
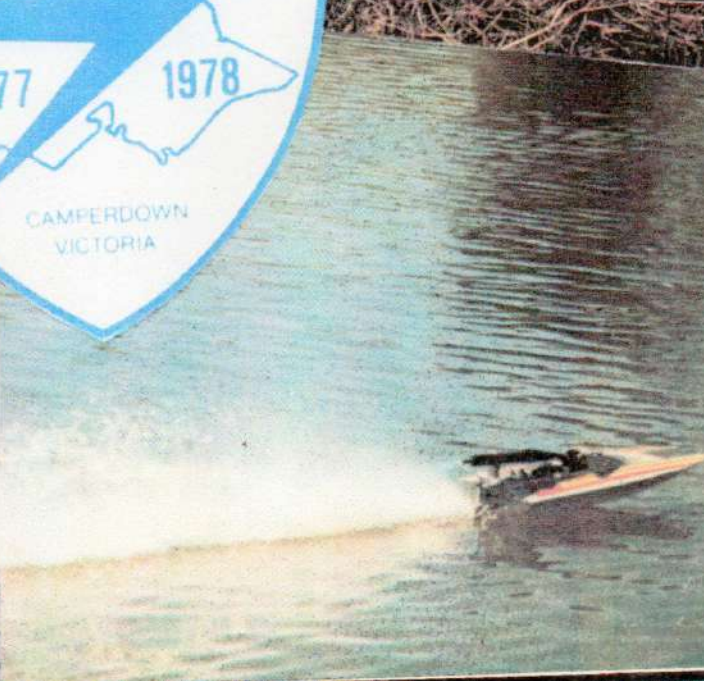
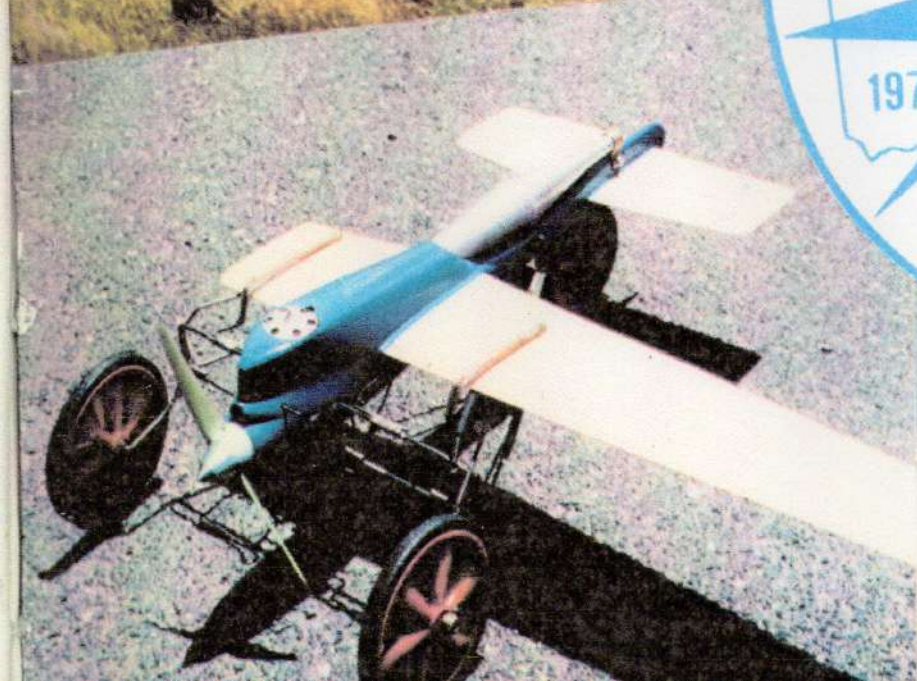


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# THE AUSTRALIAN AERO MODELLING 31ST NATIONALS

CAMPERDOWN—28 December '77 to 4 January '78.

For several years the aeromodelling Nationals have been increasing in size, except perhaps for the '76-'77 Nats at Bunbury, WA. Judging by the entries received, the Camperdown Nats were about 40% larger than the previous largest which were at Loxton, S.A. However, the drop-out rate in many events was such that the two were of comparable size. Due to the large entry, the VMAA Nats Committee was prepared for more hard work even after eighteen months of tremendous effort. The result was a very successful Nats with very few problems. When one arrived at the Nats headquarters, one was greeted with a smiling balloon face on the wall, and the caption: "Smile! And have a happy Nats." It worked!

The Nats program continued the trend of too much to do and see. This was particularly so with the daily flying program, but the evenings were also fully committed for many, particularly the State Delegates and the administrators.

## EVENING ACTIVITIES

The evening events began on Wednesday 28 December, with briefing, which went quite smoothly, and included short speeches by the President, Bob Allen; The Mayor, Jim Murnane; the Town Clerk, Hugh Learmonth; the Federal Secretary, Gordon Burford; and visiting Californian, John Pond. The groundwork for a good Nats was put to the test during processing, and the workers at the various tables did so well that the atmosphere was quite relaxed and cheerful.

During the afternoon of the next day, the indoor rubber event was flown and that evening several demonstration flights were made, and enjoyed by a large crowd in the dress circle seats of the cinema. In the adjacent gymnasium, the inaugural Badge Collectors meeting was in progress.

The next day, Friday 30 December, the MAAA council meeting convened, very late, in the Leura Hotel, and once proceedings began, business was continued satisfactorily.

New Year's Eve was a warm day, more appropriate to summer than the previous week had been, and by late afternoon the barbeque at the football ground had attracted a very large, happy crowd which thoroughly enjoyed the food (cooked by Apex members) the excellent company, and some hurl gliding taking place on the oval. As it was getting dark, many people took the short drive to the Racecourse for the Night Scramble. The conditions by starting time were flat calm and starry, so that the Scramble was a spectacular success — undoubtedly the high LIGHT of the Nats — (no apology for the pun!) — and thoroughly enjoyed by a very large crowd in the cheerful, velvety darkness.

The following evening the auction was conducted by Ivor F in his inimitable fashion, and in spite of there being less goods than usual, a worthwhile profit was made for the local hospital.

On Monday evening, 2nd, another good crowd gathered in the gymnasium for indoor hurl glider and Peanut Scale. Flyers in these two events were far below the number of entries, and perhaps as well because of the limited floor space available after spectators had settled down around the periphery. Many were the oohs and aahs as models cavorted in the airspace from rafters to floorboards.

The Rules Conference on the following evening confirmed the pattern which began to emerge at the Geelong Nats, where delegates came prepared to vote rather than haggle, and the meeting ran smoothly all through. The basic cause of this success is good administration, particularly by the Federal Executive.

The final night saw the culmination of the longest Nats, with the biggest ever Nats Presentation Dinner. The meal was served smorgasbord style which was a fairly tedious process, but the food was very good. The speeches were commendably short, particularly in view of the fact that the acoustics of the gymnasium were poor; and so the Guest of Honour, Digby Crozier, the State Minister for Tourism, showed nearly as much stamina as some of the flyers had during the week, by capably presenting a seemingly countless number of handsome trophies. He seemed to enjoy the chore and the modellers showed that they appreciated his attendance by behaving like modellers and having a good time!

It was a happy Nats, a great Nats: there couldn't be another one like it! Thank you Camperdown: thank you Australian aeromodellers!

# FF

## BY THE EDITOR

Free flight at the Nats was practically trouble-free (the rules book was opened only once or twice) and the weather was quite satisfactory although atypical for the time of the year. The story of the contests is a continual one, covering all eight days, and I shall report them as they happened.

The first one was **FAI POWER**, which began on time, the overcast making dawn conditions quite dull, but there was no wind. Once flying commenced it soon became evident that Nash and Gostelow would do well, as Pettigrew's models were overpowered, East was not in form, and the models of Hinds, Borrill and others were not getting high enough. And so it proved to be: the weather became warmer and the breeze freshened only slightly, but Nash dropped only a couple of flights in a superb performance.

RESULTS 24 entries: 11 flew

Peter Nash	Qld	1152 Cox Conques
Howard Gostelow	Vic	1116 Rossi
Stan Hinds	ACT	963 Cox Conques
John Borrill	NSW	910 Super Tigre

There were no new ideas in FF at Nationals level. FF rules have been stable for many years and the conduct at contests is well understood. However, the standard of flying on an individual basis improves or lapses, but overall remains static and very much subject to weather conditions. While the proportion of aeromodellers favouring radio control increases with each passing year, the position of FF at the Nats is stronger than ever. The high drop-out rate of this Nats clearly reflects the economic difficulties experienced nation-wide during 1977, and it is to be hoped that this circumstance is reversed soon.

In spite of the fact that many FF modellers also fly RC, it is clear that their loyalty has not shifted significantly from FF, which again supports the long-standing adage that FF offers more for less.

# CL

## AEROBATICS

BY STEVE MITCHELL

**Doug, Harlow, makes it three in a row!!**

The site for Aerobatics was the football oval in Camperdown. A rather picturesque spot, with trees all around and Mt. Leura as its backdrop. Unfortunately, with the conditions that prevailed during the whole of the competition, all competitors were in accord that this area, was the most treacherous that any had ever flown on.

The event was run over four rounds, the first two being elimination rounds, leaving fifteen flyers to contest the final two rounds. Practice circles were in full operation as was the main contest circle prior to the start of competition. During practice, conditions were found to be difficult, but not unmanageable, however strange wind currents and down drafts were to appear later on, this being the penalty of having trees and the mountain close by. There was a very strong N.S.W. contingent of eleven flyers, three flyers from Queensland, one flyer from South Australia, and the balance from the host state, making a total of twenty six. The first round produced some interesting motor settings, short runs and overruns, interesting, because in practice flights, this wasn't happening, and the all too familiar "But that was the same setting as my last flight", however most of the top fliers finished this round O.K.

Round two proceeded on the following day with a completely new draw for flying positions. The wind was also blowing stronger than previously, particularly in the higher manoeuvres. Ray Ogle of N.S.W. was flying a very impressive looking semi-scale Corsair. Ray's model used an Enya 45 complete with radio carby and a 'timer'. The timer makes the whole flight very impressive as the Corsair lands with the motor idling. Of course, if the motor setting is a bit rich this could lead to an interesting result!

Reg Towell also had a very nice model, originally designed by Dallas Hanna not the usual jetline style model that has been the vogue over the last few years.

Paul Turner of N.S.W. a former Nationals winner also sported a new model this year. Although using the same combination of colours as his other models, yellow wings,

green fuselage and red trim, this model was so different in configuration to the standard type of model that it does require mention. Wing root chord of thirteen inches, plus a flap of four and a half inches, combined with a tail moment of twenty inches and nose moment of twelve inches will give you an idea of length of model, coupled with a fifty two inch span! Paul has called this model "Wind Wand".

John Tidy of N.S.W. also a former Nationals winner, was flying a new model after having demolished the model he had used at the World Champs. His model was quite large and nicely finished in silver with red and black trim. There was also some very nice line work over the wings. It was a handful in the wind owing to the area but he flew it fairly fast and it appeared to penetrate quite well as spectators will agree, watching John dance his little "jigs" after each manoeuvre was successfully completed!



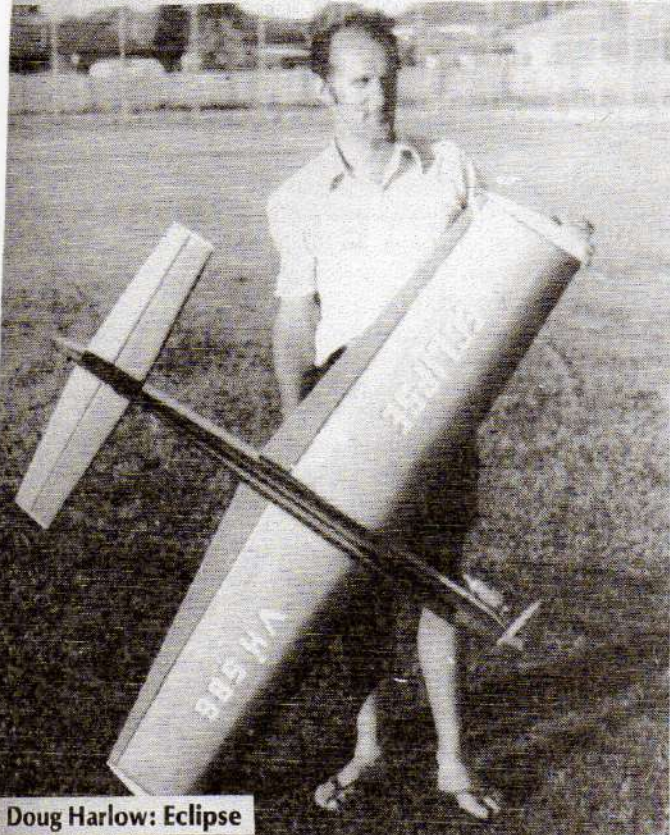
**John Tidy: Starmist**

Last years winner at the Bunbury Nats. Doug Harlow, like John Tidy, also had to build a new model which he called "Eclipse", as his earlier model suffered the same fate as John's. Doug's model was based around McDonald's stiletto, but with certain differences to the one which Doug wrote-off earlier. Those certain differences have apparently paid off as the model is quite easy to fly (according to Doug). Power used, as in a lot of cases at this Nationals, was a Super Tigre 46, with a 12 x 6 prop. Peter White, of Victoria flew a slightly smaller model than he has used in past Nationals. His model which he has called "Zodiac", also used a Super Tigre 46. Peter has used an appreciable amount of sweep back on the wing, three inches to be exact.



**Reg Towell with reserve model**

Another model worthy of mention was by Dallas Hanna featuring tricycle undercarriage and Super Tigre 46. This model is the same model used by Dallas in the World Championships, so it is stood him in good stead, and seen quite a lot of flying since that time.



**Doug Harlow: Eclipse**



**Bruce Ogden: Comanche**

The final day loomed windier than the other three days of competition and for the fifteen finalists it was not very encouraging. B. Tillitaki, of N.S.W. first off with his "Thunderbird" and not too happy at all with the wind, however, he managed the whole pattern and brought his model down in one piece (much to his own relief). Ian Wright of Victoria next, with conditions still very bad, so he elected not to fly. Ian's model was a variation of Doug Harlow's "All Torque" except that the tail span was thirty inches. John Johnson of Queensland next with a modified "Thunderbird" and Super Tigre 46 for power. The pattern John flew was quite fast (winding up in the loops) until he got to the horizontal eights, where he couldn't pick the wind direction and came to grief at the bottom of a loop. I might add here, that the wind at ground level bore no resemblance to what was above for the manoeuvres.

RESULTS

Doug Harlow	Victoria	5840
Peter White	Victoria	5750
Paul Turner	N.S.W.	5749
Reg Towell	N.S.W.	5743



**Ian Wright: Moa**

Next off, yours truly electing to have a go with a second string model, and I can honestly say that I have never flown in conditions as bad as that, which produced (in my case anyway) a dry mouth and a heart in the pit of stomach feeling even before take off!! Anyway, having landed safely, I considered it a good flight, because it was unbelievable what was happening overhead!!! Warren Williams next but with the motor problems he had elected not to fly rather than risk the model. Doug Harlow elected to fly his second string model for this round and it proved fast but excellent in the conditions. The flight proved good enough to give him the highest score for this round out of all of the fliers. John Tidy next, elected to go, and his flight was another excellent one from John. John's antics in the centre added some light relief from tension to the spectators, particularly for those who know John's physical size and the size of his model!!!

## F.A.I. TEAM RACE

### BY THEO. GEORGIADIS

F.A.I. Team Race at the Nats was the culmination of twelve months of organizing, nearly two years of hard work by teams in preparation for this event, excellent weather to a top of 20° Celsius with light winds, a great jury and most important, an air of professionalism never before experienced in Australian racing, producing a remarkable uplift in standards to make this day a most memorable one both to regular competitors and newcomers. Because the Nats was the final round of the team selection programme for the 1978 CL World Champs it was essential that facilities be of the highest level possible, as they proved to be, much to the town's effort and the delight of competitors. In due fairness, it must be pointed out that the Amberley Nationals did provide the first hard surface, but teams did not realize the full potential at that time.

It was no surprise to find that the sub-five minute barrier was no longer a problem to most competitors as attendance of Australia at the previous World Champs left a lasting impression to all to bring out their best. As in all international race meetings a jury team is mandatory. Present for this event were Andy Kerr (NSW), Dan Hanley (S.A.) and Bruce Treagus (VIC) who formed a most capable and well informed jury team. Teams that did not pass safe requirements were politely persuaded to withdraw, and rightly so, a much appreciated decision to all competitors.

Referred to as "sorting the men from the boys" the semis produced two excellent times of 4:02 and 4:12.0 by Oddy/Reichardt and Wilson/Wilson respectively, the latter establishing a new Australian heat record.

A ten minute practice set the stage for the final race. Trouble struck for Prior/Georgiadis during this practice session when their "Bugl" powered racer suddenly lost range, compounded by difficult re-starts. However the final got under way to a good start only to have Prior/Georgiadis land at 25 laps with a "cooked" setting. A second warning for "model off ground" during the pit-stop and a subsequent run-in on take-off forced this team to view the remainder of the race from the sideline.

Excellent flying by pilots Hutton Oddy (NSW) and Graeme Wilson (VIC) kept the suspense to the end to find that Oddy/Reichardt finishing 4 laps ahead with a time of 8:36.5 and two warnings for high flying. A fitting final, full of suspense and drama, with the three finalists earning the right to represent Australia at the World Champs.

At the Loxton Nats, semi cut-off time was 6:00min with the final qualifiers cut-off time at 4:54.8. In contrast at the Camperdown Nats the semi cut-off time was 4:57.7 with the final qualifiers cut-off time being 4:19.0. A fantastic improvement in the short space of two years which also included the attendance of the 1976 World Champs. Most popular motor was the Rossi 15 F.I. much in evidence with no less than 10 counted a Rossi 15 RV used by Wilson/Wilson, a Nelson 15 by winners Oddy/Reichardt and "Bugl" by Prior/Georgiadis fitted with all insulated backplate and magnesium pan by Pietro Fontana of Italy. All finalists utilised the two-part head set-up with pressure systems now becoming universal.

#### RESULTS

Hutton Oddy/Julius Reichardt NSW;  
Graeme Wilson/Ron Wilson Vic.;  
Theo Georgiadis/Dennis Prior Vic.;  
Peter Roberts/Garry Sweetman Vic.

## CLASS 2 TEAM RACE

There were only four teams which flew in this event, and when the Morandini team was disqualified in the final, the result was a tussle between rival CLAM teams from Victoria. The lack of support for this once popular event can be attributed partly to the greater interest in FAI team race; but there are several new 5 cc engines available for evaluation. The rise of rat racing and, more recently, of Goodyear must also have something to do with it.

#### RESULTS

Don Broughton/John Herron	Vic	7:02.3
Peter Roberts/Ron Wilson	Vic	7:16.4

## HALF A TEAM RACE

Only eleven teams got down to the business of tuning engines for this event. In the first heats times were slow, and they improved during second heats and semi-finals, although several models did not complete the course for different reasons. The final had one Sandgroper team in with the Vics, but it didn't score a single lap! This left the Wilsons to take the chequered flag.

#### RESULTS

Wilson/Wilson	Vic	10:09.5
Lumsden/Chantry	Vic	10:27.4

## SPEED

by ROBIN HIERN

#### FAI

Gusty winds caused problems to a few of the 5 competitors in FAI speed. Bruce Treagus and Theo Georgiadis ran the event very capably, and exactly as per the rule book as this was one of the qualifying events for the World Champs team to go to the Championships being held in August 1978 in England.

First to fly in round one were the Wake brothers from Victoria. Model used was of the conventional layout, the only one at the contest, powered by a Rossi RV on suction feed.

Next, Andy Kerr of NSW, a newcomer to the FAI class, being more used to his 199 mph 60 speed models, recorded 201 kph, dropped to 199 kph on his second flight; then after a bit of fiddling achieved 212 kph for third place. His model was a Rumpel Kingfisher-inspired design powered by Rossi RV on suction feed and home moulded 6 x 6½ inch prop.

Next up was myself, and after the model fell out of the dolly on take-off and broke the prop on the first attempt, the second attempt did not achieve enough laps in the pylon. On the second official flight, however, I recorded 230 kph (143 mph) for first place and a new Australian record. Third flight was 228 kph. The model in this case was a "Rossi-Sidewinder" alloy winged asymmetric design powered by Rossi FI ABC on suction feed turning a 6 x 6½ inch GF prop.

Fourth to fly was Graham Burgess. He attained 215 kph for second place. Tuning problems prevented him from recording a third time. His was a Kingfisher model with Rossi FI ABC on crankcase pressure (with centrifugal fuel switch) turning a home moulded GF copy of the Rossi 6 x 7 inch prop. The same setup was used by his team mate Dave Smith who failed to record any times due to flying and tuning problems with a new model.

## RESULTS

Robin Hiern	Vic	230 kph/143 mph
Graham Burgess	NSW	215 kph/134 mph
Andy Kerr	NSW	212 kph/132 mph



Darren Smith and Dennis Prior flank Australian FAI speed record holder Rob Hiern, who proudly displays his superior model. At the Saleyards where the hot-mix surface was appreciated by the speed flyers and racers. Photo: the author.

## COMBINED

Combined speed held on Sunday 1st January, attracted an entry of 17, reflecting the popularity of this event in Australia. Both Julius Reichardt and Andy Kerr had hoped to break 200 mph, but the hot and humid conditions prevented this. Reichardt won with a speed of 198.28 mph using a Super Tigre 60 RV ABC on Mini-pipe; as did Kerr at 196.44 mph for second place. Third also went to Julius flying in the 29 class with a very creditable performance of 178.87 mph using a Super Tigre 29 RV with steel liner. Unfortunately, on the second flight a lean run melted the piston putting an end to their flying! Fourth place, also flying an ST 29 RV, but with ABC piston and liner was the Cincotta/Treagus team with a speed of 171.05 mph. An interesting point of this model was the use of a metal tank, in contrast to the normal bladder tanks which have a habit of bursting at the wrong time, especially in the hot weather, as was found out by some of the other competitors! Fifth, with yet another ST 29 RV ABC was Dave Smith with 154.46 mph. Unfortunately, Dave Baird of NSW failed to record an official flight with either his 29 models or his 60 model due to needle setting problems.

## RESULTS

Julius Reichardt	NSW	198.28 mph ST60
Andy Kerr	NSW	196.44 mph ST60
Julius Reichardt	NSW	178.87 mph ST29
Cincotta/Treagus	Vic	171.05 mph ST29

# SCALE BY THE EDITOR

Both FAI scale and stand-off scale were flown at Camperdown, and from entries received it appeared to be a good move to stimulate interest in these models. However, there were only four flyers in each event, and allowing for the weather deterrent and personal problems, there must have been many unfinished scale models left at home!

## FAI

As was to be expected, Max Newnham's Lancaster flew away with this event. A magnificent model in the hands of a World Championship's pilot, it will set the standard for some time to come. As Max said to me after the event, "Three good flights: I'm happy!" On the other hand, Bert Ronk's Ryan collected a lot of points in spite of its unpretentious appearance, but only its first flight was a good one.

The other multi to appear was Monty Tyrrell's B17 which is nearly as much a veteran as is the pilot. The fourth model was another much flown machine, the Spirit of St. Louis of Roy Summersby, which was flown only in the first "round", when conditions were poor.

## RESULTS

		Static	Flying	Total
Max Newnham	Avro Lancaster B Mk 1	943.5	1138.5	2082
Bert Ronke	Ryan M1	700.5	924.5	1625
Monty Tyrrell	Boeing B17	529.5	632.0	1161.5
Roy Summersby	Ryan NYP	330.0	469.0	799

## STAND-OFF

The opportunity to participate in what could have been a great event — imagine scale models all sitting on the grass around the circle — was missed by many. The models which featured were quite mixed up, in that top static scorer was not the best flown, as the scores show. The potential of this type of model is perhaps best illustrated by the quite tidy **aerobatics pattern** which Ray Ogle put his Corsair through more than once during the week: and in the wind too! The feature that pipped Glen for second spot was probably the taxi-ing Bert did with his Bellanca — right up to the judges table — at the end of his last flight. A very nice touch.

## RESULTS

		Static	Flying	Total
Ray Ogle NSW	Corsair F4U-1	129	158	287
Bert Ronke NSW	Bellanca XRE 1	118	136.5	254.5
Glen Elliott Vic	Grumman Tigercat F7F-1	148	106	254
Lyal Gadsden NSW	Howard D6A6	144	65	209

# GOODYEAR

## by ROBIN HIERN

Goodyear was held on day 4, Saturday 31st December, with an entry of 41 teams of which 29 teams flew. Conditions were warm and windy, not ideal conditions, as Goodyears are renowned for their bad handling in the wind.

Fastest heat time was 3 min 32.9 seconds by Hiern/Sweetman well below our Australian record of 3:05. The model used was an Argander special powered by a Rossi 15. Also in this heat the Jackson/Cole team had their lines cut by another model, causing a fly-away. The model landed in the car park, fortunately not hitting anyone or damaging the motor! Next fastest was the Wilson/Wilson team with a time of 3:40, also using an Argander but powered by a Super Tigre G15. Third qualifier for the final was the J. Owen/G. Owen team with a time of 3:55. The next fastest were Adler/Stivey 4:12, Morrell/Dawes 4:18, Dillon/Dillon 4:26 and R. Owen/M. Owen 4:29.8. These latter four then flew a 160 lap feature race, the winner of which became the fourth qualifier for the 160 lap final.



Argander Specials (from Aeromodeller plans) and the guys: Gary Sweetnam, Robin Hiern, Ron Wilson and Steve Wilson. Note popularity of T-shirts (all different colors) and footwear — joggers or similar. Photo from Robin Hiern.

After a good start in the final, Hiern/Sweetnam led from Ron Wilson due to superior air speed until I missed a check on the 2nd and 3rd pit stops allowing the Wilsons to take the lead. The model of Owen/Owen and our model unfortunately came together in the air, stopping our motor and causing an unscheduled fourth pit stop thus dropping us to third position.

#### RESULTS

Wilson/G. Wilson	Vic	7 min 37 sec
Owen/M. Owen	NSW	8 min 59.1 sec
Kiern/G. Sweetnam	Vic	9 min 10.3 sec
Owen/G. Owen	NSW	141 lap

The most popular models were Argander Specials and Miss Lan Bernadino's. Various motors were used ranging from Rossi 15's, ST G15 and G20 glows and diesels, Taipan glows and MVVS diesels, showing the spread of interest and possibilities in this popular event.

# RC

## AEROBATICS

BY TED RIVETT

On the 29th December 1977 Camperdown in the Western District of Victoria saw the greatest gathering of R.C. aerobatic pilots in Australia's history. With 17 expert and 22 novice contestants the stage was set for a tremendous contest.

**Thursday 7 a.m.** Flying conditions were good with zero wind and low cloud but unfortunately there looked to be rain about.

It was apparent after the first round that the place getters would earn their positions, with Brian Green putting in a 4575 to set the pace from Tracey 4255 and Hurst 3875. Tom Prosser and Barry Angus both had engine failures which meant that the pressure would be on them for the next three rounds.

Round 2 commenced after a short break with some excellent flying by big Jeff posting a score on the central recorder of 4810 and Brian 4530. Tom followed with 4370

Flying for the experts finished around 12 noon, with the novice contestants ready to go straight after lunch. By this time the wind had strengthened slightly and the low cloud dispersed to make way for excellent flying conditions.

Novice contestants aircraft were excellently prepared and trimmed. Although I did miss a few flights due to the two flight lines I managed to see Ted Ryan fly, (a protege of Brian Green) and he had a first round score of 3405 followed by John Hughan 3195 and Bob Murtagh 2960. Round 2 commenced immediately after Round 1 with the positions remaining unchanged.



Ted pauses in the tournament ready box on his way to the lists; sorry, flight line. Practice has improved his flying markedly. Photo from the author.

**Friday 30th, at 0615 hours.** Highlight of the 3rd Round was Tom Prosser's 4840 score which really gave us something to think about. It was magnificent, truly a flight worthy of a world champion. Big Jeff didn't quite measure up to it, but also had an excellent flight at 4765, with Brian Green very consistently putting in a 4520.

Third Round for novice was underway almost immediately after expert concluded with Ted Ryan still holding 1st John Hughan 2nd Bob Murtagh 3rd, and not far behind was Geoff Hennig really putting the pressure on the top three. Round 4 saw the top two places fairly well consolidated with the fight going on for 3rd position and, after two excellent flights from Hennig and Bob Murtagh 3rd place went to Geoff.

With the flying over it was a good chance to wander around the pits and examine the models in detail. Over all the air frames were constructed much better than previously seen with some excellent paint schemes; the new fibre glass resin and epoxy paints being almost essential for a good finish.

Flying styles have changed with the use of more powerful engines. Long sweeping dumbbell turns or power-off split S for turn arounds with large fast manoeuvres; and with the new pattern just announced, we will probably see

