor Rubber
FAI Power
Open Power
Power Scramble

Night Scramble Scale

Night Scramble Scale

R/C
Thermat Glider
FAI Scale
Stand off Scale
Aerobatics Expert
Aerobatics Novice
FAI Pylon
QM Pylon

SOLARFILMING

Solarfilm, Quickote and Monokote are all very similar products with the only difference being a slight variance in material thickness and working temperature. Essentially, these products are mylar filmed material with a heat sensitive adhesive on one side and with the feature of shrinking quite considerably when exposed to a strong heat source. This article is intended to familiarise those who have not yet tried the products, and perhaps to jog the memory of those who have given it a go at one time or another.

The covering of a model is the final crucial act after construction that will determine:

- (a) The model's flying weight.
- (b) The strength of the model's structure.
- (c) The lastability (that's a goody!) or life span of the model resulting from the prevention of fuel entering the structure.

The use of Solarfilm may well be likened to a well-known T.V. commercial where a likeable character states of a product — 'I hate it, but I use it twice a day'. Hence with Solarfilm, it is quite unlikely that one will ever bump into the modeller who claims to enjoy solariflming, but you will find many modellers reverently admiring the finish he has obtained by using the product.

Why use it you may well ask, if in doing so the frustrations are likely to make one a candidate for the nearest psychiatric clinic? The answer lies somewhere in the area that it is a sign of the times. Science and industry have produced a product which is lighter than doped and painted tissue,

stronger than silk, and - properly applied - gives an immaculate appearance with no further doping, sanding or painting necessary.

To the skilled modeller it probably represents the biggest single contribution to keeping down the weight of his aircraft (how many of us suffer the problem of building models too light! Precious few!)

In usage, most people experience difficulty initially by following the application instructions too precisely. For the uninitiated, the writer has adopted the following procedures—variations of which can be adapted to suit individual conveniences.

When covering wings, cut the Solarfilm sheet by placing on top of it a template of the wing plan which has been made with a one inch overlap on leading and trailing edges as well as on the wing tip. The cut panel is then placed over the underside of the wing, the model being upside down on the work bench of course. At this stage we pick up Murn's clothes iron which had earlier been plugged in and set to a lowto-medium temperature. It is important to get the temp setting right as explained in the Solarfilm instructions and to test on a scrap piece of Solarfilm. Check that the iron has stabilised at the working temp just before use on the wing panel. If the Solarfilm melts when touched by the iron, back off the temp setting a fraction and try again. The aim is to get the iron as warm as the Solarfilm will tolerate. With the Solarfilm positioned on the wing with its adhesive side against the balsa we can begin. (Incidentally, give the wing a coat or two of dope with a light sanding after each before starting the Solarfilm process; this gives a smooth surface for the Solarfilm to adhere to.

Now begin to tack down the outer edges of the panel with light and smooth movements of the iron. Remember these points:

- (a) The Solarfilm should be as wrinkle free as possible without stretching and creating tension creases.
- (b) Be quick when tacking down with the iron, prolonged application of heat is going to commence shrinking of material in the area. The aim at this stage is simply to tack the edges and have as few wrinkles as possible.

Next step is to hold the wing in front of a radiator and apply heat to the entire panel. This way we should acquire a good even shrink thus avoiding stress areas leading to warps. For best results the shrink should be done in two stages; the first will simply remove all slack, then go over all the edges with the iron and make sure that all edges are properly sealed down including the wrap around overlaps on to the top of the wing. Follow this with a second application of heat from the radiator to get a nicely taut surface.

The process is then repeated with the top panel of the wing. With both top and bottom panels in place, go back to the radiator for a final shrink to the desired tension. At this time, check for warps, and remove any by holding the wing in front of the radiator while holding the wing to the desired shape. When heat first hits the Solarfilm, it

loosens slightly allowing any warps to be straightened out, as the shrink then takes place the Solarfilm will hold the wing in the new, unwarped position.

The compound curves of wing tips need not cause undue concern. As with any covering material, these areas of compound curves are more difficult than flat surfaces. Take heart however as these can soon be mastered and results with Solarfilm can be superior to other materials. When covering the tips a surplus of material bunches and gathers at the outer rim of the tip. Don't attempt to tack the Solarfilm all around the tip in one go. Tack the edge at about one inch intervals which gives a corrugated effect. Then tack down the overlap and use the radiator for a shrink to reduce or remove the excess material between the one inch tacks. Now back to the iron and seal the rest of the edge before a final shrink at the radiator.

When covering large sheeted areas, air bubbles caught under the Solarfilm can be removed by puncturing the blister with the point of a pin then shrinking.

The methods discussed above have proven satisfactory for the writer. It should be remembered however that this is a product that lends itself to a variety of application techniques. Hence the intent of this article has been to provide general guide lines rather than a step-by-step instruction. As with any new material, use it and experiment to find the best way for you to apply it to your own requirements.

Final words: practice makes perfect.

IT'S A SCHNURLE WORLD

MAL ROBERTS

'.....our latest engine is Schnuerle ported'. Is what? Sounds rather nasty that does! Why is it that some of the latest Enya, K & B and HP engines feature Schnuerle porting?

Firstly, to understand the basics involved we must lift the lid off two-stroke engine design and peer more closely at the compression chamber — involving the piston, cylinder, cylinder head and most importantly, the ports. In order to operate efficiently a two-stroker must make the maximum use of each charge of fresh mixture entering the combustion chamber from the carburettor, in our case via the transfer ports.

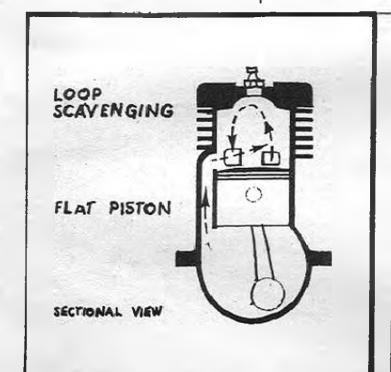
In the case of our model aircraft engines the fresh charge enters the combustion chamber through ports which are exposed by the piston during its travel up and down the cylinder bore. These ports act like valves allowing the mixture in and out of the combustion chamber at certain times - and because of the number of different engine designs there are many many arrangements of ports both in size and number. Even so, their function is simply to get gas flowing into and out of the compression chamber with maximum efficiency. To this end, the engine designer uses the incoming fresh charge to remove any residual exhaust gases, thereby allowing effective combustion of the fresh charge to give more power.

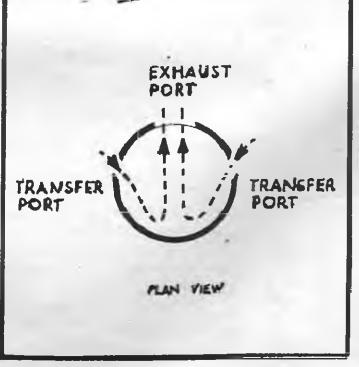
Until fairly recently, at least in model aircraft engine design many makers used the so-called crossflow scavenging principle, or simple derivations thereof, where the fresh charge would be sent high into the compression chamber by a deflector on the piston top. Unfortunately a great percentage of fresh gas also shot straight out through the exhaust port — with the resultant lower efficiency or, if you like, more fuel for less power.

Enter inventor Schnuerle. By arranging the exhaust port and transfer (or inlet) ports at roughly 90° to each other Schnuerle persuaded the fresh charge to shoot upwards against the cylinder wall opposite the inlet ports and loop over in the upper cylinder sweeping the residual exhaust gases away in the process. With its more efficient use (less waste) of the fresh charge, the Schnuerle loop scavenging principle has proven to be more effectin terms of economy and power output than the older crossflow scavenging method used for many years.

Basically simple though it is the Schnuerle loop scavengine system is more of a headache for designers to perfect because it relies on correct gas flow patterns within the combustion chamber requiring extensive engine test-bed work. Incidentally, a Schnuerle ported engine does not take too kindly to port modifications for obvious reasons.

Softhere it is, next time you are flicking away before the big flight, just ponder a little over the neat theoretical loops being performed by your mixture charge as your favourite mill turns over at around 18,000 revs. The mind boggles!





TRANS TASMAN CONTD



Beautiful electric blue colour scheme on NZ stunter mimics 'Blue Angels' colour scheme.

conditions and cold 2 deg.C temperature which seems to thrive on flying days, only a few of the hardy speed and team race boys braved the conditions.

As Denver Harvison or Confuscius says: 'Tis better to have a model with no practice — than no model at all'.

Saturday 27, the first day of the challenge was cool, with the sun shining for the a.m. hours. Because of the previous day's weather conditions, a 10.30 a.m. start was planned to allow all a few practice flights.

FAI AEROBATICS

Six team flyers plus four unofficial entries made a total of ten contestants.

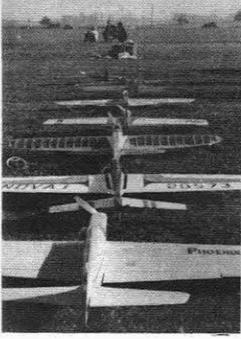
Round 1 was the first event on the Saturday with Reg Towell first man up with his Fox 40 powered Superbone design.

Most entrants flew without major problems except Ray Ogle whose Merco 35 Thunderbird cut out early due to fuel blockage. Having apparently clear-

ed the blockage Ray put in some practice flights in the lunch break, only to have the motor cut at the wrong time. The Thunderbird lost line tension and was blown across the top hitting the ground with an echoing CRUNCH At this point the front half of the fuselage left the back half, exposing Ray's craftsmanship. Quick on the scene was the N.Z. team manager Bill Forbes with large tubes of Bostik 5 Minute epoxy and with some quick work the T'bird was again in one piece, As the sun had disappeared around lunch time and the wind was coming from the tops of surrounding snow capped mountains the 5 minute epoxy became a 30 minute epo xy. Undaunted Ray used artificial help such as heaters and even a borrowed hair dryer. Thank heavens for little girls! The T'bird was again airborne and Ray put in the 2nd highest score for round 2 with a lovely

flight.

All scores were close at the end of



Stunt line-up at Trans Tasman. Photo: Warren Williams.

round 2 with the New Zealanders at a slight disadvantage, not having flown to the FAI pattern and rules in previous competitions.

The 3rd round was flown on Sunday and commenced at 2 p.m. Weather conditions were wet and cold around minus 1 deg. C (commonly referred to as Penguin Weather). Despite these conditions some very smooth patterns were flown.

It was interesting to note that in N.Z. all judges are in the centre with the pilot, and they call a score for each manoeuvre which is written by their secretaries. As Reg Towell said. 'Quite a crowd out there'. It's different for us to hear our score, straight after each manoeuvre, you instantly knew what you didn't get away with.

The judging however was very close with only 25 points between 1st, 2nd and 3rd placings, which went to Australia followed closely by Peter Wheeler and Bruce Turner of New Zealand just over 100 points behind.

The team totals for Stunt were Australia 10,909 and New Zealand 10,229, although my guess is that the next challenge will see the Kiwis much sharper and likely to even the score.

The judges must be thanked for their task as after we chipped the ice off them and had them defrosted, they still spoke to us.

The models used by the New Zealanders were similar to those used in Australia with 6cc and 7.5cc motors as standard. Models noted were Nobler Commodores, modified Novi 3 and Peter Wheeler's HP 40 powered Phoenix special.

FAI SPEED

It was just too cold for these models (especially those with pipes). But four times were recorded in the first round. All the New Zealand team recorded one. Phil Staples and Ralones both recorded the fastest for the round at 121.25 mph. Mery Bell of Aust. next with 111.85 mph and Harvey Westland (NZ) on 110.75.

Sunday and rain, rain and still heavier rain. Speed had the first go at the weather for their second round, and their last round was during the last round of aerobatics. All entrants managed to record at least one time during the weekend, no mean feat with the cold wet weather.

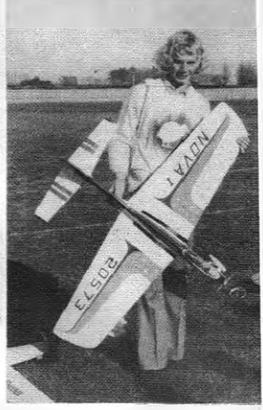
Phil Staples was the only one to improve on his speed. He brought it up to 122.91 mph which was good enough for first overall. Merv Bell and Harvey Westland both recorded slower times than the day before. Jeff Potter (Aust) came in with a 109.12 mph and Dave O Brien (Aust) recorded 93.99 mph.

This gave N.Z. a win in speed by 39.95 mph.

One interesting point was that a local Kaiapoi farmer Harvey Westland manufactures his own motors from castings to prop nuts. Harvey has been doing this now for some years and the locals advised that Harvey was using schnurle porting 10-12 years ago before Rossi and Co. even thought of it. Anyhow the motors turned out by Harvey and known as the 'Westland' are beautifully made and perform extremely well.

FAI TEAM RACE

The first round of team racing heats produced the eventual finalists. The first heat saw the Turner Westland (NZ) team pull out after 80 laps with fuel problems. Oddy Reichardt (Aust) team went on to record 5.15.6 ahead of Chrystal/Staples (NZ) in 5.41.6. The second heat saw the first disqualification, that of Potter White (Aust) team



Bruce Turner - NZ Aerobatic team member.

(model lost half its elevator). The Long' Healey (NZ) team recorded the fastest time of the contest with 5.10.6, with the Bell/O'Brien (Aust) team close behind on 5.15.8. This left the contest wide open. As the Aust.—NZ contest is decided on heat times it had the makings of an interesting final round of heats.

Team race was the class the whole contest hinged on, with N.Z. well ahead in speed and Australia looking like the aerobatic winners. The first heat of round 2 and the Potter/White (Aust) team needed a time after being disqualified in round one. They were the only team to record a time in this heat as the other two were disqualified. Potter/White's time was 5.51.5, Oddy Reichardt team and the Chrystal/ Staples (NZ) team who were both disqualified already, had good times in. This left it all up to the Turner, Westteam did not improve on their 5.15.8 had to do it in about 5.30.0. to give NZ a win. But this was not to be. Not for the lack of trying though, Bruce and Harvey had the misfortune to have a pit stop with one lap to go. When the motor cut for the final pit stop they were on about 4.59.0 finishing with a 5.39.0. The others in the heat both finished before them, but did not improve on their first round

This gave the team race contest to Australia by 8.3 sec. In the final to determine individual places Long/Healey team won with 11.57.0, Bell/O'Brien second with 13.22.0. The team of Oddy/Reichardt was third after pulling out with problems.

The challenge was very well organized with good sponsorship, Press, Radio and Television coverage. It was unfortunate that the extremely cold and wet weather kept some thousands of spectators away, however the gatherings were quite large.

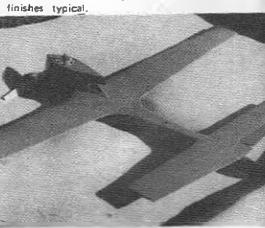
To end a very enjoyable weekend a Dinner was arranged for the Sunday night at the Island Motel with the Mayor of Kaiapoi, Mr. Williams, in attendance to present prizes and the Trans Tasman Trophy.

The hospitality shown to the Australian team by the New Zealanders was overwhelming and for certain will always be remembered.

Australia was successful in winning the 1st Trans Tasman Challenge and certainly the 2nd challenge will be a most interesting event.

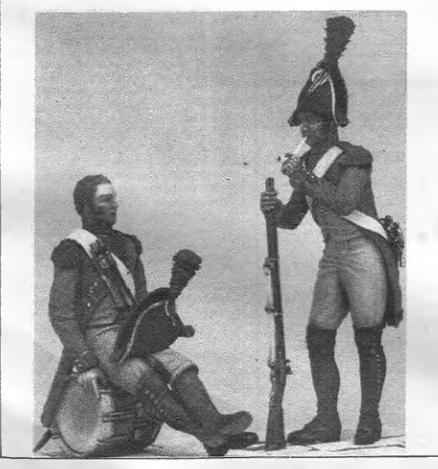
Warren Williams, Australian Team Manager, Results Page 5.

New Zealand FAI Speed model. Good





HISTOREX FIGURES AND MANY OTHERS AVAILABLE NOW



BUY 'MODELLERS' MONTHLY' AND 'AIRBORNE & R/C MODELS"

CLUB NEWS

CONTROL-LINE AIRCRAFT MODELLERS (VICTORIA)

Report: Courtesy of 'Circle Torque' By Stu Thomson

FAI TEAM RACING

After our very wet winter and two cancelled contest days, the weatherman finally gave us a perfect day for flying. This, plus the use of an alternative site

added up to a good contest day.
The FIRST HEAT saw Roberts/ Hiern, with a neat white model, incorporating pressure fuelling, as the only team to record a time of 5.54.9. This was due to David Kidd breaking the con-rod in his Eta at 77 laps and Ramsdell/Thomson retiring after only 28 laps with a faulty cut out. John Ramsdell received one warning for

whipping.
SECOND HEAT contained Herron/
Boughton who recorded 7.23.3 and Hunting Bros. who managed 7.04.4

with their Taipan powered model. THIRD HEAT of Round one had Wilson/Vella turning 5.21.0, with speeds up to 85 mph for around 30 laps. Their opponents (Skelt/Jardell) eventually retired, but should have been disqualified when the pitman entered the flying circle to retrieve his model,

SECOND ROUND: HEAT 1: A slow race with Ramsdell/Thomson winning in 7.09.0 after re-tuning and slow stops. Hunting Bros. finished some 40 seconds later and Roberts; Hiern destroyed an engine at 71 laps. HEAT 2: Wilson Kidd vc Herron

Boughton. This race was quite interestif only for the fact that both pitmen decided to pit in the one segment, at the one time. Lines were crossed and some time lost sorting things out, Each team subsequently received a warning for not retreating one segment. Wilson Kidd 6.16.0, and Herron/Boughton 6.28.0 were the eventual times.

The FINAL consisted of Wilson/ Vella, Kidd/Wilson and Hiern/Roberts. This final was a rerun (for what reason I'm not sure) and was fairly unevent-ful, with Wilson/Vella winning in 11.13.7 after cooking up on one tank full and slowing to 78 mph. Mike Vella also received a warning for pulling through while overtaking. David Kidd and his new pilot recorded 11.46.7 for second place and collected a warning for high flying along the way. David was low on laps today and was timed at 81 mph during this race.

Roberts/Hiern forsook their pressure' model for the final and started off quite well. However the engine went sour at 128 laps. Down at 140 laps and re-tuned, they were off again but retired at 177 laps.

So ended the day's OFFICIAL rac-

During the lunch break, three teams had their first attempt at FAI POSTAL RACING. The three teams competing were: Wilson/Vella, Ramsdell/Thomson and Hunting Bros, who finished in that order. At the start, Hunting Bros, were left on the ground, flicking a reluctant Taipan which later proved to have a loose cylinder head. The other two models were well matched for speed and both needed 3 stops in the 100 laps. Ron Wilson's ST G20D and Rev-Up prop cooked up on one tank while my Oliver ran consistently. However, I missed a catch and generally gave a poor display of pit work. At the mnish, it was Vella/Wilson 6.00.6 to Ramsdell/Thomson 6.11. Actually I was a little surprised at our time being so slow, but it just goes to show how poor pitting can cost you a race. All three teams were prepared to try again later, but due to a tight schedule we could not squeeze another heat.

Not exactly a good start to our postal effort and we would need to improve by at least 40 seconds to be competitive with the overseas teams.

TASMANIANS FLY THERMAL SOARING

COMMENT by G.O. Wilmot, Editor, Tasmanian Radio Control Association Newsletter.

We have new rules for Thermal Soaring and Pattern with some modifications to rules governing other events.

The change in the pattern is understandable and necessary to separate the best fliers in the world when competing at International level and thus also necessary for Australian Champion-

ships.
Unfortunately the adoption of the

said pattern also widens the gap between the expert and the average club flier who likes to enter a few competit

While I can see some merit or necessity for the change to the pattern rules I am less than enthusiastic regarding the deletion of the existing

FAI Thermal Soaring rules.

The new multiple task events require considerably more officials and equipment, plus the marking out of specific courses and measurement of each land, ing. The previously used rules provided an event which was easy to run and extremely popular with competitors. One didn't have to be an expert to compete with distinction and the only problem appeared that organisers could be embarrassed by the large entry.

I have little doubt that this Association will continue to run events to rules approximating those previously in use even if it is only to ensure that existing models don't have to be scrapped, and it is also to be hoped that the old rules or suitable modifications thereof are retained as an event at the Nationals so that modellers outside the sphere of the semi-professional pot-hunters have at least one R/C event left open to them.

In my opinion the Thermal Soaring event has put some of the fun back into modelling and after all, isn't this why most of us take up the hobby in the first place?

MODEL FLYING CLUB OF AUSTRALIA

OPEN STUNT COMPETITION

By Warren Williams.

The MFCA Annual Open Stunt Competition was held on Sunday 30th June at the MFCA's flying site in Centennial Park. The weather, contrary to predicted reports, was a lovely 20°C plus sunny day, although wind gusts over the tops of surrounding trees had its effect on flyers' perform-

The entry was not as large as anticipated, but the competition was keen and it was good to see both John Tidey and Ross Middleton down from Newcastle. John's Club has a \$25 trophy running for the first Junior in their Club to complete a full stunt pattern in an MAAA sanctioned contest. Ross missed out in Rounds 1 and 2 at MFCA, then almost made it to the chequered flag in Round 3 only to have his motor cut in the final manoeuvre (the clover leaf). Twas noted that the Merco 35 used by Ross was on loan from none other than (you guessed it)

John Tidey - Coincidence?! The first Round was under way at 10.30 a.m. and this produced a plague of motor problems. Only two flyers, Paul Turner and Rick White, completed full patterns placing them well ahead of

Round 2 saw some more competitive patterns, although the gusty conditions made precision flying difficult. Paul Turner again emerged No. One, although hotly pursued by Reg Towell, Warren Williams, Nev Carlos and John Tidey. The Judges later commented that Reg Towell's flight was near perfect with his Fox 40 powered Superbone, but missed valuable points by flying horizontal eggs for loops, this possibly accentuated by the windy conditions. John Tidey's Windwaggon suffered badly with yawing on square corners; John has had mixed success with the Windwaggon and is pondering a new machine for the Nationals. Neville Carlos is becoming very consistent with his Fox 35 powered Windwaggon and put in some excellent manoeuvres to score well. Warren Williams (yours truly) was sporting a new tight Merco 35 and lack of power resulted in some free flight excursions. Rick White dashed off to play in a football match at Manly through the lunch period and unissed the Second Round altogether.

Round 3 again saw more hairy competition as Paul Turner's Windwedge cut out on overhead eights placing him fourth in this Round. Rick White returned from football to score top points despite a short motor run that made him miss his four leaf clover and landing. Glen Millen flew his first stunt competition with an OS 40 powered Thunderbird (ex Ray Ogle). Glen also had his share of motor problems for the day and provided some spectacular near misses which produced cheering from the large spectator gathering. TRANS TASMAN RESULTS (Continued from Page 4)

RESULTS

FAI SPEED P. Staples (NZ) R. Jones (NZ) M. Bell (Aust) 122.25 mph 121.58 mph 1st 121.25 mph 121.25 mph 2nd 111.85 mph 109.12 mph 3rd H. Westland (NZ) J. Potter (Aust) 4th 110.75 mph 101.68 mph 109.12 mph D. O'Brien (Aust) 93.99 mph NEW ZEALAND TEAM AUSTRALIAN TEAM Staples 122.91 mph 111.85 mph Bell 109.12 mph 93.99 mph 121.25 mph 110.75 mph Jones Potter Westland O'Brien TOTAL 354.91 mph TOTAL 314,96 mph

AEROBATICS (Note: Final column is total of best 2 flights.)

1st W. Williams (Aust) | 1745 | 1828 R. Towell (Aust) 1730 1831

- 3652 pts - 3630 1799 R. Ogie (Aust)
P. Wheeler (NZ) 1444 1829 1798 - 3627 1633 1750 -3522B. Turner (NZ) - 3458 5th 1661 1711 1747 A Lawrence (NZ) - 3249 6th 1562 1627 1622 C. Allen P. Staples 7th 1208 1264 1434 = 26988th 1408 1166 -25741301 F. Bennett 1086 = 24759th 1174 10th G. Lott 859 887 1001 -1888NEW ZEALAND TEAM **AUSTRALIAN TEAM** 3522 pts 3458 pts Williams 3652 pts Wheeler 3630 pts Towell Turner 3627 pts Lawrence 3249 pts Ogle

5.10.6

5.15.8

5.15.6

FAI TEAM RACE Healey/Long (NZ) Bell/O'Brien (Aust) 1st

Oddy/Reichardt (Aust) Forbes Wheeler Westland/Turner (NZ) 5th Chrystal/Staples (NZ) 6th Potter/White (Aust)
Robinson/Allen
McAnelly/McAnelly
Brown/Lawrence 7th Sth 9th 10th Summerfield/King AUSTRALIAN TEAM Bell/O'Brien Oddy/Reichardt 5.15.6 5.51.5

TOTAL 10,909 pts

5.19.7 5.39.0 80 laps 5.41.6 5.51.5 6.17.5 6.42.06.24.7 8.21.7 9,01,1 7.01.0 26 laps NEW ZEALAND TEAM Healey/Long 5.10.6 Westland/Turner 5.39.0 Chrystal/Staples 5.41.6

TOTAL

TOTAL 10,229 pts

5.27.6

5.30.3

11.57.0.

13.22.0

16.31.2

Potter/White TOTAL 16.22.9 Bruce Hoffman took out seventh place overall and flew well although his Merco 35 powered Windwaggon was running too rich at times for the windy

conditions. The official results are as follows. and three beautiful trophies were pr and three beautiful trophies were pre-

engine was a little lean and richened it a bit, which turned out to be too much: On this setting it consumed too much fuel, and cut out after finishing the overhead eight. This gave a first round score of 949 points. In the second round after turning the needle valve back to its original position, he managed 1020 points. With no third round,

1.	P. Turner - Fox 40 Windwedge	792	907	748	1699	40
2.	R. White	779	-	793	1572	
3.		650	780	783	1563	
4.		637	722	765	1497	
5.	- Fox 35 Windwaggon W. Williams	614	756	710	1466	
6.	- Merco 35 Windwaggon J. Tidev	664	690	639	1354	
	- Merco 35 Windwaggor		470	507	1061	
	- Merco 35 Windwaggon					
8.	R. Middleton - Merco 35 Windwaggon	155	4 20	500	920	
9.	G. Millen - OS 40 Thunderbird		27	132	159	

BANKSTOWN STUNT COMPETITION

The field at Bankstown was a little rough due mainly to horses using the area and cutting up the ground. The site is very interesting as it is on the approach path for the planes landing at Bankstown Aerodrome, and they float over at about 300 ft, I wonder what it looks like to the pilot as he is making his approach and a 5 ft, wing span stunter looms up at him.

Anyway the weather was perfect which made the standard of flying very high. The first round got off to a very late start at 11 a.m. which was going to make three rounds difficult. Having this in mind meant that the first two rounds would have to be high scoring flights in case the last round was cancellec, which (as it happened) turned out to be the case. The first round put Reg Towell ahead with 1040 points, Mick Cavan second with 1033 points, and Paul Turner 3rd with 1029. The se cond round completely changed these places with Mick Cavan on 1070 points, Paul Turner on 1059 points, and Reg Towel with 1021 points. As there was no third round the places remained in this order: 1st Mick Cavan 2103, Paul Turner 2088 and Reg Towell 2061 points.

Rick White of KMFC won the Junior stunt with 2006 points. Congratulations Rick. The only other flyer from KMFC was Nev Carlos, but after having a practice flight, he decided the

no improvement could be made, leaving him well down in the pack with

1969 points. The prizes were very good with a Fox 40, \$10 and \$5 worth of balsa for 1st, 2nd and 3rd places respectively. First place in Junior stunt was \$5 worth of balsa. All considered it was a very enjoyable day.

KMFC

Seen at the Club Field on July 14 was Rod Murdoch's very impressive new stunt model. It is a semi-scale Mustang designed by the top U.S. flyer Al Rabe; wingspan is 59 inches, with about 620 sq. inches of area, and an all up weight of 50 ozs. Power is supplied by a Super Tigre .46 turning an 11 x 4 prop. The model features adjustable lead-outs and a moving rudder connected to the elevator.

Plans for the Mustang were scaled up from American Aircraft Modeller magazine by Pieter Stroethoff. Rod took about six months to build the plane which flew for the first time early in June. Estapol paints were used to finish the aircraft; blue topsides with white stripes and USAF markings, a yellow nose, black and white undersides, and black panel lines really create an attention gathering model. Scale details include engine exhausts, pilot and gunsight.

In the air the Mustang looks really great, and Rod is sensibly practising stunt flights on other planes before risking the Mustang.

CLUBNEWS '74

BARRY CRAVEN, Hon. Sec.

NEWSLETTER

The Annual General Meeting was held at Sydney Technical College on Tuesday 6th August 1974 at 7,00 p.m. The following officials were voted in:

Dave King - President lan Darly - Vice President Barry Craven - Secretary Graham Hutcheson - Treasurer

It was with regret, that we had to accept the resignation from Official duties of Mr. Ken Anderson who had been the President since the inaugeration of the club,

He is however, a staunch member and to make sure he stays that way, we have made him an Honorary Life Member, A special badge will be presented to him soon.

The outing at Sutherland Olympic Pool was a success.

We were a little disorgenised owing to not being used to having so many members attending.

I would like to take this opportunity of thanking those members who attended, IMPORTANT NEWS

Kippax Lake has been cleaned, that means it was drained.

The process of cleaning took about 3 weeks, so that by the time you read this we hope rain will have fallen to refill it.

Ring me if you aren't sure.

There will be no Waratah Festival this year, owing to shortage of money and sponsors, perhaps next year,

One of the chaps going to Victoria in October is Andrew Young, He runs an OPS Speed 60 in a 'Super Delphin' (Plranhe) hull, as the motor is extremely powerful, I am surprised at the speed of the boat, She turns extremely quickly, will possibly put up some good times on Naviga triangle.

I myself prefer a 40 motor such as the K & B 40 reer intake, very quick but not quite as powerful.

Another member, Wayne Waddington, has purchased a later version of the OPS 60 which does not use water cooling as it has an ABC piston and cylinder runs better when it gets hot.

Graham Hutcheson has just finished a new petrol boat, powered by the O & R 1.6hp, very quick;

If props can be available, there will be a new motor running in petrol boats soon, It's an American 'Roper' same size as 0 & R, the only thing is, it turns right-handed.

Developments are in progress at the moment on tuned pipes for petrol engines.

We recommend International Hobby Supplies, 221A Wentworth Avenue, Pendle Hill 2145, Phone 636-3594, Talk to Sergio he is very helpful with boat kits, plastics, and model ship fittings in beautiful brass, plywood strip wood and such.

If anybody would like a motor watercooled very micely you should contact. Laurie Cantwell of Competition Engines, He does a very fine job.

The field of fibreglass hulls a opening et now with most of the hobby shaps getting a variety of different shapes in, some good, some bad, on which I don't feel ontitled to comment.

The club itself is getting in shape with new hulls of good performance, the hulls going very well in England are the Opus 40, Balu 60. Bellina, All are Pollard hulls, he seems to dominate the design scene.

I would like David Leigh in South Aust, to design something for us, also Philip Connelly.

I run my own designs which are fast, but how fast it remains to be seen.

I also have designed a very quick petrol boat for which the glass hull should be ready soon,

Last issue of Modelfers' Monthly featured a photo of it in one of my articles. This hull should open up petrol class and make it more competitive with Glo.

Well so much for now chaps - Cheerio, Barry Craven, Hon, Sec.

NB: 'Hints for Good Boating' has been held over till the December issue due to lack of space in this issue. Dec. will be a bumper

CLUB NEWS

Sundays are a pleasure again and things are getting back to normal.

grade petrol is waning, most probably due electrical interference and even some of the highly screened radios are feeling

The interest in glo-motors has become almost ferocious, new boats and some very potent OPS 10cc engines appearing,

These engines arevvery powerful and the problem is to find a hull that will not turn over if you look at it,

If a boat flips a pressure-lock occurs that could cause a bent or broken conrod and can even blow the head clean off,

Don't dispair lads, we have the matter in hand; weekso would like to see this motor in

Recently we held an outing at Sutherland where we were presented with prizes of some fine electrical goods which included a Sharp transistor radio. Those members who won these terrific prizes had to work hand and enter as many events as possible.

just as successful and warrant the donation of bigger prizes in the nature of ocean trips and even world trips. All that is needed in

IMPORTANT NEWS

The editor of Modellers' Monthly has kindly allowed us to use this newspaper as our official news sheet.

All news will be put in monthly so don't forget your copy. Also copies can be purchased from the club.

I recently made a trip to Melbourne, to visit with Tony Gray, a prominent member of Ringwood Marine Model Club, and a very good friend,

The boat went along in my luggage of course, to show the Melbournites a thing or

The prop was on the other boat, because they showed me a thing or two.

Some very fast equipment there, imported hulls from England too.

Ringwood's water is excellent, big enough for any multi 'M' course or naviga triangle. They operate usually on Saturday afternoons, on different days, different competitions. We hope to offer them a good reason to visit us in the near future.

By the way, the reason my boat didn't go well was found to be a wrecked notary valve disc. After replacing this, all o.k! The The new Webra carburetter is great so you lot had better look out next time!

There was some subdued interest in the NZ tug featured in the MAY-JUNE issue of Modellers' Monthly, but it later became quite pronounced and members would like plans as it would make a fine steam tug or electric with R/C.

Thanks to the editor for a fine article. Well I am dry of news now, so see you at Kippax Lake.

Barry Craven, Hon Sac. We have asked the Wellington Harbour Board to supply us with details of sections, etc. We'll probably have a set of usable model plans drawn up and built. Ed.

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SCALE

The best news yet, is the good weather.

The worst news is that interest in A bad

The hulls available here in Sydney are just not up to it.

We hope you will make the next outing

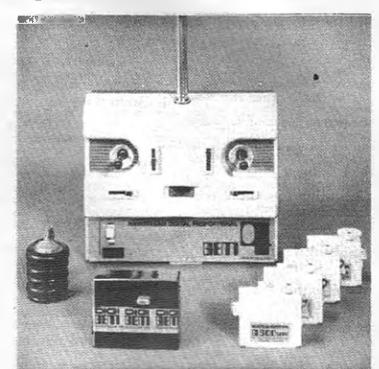
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Smart 'J.F. Kennedy' PT 109 Patrol Torpedo boat seen at Ringwood. Victoria.

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GOODYEAR RACER MATERIALS LIST

- 1 Sheet 3/8" x 36" hard balsa
- 1 Sheet 3/8" x 3" x 36" medium balsa
- 1 Sheet 3/8" x 4" x 36" medium balsa
- 1 Sheet 3/16" x 3" x 36" medium balsa
- 1 Sheet 3/16" x 3" x 36" hard balsa
- 1 Sheet W" x 3" x 36" soft balsa
- 1 Length 3/8" x 3/8" hardwood (bearers)
- 1 Length 3/8" x 1/2" hardwood (wing insert)
- 2 x 1/16" plywood for nose doublers, 7" x 4" ea.
- 10 SWG, 14 SWG, & 18 SWG wire.
- 1 x 2" bellcrank, elevator horn, two 1%" diam, wheels.



5/8"

PROJECT GOODYEAR

Goodyear racing has been developed as an event requiring less skill and experience (and less financial investment) than the more sophisticated Team and Rat Racing events, Goodyear retains all the excitement and challenge of a race against other aircraft and pilots, and it uses close-to-scale models of full size racing planes that lend them-selves to colourful paint schemes. The models use profile fuselages which are cheap and easy to build, but strong and durable in use. Any 2.5cc engine can be used - again cheap and readily available, and a common engine size for newcomers to the hobby. The Rules for the event are simple, and literally everyone has a good chance of winning So, here is Project Goodyear. We

hope you'll try it; we are sure you'll get lots of enjoyment and excitement if you do.

GOODYEAR RACING

By Brett Keogh.

Goodyear is probably the most enjoyable racing event on any contest calendar; it does not have the tension and very fast pace of Rat Race, nor the intricate rules which have to be complied with in Team Race. This is not to say that Goodyear can't be fast and exciting with speeds of 85 mph plus.

Similar to Rat Race in that the rules are few and simple, Goodyear models have profile fuselages, uncowled engines and two wheel undercarriage which adds up to extra drag and slower top speeds. The planes are close-to-scale one-eighth full size of the American Goodyear midget racing aircraft. The popularity of theeevent has grown dramatically over the last year or two, and there is now available a good variety of plans nearly all of which are very simple to follow and which produce competitive racers. One of these plans is reproduced in the centre pages of this month's MODELLERS'

Many newcomers to the hobby shy away from racing competitions because of the apparent complexity of the model, and particularly the specialised modifications that may appear necessary to get a good racing engine. Think again; Goodyear is an event where any glo or diesel engine of 2.5cc can be used. Diesels are generally preferred because of their reliability and easy re-starting characteristics. As in all racing events, Goodyear races include pitstops where the ability to re-start the engine quickly can mean the difference between winning and coming second. It's no good to fly at 100 mph until the first pitstop and then sit on the ground trying to get the engine going again, while a more re-liable engine moves steadily through the whole race at a consistent 80 mph or so. The secret is to know your

engine, whatever it may be. Get used

to it, know how to start it quickly hot or cold, stay with the one engine, don't chop and change without good reason. Taipan diesels can be as competitive as a more exotic brand. I've been beaten before by a Taipan diesel. Hutton Oddy had one in a Goodyear that was winning and turning in faster times than any Super Tigre model around at that stage; and it won because it was consistent, never missed a beat, and had good starting qualities.

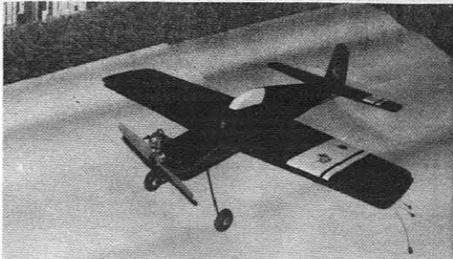
So come on all you modellers who haven't been in competitions yet. Get out that 2.5 cc engine you've got in that trainer or sport model, build yourself a Goodyear, and start racing. Many of you juniors don't have enough confidence in yourselves. You're all all thinking that you can't beat those fast models, but it's just not true. One thing is for sure, you won't win it if you're not in it. I've had my eyes open and most of you can fly very competently. So build a Goodyear, forma team, get in some practice, enter a few competitions, and before you know it.

that Goodyear trophy will be yours.

A few general points on the construction of Goodyear models should be of interest. A profile fuselage must be used and this is usually cut from a sheet of medium weight half inch balsa. Cut-outs are made in the nose and half inch square engine bearers are epoxied into place at a spacing to suit the particular engine to be used. Another piece of bearer is epoxied into the fuselage, and the undercarriage wire is fastened and epoxied to this bearer. Both sides of the nose section are then faced with one sixteenth inch ply back to the middle of the wing. The fuselage can then be tapered from its half inch thickness at the wing down to about a quarter inch at the tail. It can also be tapered from the wing chord line up and down to the top and bottom of the fuselage.

Next step is to shape the wing, and this is the most important part of the model. The airfoil section must be constant for the full span of the wing. Select a piece of straight grained half inch sheet balsa that offers a good balance between strength and light weight. Cut out the plan shape of the wing. Now mark a biro line right around the wing edges exactly on the centre (i.e. a quarter inch up from the underside). Recess into the wing a one-eighth ply plate at the design location for the bellcrank mount. Mark the centre line of the wing across its span. Commence shaping the wing to the airfoil section as shown on the plan but leave the centre half inch square for a stronger join with the fuselage. Shaping is best done with a razor plane or rasp and several grades of sandpaper used on a sanding block. The wing should taper slightly from its half inch thickness at the centre to about a quarter inch at the tips

Once the wing shaping has been finished, it is necessary to decide whether the lead-outs are going to be recessed into the wing, or simply mounted externally. Internal lead-outs create much less drag, but are harder to fit. For a first Goodyear, it makes



sense to use external lead-outs that run through a guide plate on the in-board wing tip. In either case, use 7-strand laystra e wire for the lead-outs

Now we can move on to the tailplane which is generally built from plane which is generally built from hard three-sixteenth sheet. Shaping is carried out in the same way as the wing, then the elevators can be cut free and hinged to the tailplane using either tape, commercial nylon hinges, or by sewing. The elevator horn is then bolted and/or epoxied into position

With all three major parts of our Goodyear racer now ready, we can begin the actual assembly. Firstly, cut out slots in the fuselage for the wing and tailplane, and then epoxy the wing into position taking extreme care with its alignment. It must be at exactly 90 degrees to the fuselage sides, and the chord centre line must be exactly parallel with the engine thrust line. Repeatedly check this alignment, then allow the epoxy to set overnight. Repeat the process with the tailplane. Now form the cheek cowl on the inboard side of the fuselage nose using half inch sheet. Fit the bellcrank pushrod and lead-outs temporarily and check for free movement of the elevators with equal control up and down. Then remove the control system while the model is finished.

Getting the final smooth surfaces and paint job is an important step in my opinion. A good finish protects your model from fuel oil and gunk, and of course makes the plane attractive. Start by filing all gaps and dents with plastibond, dope and talcum powder mixture, or other suitable filler. Allow to dry, then sand the whole model to a smooth surface. Then 3 or 4 coats of dope should be applied sanding lightly between each coat with very fine sandpaper. The rules require a realistic colour scheme to be used, and a suitable paint job should be planned with this in mind. I used Estapol enamel applying one coat and rubbing it back with 600 grade wet-and-dry sandpaper used wet. A second coat then goes on and is left to dry for at least 48 hours before being cut back with car polish.

I've left the most important part of the plane until last, although it would normally be fitted before the finishing stage is started. This is the fuel tank. The shape, design and size of the tank varies whether you use a diesel or glo engine. Goodyear rules require at least one pit stop in the 80 lap heats, and three stops in the 160 lap final. The tank size must be adjusted accordingly.

So now the final assembly. Fit the wheels and control system, bolt your engine in place, get your pit crew lined up, go practice, then to race. Goodyear!



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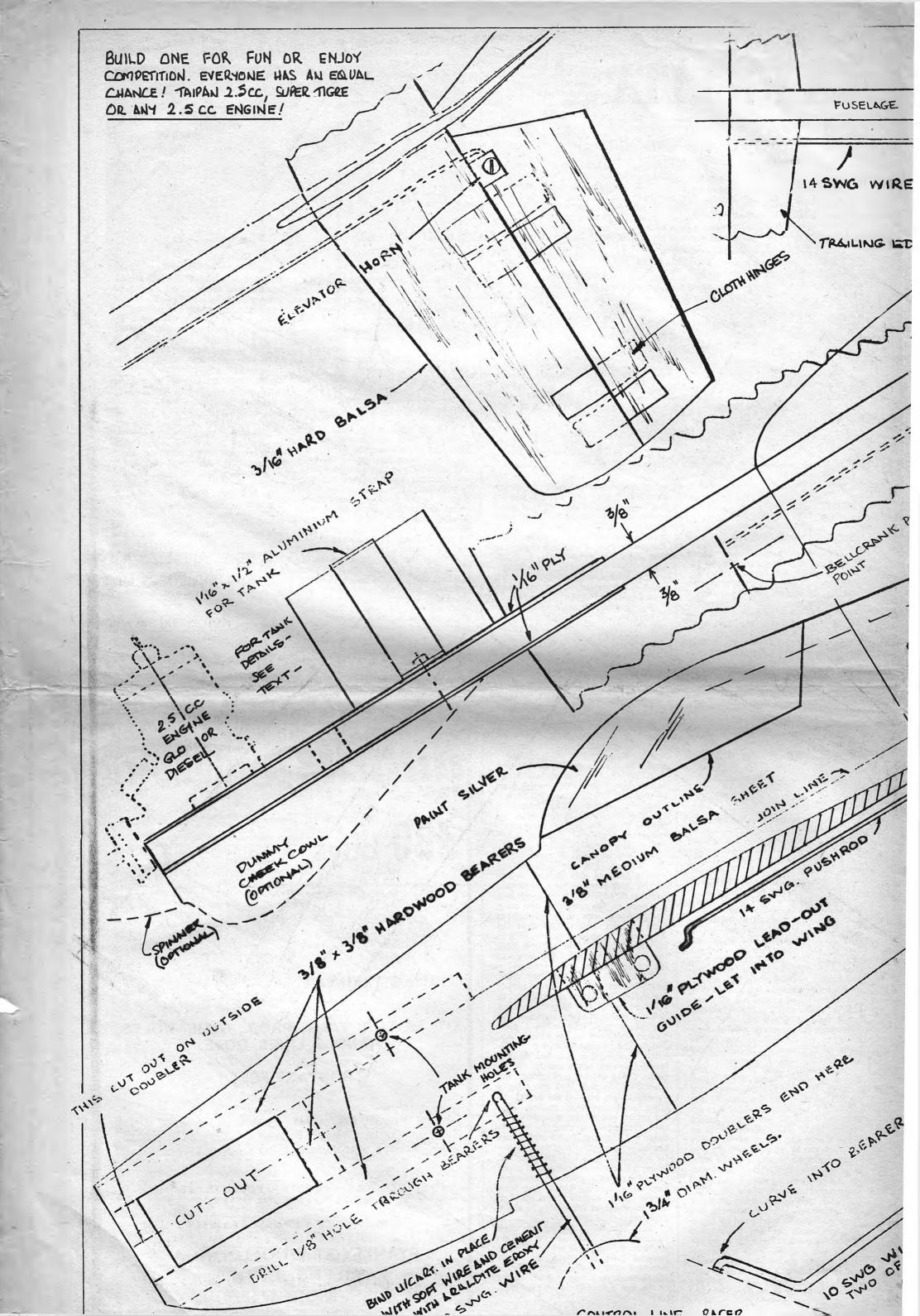
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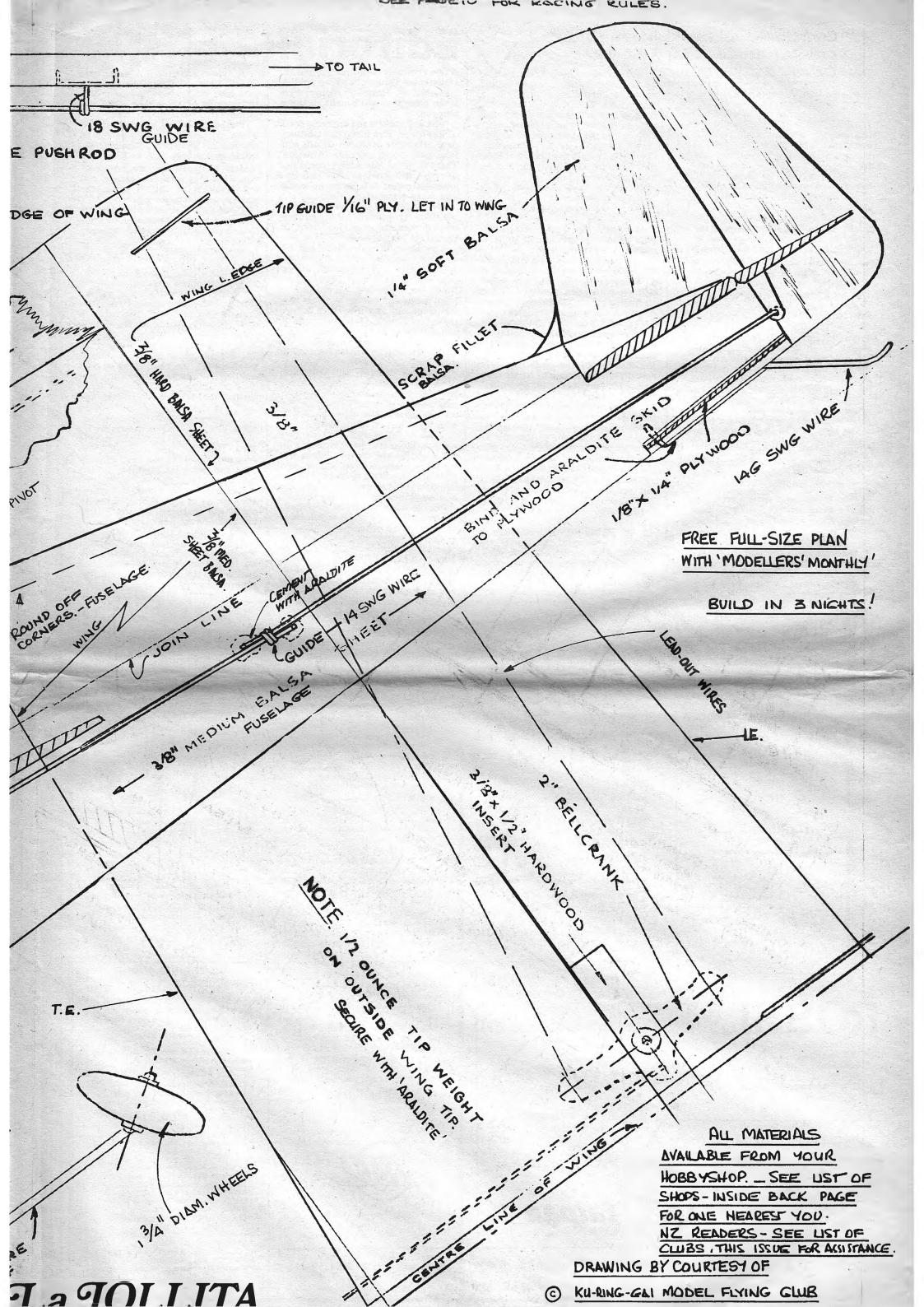
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RULES FOR SCALE RACING (AMA) MAAA

Reprinted from Aeromodeller July 1969.

1. OBJECTIVE It is the purpose of this event to fly semi-scale realistic aeroplanes in direct competition through a heat race to a feature race for the better teams at the contest. The following rules are an attempt to have a slower more inexpensive version of Rat Racing and an event with added spectator appeal.

regulations and the regulations for gasmodels-control line speed, covering the flyer, the model and the flight shall be applicable, except as specified below.

4. The model shall have a minimum consistent scale of one and one-half (11/2) inches to the foot (1/8 scale). All scales must be within a plus or minus 5 per cent, for the top and sides profile (views) with the exception of the stabilizer and the fuselage width (this allows profile type models). Models which appear to comply with this tolerance upon rudimentary inspection need not be further checked except in case of dispute.

Stab area may be increased up to 25% of wing area, but thus maintain

scale configuration.

The landing gear must exit from the scale location, but may be longer, higher, or swept forward. (Wheel pants are optional).

Cowls or apple-cheeks are used on the full size craft and recommended but not required.

5. The model must have a scale-like paint scheme, not necessarily the same colour, but representatives of full scale

(a) Model must have scale racing numbers of the fuselage and rudder sides and on the upper left wing.

Contestant's MAAA number should appear as part of the scalelike licence number (preceeded by VH).

res maynemmi chilitadal LUMB UISplacement is limited to .1525 cu. ins. Engine replacement is permitted, but

not during a heat.
7. There shall be no restriction placed on fuel tank capacity. Pressurized fuel systems are permitted.

MODEL SAFETY REQUIREMENTS 8. Models shall pass a general safety inspection prior to each race or heat. 9. Line length measured from the centre line of the model to the centre line of the handle shall be 52 ft 6 ins plus or minus 6 ins. Minimum line diameter shall be .012 ins.

10.Single line control systems shall

not be allowed.

11 Model control mechanism from the handle to and including the model shall withstand a 20-G pull-test, Pulltests should be performed prior to each heat or race.

FIELD SAFETY REQUIREMENTS 12. Field safety requirements shall be the same as for Rat Racing, except that crew members must stay outside (including all equipment) a 70 ft circle (except while launching model). ENTRY AND QUALIFICATION

13. Entry and qualification shall be the same as for Rat Racing, except that the builder must be either the flyer or the member of the pitch crew who actually flips the engine at all times

during the race or heat.

14. Races shall consist of one preliminary heat of 80 laps. The four best times proceeding to the 160 lap feature race. If the time permits the 4th through to 7th best times may fly a 160 lap consolation race to determine the 4th team in the final race. One (1) re-fuelling stop is required in the 80 lap primary heat and three (3) refuelling stops are required in a 160 lap feature race.

TIMING 15. Timing for each race or heat shall start at the drop of the 'Go flag' (all engines must be stopped) as in the Le Mans start, and end when the model has completed the required number of

Editoria

vertisers for disruptions to our publishing schedule. However, changes have taken place that will benefit all in the long run.

The unfortunate and untimely death of our friend, Ron King, (see Ubituary page 2) brought problems to our con-temporary model magazine, 'Airborne'. The publishers found they could not carry on without Ron, and associated problems meant that Airborne would have to be terminated unless

We are the 'unless' because we have assumed responsibility for the publication of that magazine in addition to Modellers' Monthly.

The issue on which Ron and his wife were working at the time of his death is now in printing and will be published around the beginning of November. From then on, we plan to bring it out as a quarterly. (Next issue will come out as a December issue in time for 'Xmas). Club news will be

deleted from Airborne, making it a general magazine with interesting and instructure articles written by practical modellers.

Modellers' Monthly will continue in its present format as a Newspaper and will still contain Club News and announcements of coming events. This way we hope to give maximum service with the minimum of problems.

None of the persons formerly managing Airborne are now associated with the magazine and the new Editor will be Noel Shennan, well known as a scale modeller and a resident of Camp-belltown, NSW. Barry Craven becomes Boating Editor for both journals, a job which he has undertaken voluntarily for six months, and for which he is now recognised officially.

Several name changes will take place. Australian Airborne Models will become AUSTRALIAN & NEW ZEA-LAND AIRBORNE & R/C MODELS, from the November issue, and you will notice that this issue of Modellers' Monthly is called AUSTRALIAN AND

NEW SEALAND MODELLERS MON-THLY'. These changes are necessary because of the nature of the magazine and newspaper.

In future Airborne will concentrate on all types of flying models, with particular emphasis on the radio control espects of the hobby. R/C also includes R/C boats, yachts, cars.

Plastics modelling will be included where practical, but will generally be covered in Modellers' Monthly. We would particularly like to hear from readers as to whether we are giving you what you want. We believe that this break-up of subject serves the majority and the minority.

Please note that the editorial postal address for all communications for Modellers' Monthly has been changed (What again? Yes! Again). This time to: MODELLERS' MONTHLY,

P.O. BOX 117,

TERREY HILLS, NSW 2084. New telephone numbers have not been established but we will use the Airborne telephone number temporarily until further notice. That is: Area code 046-25-3138 (Campbelltown NSW

We extend our deepest sympathy to Mrs. King and family in their sad loss and our appreciation for the admirable work she has done in so ably assisting her late husband in the preparation of the current issue of Australian Airborne Models (now Airborne & R/C Models) which we believe to be one of the best issues of a model magazine yet published in Australia. We include Shirley in our tribute to Ron King. Ron had great courage does his little woman who so ably assisted and cared for him over the last nine years of his life.

'Airborne' will continue, perhaps not as glossy or sophisticated as before. but it will continue. The contents of the present issue represent Ron's last work. It too is a tribute to both Ron and Shirley. Our only regret is that because of the economic circumstances, we have been forced to reduce the quality of the production (not the

material content). The Editor.

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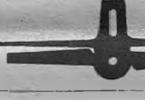
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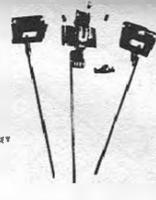
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28th AUSTRALIAN MODEL AIRCRAFT CHAMPIONSHIPS PROGRAMME AND TIMETABLE

SUNDAY, 29/12/74

MONDAY, 30	110/74				
	12//4				
R/C		F/F		C/L	
FAI Glider	0500	Wakefield	0500	Junior 2.5 Rat	1000
FAI Scale	1200	A1 Sailplane	0500	Open Rat	1300
Stand off Scale	1200	Scale	0500	FAI speed	0900
Tuesday, \$1/12	2/74				
FAI Glider	0500	A2 Sailplane	0500	%A Team race	0900
FAI Scale	1200	Open rubber	0500	B Team race	1300
Stand off Scale	1200	Night scramble	2030	Aerobatics	1300
Wednesday, 1/	1/75				
FAI Aerobatic		H/L Glider	0500	Junior combet	0900
FAI Aerobetic		***************************************		FAI combat	1300
FAI Scale prod				(Aerobatics	0900
				(Junior aerobatio	3
Thursday, 2/1/	75	1,00			
FAI Aerobatics expert 0800		FAI Indoor rubber 0900		Aerobatics	0930
FAI Aerobatics novice 0800		FAI Indoor rub	ber	B. Proto	0900
		Demonstration 2000		8 Speed	0900
				2.5 Rat	1300
Friday, 3/1/75					
FAI Glider	0500	FAI Power	0500	FA! Team race	0900
FAI Pylon	1200	Open Power	0500	Scale	0800
		Power Scramble	1100	Goodyear	1300
Saturday, 4/1/	75				
QM Pylon	0800			Open combat	0900
				C. Speed	0900

Nationals conference - Wednesday 1/1/75 Presentation dinner - Saturday 4/1/75.



This is the real Stinson SR-6. Plans for a rubber-powered/engine F.F.J. control-line version are available, SEE ADVT, on Page 15.

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CONGRATULATIONS DAVID LEIGH!

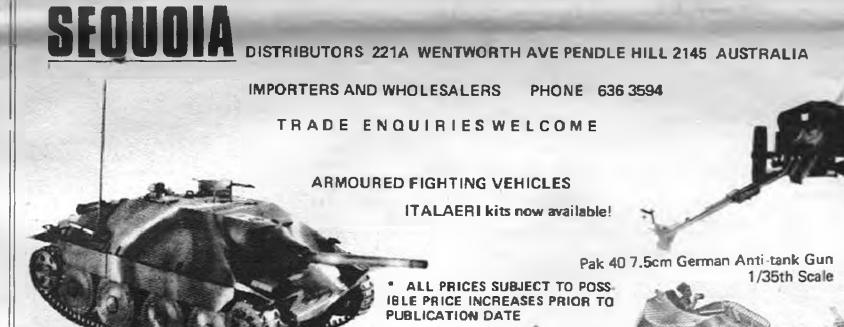
NEWS! OPS.60 'RED 73' BROKE AUST POWERBOAT RECORD BY 2.3 SECONDS - TIME 16.3 SECS FOR NAVIGA COURSE. OPS,29 BROKE WORLD RECORD (CLASS FP/1S) FOR NAVIGA COURSE IN 18,3 SECS

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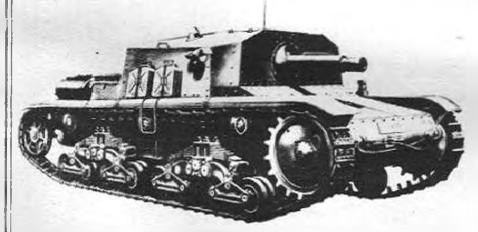
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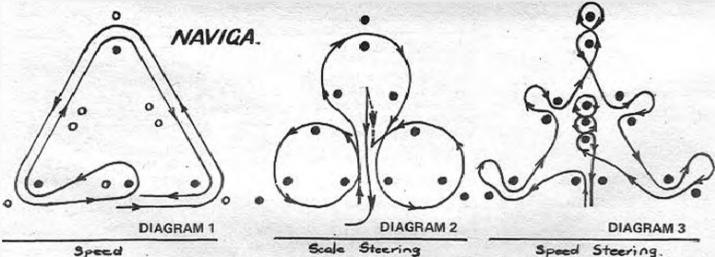
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Barry Dottore's enlarged "Force 3" (42 inch) powered by the 25cc Cox engine shown in Photo 2 below. A horne-designed and built tuned pipe was aluminium brazed for this boat.

MODEL SHIP&POWER BOAT CLUB OF S.A.



Speed

Since the first Power Boat State Titles in South Australia in January 1972, a 'lot of water has flowed under the bridge'. Hull design, engine mounts fuel and handling has been the main topic at night meetings and at the Pondside. This was necessary when dealing with speed in the vicinity of 59 kph

(36.5 mph).

John Dabrowski has come up with a very stable Mono-hull to handle ripples at high speed. This development has been backed by David Leigh and Dean DiGuisto operating O.P.S. 40 and 60 motors (See World Record Unofficial).

As the metric system is now in and Classes are recognised in cubic centimetres perhaps manufacturers could refer their sizes in c.c. instead of the Imperial cubic inch.

Engine Mounts: We have found that plate mounted on blocks is out and bean type in cast aluminium as shown in photo 1, fabricated as in photo 2 or extruded aluminium section are best. Octura have an excellent range of these latter mounts.

For the best performance, a motor should run at a controlled temperature best affected by a cool clamp instead of a water jacket. Exhaust systems are a necessity in our Club with noise levels in mind, ready for Government Legislation later this year. All copper and brass fittings are silver soldered and aluminium fittings are welded. Soft soldering and sticking with Araldite we have found is not successful. From the experience we have gained in aluminium welding (or sometimes referred to as aluminium brazing) many of our members are designing and making their own tuned pipes and other mufflers. An example of this can be seen in photo 3 of Barry Dottore's enlarged Force 3 (42 in.) powered by the 25cc

Cox shown in photo 2.

This craft incidentally won the 1974 Australian Open Power Boat Championship in the 15cc - 35cc spark ignition class on the Naviga Speed course with a speed of 26.6 sec.

The Naviga Speed course is shown in Diagram 1.

Multi Boat Racing to the course shown in diagram 3. The idea is to have as many boats on the water at one time, the winner being the boat completing the highest number of laps in 10 minutes. As it was inevitable that some boats would miss a buoy from time to time, we devised a formula that would not penalise too heavily these boats. Scoring was: Number of laps completed multiplied by 5, minus number of buoys missed, then this figure divided by 5.

With competition keen refinements such as needle bearings, ball races and Teflon sleeve bearings have replaced the bronze or brass bush bearings.

The following S.A. speed records over this course are now being claimed as Australian records to be recognised by the A.M.P.B.A.

Mono Hull Class	Name of Holder	Engine	K.P.H.
0- 2-5	D. Leigh	Rossi	42.4
2.51- 3.5	D. Leigh	Taipan 3.5	40.9
3,51- 5.0		Super Tigre 29	
5.01- 6.5		O.P.S. 40	56.3
10.01-			
6,51-10.0	D. Leigh	O.P.S. 60	59.0
10,01-15.0	D. Leigh	Super Tigre65	65.5
*15.01-35.0	B. Dottore	Cox 140	35.6
Hydro-Plane			
2.51- 3.5	D. Hobbs	Taipan 3.5	40.9
3.51- 5.0		Super Tigre 29	
		0.P.S. 60	62.1
6.51-10.0	D. DIGIGSIO	U.I.J. 00	02.1

These trials were run over a 50 metre course timed in both directions.

Owing to the shortage of suitable model boat equipment in S.A.Mr. Don Hobbs (one of our members) has opened 'The Port Adelaide Hobby Centre' to cater for our needs.

The following is our Power Boat Program for 1974-75 season:

9th Nov. Multi Boat Racing + 3.51 to 6.55cc 16th Nov. SPEED RECORD ATTEMPT

23rd Nov. Multi Boat Racing + 6.56 to 15cc
14th Dec. Multi Boat Racing + 15cc to 35cc (Petrol and spark ignition.
28th Dec. Naviga Speed and Steering

1975

4th,5th Jan, AUSTRALIAN NATIONAL OPEN POWER BOAT

SPEED RECORD ATTEMPT 6th Jan

CHAMPIONSHIP

12th Jan Multi Boat Racing + up to 3.5cc 26th Jan Naviga Speed and Steering

CLUB CHAMPIONSHIP - MULTI BOAT RACING 8th Feb

22nd Feb CLUB CHAMPIONSHIP - NAVIGA SPEED & STEERING

Multi Boat Racing + 3.51cc to 6.55 cc. SPEED RECORD ATTEMPT 8th Mar.

9th Mar 22nd Mar

Multi Boat Racing + 6.56cc to 15cc.

Multi Boat Racing + 15cc to 35cc Petrol & Spark ignition

Naviga Speed and Steering 12th Apr

26th Apr

10th May Multi Boat Racing 17th May SPEED RECORD ATTEMPT

24th May Naviga Speed and Steering

An extended race will be run for these classes.

Being a mixed Club we also sail yachts in the Marblehead and 'A' Class. Unfortunately we lost our sailing water due to works being done on the Locks in the Boat Haven at Glenelg. This work could be finished by the end of this year. (So rumour has it.) We hope this is correct! A. Middleton,

Hon. Sec. M.S.&P.B.C. of S,A,

NEWS!

NEW UNOFFICIAL WORLD RECORD

Our Melbourne Correspondent informs us that two World records have been broken recently, unfortunately, unofficially,

David Leigh, secing his OPS.29 boat broke the world record for this class (class FP/1S) by traversing the triangular NAVIGA speed course in 18.3 seconds.

His OPS.60 'Red 73" engined boat broke the Australian record by 2.3 seconds with a time of 16.3 seconds.

This was the first competition run by both boats to the latest Naviga International rules.

Congratulations to David Leigh for a splendid effort. We hope he can duplicate the runs again soon, this time, officially.

Photo No. 1 (See text)

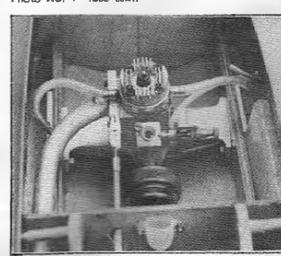
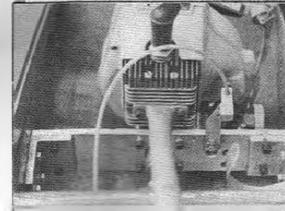


Photo No. 2 (See Text)



NEW ZEALAND

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D. Mitchell, 69 Davis Grove,

D. Mitchell, 69 Doepdale Street. Christchurch. L. Banks, 30 Davis Grove, Wainuiomata.

J. Allen, P.O. Box 842, Whangarei.

NSW STATE CONTROL-LINE SCALE CHAMPIONSHIPS

Scale was blessed with perfect weather for the State Championships this year, though the ground was not good and so gave its problems.

Of the eight entries, five turned up. Barry Franklin turned in a good flight performance with his well-tried Hurricane of three years. His throttle control worked perfectly, though not so Emie Holden's Stinson Reliant. Whilst his actual flying was impecable. Emie had trouble with the throttle and so muffed his landing with a loss of power, a thud and a turnover.

Col Bruce's Smith Miniplane flew and throttled well to earn him third place with junior contestant Bruce Hoffman of Bankstown with PT17 bravely pitting his skills and abilities against the vets to come fifth in open scale and first in junior scale. There's a bright way ahead for this lad in model aeronautics - his score was 103. Only one other junior contested the junior scale trophy and that was Allen Ross of Phoenix Scale Model Society flying a Bell P39 Airacobra which put in a good stable.flight. Last to fly was Bert (SE5A) Ronke with a Miles M5 Sparrow Hawk. Having much motor (or contest jitters?) trouble, Bert persisted whilst the judges displayed a tremendous air of patience. But finally Bert won the battle, but lost the contest as the model flew him for 18 laps landed perfectly under moderate power and came to a stop with motor still ticking over.

1. Barry Franklin - Ku-ring-gai Hawker Hurricane 133.6 pts

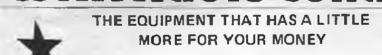
2. Emie Holden - Scale MAS. Stinson Reliant 121. pts. 3. Col Bruce - Scale MAS.

Smith Miniplane

From Bert Ronke Scale Model Aircraft Society.

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These books are full of information, photos, colour schemes and are of use to modellers, historians and reggie spotters alike. New titles available later this year cover the Tristar, the H S 748, Boeing 747 Pt 2.

J.P. WORLD AIRLINE FLEETS 1974

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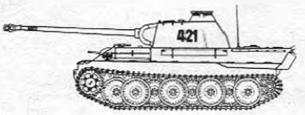
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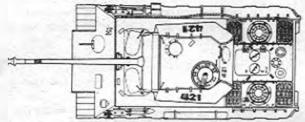
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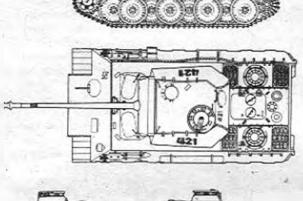
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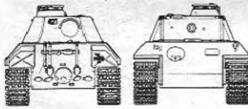
PLASTICS MODELLING...

Panzerhampfwagen V PANTHER 1/35











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PLASTIC

MOTORISED PANTHER V

C.LEWIS

There are a number of motorised tank kits on the Australian and New Zealand market. Some, like the Tamiya M60 Kit at \$9.95 Aust, have two electric motors, each driving a separate track. Others, like the Tamiya 1 35th scale Panzerkampfenwagen Panther V, have one electric motor.

We had a ten year old built the PZK V and supervised construction.

Firstly, this is a good kit, and makes up into a realistic version of the PZK V. However, because of the motorisation, it does have modifications.

There were difficulties in construction, some of which were caused by the inadequate instructions.

When assembling the idler wheel assembly, care has to be taken to check the fit of ALL wheels on shafts before final assembly. We found two wheels that did not fit the shafts well. The order of assembly is tricky, and we do not recommend cementing the wheel caps until sure that everything

More detailed written step-by-step procedures would have assisted the assembly - even an adult would have had trouble nutting out the fitting of the rear plate on the hull, as the drawing is not detailed enough!

On the 'plus' side, the mechanics are good. The motor is powerful and the gearbox is well made. The tank moves at good scale speed and passes over most reasonable obstacles.

As a stationary display model, the PZK V looks good, with its moving turret, authentic machine guns and crew members. We would have liked more armour plate pieces for the turret and hull, but the number supplied is probably enough.

It is not as good as a twin-engine model but for the money - \$6.95 from most hobbyshops, is good value.





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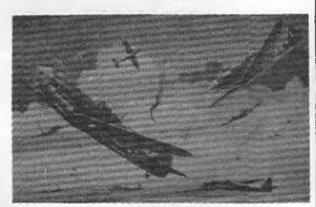
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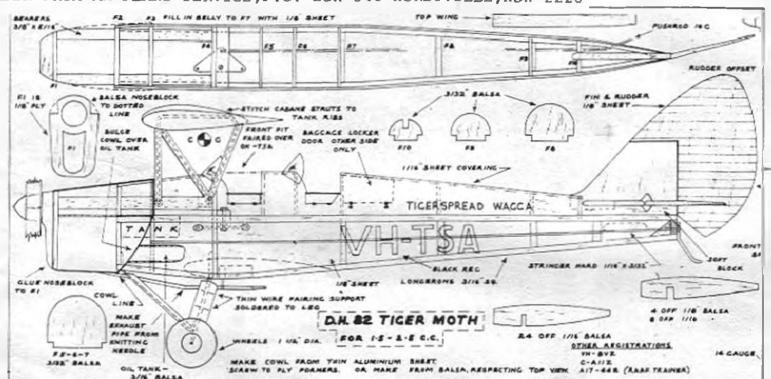
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