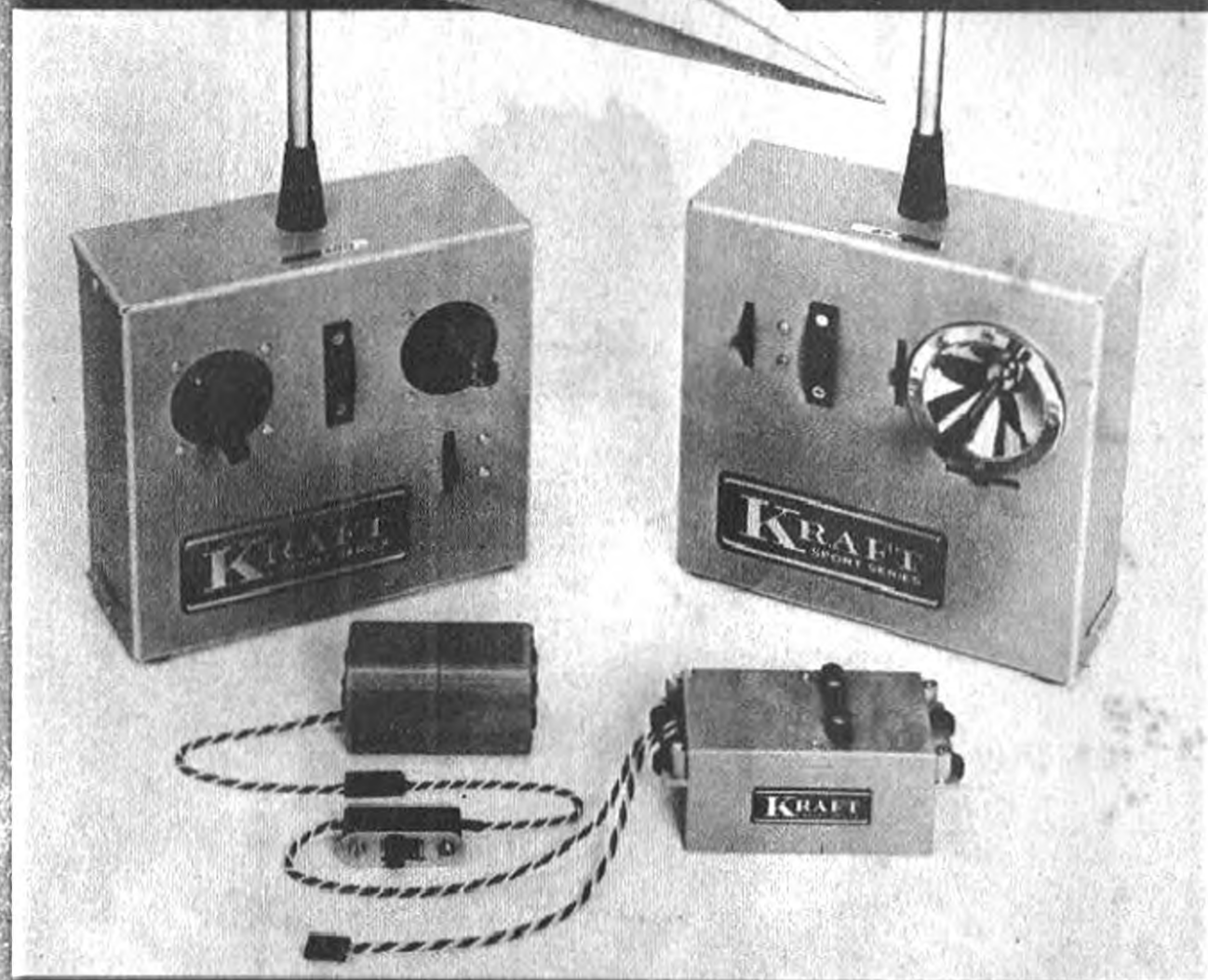


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# MODELLERS' MONTHLY .30¢\*

\* RECOMMENDED MAXIMUM AUSTRALIAN RETAIL PRICE

VOL 1, No 7

JULY 1974





# MODELLERS' MONTHLY



Vol. 1, No. 7

MODELLERS' MONTHLY

JULY 1974

## PLASTICS MODELLING...

### SCALE DETAILS

# FROG NEPTUNE SP-2H

### THE PLANE ON THE COVER



A Neptune A89-303 climbs away at an airshow. Note radome details starboard pod and last digit of serial number repeated on outside of pods. Photo: N.M. Parnell.

We assembled the Frog Neptune kit after a long examination of the parts and the instruction sheet. Our first reaction was that this would be a simple model to assemble. Looking back, we can say that this is not necessarily so.

We were dismayed to find that the kit had been damaged, probably in transit. This is no reflection on the manufacturer, merely a comment about the kit as bought from the shop. The hobbyshop immediately offered to replace the kit but we elected to try and make a go of it, despite the damage. In fact, we had little difficulty mending the damaged wing panels, and from then on, followed the instructions. Half an hour with some Testors' Solvent cement, and the wing panels were set.

Some difficulty was experienced with the tongues of the wings where they joined the fuselage. They are too long. This stops us from putting the wings right through and is an obvious fault. Using an Exacto saw, we cut off 3/8" from the end of each tongue. Then the wings fitted well. Little puttying was required to fill the wingroot gap.

The engines-nacelles-wingroot join-up was tricky. We used the propshafts to align the engine halves, (front and rear) taking care not to get any cement on

It is advisable to paint the front engine half only since the rear one is not seen. Paint it before assembly. It is not worth painting the rear bank unless you intend to show the model with the cowlings removed. So little is seen of the engine anyway.

(Incidentally, we recommend pre-painting as many parts as possible. It will make the job of assembly easier but remember to scrape off any paint from areas to be cemented, otherwise the cement will not stick properly.)

All transparencies were fitted first, except those for the cabin and nose. This means painting around the windows but the windows fit better if put in place first.

What a large aircraft the Neppy is! We were struck by the size of this model. The large areas of plastic make the model look simple but the many small parts soon make one change one's mind!

One criticism we have is that the roots of the propeller blades are very small and are a poor fit in the spinners. Despite great care, we still managed to break at least three blades off during assembly. One has to be a juggler to keep all the blades straight at one time.

A suggestion: we poked the prop shaft through a piece of cardboard, glued the

from the cardboard. A nasty job, but, this one is a little difficult.

We consider the instruction sheet less than adequate for this job. The engineering is poor for this assembly. The roots of the propellers are less than 1/16" in diameter instead of the required 3/32" or more.

We give credit where it is due though for the mouldings are very clean and with the exception of the error in wing root lengths, the fit of the parts is good. Panel detailing is good and there is no need to sandpaper it back.

The kit can be assembled as an SP-2H of No. 10 Squadron, RAAF, Q'land in 1971, (our choice,) or an SP-2H of No. 320 Sqn. Valkenburg, 1971, Royal Dutch Navy.

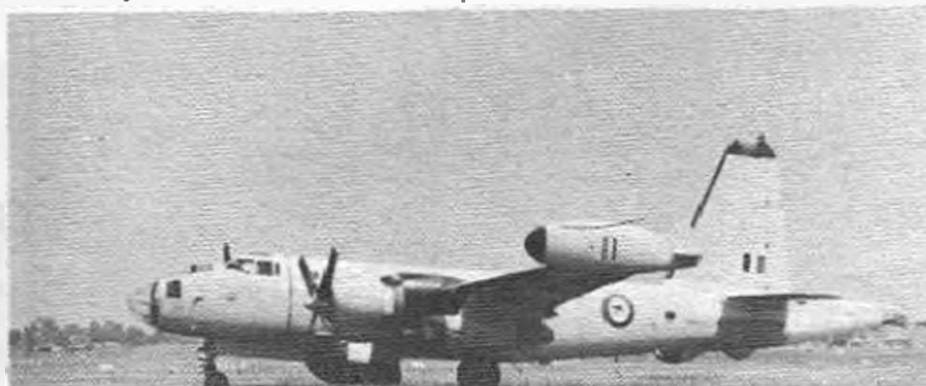
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# Editorial

We would like to point out to readers, that 'Modellers' Monthly' is what YOU make it! Yes, we can only publish what you, the modellers, send US to publish. Why not show your fellow modellers what you are building?

We have had letters from modellers in 'far-flung outposts of Empire' who have expressed their appreciation of news from their home states. These include serving members of the RAAF of whom we have at least ten readers in Singapore.

Write and let us know what kind of features you would like to see in Modellers' Monthly. We're willing to provide or ask others to provide.

## CONTRIBUTIONS

We have stated that we pay for contributions. Ask any of our recent contributors — ask Warren Williams who expressed surprise at being paid for his articles! Perhaps modelling magazines in Australia have had a reputation for not paying their way. This has been so in the past, but we offer a new deal to the modelling movement. Let your efforts earn you money. We need 'how to...' articles and plans of your super-dooper.... So it isn't a contest winner! So what? Perhaps you have a neat model of your own design that has given you hours of flying or boating pleasure. Why not let us see the plans. We can re-draw or ink them if necessary — and pay you for them as well.

We are trying to please all branches of the Model Hobby movement. Obviously we can't please everybody, but if we have 'too much' boating one month, we'll make up for it next month with 'too much' railway modelling!

The main thing is that we need you to continue buying Modellers' Monthly. We hope we are giving you enough interesting reading to justify your pur-

chase of our paper. And please, if you order goods from our advertisers, say 'I saw it advertised in Modellers' monthly! That will tell him that his ads are working for him.

## NEWS

Junior events for the next Nationals in NSW will be FAI combat, 2.5 Rat Race, and in freeflight open glider, open rubber and hurl glider.

The MAAA will apply to have the Nationals listed on the world FAI calendar, which means only affiliated members may enter.

MAAA's transfers will be available soon.

MAAA's bank balance at 31st March was \$5,340.99.

Rules subcommittees will be established by the Federal Secretary, Gordon Burford, and a delegate to attend the Nats rules conference is required from the VCLA.

BRASS SWIVELS have been approved by the MAAA on the basis that a pull test will find weak connectors. (Note:- Brass swivels have failed on several occasions because they wear out. Over 50% of our members do not fly competition and therefore do not have any pull tests. Competitions are held on one day of the month and that leaves plenty of days without pull tests. WE STRONGLY ADVISE AGAINST THEIR USE.) (Since we have heard that several other States were against the use of swivels, we wonder how this motion was approved? — Ed. Modellers' Monthly)

## 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.

This month we are publishing a reduced scale print of part of Theo Georgiadis' plan of his 'Challenger'. The original

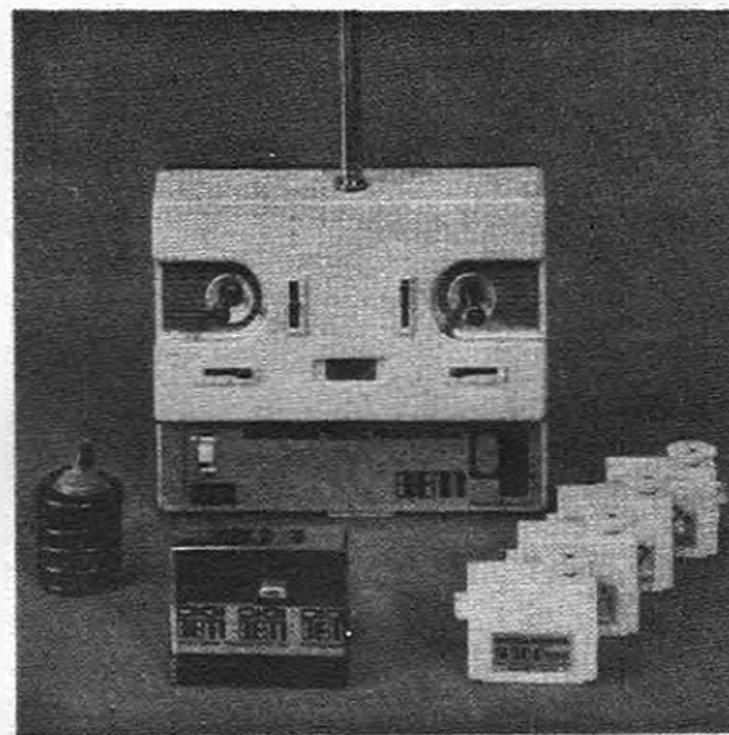


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plan is yards (or metres) long! We can only print parts of it on a page.

However, we refer intending builders to the advt. for MM Plans Service. Orders for 'Challenger' will be supplied by the Plans Service, or direct from Theo Georgiadis. Order your copy now. This really is a SUPERB plan of a successful stunter.

## TRADE NEWS

GORRIE'S have now a full range of Futaba Radio Control gear, O.S., Cox, Cox, Allbon and Taipan motors, and practically every type of C/L, F/F and R/C kit available. Write for free price list with S.A.E. KSB Timers, Roberts 3rd line. Wood Props.

Arthur Gorrie reports that he has lots of spares for old-model engines — especially crankcases. If you are finding spares hard to get, try Gorries first. Arthur also has Tru Flex propellers.

## ATTENTION! SCALE MODELLERS!

SELECTIONS FROM OUR 1974 PLANS LIST.

ELITE PLANS BY DENNIS BRYANT		\$
1/4 Turbulent, 1/6 Chipmunk, 1/6 Magister.		5.50
BOB HOIMAN PLANS		
1/8 S.E. 5A, Fokker D7		2.75
1/8 F.W. 190D9, Sea Fury		5.00
1/6 Fokker D7		5.00
Authentic Scale by Harold Towner		
1/12 P51 Mustang (control line)		\$ 2.00

'AEROMODELLER' SCALE DRAWINGS		\$
1/24, 1/48, 1/72 Tempest		3.30
1/24, 1/48, 1/72 Mosquito, P51D.		2.20
1/12 & 1/36 Cassutt, Rollason Beta.		2.20
1/24 & 1/48 P40, Zero.		1.75
1/24 & 1/48 F.W. 190, Jodel D117, Emeraude.		1.00
1/24 & 1/72 Wirraway.		1.20

Plus many others, send S.A.E. for list.

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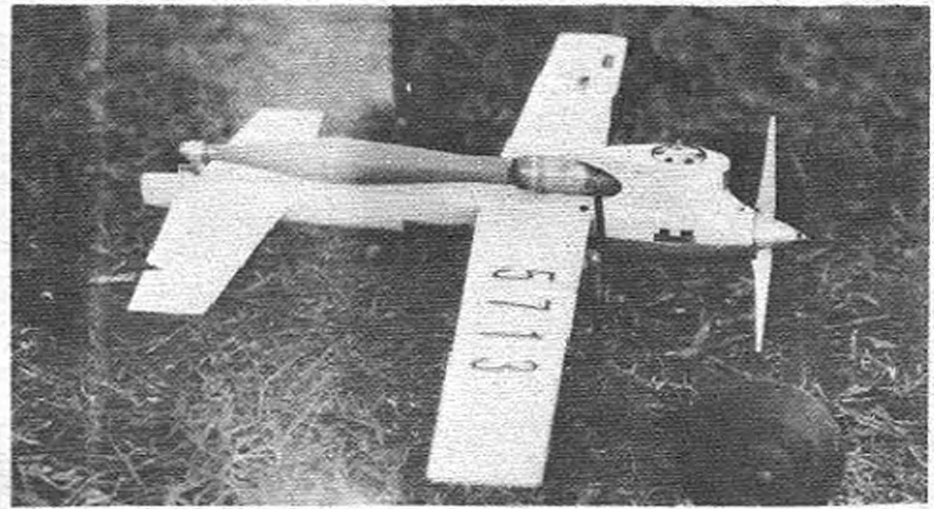
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# NSW STATE CHAMPIONSHIPS 1974

PHOTOS BY WARREN WILLIAMS  
AND VIA DAVID SIMONS

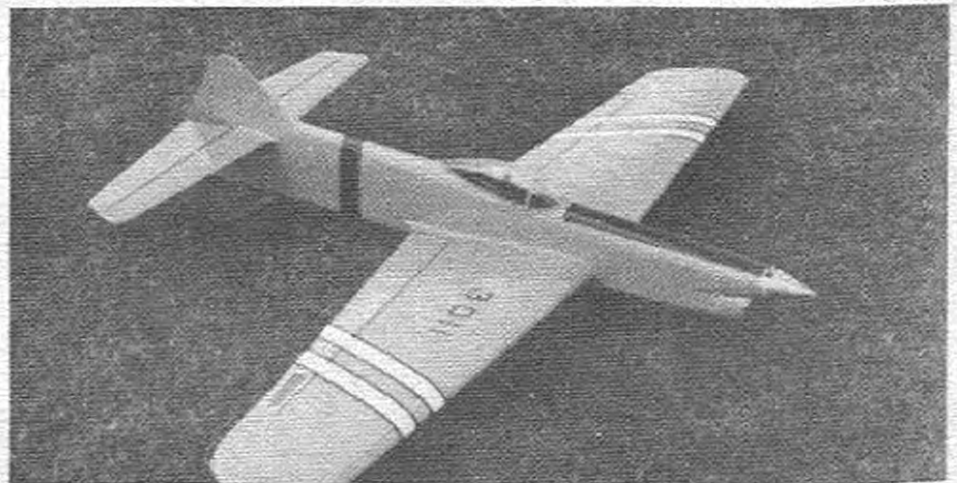
FULL REPORT ON STUNT AND ALL FIRST THREE PLACES RESULTS ON PAGE



Hot speed ship with tuned pipe. Can anyone supply details?



Top: Barry Franklyn's Hawker 'Hurricane' IIC, first in Scale, with his Mosquito. Two beautifully realistic models as this picture shows. Barry is from KMFC.  
Above: Barry, (Incognito) with his Hurricane.



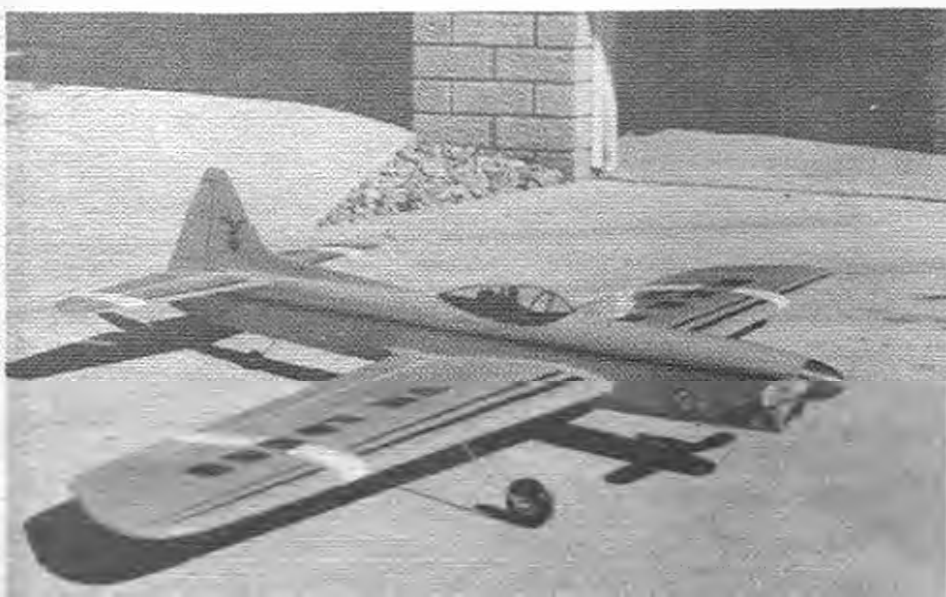
Paul Turner's 'Windwedge'. Looks meaner and more purposeful than 'Windwaggon'. Paul won Open Stunt with this new design - a threat to the stunt scene. Beautiful finish is bright green and red white bands, black trim.



Goodyear teams - Winners and place. Would anyone supply names please?

Above: Steve Mitchell and 'Super Roo'.

Below: Warren Williams' 'Windwaggon' scraped into third place, Open Stunt. Model was his old one refurbished and beautifully repainted.



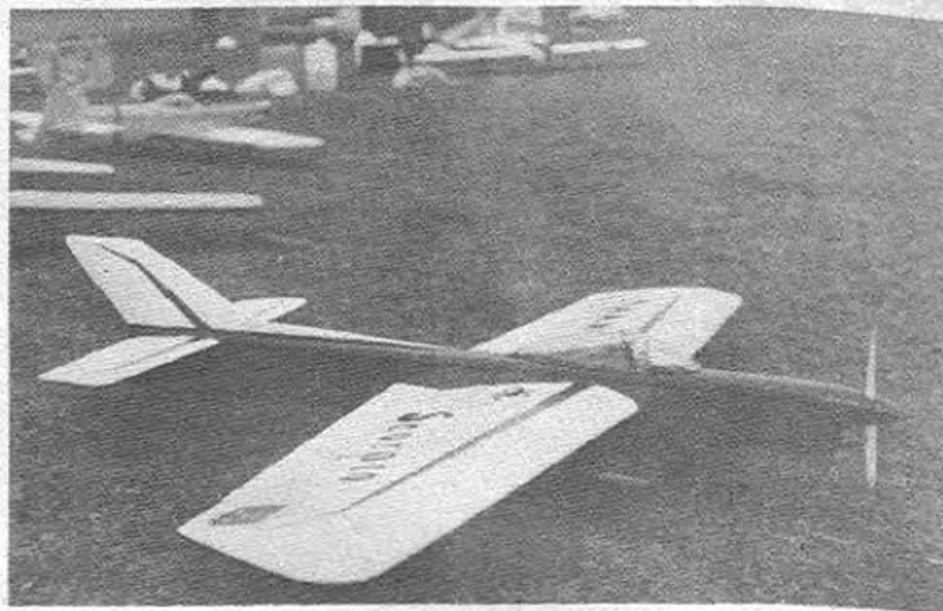
Denver and David Harvison, father and son, with their models modified 'Chipmunk' and high-wing stunter - with low aspect ratio wings that seemed to handle the wind well.



# NSW STATE CHAMPS RESULTS



Above: Consistent flyer, Diane Chandler with *Fast Race*. This young lady gives the men a lot of competition in the circle. Wait till she's tall enough to pass her lines over you tall lads! Photo: via Warren Williams.



Top: Doug Harlow's Scorpio, 5th in open stunt.



Above: Mick Cavan with Supermaster-Merco 35 power. 6th in Open Stunt.

## STUNT SCENE — NSW CHAMPS — 1974 W. WILLIAMS

This year's State Champs saw a good line-up of 19 entries in the Stunt circle including 4 from Victoria.

One noticeable change this year was a trend towards the .40 to .45 powered stunter by some of the top flyers and Duke Fox seems to have a very good thing going with his Fox .40 powerplant.

Our Publicity officer ordered fine weather for the weekend from the weather bureau, however it was feared his letter went astray in the postal dispute, and instead Cold-Gusty-Windy weather with continuous rain was supplied for the first round flown on Sat. afternoon.

The rain eased for Sunday, giving slightly better conditions for rounds 2 and 3.

The gusty conditions forced most competitors to fly at faster than normal speeds, making a smooth pattern difficult to achieve.

The first competitor to fly and eventual winner was Paul Turner with a new model named Windwedge. This aircraft is a development of Paul's very successful Windwagon and performed very well under the conditions.

Reg Towel placed 2nd with another new stunter Superbone! (Super what?) Well anyhow, it flies just great and Reg also put in three excellent flights.

Third place went to Warren Williams with his yellow streaker (Windwagon) just ahead of John Tidey by 26 points with another Windwagon.

Doug Harlow from Victoria with his new Scorpio looked promising, placing second overall in the second round, but problems with a rich motor setting and new model bugs cost Doug vital points in later rounds.

It was rumoured that Doug tried earlier in the week to commandeer Camden Airport, for practice, but was unsuccessful as Airport officials were reluctant to close the airport (sorry Doug).

Mick Cavan with his beautifully finished Supermaster flew an excellent second and third rounds and finished just a few points behind the winners.

Herb Hanna and Ray Ogle also close behind the winners, both flew fast patterns with Herb's Skyscraper going at sub-sonic speeds which made for difficult flying conditions.

Another Windwagon in the hands of Neville Carlos made its presence felt and Neville was breathing down the winners' necks throughout the

Steve and Vic Mitchell from Vic. were at a disadvantage in their first round as they arrived late with no sleep (having travelled all night) and as the competition was under way, practice was not possible.

Steve brought a very impressive new stunter, 'Super Roo' Fox .40 powered, but as this was unflown, decided to fly his 'Snoopy' (named after his cat!) and was not far from the winners.

Vic Mitchell suffered from very rich motor runs (possible tank problems) and after attempting some hairy manoeuvres with an extremely slow-flying aircraft, decided to save the model and cut short his patterns.

Theo Georgiadis, also from Victoria, also arrived without sleep and had his brand-new, beautifully finished 'Challenger' also Fox .40 powered.

Theo did not fly in the first round as late arrival did not allow time for practice and the gusty conditions were not favourable for untried models.

Having put in some practice prior to the 2nd round, Theo forgot something called 'Triangles!' in his official flight which put him out of the running. A pity, for the 'Challenger' is just that.

Denver Harvison flew another new model, a Fox .35 powered Alpine. This featured a high wing with a low aspect design and handled the wind quite well.

Dave Thomas flying his Spacehound suffered a nervy flight after one of his line connectors had doubled back on itself and finally jumped back on his reverse wingover, causing the model to dive at the ground, clipping his prop and wheels.

Ricky White again placed first in the juniors with three very nice flights and also placed 11th overall in the open class.

Ross Middleton suffered a plague of motor problems and his Windwagon was not up to its usual standard.

Bruce Hoffman with another Windwagon flew well to take out 2nd place.

David Harvison flew an extremely fast Chipmunk to 3rd place.

All in all a good competition and if anyone is going to place at the Nats, they will have to spend the next six months putting in some solid practice.

### SCALE

1. B. Franklin KMFC	113.6 pts
Hawker Hurricane	
2. E. Holden, SMAS	121.0 pts
Stinson Reliant	

## OVERALL PLACINGS - AEROBATICS

1. Paul Turner	5816
2. Reg Towell	5462
3. Warren Williams	5307
4. John Tidey	5281
5. Doug Harlow	5111
6. Mick Cavan	5093
7. Ray Ogle	4897
8. Herb Hanna	4837
9. Neville Carlos	4808
10. Steve Mitchell	4674
11. Ricky White	4302 Jnr
12. Bruce Hoffman	3887 jnr
13. Denver Harvison	3534
14. David Harvison	3234 Jnr
15. Vic Mitchell	3223
16. Dave Thomas	2949
17. Theo Georgiadis	2075
18. Ross Middleton	2055 Jnr
19. Ron Nyberg - Scratched.	

## RESULTS

### NSW STATE CHAMPIONSHIPS

#### HALF A TEAM RACE

1. Patsky, MMFC	11.13.9
2. M. Bell, Dubbo	11.4.1
3. C. Nomkes, EDMFC	11.23
4. K. McDonnell, Dubbo	

#### FAI TEAM RACE

1. Oddy-Riehardt, KMFC	9.54
2. Shing-Kerr, EDMFC	10.39.6
3. Wilson-Vella, VCLA	12.2.0

#### B TEAM RACE

1. D. Baird, MMAC	7.26
2. M. Bell, Dubbo	7.31.5
3. Plgrim-Gappes, Doonside	9.42

#### FAI COMBAT

1. Bourne, VCLA	300 pts
2. B. Paulson KMFC	50
3. G. Sweetnam, VCLA	

#### JUNIOR COMBAT

1. G. Wilsonm VCLA	
2. P. Possee V BMFC	
3. G. Sweetnam, VCLA	

#### OPEN COMBAT

1. G. Bourne, VCLA	
2. B. Phippen, REMAC	
3. M. Phippen, REMAC	

#### OPEN RAT RACE

1. M. Bell, Dubbo	7.49.4
2. P. Waterbeemp, ACT	7.54.5

## JUNIOR RAT RACE

1. Sweetnam, VCLA	314 laps
2. Stokes, Dubbo	293 laps
3. Comiskey, VCLA	222 laps

## 2.5 RAT RACE

1. D. Kidd, VCLA	239 laps
2. Wilson/Vella VCLA	238
3. Burgess, IMAC	183

## JUNIOR SCALE

1. B. Hoffman, BMFC	103.6
Stearman PT 17	

## GOODYEAR RACING

1. Keogh-Hewitson, KMFC	9.2.8
2. Oddy-Riehardt, KMFC	10.13.0
3. B. Lee, SCMAC	11.20.0

## FAI SPEED

1. B. Treagus VCLA, 17.26, 130 mph	
2. M. Cook, VCLA, 17.48	
3. M. L. Trimmer, REMAC 36.00	

## CLASS 2 SPEED

1. A. Kerr, EDMFC	
2. Oddy-Riehardt, KMFC	11.44
3. D. Baird, MMAC	12.28

## CLASS 3 SPEED

1. A. Kiellor VCLA (new record?)	9.89
2. A. Kerr, EDMFC	9.90
3. B. Treagus, VCLA	11.65

## AEROBATICS

1. P. Turner, Doonside	5811
2. Reg Towell, "	5462
3. W. Williams MFCA	5307
4. J. Tidey, NACA	5264
5. D. Harlow, VCLA	5111

## JUNIOR AEROBATICS

1. Ricky White	4302
2. Bruce Hoffman	3887
3. David Harvison	3230

## CRATE RACE CANCELLED

## B PROTO

1. D. Baird, MMAC	34.94
-------------------	-------



DAVID SIMONS

# DH 94 MOTH MINOR RUBBER POWERED MODEL



Why rubber power? — well, it's simple, inexpensive, quiet and it starts every time. This form of motive power also allows simple lightweight finishes since no fuel proofing is needed.

This little model was designed with sports or 'fun' flying in mind. It offers good performance, realistic flight and simple construction. Low wing designs fly as well as any other configuration under rubber power, the light wing loading gives a slow flying speed, which makes the model less difficult to trim.

Weight is the key to success; my original DH 94 weighed 4½ ounces, including ½ ounce of lead ballast. Aim for 4 ounces all up, which means 3½ ounce airframe weight.

The DH 94 is unfortunately not a well-documented aircraft. The original was decorated in RAAF wartime trainer colours of all yellow (lightweight tissue) with transfer roundels and identification markings. Control surfaces

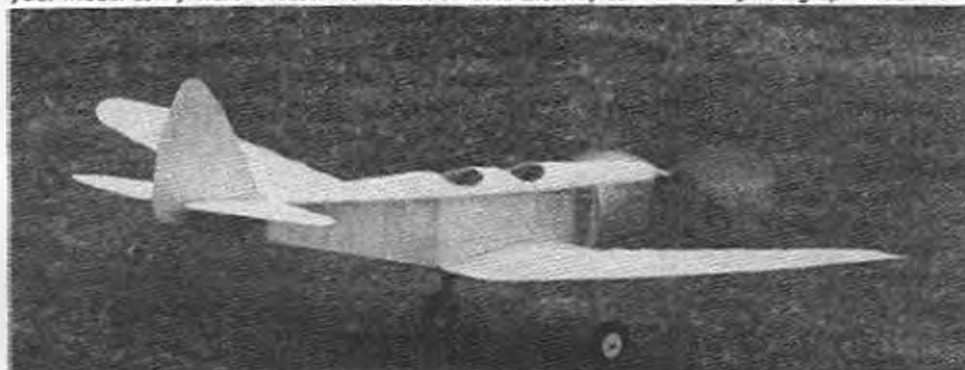
were marked in using drawing ink and a drawing pen. An alternate method would be to use narrow strips of black tissue.

Construction-wise, the model is quite straightforward, but careful wood selection is necessary to get down to the desired airframe weight. The fuselage decking should be the lightest 1/32nd available. Fuselage longerons should be medium-hard 1/8" sq. All cross pieces and other materials should be light.

Begin fuselage construction by laying out two sides, one above the other, separated by waxed paper. After these have set, they are removed from the board, and joined by the centre two formers. The nose former can then be added and the tail ends of the fuselage can be drawn together using clothes pegs or rubber bands. Add the top fuselage formers and then glue on the fuselage top decking in three pieces as shown. Do not cut out the cockpit



Above: Just off the strip and climbing well. Below: Off grass — no trouble to the Moth Minor. Left: Excellent view shows the simple framework to advantage. Model was first flown without details. Trim was added later with drawing pen and transfers. Go sparingly on paint if you want your model to fly well. Photos: R.Katsch. (This is the way to REALLY photograph models!).



apertures until the cement has dried. Add the ply nose former and cowl cheeks etc.

The wings are built straight over the plan. Construct the centre section first then add the wing panels, propping them up to the correct dihedral angle. Note the use of gussets at the dihedral joints. The 16 gauge undercarriage is bound and epoxied to the undercarriage spar — again note the use of gussets. Be liberal with glue here.

Tail surfaces are straight forward, but be sure to use the lightest 1/16 sheet available. Note the use of anti-warp strips inlaid into the surfaces.

Finish with two coats of well-thinned dope on lightweight tissue. Since weight is important paint should only be used on details such as wheels, cowl, prop etc. Any markings are best applied with coloured tissue or transfers.

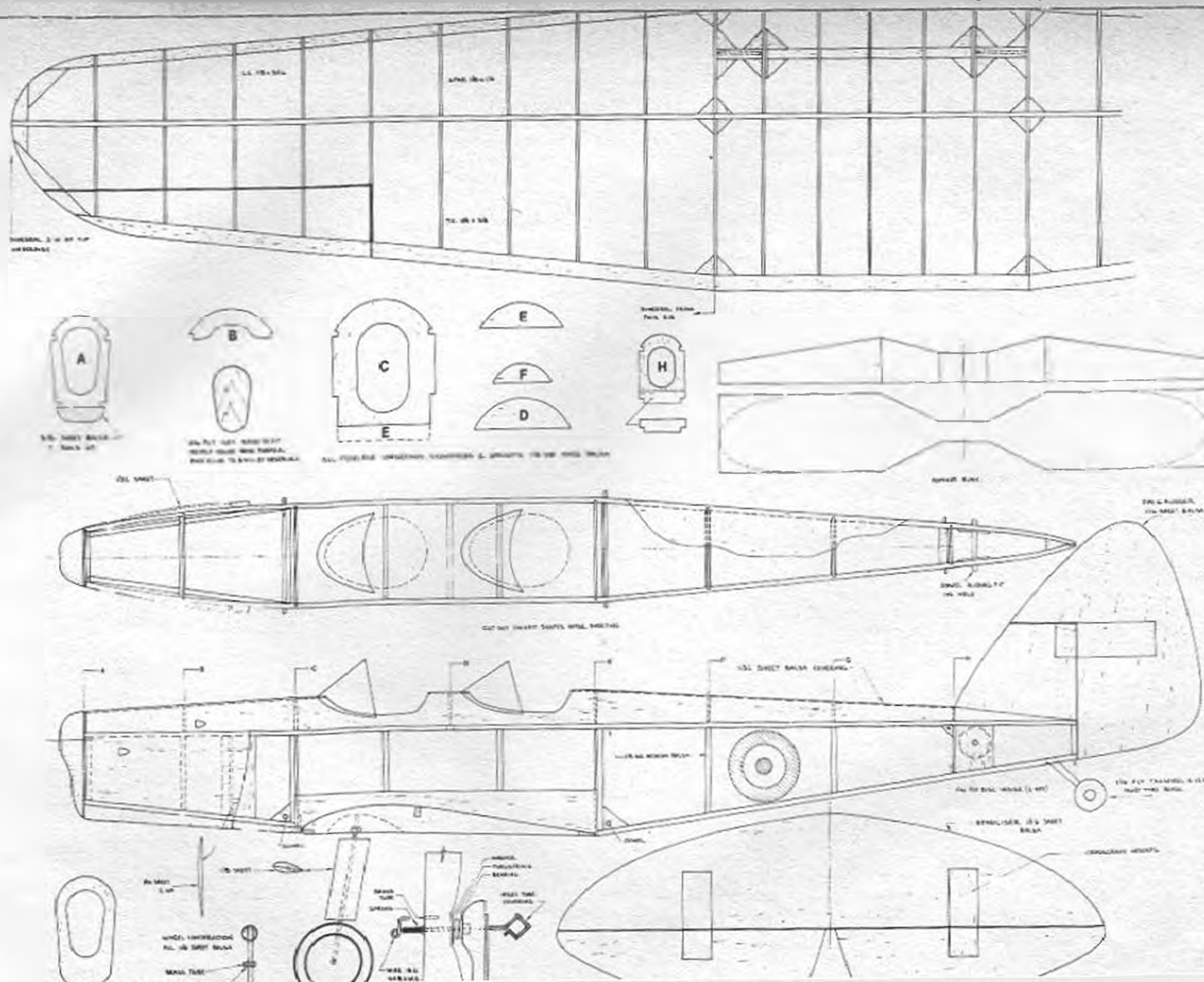
The propeller is really quite simple to make, following the recent series of

articles in 'Aeromodeller'. Finish the prop with lightweight tissue and paint (lightly) if desired. Alternatively a 12" diameter commercial plastic prop may be used, but there is really no substitute for the carved balsa type.

The prototype used a thrust bearing in the nose block, but 2 x ¼" copper cup washers back to back would probably suffice. Note the use of a free wheel mechanism. It is well worthwhile spending some time on the prop assembly, since this is really the heart of any rubber model.

Trimming is simple. First make sure the freewheel is operating correctly and the centre of gravity is in the correct position. Aim for a slow glide with a right turn from a hand launch.

Under power, add sufficient right thrust to give wide right hand circles. The original used 6 strands of 6 x 1 mm Pirelli; on about 450 turns it would climb to 150 feet or more. ROG's are easily accomplished.



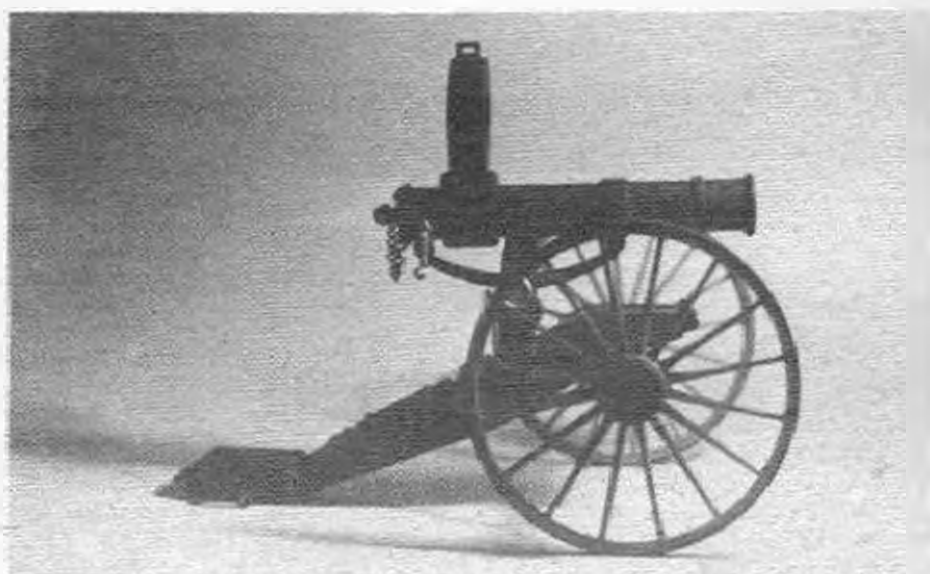


# GATLING

MILITARY GENIUS? FATHER OF THE MACHINE GUN, DESIGNER OF MASS DEATH.

HERE REVIEWED FOR THE FIRST TIME! A PLASTIC KIT OF THIS FEARSOME WEAPON!

BY CRAIG LEWIS



Above: Profile of Craig's almost finished Gatling. Barrel later painted bronze.

To Richard Gordon Gatling goes the credit for inventing the first efficient machine gun. Gatling commenced work on his manually powered rapid fire weapon just after the beginning of the American Civil War in 1861. By early 1862, Gatling had developed his first prototype gun. The two specific features of this gun which were to be common to all Gatling guns were, firstly, a lock cylinder containing the strikers which revolved with the barrels, and secondly, a separate striker for each barrel. This initial type of the first model which had six barrels was a percussion model with paper cartridges and a 0.58 calibre projectile. It fired at a rate of 200 rounds per minute. Its major defect was gas leakage at the breach and this was remedied in the second version which fired a copper-cased 0.58 calibre rimfire cartridge. The gun was quickly though somewhat hesitantly adopted by the US Army.

It saw service during the Civil War and in the Indian Wars. Eventually its rate of fire was increased to 1,000 rounds per minute.

The last model Gatling gun to be produced was the 1895 version. Its barrels were rotated by gas pressure from a tapping near the muzzle.

In the USA the Gatling was finally declared obsolete in 1911, eight years after its inventor had died.

It is not always appreciated that the British Army and Navy made extensive use of this American weapon. They first equipped themselves with the gun in 1874. Despite the fact that it was a cumbersome weapon and had some faults, mainly ammunition troubles, the Gatling gun was put into deadly effect in many of the colonial wars which were fought during the last quarter of the 19th Century. It was successfully used against Zulus, Peruvians and Egyptians. Often the Gatling gun was used in land battles and were actually manned by Naval detachments.

Such was the case during the Battle of Tel-el-Kebir in the Anglo-Egyptian War of 1882. Thirty British sailors manned six Gatlings which gave an impressive performance. At the close of the battle the death toll was:

BRITISH: 39  
EGYPTIANS: 2000.

The British phased out the Gatling when the Maxim machine gun was gradually introduced after 1884.

When I first noticed the Gatling gun kit displayed in a Sydney Hobbyshop I was keen to construct a model which

by Palmer Plastics (the kit represented a five-barrel Gatling gun. It consisted of 44 pieces and had a good and easy-to-follow instruction sheet. After an inspection of the pieces the heat of my enthusiasm began to wane a bit. One of the wheels had not properly formed in the mould and had to be completed by filling the misshapen hub with Britfix body putty.

The pieces in the kit did not fit well generally, and there was much work to be done with both knife and putty and file before assembly. The general lack of precision was most noticeable on the barrel and associated fittings. A major drawback of the model for me was the lack of detail. The fact that I had recently constructed some finely detailed Tamiya kits made me all the more aware of some of the crude and inaccurate aspects of the model. A glaring inaccuracy was the distortion of the curve of the elevation quadrant. This should be semi-circular and not a shallow curve as represented on the model.

On the model it can be seen that the barrels are enclosed in a metal case. Until 1876 nearly all Gatling guns had exposed barrels.

Two exceptions were certain guns of the 1874 and 1875 models made for the US Navy which were bronze encased. In 1877 the Bulldog model Gatling appeared. This was the first regular production model to have its barrel and breech sections fully enclosed in a cylindrical bronze housing. At the front of the gun the muzzles protruded slightly through a bronze plate.

Research into the actual colours to be used revealed that nearly all early Gatlings were furnished with just a bare metal finish. Then, from 1895 onwards, bronze parts were painted black or blued, and other steel parts such as barrels and point bar were such as barrels and pointing bar were blued. As I was not satisfied with the brass plating on the barrel of the replica I painted the whole of the barrel casing and mounting black and then painted the appropriate sections with bronze paint. In fact, I would suggest that the barrel be painted first with the bronze, with the black overpainted as the darker colour should really go over the lighter. For this I used one of the Humbrol metallic finishes and was very pleased with the result.

The model features a drum magazine rather than the better-known tin box magazine. The type shown is the Accles Positive Feed Magazine. This type had

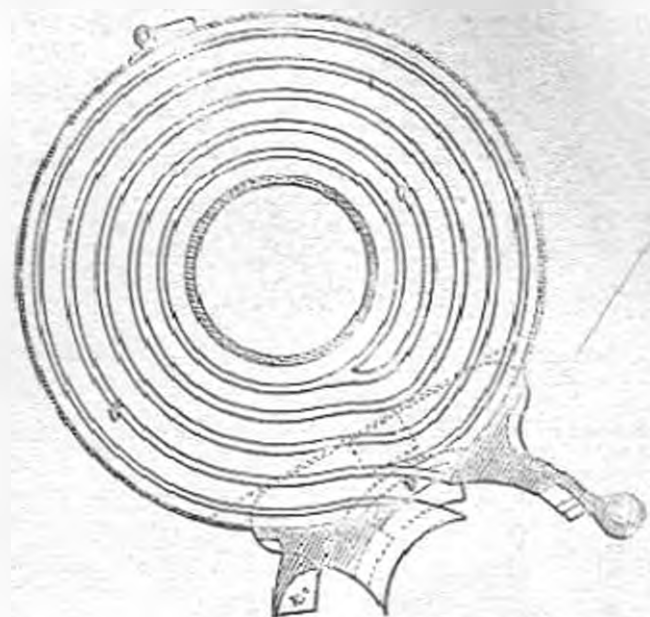


These engravings are from a contemporary publication and illustrate the particular model similar to that chosen for the kit. Note that the elevation quadrant — a semi-circle on the real thing — is a gentle curve on the model.



Left: Contemporary engraving of a Gatling in position to deliver high angle or mortar fire.

Below: 1/4 near view of Gatling kit showing plated accessories. Photo A. Shannan.



ACCLES POSITIVE FEED MAGAZINE SHOWING SPIRAL FEED TRACKS.

front and back plates. A propeller wheel was rotated by a gear on the barrel unit. This meant that as the barrels revolved cartridges, which lay in the slots of the propeller, were guided in a circular path through the tracks and into the gun. On the model it was necessary to cover the inside wall as the kit pieces were left open. This was easily done with some thin plastic card.

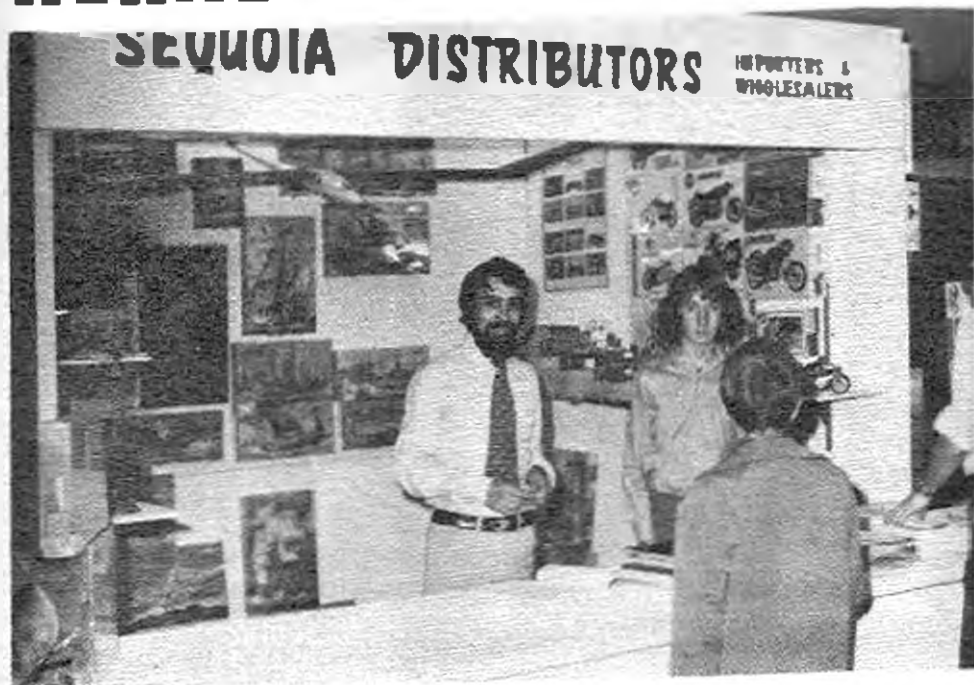
The model is mounted on a Broadwell all-metal carriage. This is one of the many different types of carriage used during the gun's varied career. The 1862 version was mounted on a slightly modified artillery carriage. At that time

weapon. As its offensive potential came to be known, various types of mountings were developed. These varied from lightweight, collapsible tripods to the larger and heavier armoured carriages. There was even a special mounting made so that the Gatling could be fired from the back of a camel.

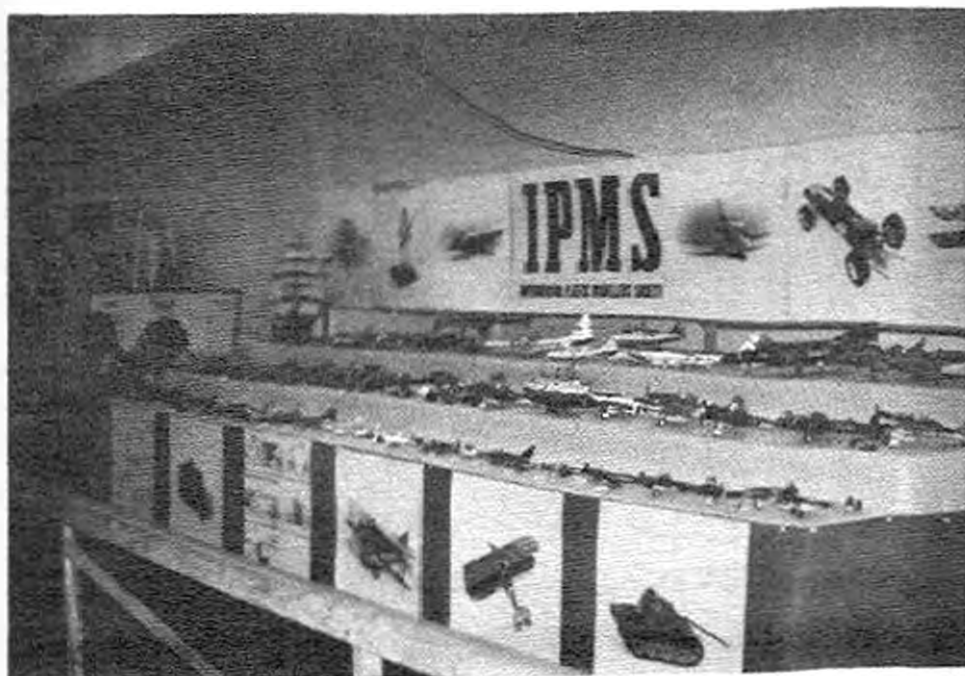
I would like to mention a redeeming feature of this model, namely its size. It stands seven and one half inches high and is seven and one half inches long, so that, despite its other deficiencies, it makes a most impressive display model. This impressive display piece is well worth the time and effort to construct it, and would be a fine addition to any collection.



# HERALD HOBBY SHOW ON AUSTIN TITO LEAN:



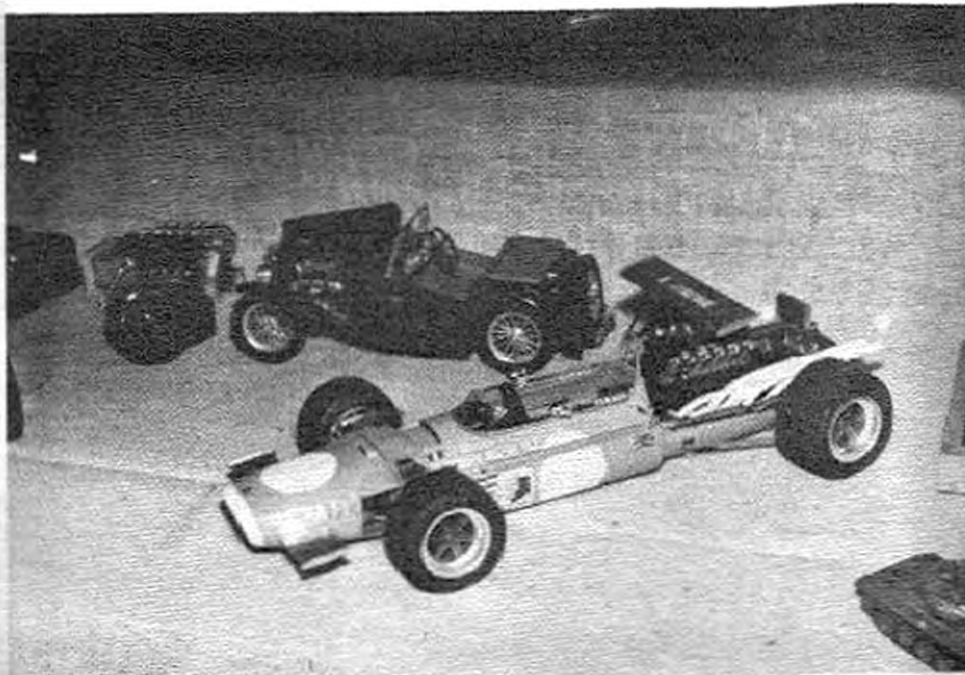
Sergio Taccoli presides over his stand at the Herald Hobbies Exhibition. Stand displayed ships, motorcycles, ancient weapons.



The excellent IPMS (International Plastic Modellers' Society) stand. Over fifty superb plastics of planes, ships, cars and armour graced stand.



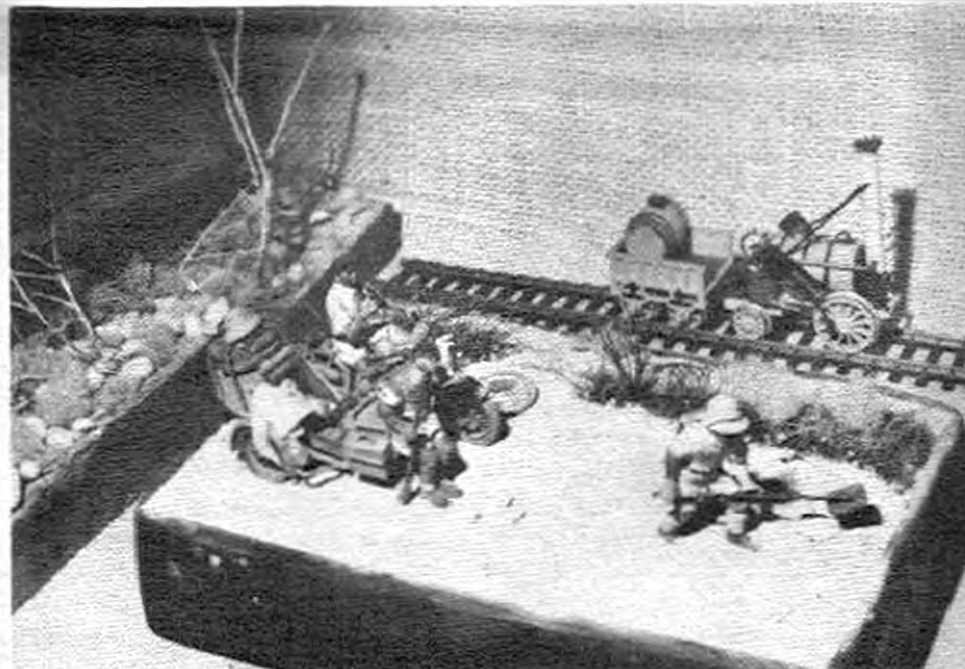
John de Horne displayed variety of hobby goods at Fantastic Hobbyshop display.



Delightful racer and MG TC Sports took our eye on IPMS stand.

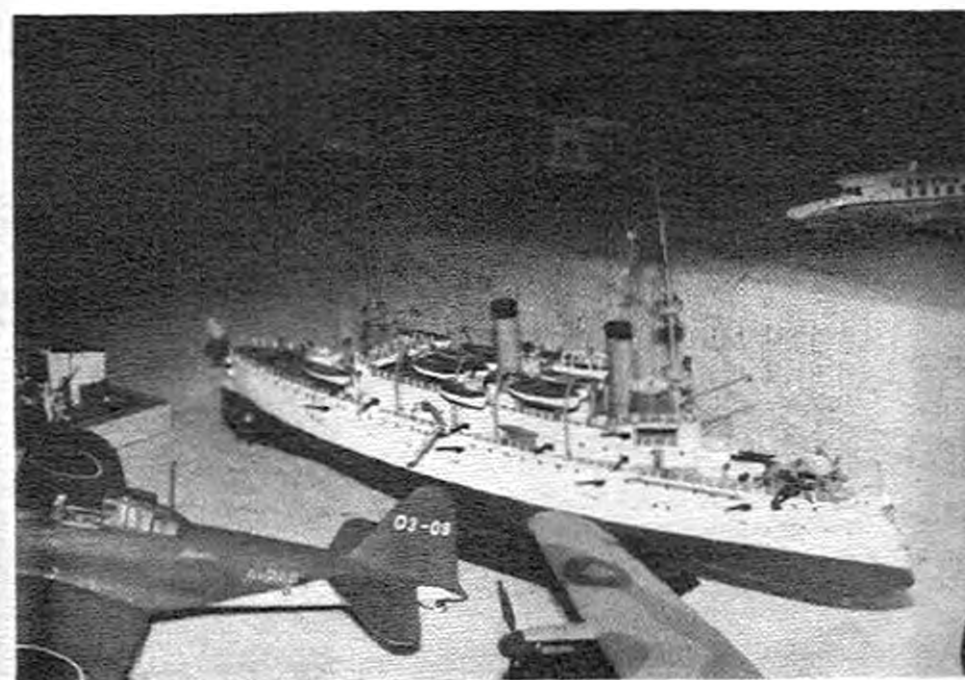


Laurie Cantrell dispensed advice and 'know-how' from Competition Engines/Lloyds Hobby Centre stand.



Superbly detailed small diorama on IPMS stand shows Afrika Corps unit with mine detector. Stevenson's Rocket in background.

Ashfield-Burwood Railway Modelling Club had comprehensive layout, very popular with visitors.



U.S. Battleship 'Maine' on IPMS stand. Some aircraft had handpainted lettering of superb quality.



# CHALLENGER

SUPER STUNTER FOR ALL .40 ENGINES

DESIGNED AND BUILT BY  
THEO. GEORGIADIS, (Victoria).



The author, genial Theo. Georgiadis with the subject of this article. Theo's superb drawings are available.

The last time when I seriously sat down and built a stunter was three years ago for the Wallacia NSW Nationals. The models I built then - two of them - were of an American design called the "Formula S" and I suppose, looking back, it wasn't a bad design, had it been built around 46 oz instead of 52 oz. In fact, for many years, my models were of the proven variety, e.g., *Noblers*, *Thunderbirds*, *Shark*, and many others. Somehow, these designs had never felt right.

It wasn't until after the Geelong Nats. in 1972 when my mind was made up, that I decided to scratch everything and start from the beginning on my own. Hence the name, *Challenger*, a sudden questioning or calling to answer. And there were a great many questions. E.G. What sections? How thick? What moment arms? What areas? Trike or dual gear? Wing or fuselage mounted? What power? What to aim for? etc.

The obvious start was the wing, and I here I believe, is the heart of the aircraft, keeping the wing loading to a minimum. It has been common practice in Victoria to build small, sometimes heavy overpowered designs. All these under-area designs would probably have a high wing loading of perhaps, 20 oz/sq. ft. The solution is, of course, to install a hot .45 to .60 engine to overcome the weight that the wing is unable to support. A good guide to determine area is to use a factor of 8oz. per 100 sq. inches of wing area. This also gives you a maximum weight of model to aim for.

The decision was to follow along the lines of large areas with thin sections for penetration. Overpowered types did not appeal to me and I've found them very uncomfortable in windy conditions. At the same time I wanted to build the design around the Fox .40 stunt motor, then reputed and since proved to be a very powerful power plant.

I chose a thin symmetrical airfoil

and the tip 12% with an overall span of 62 1/4 inches. The leading edge was swept back 7° to give tip stability about the yaw axis. High point of the sections was calculated at 25% of overall chord.

Due to poor selection of suitable balsa in Victoria, the ultimate wing area of 734 sq. inches was to overcome this deficiency. As it worked out the area chosen, handled the weight of 55ozs on the prototypes easily.

Overall drag on the wing in probably close to the smaller, fatter wings of popular designs but must be remembered this model has a larger overall area for its size. The *Challenger's*, at 55ozs and an area - wing only - of 734 sq. inches, gave a very desirable loading of approximately 11 ozs per square foot.

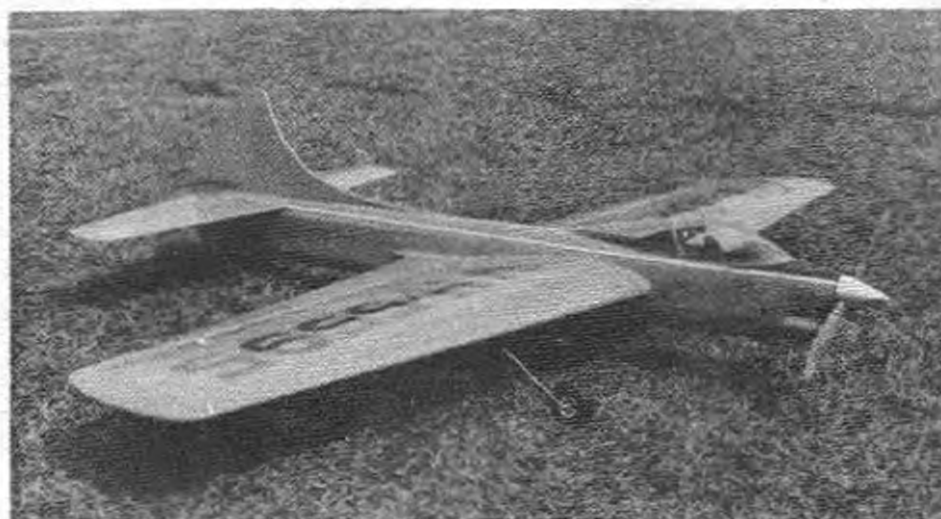
Next step was deciding moment length. Here is an area where any form of detailed calculations is still purely a guess on experience. In this case the determining factor for the moments chosen - and they may appear short - was an incredible 16 ozs of hardware in front of the C.G. e.g. motor, muffler, unbelievable 3ozs), removable tank, wheels, fibreglass cowl, spinner, shaft extension, prop, canopy. The moments shown on the plan are those actually used and the only deviation was during the trim flights when an aluminium shaft extension was replaced by a steel counterpart for added nose weight.

Being a draftsman by career it is my habit to produce a drawing which is totally self-explanatory, and on this basis, lengthy step-by-step instructions are not essential. However, some minor building details should be discussed.

## WING:

I strongly recommend the use of a jig as outlined on the plan. Make certain that centre lines are accurately marked to ensure that warps and washouts are not built in when the structure is turned over during sheeting.

Assembling takes place as a complete wing, not forgetting to install the bell-



Two views of the Challenger showing off the sleek but practical lines of this efficient stunt machine.

of the ribs. Turn over the complete assembly when dry and install undercarriage wires and bottom sheeting. Again turn over, pin down and complete top sheeting. When all is dry, shape down excess wood on the leading edge and trailing edge extensions to cross-section indicated.

The prototype models employed adjustable lead-outs as shown, and was found that they had to be raked back an additional quarter-inch from the position shown on the plan for line tension.

Manufacturing control-horns should not present a problem as there are numerous places where silver-soldering could be done for you, or if you are capable of welding, it can be done at home with a gas torch. However, any of the commercially available horns of your preference can be used, ensuring that the flap/elevator ratio is fixed at 30 degrees flap/45 degrees elevator movement either way. Do not install flaps permanently until wing is inserted through fuselage.

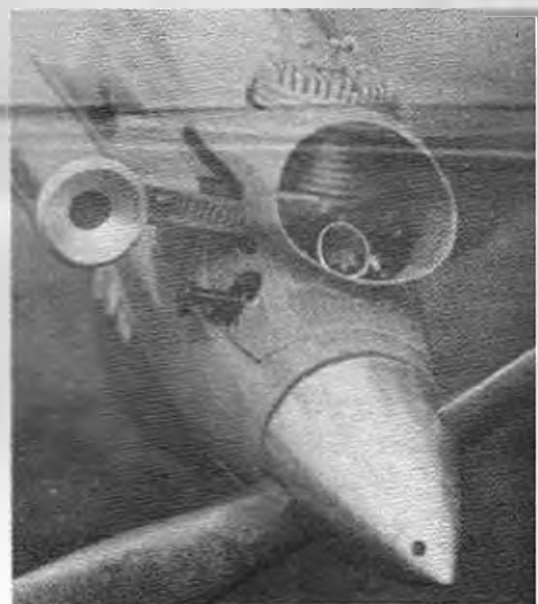
## FUSELAGE:

Fuselage is of the common box construction and is very straightforward. The flaps are inserted through and moved back by cutting an elongated slot of about three-quarters of an inch on each side of the fuselage. This allows the flap assembly to clear the wing while it is slid through.

To allow this, two cuts have to be made to the fuselage sides at the U/C location, the wire being flexible enough to juggle past the cuts. The flap assembly can now be installed permanently using nylon hinges or your preference.

This installation procedure prevents large sections of the fuselage being removed to install the wing from beneath, causing misalignment of the top edge of the sides, commonly used as a reference for measurements, to align the tailplane at 0 deg.-0 deg- to the wing and thrust line.

cowl.



Nest cowl is fibreglass. Theo explains how to make it, below.

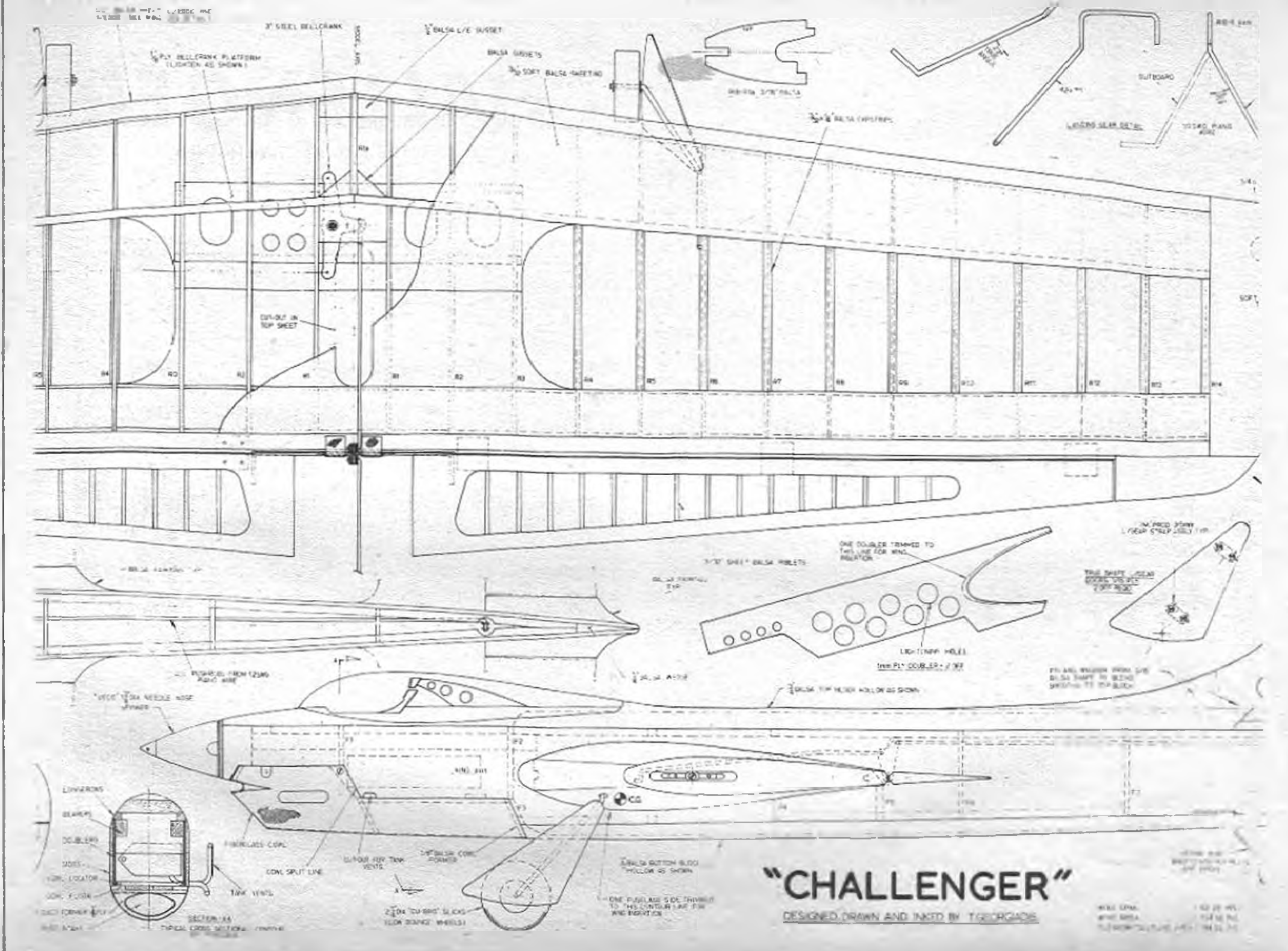
they cannot be shaped to any streamlined form without greatly weakening them. Fiberglass cowls on the other hand, are strong, thin in section, and can be made to any shape without fear of loss of strength. In addition, more air space is available in the engine area for greater circulation of cooling air.

For those who have never attempted moulding fiberglass cowls, this, briefly, is the procedure:

1; Carve a hardwood pattern and finish to a high polish. Make certain that plenty of "draw" is incorporated for the easy removal from the "female" mould. Especially around the intake air area where the undercut blends with the spinner contours. This area can be nasty, as it tends to key itself to the mould.

2. Place pattern in a box temporarily. Liberally coat pattern with mould release. Pour dental plaster, working well into the form to remove air bubbles. One word of caution: Dental plaster must never be mixed in large quantities as it generates heat and begins to set very rapidly, even while mixing. It would be best if small quantities are mixed giving more time for pouring and with less wastage. When set - approx. two hours - remove box sides and pattern should easily slide out. If persistent,





PLAN IS SO LONG WE CANNOT GET IT ALL IN! WRITE FOR YOUR FULL SIZE PLAN NOW!

a light tap should persuade it. Leave mould to dry thoroughly. This is important as any moisture in the mould with

ant as any moisture in the mould will prevent the resin from curing. Coat inside of mould with silicone mould release, working it into the surface. You are now ready to lay cloth.

3. Coat mould with resin or 'Gel-Coat' prior to cloth laying. For the more difficult shapes, cloth should be cut in strips so as to easily follow the desired thickness has been achieved. When cured, remove the cowl and trim to shape. Any sanding can be done with 180 grit wet/dry paper, used wet. Target weight for cowls should be in the vicinity of 1½ oz - 2 oz finished. Balsa construction can be fixed using two-part epoxy cement.

screwdriver through the large cowl intake.

This design will not disappoint you. Any and all queries about this design or suggestions for improving the design will be welcome. Write to me at: 77 East Street, GLENROY, 3046, VICTORIA.

**FULL-SIZE PLANS FOR THIS MODEL ARE AVAILABLE FROM THEO GEORGIADIS AT THE ABOVE ADDRESS, OR FROM M M PLANS SERVICE, P.O. BOX 201 CAMPBELL TOWN NSW.**

**PRICE: \$10.00**  
Postpaid.

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, 11 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.

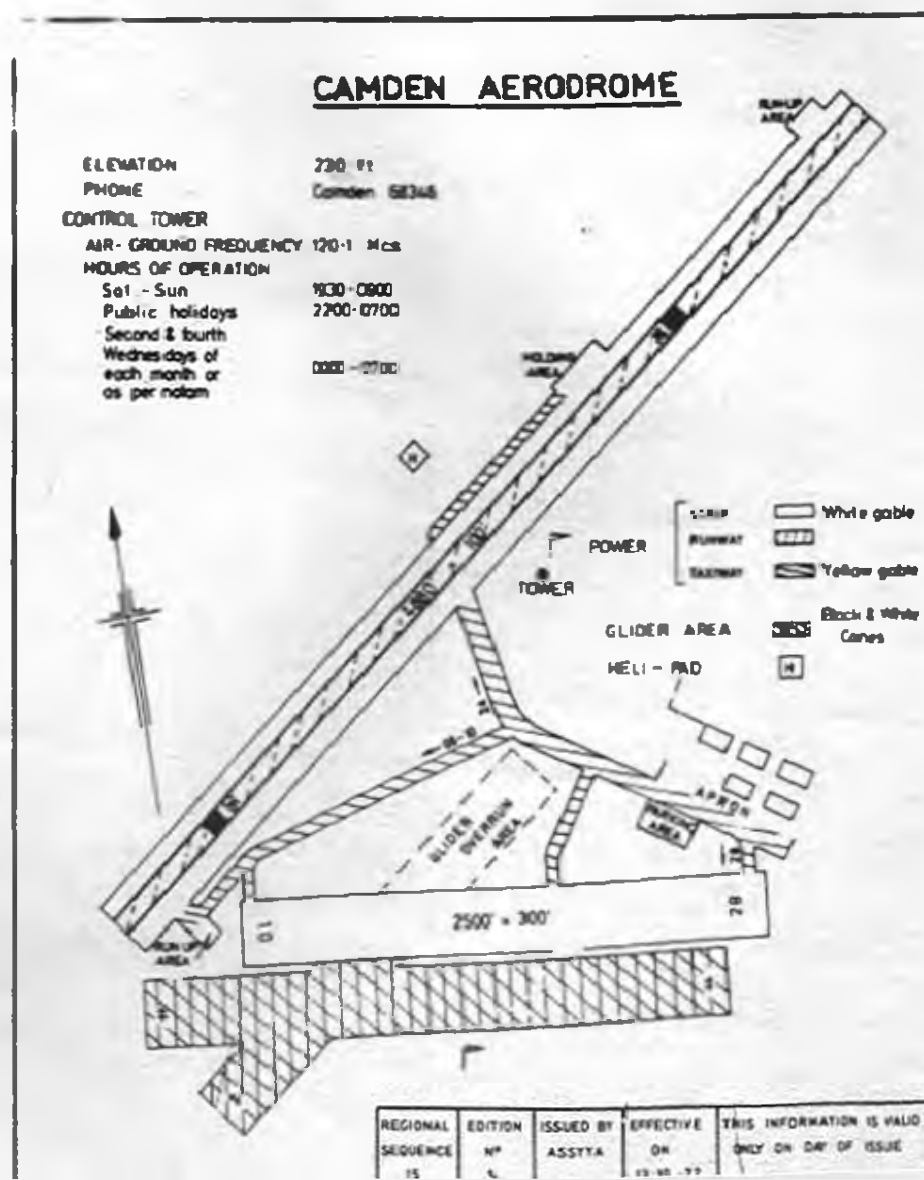
# STOP PRESS NEWS NATS AT CAMDEN

It's official now, there is no 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 will appear in August Modellers' Monthly. In the meantime further details may be obtained from Ken Burke (02) 660-5366 (day) or 337-4311 (home) or Dick Summer 609-7816 (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 in-



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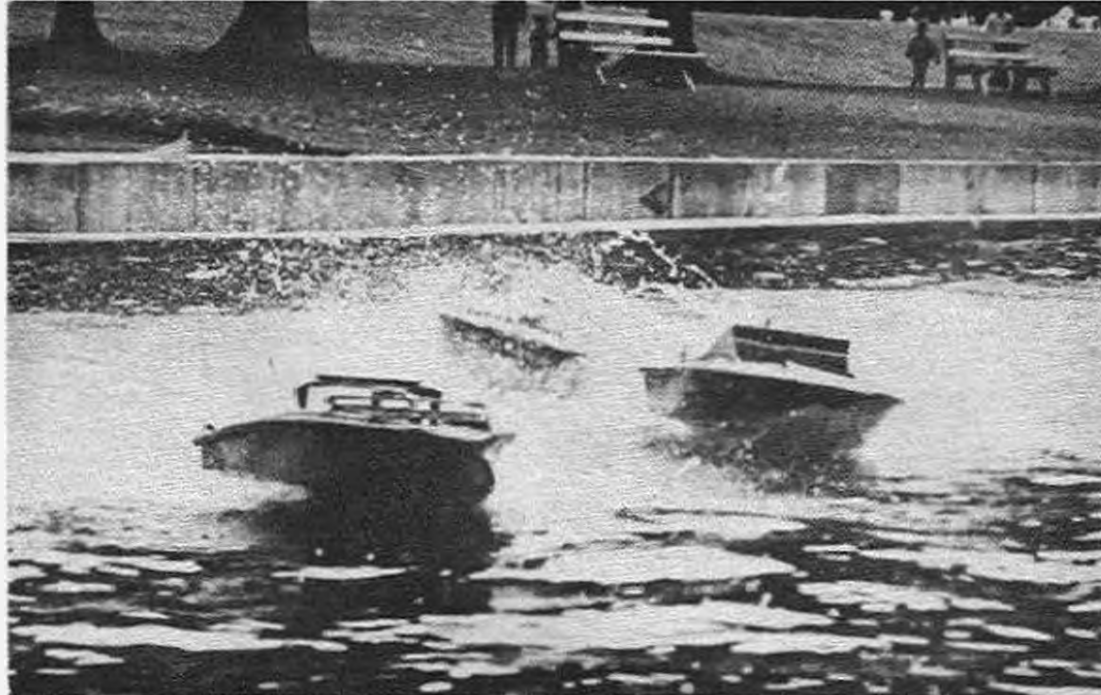


M.B.C. of N.S.W.

## CLUB NEWS '74

BARRY CRAVEN, Hon. Sec.

*Spray flies on the turn as these three boats fight it out for the lead in a recent club competition.*



### MODELLERS' MONTHLY NOW OFFICIAL ORGAN OF THE MODEL BOAT CLUB OF N S W

Last issue I said I would report on activities so here they are.

The combined meeting was a dismal failure, as only two members from other clubs (namely Taree and Kempsey) came down.

Ray Blight from Kempsey brought two boats which he ran successfully.

Ray Childs from Taree was unfortunate, as his boat was put out of action at the last minute. But he came just the same.

The meeting was only a failure from visitors' point of view, as we had a very good and encouraging turn-up of club boats.

The film night was run and again, was not popular. (I am unable to understand what members need to make them happy!)

The films were excellent and very interesting.

The Ryde Pool outing was a success from the program side but not patronised by members.

Those members who came were very pleased with the new pool format. These were as follows:

1. Pairs racing
2. Steering comps for both electric and power.
3. Novelty items such as balloon bursting.

No boats were wrecked and all members enjoyed themselves. It was decided to continue these outings.

The club has decided to cut down on meeting nights. These will be held on the first and third Tuesday nights for six months' trial, from first Tuesday in June.

The meetings will be held at Sydney Technical College, Recreation Block, Mary Ann Street, Ultimo.

There is a shortage of props just now but the sun will shine through soon as more will be coming in to Silvertone Electronics, Competition Engines and Hobbytec, all of whom are now waiting for supplies.

Laurie Cantwell of Competition Engines has K & B .40s and can convert them to water-cooling on request.

Hobbytec will do some mechanical work if needed.

There will be new petrol motors introduced into the club, made by ROPER engines, USA. We hope they will replace the O & R successfully; the only problem is that they run right-handed. Special props are being made up at present to suit.

It has been suggested that a steering competition be held at Kippax Lake and also a speed course, for the comparison of speeds with other parts of the world. This will be under way as soon as possible.

There will be more emphasis on scale models too, as they add to spectator and display appeal.

There is a possibility that the club will be taking part in a charity display at St. George Speedboat Club. We will run races for any boat which attends.

I have had the pleasure of meeting a couple of lads from Wollongong who are as keen as mustard. They run 'Cachalots' with OS and Enya .35s.

For a couple of fellers who haven't tried boats before they are doing very well.

They have ample water at a Wollongong friend's dam and are trying to

interest more people in the sport.

I expect they will be breathing down our necks very soon! Good luck to them anyway.

Cheerio for now and good boating.

Barry Craven,  
Hon. Sec.,  
90 Brougham St.,  
Kings Cross. 2011.

Beautifully built Rescue launch seen at Melbourne outing.

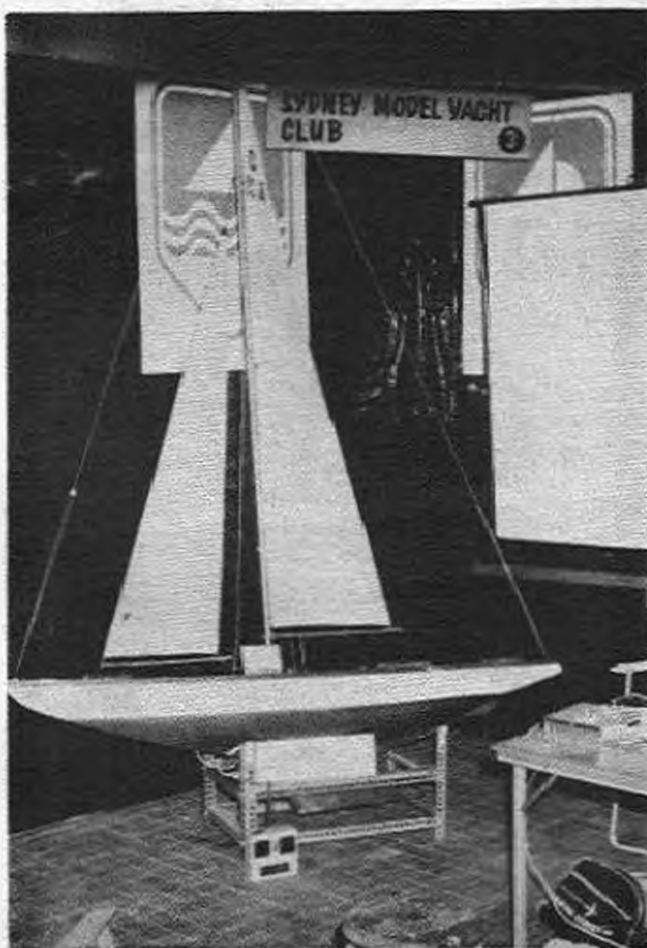


MM NOW INCORPORATES  
MB OF NSW NEWSLETTER



'Empress of Australia' in miniature on IPMS stand at Hobbies exhibition.

Below: Left: 'O' Class yacht on Sydney Model Yacht Club stand. Right: 'Marblehead' class yacht on SMYC stand (see plans for Marblehead in Modellers' Monthly, March 1974)





# MAAQ



Silvio Tloag of Ingham gave a fabulous display of a helicopter flying. Came to learn about helicopters but knew more than anyone in Brisbane. Here seen with his son and conventional R/C scale. Photo: Courier Mail via A. Gorrie.

The Labour Day week-end was terribly wet and great pools of water lay on the strip and the ground was churned into mud with torrential rain at varying intervals. Perhaps the most redeeming feature of the weather conditions was that there were no dust worries.

A giant marquee used for official purposes and for displaying storing scale and other models was quite beneficial to many spectators during some of 'those varying intervals'. The field was packed with cars and it looked as if the R/C Champs were one of the few forms of entertainment worth going out in the weather to see. Scale was quite interesting and encouraging with a Bleriot, Avro Cadet two Mustangs, Piper Comanche, a beautiful Nieuport and Smithy's Southern Cross and an extremely good looking Moth Minor, which had never flown before the day. Shades of the Nats.

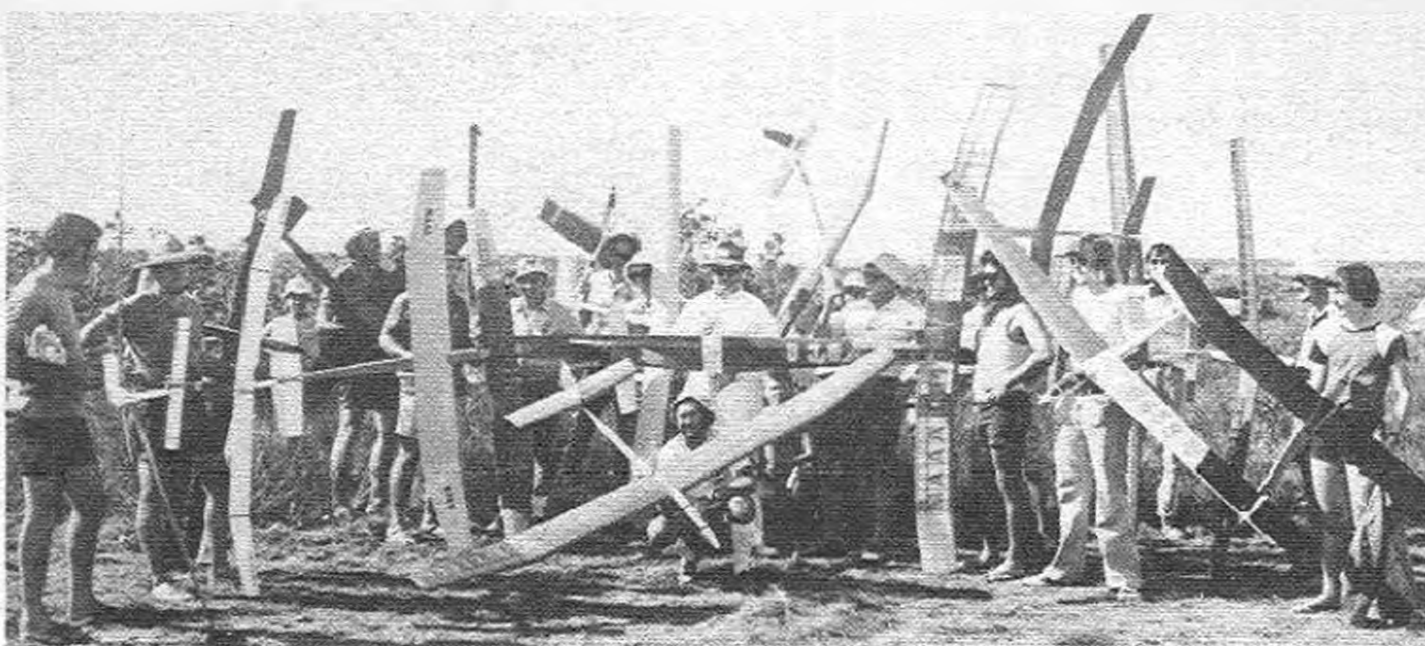
Refreshments were sold on the field - hot and cold with a big demand for HOT. Leaflets on affiliated clubs and championships program were distributed and generous donations by visitors should help defray expenses. It is an excellent arrangement if these days pay their own way, although this is not an MAAQ stipulation by any means. Most businesses even try to operate on the same basis!

Vern Butler did an energetic job of Contest Directing and managed to include a few flights with his Rumpelstutz, as did Bruce de Chastel and Ben Staines. Ben nicked off at one stage to cut a branch off one of the large trees but he reckons he'll use an axe next time. He got it off but it made a mess of his model.

Ben also earned a mention in Guinness's book of records for his 3,864 attempts to get his veteran Mustang up out of the water and into the air. The judges said that according to the rule book he'd had all of his attempts.

Ron de Chastel's Bleriot waved a little French flag after the 7th manoeuvre which wasn't an atom bomb drop, and narrowly won the event from Ron Goostrey with his now common sight Avro Cadet. He had it at the Champs last year and at the Nats. Due to rain and another reason he was not able to fly at Amberley. Looks and flies beautifully.

Trevor Larsen flew his Mustang in



R/C Glider Champs 1974 Maryborough Qld. Photo: Byron Christmas via A. Gorrie.

Pattern and Scale and drew rounds of applause from spectators as it screamed across the field with undercart retracted and bored upwards in a vertical spiral.

Ron Chernick's Nieuport would have been one of the nicest planes on the field but was ineligible to compete as entries had closed and static judging finished.

Streamer cutting demonstration by Vern Bunter and Bruce de Chastel was quite a crowd pleaser as was the limbo injected into the day by Vic Miscampbell. Dave Frederick and Bob Carpenter got into the act but after a sizzling inverted low level run well under the 5 ft high streamer Vic did a spectacular wing over and lost all interest in the 'game'.

Sensation of the Champs was Silviano Toigio who came down with his Bell Jet Ranger helicopter to 'pick up a few clues' and finished up 'running the class'. He pleased the crowd many times with an excellent display of 'control' as he waltzed the model around touching lightly and lifting off again.

The long wet week-end was only climaxed by the social arrangements made by the Maryborough Club for the entertainment of the visiting competitors in the two Championships events held in their area - R/C Sailplane won by Bob Carpenter and Sea plane won by Ian Robertson with his beautiful and old reliable floatplane.

The R/C Champs are now history and a successful page at that and even though the program architects didn't pick the best week-end for weather we must give them credit for one thing - they picked the Australia Day week-end in 1973 and it was hot, fine and dry THAT year. Imagine if they had let this influence their choice in '74.

Arthur Gorrie,  
PRO, MAAQ.

## MAAQ NEWS

from Arthur Gorrie.

By arrangement between PRO Arthur Gorrie and Bob Moore of Redcliffe Aero Club, MAAQ will be conducting control line and radio demonstrations in conjunction with air pageant at Redcliffe on 18th August.

Arthur Gorrie was approached by Beadesert with a view to including modelling in a display in the area. Matter in MAAQ and Beadesert Club hands for 12th October.

Next MAAQ meeting for July will be in RAAF building, Thorn Street, Kangaroo Point. Commences 7.30.

MAAQ members invited to participate in display in conjunction with the TRUCK SHOW. Static display in August. More details at MAAQ July meeting.

MAAQ in conjunction with the Brisbane Hobby Show will be assisting and judging aeromodelling section of the Founders' Trophy open to all modellers throughout Australia. No need to be a club member. Write to

## MODEL AERONAUTICAL ASSOCIATION QUEENSLAND

### 1974 CONTROL LINE MODEL AIRCRAFT CHAMPIONSHIPS

25th August  
SANDGATE

FAI Combat  
Open Combat  
A Combat  
Jnr. FAI Combat  
Goodyear

8th Sept  
BEAM'S RD.  
ZILLMERE  
Open Stunt  
Jnr. Stunt  
Open Scale  
Jnr. Scale

22nd Sept  
SANDGATE

A Rat Race  
B Rat Race  
Jnr. Rat Race  
Bendix 35

6th Oct  
BEAM'S RD.  
ZILLMERE

FAI Team Race  
B Team Race  
FAI Speed  
Class II Speed  
Class III Speed  
Intermediate Speed  
Proto Speed

Further Enquiries: Write C. Greenwood  
Lady Scherger Crescent, Amberley, Q.  
or Phone A. Gorrie, 44-4829.

John Prescott, Hon. Sec., P.O. Box 73,  
North Brisbane. Any type of model.  
Competition will be held in November.  
Radio Pattern and Thermal Glider  
events to be held at Amberley, 7th  
July, 1974. Public invited. Entrance  
side gate between 9 and 12 a.m.

MAAQ affiliation fees to increase.  
Seniors will be \$6.50 and Juniors \$4.50.  
To apply period 1975 to 1976. For  
1974-75 period Clubs pay: \$5.00 re-  
gistration \$4.50 seniors, \$2.50 juniors.



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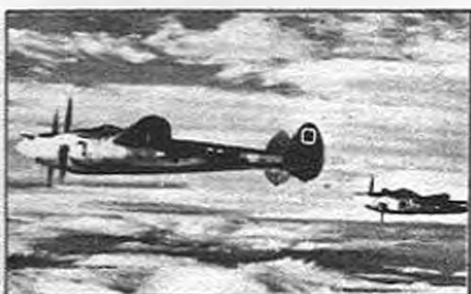
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maps, three-views.

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# HINTS FOR GOOD BOATING

**BARRY CRAVEN, Model Boat Club of NSW**

Last month we progressed to the finishing of the interior; this month we look at interior fittings and suchlike.

Mount to the engine blocks, the engine coupling and shaft, checking that there is endplay in the coupling so that the prop bears on the tube bearing, to relieve strain on the engine bearing. Now look at the exhaust, a slightly more complicated piece of equipment.

A muffler (silencer) can be bought for most engines and serves a useful purpose. An open exhaust straight out the side can be simpler but undoubtedly noisier.

Plastic tube or rubber hose can be used to connect the muffler but only after running the engine cooling outlet into the after-end of the muffler.

Polythene or Neoprene plastic tubing should be used to connect the water cooling system. If Polythene is used bind the tube to the jacket outlet and inlet.

The fuel system is next. Mount the tank in the rear of the engine space and as low as possible so that the level of the fuel is level with the spraybar of the carburettor.

A filter should be introduced into the fuel line between tank and engine.

An aircraft 'clunk' type tank is satisfactory. A simple bracket and rubber bands can be used to secure tank.

Presuming that radio control is to be used, the rear compartment should be prepared now. Simple softwood (pine or similar) bearers should be fitted to the hull bottom, then a false floor consisting of a square or rectangular piece of 1/8th inch plywood. Make sure that it can be removed easily to make cleaning the hull easier. Countersunk self-tapping screws of about 3/16th inch diam are ideal.

As the installation of radio is an exciting business, I will cover it separately.

The cabin, hatches, etc., can be fitted now. The deck should be glued on very carefully to ensure correct fit.

The procedure for finishing the outside of the boat is the same for finishing the inside.

Coats of undercoat (any good paint undercoat, or primer will do) rubbing back each coat when dry, with 'wet or dry' abrasive paper, grades 400 and 600.

When you have worked up a good surface, proceed to apply a coat of fairly thin enamel of a colour which is most visible at a distance. Several thin coats are always better than one thick one. Rub back each coat with 400 paper until a full coverage of colour is evident.

If two or more colours are to be used mask off with masking tape or plastic insulation tape. Cellotape is OK but it does tend to pull up the finished coat when the tape is being removed.

Some kits include a certain number of 'dress up' fittings. These should be fitted now.

The boat is now complete except for radio.

The whole system should now be tested for loose parts or fittings with the engine running and the screw in the water. This will show up any faults such as not enough water through the system, fuel starvation or gravity feed.

Use a 1.5 volt battery to start the engine, a substantial strap of either nylon or leather, and a good size plastic filler bottle.

You now have the basic equipment for boating. The last thing is fuel. Commercial fuel can be OK! But pricey! Methanol and Castor Oil or Castrol M can be obtained readily and is best and cheapest.

The installation of radio in your boat will be dealt with in the concluding article in this series. Please note that we will be happy to answer any queries that you may have. All letters will be answered. Please send a stamped addressed envelope for the reply.



**M.B.C. of N.S.W.**

Hello members and boating enthusiasts.

More varied activities have been planned for you over the following months.

Unfortunately we can't report on the latest activities, as they are happening now, but we will report on them next issue.

We have modellers from Taree and Lake Macquarie clubs attending Kippax Lake, for interclub competition.

I have seen and heard they have some pretty potent machinery there.

We are very pleased with our new club rooms at:

Sydney Technical College,  
Students' Amenities Block 21A,  
(Television Room)  
Mary Ann Street,  
ULTIMO.

(Visitors are welcome.)

The new club rule book is now available and as it has taken some years to compile, we would like members to obtain a copy immediately.

Membership of the Australian Model Power Boating Association is 20 cents per member, and if more than 6 members join, the home club becomes affiliated. Let's get those membership fees in.

The 1974-75 Championships will be held in Adelaide in January 1975.

We have Olympic Pool outings with us again, on behalf of the Foundation for the Disabled.

The first of these was on 21st April 1974, a new type of outing. At previous outings we have run powerboat races with up to 8 boats in a race, which results with smashed boats by lunch time.

The new format will be to run powerboats in pairs and have novelty events for both power and electric. This would make a virtually non-stop program.

The club point score will not apply to these competitions.

If this meeting is a success and enjoyed by the public and members will have more throughout the winter season.

Ryde Olympic Pool was the first venue. (The Sutherland meeting was plagued with rain, cold and low attendance. — Ed.)

We had a film night arranged for 23rd April at Sydney Technical College, the films shown were the ocean racing films 'Ride the White Horses' and '10th B.P. Ocean Classic', all in technical.

Heading Photo: Barry Craven tunes engine in his speedster at Sutherland Pool.



These dates are gone but it will give you an idea of what you are missing if you are not attending.

The Kraker (USA) electric motors, the Sea-ram and Sea-wasp are about to show their paces, with some assistance from owners Carl Dunkley and Bill Gibb.

These boats should be capable of speeds equal to a 2.5 cc glo engine. The acceleration of Bill's boat should be seen to be believed.

We also have some very nice scale models recently equipped, built by Dave King, Tim Viner, Charley Davey and Graham Hutcheson.

I said last issue that I would review RC outfits.

**SPACE COMMANDER 2 channel.** Good set but somewhat under-equipped with refinements. Excellent for electric and glo power; petrol engine ignition sometimes interferes. \$125.00.

**SILVERTONE 2 channel.** As yet unproved, but Bob Young is having one made up specially for boats. Our treasurer Lew West is the owner and will have it fitted very soon. The addition of powerful servos make this a good buy. \$189.00

These are only observations from experience, as I have seen most of these units at work. I have a Space Commander and a new Futaba myself. I realise that most members will be equipped already, but for those still looking, these comments may be helpful.

One thing I do know is that equipment should be correctly set up and waterproofed.

No photos this time, but more next issue, along with the concluding article on Model Boat Construction, setting out how to install Radio.

Barry Craven,  
Hon. Sec.

**KRAFT 2 channel Brick.** Ideal for glo engines but a little weak for petrol engines. \$125.00

**FUTABA 2 channel FP-2D-1C.** Very good set but servos slightly weak; new servos of a more powerful torque, available very soon and servos can be traded in, if in good condition, on these new ones. \$125.00

Below: Beautiful electric yacht is a crowd pleaser.



Above: Electric power boat is quiet, fast with terrific acceleration.  
Below: Members prepare scale models at Sutherland Pool.





# CLUB NEWS

## FAI AEROBATICS COMPETITION BANKSTOWN 14TH JULY 1974

The Bankstown Model Flying Club is holding an FAI Aerobatics Competition on 14th July 1974 at the Bankstown Showground carpark (off Milperra Road).

For you stunt enthusiasts, perhaps looking for a new engine, there is a chance of picking up a new Fox .40 engine which has been donated by Revesby Hardware Pty. Ltd.

Entries will be accepted on the field.  
Enquiries: Phone G. Millen  
771-4062.

## AUSTRALIAN NATIONAL MODEL AIRCRAFT CHAMPIONSHIPS

FROM SUNDAY 29 DECEMBER  
TO SUNDAY 5 JANUARY '75.

Latest word is that the Nats will be held at Camden Aerodrome subject to final confirmation.

Camping will not be allowed on the airport grounds so all intending campers will have to make other arrangements.

A bulletin will be issued later this year and will list camping sites, motels and hotels.

This is an excellent flying field, as modellers who have been to Camden before, will remember.

## WAGGA WAGGA AERO CLUB MODEL AERO CLUB

On 27th and 28th April the Wagga Wagga Model Aero Club held a World War II Pageant which was staged in adverse conditions but luckily the rain held off for the major part of the competition.

Competitors from many clubs competed, those being Hawkesbury, Dubbo, Canberra, Albury, Belconnen and Wagga Wagga. The placings were as follows:

**RADIO CONTROL SCALE**  
First was Jack Gilmore of the Wagga Model Aero Club flying a Stearman P17. Second was Ray Ogle of the Hawkesbury Club flying a War Hawk P-40.

### BALLOON BURST

Won by Trevor Larsen of Dubbo Club flying a semi-scale Mustang.

### MYSTERY EVENT

Won by John Tennant of Belconnen Model Aero Club with a semi-scale Aerocobra.

### BOMB DROP

First Trevor Larson of Dubbo flying a semi-scale Mustang.

### RIBBON CUTTING

Won by Ray Murray of the Canberra Club flying a scale Mustang P-51 owned by John Nash also of Canberra Club.

### GUTS V GRAVITY

Was taken out by Brian Tracey of Canberra Club who put in a Sky Raider and a scale War Hawk P-40.

### MODEL OF THE MEET

This was won by Ray Ogle of Hawkesbury Club flying a War Hawk P-40.



## NEW TRANSFERS FOR MAAA

New transfers of the MAAA emblem will soon be available to MAAA members at a low price. An example of one of the larger emblems is reproduced full size above. This design is very clean and attractive with black and white boomerangs and red kangaroo.

## WAGGA MAC (Cont'd)

The control line was very poorly represented, it was a bit of a disappointment to the Club to see no more than one control line competitor to compete on the weekend. Consequently he had no trouble in taking out the control line scale with a Kawasaki Hein: the competitor was Ian Colquhoun.

The wives and girlfriends of the Club members put in a sterling performance in running the food and drink stalls on the field. The weekend would not have been the same but for our ladies.

I would like to take this opportunity to urge that next year we see a better representation of control line and free flight models for scale and profile scale for the combat.

I would also like to thank on behalf of the Wagga Club all the clubs that made the weekend the success it was.

G.B. Thompson,  
Public Relations.

## COMMENT

Vic Examiner's view of state champs.

Being state examiner for some 18 months now, I was under the impression that my sole duty was to examine only those models that had broken any records, but it is inevitable that when the state examiner also happens to belong to a particular group, he will also be the obvious choice to be the model examiner at the group's major contests, namely the State Championships for 1973, 1974 and 1975 etc...

Over the past years (and there were many) there has been a great lack of enforcement of rules, with the exception of this year and I was most amazed how so many were caught unawares. Many competitors became very indignant and bad mannered and felt they were not given a chance. To that I say 'these persons had all the chances they deserved'.

It is not an examiner's job to make the rules, but it is up to the modeller to build his models to satisfy these rules (no matter how inconvenient they may seem) to the last detail. Admittedly there are rules that are ambiguous, but the majority are clear cut and it is found that these very same clear cut rules are the ones that create all the arguments, mainly because the builder could not be bothered to conform and thinks he will get away with it or has been getting away with it.

For example, here are some prime comments from irate modellers when told their models would not be passed. 'But my models were checked at the last three nationals.'

Below: Model of the Meet — Ray Ogle's P-40 Warhawk. Photo: Warren Williams.

'I never had my models weighed with fuel before.'

'I'm not sure what they should weigh.'

'I don't know the area of my models.'

'I'm experienced in this event, you can't disqualify me.'

'But I was never knocked back before.'

'But I've built it to the 'spirit' of the rules.'

'I won't change now. It was alright before.'

'But it was alright 10 years ago.'

It is obvious from these comments that the enforcing of rules was inadequate and that the modeller would not help any by letting things slide and producing the trash that is so commonly seen these days. Surely, if there are any problems with rules, they should be brought before the V.C.L.A. for discussion and acted upon. Rules will not be changed because one person thinks it is stupid or ridiculous. Let's face it, as in any sport, rules are essential or chaos occurs. If we must have rules then let's play the game to these rules, no matter how silly they may seem. It saves arguments and no doubt the processing day runs quicker and smoother.

I trust that these few words will transmit the thinking that changes must occur.

Theo Georgiadis.

This comment refers to the Victorian State Champs now past. The Editor would appreciate constructive comments. (Thanks to VMAA for extract from their newsletter).

## NEWTOWN MODEL AERONAUTICAL ASSOCIATION

The Newtown Model Aeronautical Association has notified MAAQ of the intention to use Redbank Plains area which it used many years ago for Radio only, for radio, control-line and free flight. Every effort will be made to avoid interference with members of Ipswich Lightnings who also occasionally use the area. Perhaps the activity may stimulate interest to the benefit of both clubs rather than one.

By incorporating Club Championships in the Qld. Championships, Vic Stewart and Frank Blades emerge as equal Club Champions Free Flight for 1974 and J. Stewart as Junior Champ.

If Arthur Gorrie had only heard about D/Ts and been able to fly on Monday Frank Blades just mightn't have won scramble!

## QLD. CONSISTENT FLIERS DAY 23rd JUNE 1974 ONE MILE FIELD - IPSWICH LIGHTNINGS

### RESULTS

#### FAI COMBAT

K.	
1. N. Henrichs	332 pts
2. M. Brace	202 pts
3. R. Hart	190 pts

#### OPEN COMBAT

1. R. Morrison	164 pts
2. K. Dawes	123 pts
3. R. Hart	28 pts

#### 1/2 A COMBAT

1. K. Lee	200 pts
2. A. Brand	7 pts
3. N. Henricks	0 pts

#### A RAT

R. Morrison -	426 laps
L. Winterman	

2. M. Dillon -	321 laps
J. Dillon	

3. N. Henricks -	10 laps
S. Brand	

#### B RAT

1. R. Morrison -	426 laps
L. Winterman	

2. K. Dawes	249 laps
-------------	----------

#### A GOODYEAR

1. L. Winterman -	12 min 47 sec.
A. Brand	

2. M. Brace	12 min 59 sec.
R. Hart	

3. Henricks -	
P. Friend	

## KU-RING-GAI

Inter-Club Stunt and Combat  
19th Nat 1974.

After atrocious weather over the preceding few days. Sunday the 19th turned out to be remarkably good. Following a rather cold and overcast morning, the afternoon improved further with quite a bit of sun and only light breeze. Attendance was good (although frankly, not as good as had been hoped) with five entries in FAI Combat, five in Open Combat and eleven in Stunt.

## FAI COMBAT

First flight was between S. Redal and D. Comiskey with the latter winning after Mr. Redal's Taipan Glo gave problems and failed to get airborne. Motor troubles must have been catching as Miles Gore-Brown (KMFC) also stayed on the ground with his Super Tigre G.15 Glo leaving M. Comiskey untroubled to win the second joust. Hutton Oddy (KMFC) and D. Comiskey then had a good combat with Hutton taking a cut to win. The final was between Hutton Oddy and M. Comiskey with Hutton coming out victorious with both more air time and a cut. Hutton used a Super Tigre G.20.15 (diesel).

## OPEN COMBAT

Action straightaway with S. Rothwell (KMFC) and C. Zensky colliding

(Continued on Page 14)

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FLYING MODELS  
CONTROL LINE RADIO  
MODEL RAILWAY  
SPECIALISTS





Continued from Page 11

## MAAQ

## OLD FREE FLIGHT CHAMPS.

15,16,17 June, 1974.

RESULTS  
WAKEFIELD

- |                        |     |
|------------------------|-----|
| 1. P. Van Leuven, BMAC | 976 |
| 2. J. Lewis, BMAC      | 939 |
| 3. A. Thomas, BMAC     | 583 |

## JUNIOR SAILPLANE

- |                     |     |
|---------------------|-----|
| 1. J. Stewart, NMAA | 454 |
|---------------------|-----|

## A2 SAILPLANE

- |                     |     |
|---------------------|-----|
| 1. J. Lewis, BMAC   | 776 |
| 2. V. Stewart, NMAA | 671 |
| 3. F. Blades, NMAA  | 603 |

## CHUCK GLIDER

- |                    |     |
|--------------------|-----|
| 1. F. Blades, NMAA | 154 |
| 2. J. Lewis, BMAC  | 94  |
| 3. T. Spence, BMAC | 74  |

## FAI POWER

- |                     |      |
|---------------------|------|
| 1. B. Parsons, BMAC | 1137 |
| 2. V. Stewart, NMAA | 742  |
| 3. J. Stewart, NMAA | 322  |

## ¼ HOUR SCRAMBLE

- |                     |     |
|---------------------|-----|
| 1. F. Blades, NMAA  | 403 |
| 2. T. Spence, BMAC  | 318 |
| 3. J. Stewart, NMAA | 146 |

## A1 SAILPLANE

- |                              |     |
|------------------------------|-----|
| 1. B. Parsons, BMAC          | 518 |
| 2. V. Richard Smith, Mt. Isa | 358 |
| 3. V. Stewart, NMAA          | 296 |

## OPEN POWER

- |                     |     |
|---------------------|-----|
| 1. B. Parsons, BMAC | 675 |
| 2. M. Bennie, BMAC  | 276 |
| 3. A. Gorrie, NMAA  | 180 |
- (1st flight - lost)

## JNR. ALL-IN EVENT

- |                     |     |
|---------------------|-----|
| 1. J. Stewart, NMAA | 380 |
| 2. S. Bennie, BMAC  | 140 |

## COUP de 'HIVER

- |                        |     |
|------------------------|-----|
| 1. J. Lewis, BMAC      | 131 |
| 2. V. Stewart, NMAA    | 126 |
| 3. P. Van Leuven, BMAC | 30  |

MODEL AERONAUTICAL  
ASSOCIATION OF  
QUEENSLAND  
CHAMPIONSHIP RESULTS

## RADIO CONTROL

4-5-6th May, 1974

## NOVICE PATTERN

- |                             |
|-----------------------------|
| R. Carpenter, RAAF Amberley |
| B. de Chastel, SMAC         |
| Z. Navratil, BARCS          |

## FAI EXPERT

- |                             |
|-----------------------------|
| R. Carpenter, RAAF Amberley |
| P. Lee, BARCS               |
| B. de Chastel, SMAC         |

## OPEN PYLON

- |                             |
|-----------------------------|
| R. Carpenter, RAAF Amberley |
| L. Newlands, NMAA           |
| B. de Chastel, SMAC         |

## SPORTS EVENT

- |                     |
|---------------------|
| D. Frederick, BARCS |
| Z. Navratil, BARCS  |
| E. Pond, BARCS      |

## QUARTER MIDGET PYLON

- |                      |
|----------------------|
| R. de Chastel, BARCS |
| P. Lee, BARCS        |
| L. Newlands, NMAA    |

## SCALE

- |                                 |
|---------------------------------|
| R. de Chastel, BARCS (Bleriot)  |
| R. Goostrey, GCMAC (Avro Cadet) |
| T. Larsen, RAAF Dubbo (Mustang) |

MARYBOROUGH 18-19th May '74

## R/C SAILPLANE

- |                             |
|-----------------------------|
| R. Carpenter, RAAF Amberley |
| V. Bunter                   |
| R. de Chastel, BARCS        |

## R/C SEAPLANE

- |                     |
|---------------------|
| L. Robertson, BARCS |
|---------------------|



R. de Chastel, BARCS  
B. de Chastel, SMAC

Ian Robertson with his winning seaplane at  
R/C Champs, Maryborough. Photo: A. Gorrie.

## CHAMPION OF CHAMPIONS

— R. CARPENTER —

KU-RING-GAI MODEL FLYING  
CLUB (Continued from Page 13)

in mid-air. Steve Rothwell's wing lost its starboard panel, but he managed to get it back in the air, while Mr. Zensky resorted to a second model and went on to win with two good cuts.

Next up was G. Millen and Reg Towel. After overcoming some engine troubles G. Millen attacked Reg and achieved a cut, but took the whole streamer in the process. Reg flew on as G. Millen crashed and failed to get back up leaving Reg to win on airtime. The third flight was won by M. Comiskey after both he and C. Zensky returned to earth several times in abrupt landings. The final was then between M. Comiskey and R. Towel who took two minutes to get off the ground. Some close flying took place and M. Comiskey took two cuts to win the event.

## STUNT

A good entry of eleven pilots brought out a very high standard of flying. No less than five entrants used Paul Turner's Windwaggon design, and Paul himself flew his new Windwedge for the first time in competition. The standard of finish on the aircraft was exceptionally high. Four Ku-ring-gai members entered; Nev Carlos breaking back into inter-club competition and doing so with good scoring flights; Ric White not having much luck with his engine settings; Dave Thomas also with engine problems — this time leading to a prang; and our new member Warren Williams flying well with his absolutely beautifully finished Windwaggon.

## RESULTS

	Rnd 1.	Rnd. 2.	Rnd. 3
P. Turner	3005	3102	3056
Windwedge, Fox .40			
R. Towel	2975	3068	3088
Superbone, Fox .45			
H. Hanna	2731	3003	2985
Thunderbird, Merco .35			

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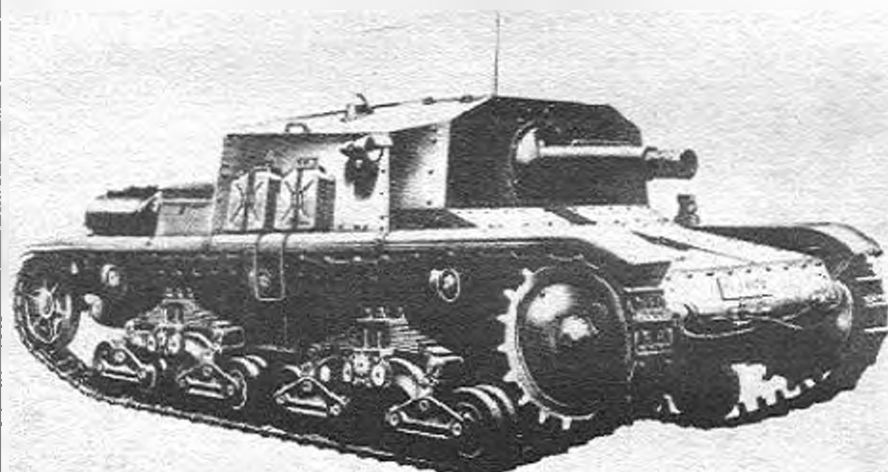
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SEVEN HILLS 2147Left: At O'land State Champs. Left: Ron  
Morrison and Ron Walters - 1st, Class III, 1st  
Class II, 2nd 'B' Team Race. R. Walters - 1st  
FAI Combat, 1st Open Combat, 1st FAI  
Stunt (Phew!) Photo: A. Gorrie**COBRA II**Advanced combat model for 2.5cc  
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fully. Simple construction would  
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