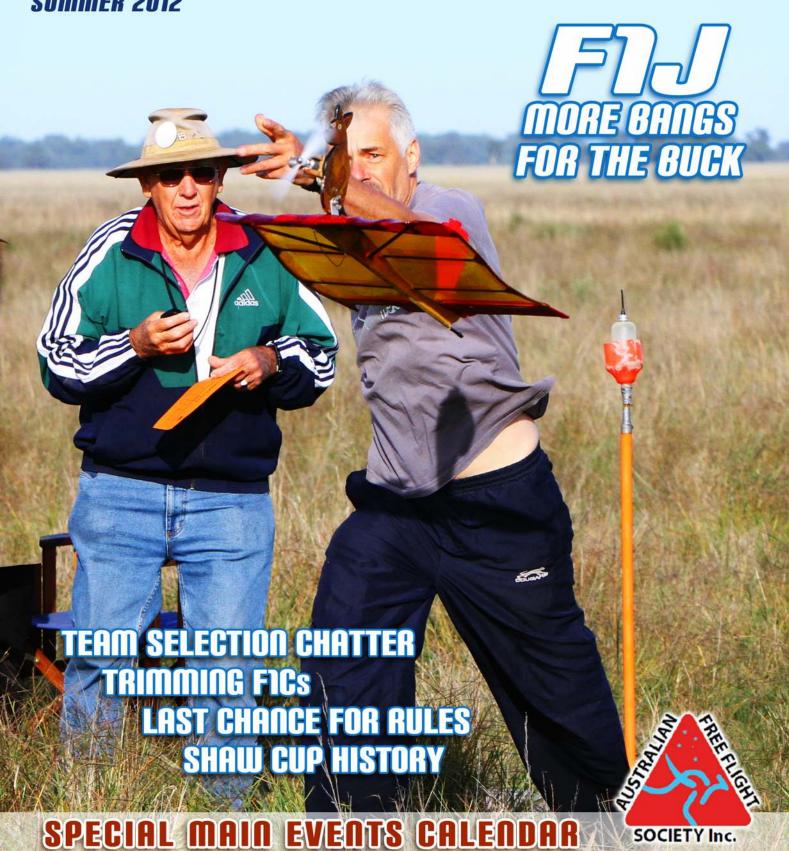
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NEWSLETTER OF THE AUSTRALIAN FREE FLIGHT SOCIETY INC

VOLUME 44 NUMBER 4

SUMMER 2012



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FRONT COVER: Uniquely Australian, the one hour Scramble. Seen here is Tahn Stowe's latest Carpet flying during the AFFS Champs at Narrandera in 2012. Tahn is a true stalwart of this black art, with chief challengers being Phil Mitchell and the fitter Terry Bond.

Free Flight Down Under Summer 2012

Volume 44, Number 4

This edition of Free Flight Down Under is edited by Malcolm Campbell, 1 Rex Street, Aspley 4034 Australia actrain@ozemail.com.au

Free Flight Down Under is the newsletter of the Australian Free Flight Society Inc, a Special Interest Group of the Model Aircraft Association of Australia. FFDU welcomes contributions in the form of articles, letters, pictures, etc on any aspect of Free Flight or related topics. Contributions can be sent to the above address or emailed to the editor. Electronically prepared material is preferred.

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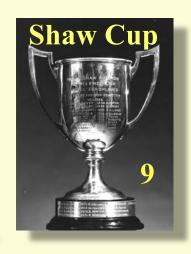
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With Special Reports On....

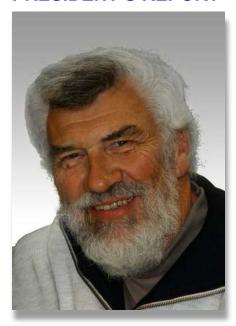








PRESIDENT'S REPORT



Hello again everyone. Another great effort by Malcolm Campbell in keeping the free flight pot boiling! Unfortunately I have just been a bystander over the last couple of months over here in the Wild West as all of our last few competitions have been blown out and there is not a lot of prospect for much improvement at this time of year.

Discussion about the team trial process continues unabated. This has partly been exacerbated by lack of clarity about the tie breaking process proposed and accepted by the last AFFS Annual Meeting. Hopefully it will be resolved (at least until the next World Championship round!) by another proposal to the Annual Meeting of AFFS. Speaking of which, I remind all members that there will now be consideration at the meeting only of items that have been advised with the formal notice of meeting and duly circulated to all members for consideration prior to the meeting, in accordance with the AFFS rules of association. Any such items should be brought to the attention of one of the AFFS committee members (contact details are on page 32 of this newsletter). Some proposed changes to the MAAA rules that have been canvassed will also fall into this category.

If you have any other topics of interest or concern that you would

like discussed without the constraint of a formal proposal, these can be brought up at the Free Flight Forum that will take place immediately after the formal AFFS meeting. Again, it would help your committee if you could tell us about them in advance so that we can get together any necessary background information, though this is not essential and you can simply raise them at the Forum if you like.

Despite the best efforts of Tahn Stowe and others to find a new flying field, it is clear that the 2013 ASFFS competition will again be held at Narrandera and so, if the need arises, people should go ahead with accommodation and travel arrangements accordingly. Interestingly we are not alone in such considerations. Even the hallowed ground at Lost Hills is now being restricted by an extensive planting of trees on some of the boundaries that has required reconsideration of flight lines and even discussion about alternative sites.

In a similar vein, there is comment in the latest 45th NFFS Symposium

Report on the problem of the rising average age of participants in free flight and also about "pooling" of model classes to create bigger competitions, much along the lines of our Combined % competition.

The AFFS Executive Committee has been active in planning the next AFFS Championships, including some new arrangements for trophies. I have also been trying to understand the roles of the various committees etc. who have a finger in the Australian free flight pie and have prepared the mud map on page 4 to try to clarify the situation. If we are not careful there will almost be as many committees as there are fliers!

Graham Maynard has been active with the Free Flight Technical Committee, considering a range of rule changes for the next MAAA cycle. He will detail these in his report elsewhere in this issue.

Finally, my thanks go out once again to Malcolm for his tireless efforts in editing this newsletter and also his great work behind the lens!

That's all for now, happy flying, Paul Rossiter

I liked the cover of the latest FFDU. I thought the latest FFDU was the best one you have done so far. Great diversity and lots of interesting articles. Clearly the team selection comments are polarized. Probably the most relevant comment was that none of the Americans like their system except the 9 who make the team.

John Lewis

Great photos Malcolm you should do it for money. Also well done with BFFS newsletter and FFDU, top issues.

Roy

I have neglected to chide you over the scale photos with all of Phil Warren's models ascribed to our best F1A flyer. Not sure how that happened????

A great effort though, I forwarded it to a guy in Italy he really enjoyed it.

Tahn

Hi Malcolm.

A ball tearer of an issue. Encyclopaedic sized as well!!!!!

Regards 007

These compliments should be directed to our contributors.

Many thanks to all of you!

And a big thanks to Roy Summersby, Paul Rossiter, Graham Maynard, Richard Blackam, Vin Morgan and George Car for help with this edition.

FROM THE EDITOR:

Where did that year go to? Perhaps it's an accepted phenomenon, the older you get, the faster the time flies. Add retirement to that and time flies faster. As Roy Summersby says, "Each day the useable slice of the pie gets smaller". Take heed. Enjoy your free flight. Roy does!

And I hope you enjoyed your September Free Flight Down Under? I got a few pats on the back for it, and I decided to print them (on page 3). Why? Because it was the members of the AFFS who contributed articles that made it such a well received edition. I only plugged it together.

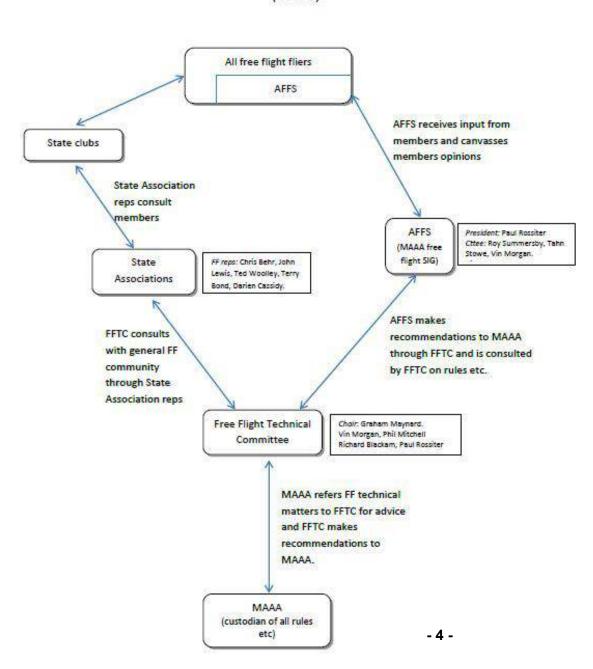
Number 4 edition is always the hardest to fill. Few competitions and people nearing holiday mode has caused my backlog of articles to dry up. Let's hope a few of our members replenish it for me to make 2013 an easier year for the editor! Like a few others, I have Lost Hills, Narrandera and France taking up the first eight months of the year, so it will be busy times. Good luck to all those preparing for next year's big events.



And all the best for Christmas and a Safe, Happy and Prosperous New Year to you all. *Cheers, Malcolm Campbell*

Free Flight Decision-Making Hierarchy

(2013)





The proposed rule is this:

1. Format

- **a.** The Free Flight Team Selection is held in a multitrials format.
- **b.** Participants may fly in any number of the sanctioned contests as specified in the schedule. The period of the trials is from 1st December to 30th November the following year.

2. Scoring Method

In each contest the Participant's score will be the sum of the normal rounds taken in seconds (with a maximum of 180 seconds counted per round). In the event that the contest is flown to less rounds or to a reduced maximum no allowance or correction will be applied. Thus the maximum possible score per Participant per contest is 1260 seconds.

In the event of a flyoff the Participant will be awarded bonus points according to their final placing in the flyoffs. The points will be awarded as follows:

| Place | Points |
|--------------|--------|
| 1 | 10 |
| 2 | 9 |
| 3 | 8 |
| 4 | 7 |
| 5 | 6 |
| 6 | 5 |
| 7 | 4 |
| 8 | 3 |
| 9 | 2 |
| 10 | 1 |
| less than 10 | 1 |

Bonus points are only awarded to participants in flyoffs. If someone makes the flyoff but does not participate they receive no bonus points. No bonus points are awarded if there is no flyoff. In other words, if only one flier makes seven maxes he or she will receive a score of 1260 but no bonus points.

3. Classification

The Participant's best three scores over the season will be taken to determine their final placing in the Team Selection.

4. Resolution of Ties

In the unlikely event of a tie the Participant's 4th best score will be taken followed by their 5th best score and so on.

5. Schedule

- a. Participants may count scores in Australian National Championships and Australian State Championships as well as International Events held in Australia (for example the AFFS Championships).
- **b.** In addition certain special Trials events may be sanctioned by agreement of the Free Flight Technical Subcommitee (FFTC) for the purpose and must be gazetted in the normal ways at least six months prior to the date.
- c. Participants may also compete in FAI sanctioned World Cup events in other countries but may only include one of those scores in their final Team Selection result.

(Please turn the page)

6. Participation

- **a.** Participants must be fully insured members of an MAAA affiliated club.
- **b.** Competitors who wish to be participate and be considered for a Team Place should advise the Chairman of the FFTC of their interest and provide contact details (AUS number, email, postal address, telephone) so they can be kept informed of relevant issues.

Discussion of the Proposal

The current season has highlighted a problem with the current format where a significant number of competitors have achieved the maximum score in several contests. There have been a number of concerns raised as a result of this:

- 1. The number of countbacks required to resolve the ties.
- 2. Expense of the travel required to gain or maintain a team place.
- 3. Many people are saying that flyoff results should be included in some fashion.
- 4. How many overseas contests should be allowed to add in a countback scenario.

It was felt by a number of people that a better way needed to be found to resolve ties and also to recognise good performances in flyoff situations. The proposal above includes a modest bonus score for flyoffs. Consideration was given to using a higher score (for example 50 points for a win). The reason 10 points was chosen was that a higher bonus would have a bigger impact to offset a competitor's dropped scores in other contests. In many contests we see people dropping 20-30 seconds and it was felt that we should not give too great an advantage to the flyoff win in that way.

Benefits

- 1. Reflect performances in flyoffs where flown.
- 2. Encourage National development of flyoff ability. We can see that this proposal will radically change the focus on competition in Australia. We can envisage a situation where people will specifically assist others to make the flyoff because it will help their own score. The current situation actively discourages this. With people actively assisting others to reach flyoffs we will develop more of the skills required to win a WC team prize. In addition, with more people making flyoffs and trying to win them there is likely to come a large increase in overall performance. This development and experience will be a bonus for any Australian who makes a team and represents Australia at a World Championships or other large International event.

- Achieve a clear result over a reasonable number of events. Even the small level of bonus points suggested will be enough to make the result clearer without the need for countbacks.
- 4. There are some people who make the point that a single trials is a better test of relative performance between Trials participants and this is undoubtedly true. However the reasons for changing to a Multi Trials are still valid; a single date can be unreasonably affected by weather, the best flier can have a stroke of real bad luck etc. In the current format the key Australian events (AFFS, SCC and certain State Champs) do tend to attract all of the interested participants and in that regard we have the best of both worlds. In this situation the keen participants do generally compete against all the others. For this reason it is probably less of interest to include more than one overseas event. The organisation may in fact conclude that we should not include any overseas events at all.

Richard

A RESPONSE TO RECENT DISCUSSION by Vin Morgan

Oh hello Flyers,

There has been a lot of email chatter about team trials. There has also been a lot of discussion which has taken place on flying fields and by telephone. Although some of the emailers seem to think the selection system is in some way broken and that we need a new system, it would seem that the talking people don't see any great problem with our existing selection system. This is probably why they have not weighed into the email discussion and therefore why Graham came to say in a recent email "The one thing that concerns me is the absence of views expressed, to me at least, by flyers who have an interest in making the team in the next round of selection events. Have any of you had views expressed to you that have not been on the wider distribution list"?

Well yes we have. A number of people have said they see no problem with the current system, that it has worked well for a number of years, and that the best flyers do seem to rise to the top. They also say in addition what a fantastic year of flying it has been. One of Bryan Oliver's mails said "What an exciting comp for F1B, Richard on 6 maxes, Bryan on 5, and Bill on 4. It has been very hard fought all the way and I am sure that this would be some kind of Australian record. Especially when you look at flyoffs to decide the victors of each round. 7 flyoffs in the Australian rounds 5 contested by Richard with 4 wins. 4 contested by Bryan with 2 win and 2 seconds. Finally Bill with 3 flyoffs and terry with 3 also. The competition is certainly improving".

I would like to add that in this year, 2012, the 48 flyers who have put in flights in trials events have amassed a total of 175,565 seconds of flight time, averaging 3,616 seconds each. In 2010 (I have taken W/Chs trials years) 45 flyers got 150,291, averaging 3,340. In 2008 where 46 flyers got 123,125 seconds they averaged 2,677 each.

Sorry to hit you with actual numerical data instead of the traditional arm waving but it does seem to me that in recent years our trials system has increased participation and has also increased the average standard of our flying.

It has also selected some quite good teams. At our last outing in Argentina the F1A team (Mitchell Morgan, Stowe) came 5th out of 31 (just 1 second behind the Brits – yes I know it was my second). The F1B team (Rossiter, Bond, Pope) came 8th out of 28 (Paul 9th individual). In F1C (Summersby, Bond, East) were 8th out of 17. Of course we could and should do better but the point is we are not going too badly particularly in view of our lack of match practice living, as we do down here in the Southern Hemisphere far away from all the good comps.

I, and a lot of flyers I have spoken with, think the selection current system has resulted in the correct people in the top places. This is, presumably the principal aim. The flyers at the top of the list are the flyers who are currently active in competition and who are achieving good results. As a byproduct there has been a lot of high level flying.

It would be nice to have a trials system involved which longer flights i.e. the ones that really count in championships flights but I don't see how this can be done in a fair manner in a multi-trial system. Flyoff are flyer on flyer and the only way to make this equitable is to have all the flyers fly all the events. As I said it would be nice but I don't see it as necessary. Our existing system in which you have to make a lot of maxes already tests model performance over more than 3 minutes. Richard wrote a piece about it some time ago under the title "Why maximise performance in F1B" partly at least, in reply to comments about why do you need more than 3 minute performance when there was a 3 minute max. You do more performance even ignoring flyoffs. It's easy to see. If you have a model that only does 3½ minutes you will be able to get maxes but a small miss-launch or a bit of sink will result in a sub-max flight. If you have a model with 5½ minute performance you can afford the occasional a bit of sink or dodgy launch and still max. Over a lot of flights (such as in our trials) sooner or later there will be that bit of poor air or a miss-launch and that performance over 3 minutes will be tested.

The reason flyoffs and places cannot be used fairly is because with both of these the result or place depends on the number and ability of the other flyers in the particular event. Because our multi-trial system is spread over a large country not all flyers attend every competition so the average standard varies from event to event. Obviously it is easier to get more points in an event if there are not so many good flyers.

In our system the performance of the other flyers in any single event is not important because we fly against the clock. The clock is an intermediary which allows comparison of flyers in different events. It works because the maximum system used in FF effectively averages a flyers performance over a number of flights. This reduces the effect of weather and prevents the one flukey thermal flight from dominating results. The FAI worked this out a long time ago. They even

increased the number of flights from 5 to 7 to give better averaging.

Our various events are comparable because in free flight time is objective (as opposed to e.g. scores in aerobatics) and although weather does play a part it is not as significant as might appear. Good flyers get good scores even in apparently poor weather. Anselmo Zero said he liked wind, even with a bit of rain because it was easier to pick lift than in calm conditions. In this year's trials Richard and Bryan demonstrated that they deserve their top trials places by reeling of 7 maxes at in the wind at Meckering and then again in the (partly) calm of Dalby (both fields more than 2,000km from their home turf).

Using flyoff results is extremely problematic. Flyoffs are flyer on flyer. The only situation in which places or a flyoff would be a fair test is if all the prospective team members gathered together and flew together. We could arrange for this as a tie breaker if we wanted to; all the flyers who had 3 maxouts could meet for one or two competitions to determine the final order. But this would be the same as the US system and I gather from comments that not too many are in favour of such a system. The US system effectively choses team members via a single flight of unlimited duration – the final flyoff. This does duplicate the sudden death situation of a World Champs but it is not a good method of team member selection. The US is the only country I know of that has a single event trial and, as I have been told at Lost Hills, "nobody likes the US team selection system except for 9 guys". All other countries have some form of multi event system, just as do most other sports in order to avoid flukey and unrealistic outcomes. Our Olympic teams are selected on the basis of how well a sportsperson has done of a number of events over a period of time. And most Olympic events are not as subject to luck as free flight.

The other problem with flyoffs is that they are not standardised. The 7 x 1 hour rounds is used in almost every competition but flyoffs are sometimes 5, 7, 9 minutes, sometimes one or two of these and a 10 minute the next day. At Narrandera we just go directly to the 10 minute. And the format varies with the performance of the flyers. If no-one makes the 5 minute you don't have a 7.

It is true that the W/Chs are a single event but that does not mean W/Chs participants should be chosen the same way. One accepts the vagaries of FF in W/Chs results. There are a lot of examples of not particularly good outcomes in W/Chs. Makarov lost a place because his model was lost by the timekeepers and twice Andriukov has lost in a final flyoff by hitting a tree. These things have to be accepted in the final event but their likelihood can and should be reduced in team selection. In team selection we need a way of showing which flyers are currently performing better than the rest. Our current system of a series of events over a period of time seems to do this reasonably well. We probably need to clarify the annual events program so the number and location of events is known well in advance. There should also be enough events give reasonable choices. These however are really housekeeping changes rather than system changes.

F1J GET MORE FUN FOR YOUR BUCK

Flying F1J is the most fun you can have for your buck. Don't believe me, then check out the cost of other top of the line models from the FAI classes, you will be surprised.

Flying F1J is not only the cheapest, but gives you all the thrill of launching into the sky a model which can climb vertically for five seconds behind its tiny 1.00cc engine, turning its propeller at 30,000rpm. While I will agree that there is nothing nicer to watch than an open or vintage rubber model climbing to great height with its two minute motor run before settling into its glide, it just doesn't give you the same adrenaline rush as a finely tuned power model.

Now, a 40 size open power ship that's a different story and a much bigger buzz, but back to the subject of F1J.

So why F1J? There are many reasons apart from the cost factor, which shouldn't matter much. Most modellers like me, are getting too old to spend our long saved funds before we ourselves, get into that big thermal. Do you really want to be the richest man in the cemetery?

The F1J is really a small classic F1C; it has nearly all the functions of its big brother. It is built mainly from modern materials, carbon, which makes for a very reliable model. It can be home produced, for those that like to build. The models that I am flying at present can bought in kit form. All parts are available separately or you can buy the model finished ready to fly if you desire.

Roy's new F1J, all Ukraine parts put together as a kit. Starting to look good in the sky, just about fully trimed.Covered in Ora light transparent covering,

Other advantages is the two minute max, less walking for us older folk and they can be flown on smaller fields than their big brothers.

A little history of this class of model. I can't go back too, far as I am just a boy, but I do remember flying what was called power ratio. There were three classes in this event 1, 2, & 3 with maximum motor sizes of 1.5cc, 2.5cc and I think 5.0cc, this changed in 1963.

Top model is Roy's, with Cyclon power; the one below is Peter Wright's with KC power

The 1.5cc event became class one power, using a motor of a maximum of 1.0cc and a limited engine run. Not long after this, and most likely following along with the Brits, it became known as 1/2A power, while still using 1.0cc motors. As there were very few 1.0cc motors that were competitive, everyone was using Cox 049 or 051 Tee Dees. This was all happening in the early 1960s. We in Australia continued to fly three classes of power for many years, and they were, Class 1 Power or sometimes called 1/2A Power, max 1.00cc, Open Power Duration, max 10.00cc and FAI Power which is now F1C.

It is believed that F1J, as we know it today, developed on the Continent from an event which was called Motor Sigler; this was a 1.0cc powered glider. I can remember this being flown at our 22nd Nationals 1968/69 in Warrnambool Australia, by the late Bluey Copprock. He was using what must have been the best motor of the day, a Schlosser 1.0cc diesel, and he flew it very well.

Over the last 25 years we have had an abundance of extremely well made 1.0cc engines available to us. Most but not all, coming from Ukraine or Russia, modern engines are both powerful and reliable. Put one of these motors together with a modern carbon model, and they are a delight to fly.

PS. There could be some errors in the dates etc. If anyone out there has accurate knowledge of this I would appreate the informatition.

Roy







The Shaw Aviation Challenge Cup for Model Aeroplanes presented for Open Competition

a report and summary by Vin Morgan

The Shaw Cup is most likely the oldest and is certainly one of the most prestigious of the perpetual trophies in Australian Aeromodelling. First presented in 1929, the list of winners is a who's who of free flighters, mostly from Victoria, however this year it has been captured by Jim Christie and taken to NSW. Word is that in 2013 NSW will be trying hard to keep it and Victoria will be trying hard to get it back.

A nice aspect of the trophy is that in its 83 years it has not been swapped around for different classes. It was originally presented for "Open Competition" when open effectively meant open rubber and the only change has been to make it a Victorian State Championships trophy.

The Trophy was presented by Major Harry Turner Shaw who was active in aviation and small yacht sailing in Melbourne. The following information is from a Museum Victoria web page. Museum Victoria holds a tool kit and a flying helmet that belonged to H. T. Shaw.

Melbourne-born, Shaw obtained his aviator's certificate (#2196) at Shoreham in the UK on 13 December 1915 after serving with the Loyal North Lancashire Regiment. He received the OBE in 1919 following service with the RFC/RAF during World War One. His family owned a property near Ricketts Point. Shaw later formed the Shaw-Ross Engineering & Aviation Company at Port Melbourne. In 1921, Shaw-Ross imported the first post-WWI aircraft into Australia, a Farman Sport biplane. In May 1922 Shaw flew a Farman Sport from Melbourne to Sydney and back for which he received the 1922 Oswald Watt Gold Medal for "the most notable contribution to aviation by an Australian or in Australia". In 1924 he was elected as committee member of the Victorian Section of the Australian Aero Club and later chaired the Air Convention, a lobby group comprised of various aviation interests. He served in the RAAF during the Second World War.

Things have changed. In the Melbourne Argus newspaper of Saturday, March 8 1941, this notice appeared:

SHAW AVIATION CUP

All kinds of rubber-driven model aeroplanes will be able to compete for the Shaw Aviation Cup on Saturday, April 5, at the Melbourne Model Aero Club ground. The date of the contest was originally fixed at April 12, but has been altered to April 5. Only one entry for each person will be permitted in this year's contest, which will begin at 2.45 p.m.

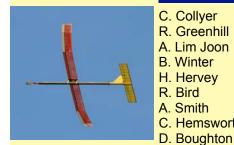


2012 winner, Jim Christie, of New South Wales

WINNERS OF THE SHAW CUP

| 1929 | H. Hervey | 1948 | A. Lim Joon | 1981 | R. Allemby (proxy J. Fullarton) |
|--------|-------------------|------|---------------|------|---------------------------------|
| 1930 | H. Hervey | 1949 | A. Reid | 1982 | C. Collyer |
| 1931 | H. Hervey | 1951 | C. Stone | 1983 | P. Lagan |
| 1932 | H. Hervey | 1952 | A. King | 1984 | R. Bird |
| Aug-32 | 2 R. Allamby | 1953 | C. Stones | 1985 | G. Odgers |
| 1933 | R. Allamby | 1954 | N. Ablethorpe | 1986 | No contest |
| 1933 | G. Machin | 1955 | N. Harding | 1987 | No contest |
| 1934 | H. Halmshaw | 1956 | R. Bird | 1988 | C. Collyer |
| 1934 | H. Halmshaw | 1957 | R. Greenhill | 1989 | R. Bird |
| 1935 | R. Payne | 1958 | B. Winter | 1990 | M. Hardy |
| 1935 | H. Hazeldine | 1959 | D. Boughton | 1991 | R. Bird |
| 1936 | T. Warburton | 1960 | S. O'Connor | 1992 | C. Hemsworth |
| 1936 | H. Hutchinson | 1961 | R. Greenhill | 1993 | M. Forster |
| 1937 | C. Brown | 1962 | R. Wilkins | 1994 | C. Hemsworth |
| 1937 | E. Scrutton | 1963 | R & J Kenyon | 1995 | C. Collyer |
| 1938 | R. Payne | 1964 | D. Boughton | 1996 | C. Collyer |
| 1938 | D. Abbot | 1965 | R. Oliver | 1997 | C. Collyer |
| 1939 | P. Renkin | 1966 | R. Greenhill | 1998 | D. Parker |
| 1939 | A. Smith | 1967 | R. Greenhill | 1999 | W. Gordon |
| 1940 | P. Renkin | 1968 | No contest | 2000 | C. Collyer |
| 1940 | J. H. Halmshaw | 1969 | No contest | 2001 | C. Collyer |
| 1941 | J. D. Belot | 1970 | No contest | 2002 | G. Car |
| 1941 | E. A. Kerr | 1971 | R. Greenhill | 2003 | G. Odgers |
| 1942 | A. Lim Joon | 1972 | No contest | 2004 | L. Morgan |
| 1942 | A. Lim Joon | 1973 | B. Winter | 2005 | P. Greenhill |
| 1943 | J. Schollenberger | 1974 | B. Winter | 2006 | V. Morgan |
| 1943 | J. Schollenberger | 1975 | B. Winter | 2007 | P. Greenhill |
| 1944 | A. Lim Joon | 1976 | No contest | 2008 | D. Boughton |
| 1944 | A. Lim Joon | 1977 | W. Buckmaster | 2009 | C. Collyer |
| 1945 | A. Smith | 1978 | R. Greenhill | 2010 | C. Collyer |
| 1945 | W. Phillips | 1979 | No contest | 2011 | G. Odgers |
| 1946 | W. Phillips | 1980 | No contest | 2012 | J. Christie |
| 1947 | A. Green | | | | |

And who's won it the most?



C. Collyer 9 G. Odgers 6 2 R. Greenhill H. Halmshaw 5 2 A. Lim Joon J. Schollenberger B. Winter 4 P. Renkin H. Hervey 4 R. Allamby 2 R. Bird 4 R. Payne 2 A. Smith 2 W. Phillips 2 C. Hemsworth 2 2 P. Greenhill

3





F1J model parts

Some parts new, some parts used. All the parts needed to build up into a competitive F1J model with a mount to suit a Cyclon or Fora type engines.



Wing: Four panel. This has been broken, since then stripped, repaired and recovered in Icarex, not used since.

Stab: Used, stripped, checked and recovered in light, white Oracover, very small patch on the D box otherwise as new.

Fin: Full fin assembly kit, new.

Fuse: Front shell new.

Boom: New.

\$370

All fittings to complete the model which includes, engine mount, engine mount ring, fuel system, timer, wing adjuster, wing wire, wing mount, tail mount, bunt, stab post and pull down, line guide for rear of boom. Some of these items are new some I have used. Timer has been modified by Jon Fletcher. Ready for someone to get started in F1J and do a little work them selves.

Roy Summersby Phone 02 4341 0072



Narrandera 2013



Australian Free Flight Society and Southern Cross Cup

Program Southern Cross Cup

| Monday, March 25 | F1B Open Power | 7 x 1 hour rounds 3 flights | 0800 - 1500 0800 - 1300 |
|---------------------|---|---|--|
| Tuesday, March 26 | Fly-offs from Monday F1A F1C Open Rubber | 7 x 1 hour rounds 7 x 1 hour rounds 3 flights | 0730 - 0800 0800 - 1500 0800 - 1500 0800 - 1300 |
| Wednesday, March 27 | Fly offs from Tuesday | 0700 - 0800 | |

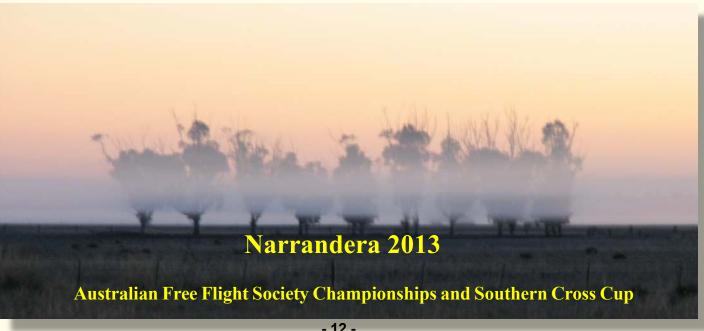
AFFS Championships

| Wednesday, March 27 | F1B Open Power F1H ****AFFS AGM For | 7 x 1 hour rounds 3 flights 5 x 1 hour rounds time and venue see CDs not | 0800 - 1500 0800 - 1300 0800 - 1300 cice board |
|---------------------|---|--|---|
| Thursday, March 28 | Spare day. Training, opti- | on to fly Comb. % Open and | Comb. Vintage |
| Friday, March 29 | Fly offs from Wednesday F1A F1C Open Rubber | 7 competitions 7 x 1 hour rounds 7 x 1 hour rounds 3 flights | 0730 0800 - 1500 0800 - 1500 0800 - 1300 |
| Saturday, March 30 | Fly offs from Friday com Scramble P-30 Oz Diesel | 3 flights, 120 max 5 flights, 120 max | 0730 0900 - 1000 0800 - 1300 0800 - 1300 |
| Sunday, March 31 | Fly offs from Saturday co F1G F1J HLG/CLG Evening. Presentation D | 5 x 1 hour rounds 5 x 1 hour rounds | 0730 0800 - 1300 0800 - 1300 0900 - 1300 7 for 7:30 |
| Anytime. | Combined % open Combined Vintage | 3 flights 3 flights | 0800 - 1300 0800 - 1300 |

Combined % open and Combined Vintage may be flown on any AFFS competition day before Sunday (including Thursday March 28). Fly offs Sunday morning.

Additional Information

- 1. WORLD CUP EVENTS are flown from a flight line in seven one hour rounds. Please assist by volunteering to time keep.
- 2. The first round flight duration for F1A, F1B and F1C will be 180 seconds.
- 3. Flyoffs will be organized after the event (start time, CD and timekeepers) but held the following morning. Durations for F1A, B & C, G, H, and J will be 10 minutes (conditions permitting). For other events unlimited.
- 4. F1G and F1J are flown on the last day and therefore cannot have flyoffs the next morning. You may make a longer 1st round flight (up to 10 minutes) as flyoff insurance in case more than one flyer maxes
- 5. OPEN EVENTS are 3 flights to a 3 min. max with no rounds and one unlimited flyoff the next day.
- 6. Gliders otherwise conforming to the F1H/A1 rules will be allowed in F1H at any weight provided they are fitted with a non-latchable towhook.
- 7. Old style F1J/Class 1 Power models restricted to a plain bearing motors less than 1 cc and no moving surfaces except DT - will be allowed an 8 second motor run in F1J (bring out your Mini Weavers and ½ A Vikings)
- 8. P-30 is 3 flights to a 120 sec. max. No rounds. One unlimited fly-off.
- 9. COMBINED % OPEN is 3 flights (no rounds). Score is the percentage of the max for that class. HLG and CLG are allowed but are only allowed 3 flights i.e. no discards. Two attempts are permitted for each flight (the 20 second attempt rule applies).
 - The 3 flights can be taken on any AFFS Competition day before Sunday (including the "spare day").
- 10. VINTAGE Glider, Rubber and Power will be flown as a combined event. You may enter more than one class. Champ of champ points will include all entries. Note new vintage cutoff date of 1956. The 3 flights can be taken on any AFFS Competition day before Sunday (including the "spare day").
- 11. VINTAGE classes get bonus points (2 per year pre 1956) as per MAAA rules 2009
- 12. HLG/CLG all flights from the box marked by 4 cones.
- 13. Oz Diesel (1.5cc plain bearing diesel, no VIT, AR etc, see FFDU2002/3), 10 sec motor run, 5 x 2 min
- 14. Radio Dethermalization (RDT) is allowed in all events.
- 15. PLACEGETTERS in AFFS events may be processed. There will be spot checks and check timekeeping on the field.
- 16. All Competitors must be in possession of a current MAAA/FAI licence.
- 17. AFFS Annual General Meeting. See notice at CDs table for venue and time. Please forward agenda items, nominations etc. to the secretary, Tahn Stowe by March 8.
- 18. The Presentation Dinner will be on the evening of Sunday. Location to be advised.. Cost will be about \$40. We need to know numbers in advance so please make your bookings for the dinner and pay with your entry.
- 19. Motorized retrieval is not allowed (pedal and electric bicycle retrieval is). We are not permitted motorized retrieval on the Department of Defence land (Field 1) and for Field 2, although motorized retrieval has been allowed in the past, we have had problems with the dust raised by cars obscuring models and blanketing the flight line.
- 20. Smoking on the field is not allowed. If you smoke in a car the doors have to be closed.
- 21. Sunrise at Narrandera on March 25 is at 07:22. Sunset 19:16.





ENTRY FORM



36th Annual Australian Free Flight Society Championships World Cup - Open International F1A, F1B, F1C

| Narrande | ra, NSW | March 27-3 | 31, 2013 | | |
|-------------|---------------------------------------|------------|--------------------|---------------------------|-------|
| Name: | | | | FAI No: | |
| Address: | | | | Age (if Junior) | |
| | | | | | |
| | Tel: | | | | |
| Events ent | tound | | | | |
| Events ent | Event | Tick | | Event | Tick |
| 1. F1A Wo | orld Cup Event | | 9. F1G (Coup | pe d'Hiver) | |
| 2. F1B Wo | orld Cup Event | | | Glider. See program not | e 6) |
| | orld Cup Event | | | program note 7) | |
| | ed % Open | | 12. HLG | , | |
| 5. Open Ru | ubber | | 13. CLG | | |
| 6. Open Po | ower | | 14. Combine | d Vintage. (entry in more | • |
| 7. Scrambl | e (Russ Hammond Perpetual | | than one clas | s allowed) | |
| Trophy) | • | | 15. Oz Diese | 1 | |
| 8. P-30 | | | | | |
| | | | | | |
| Fees: | World Cup events F | | | \$40 | |
| | Any number of other | | | \$30 | |
| | Any number of WC | | | \$60 | |
| | AFFS membership in Membership with po | | | \$30 \$40 | |
| | Dinner | sted paper | copy of FFDO | \$40 \$40 | |
| | There are no fees for | inniore | | ψ + 0 | |
| Fee calcula | | Juniors | | | |
| | try one entry option, member | ship optio | n, dinner if atten | ding Fee | |
| | ip events only | | , | \$40 | |
| AFFS eve | | | | \$30 | |
| | ip and AFFS events | | | \$60 | |
| | embership for 2013/14 (includes | electronic | FFDU) | \$30 | |
| | embership for 2013/14 with pos | | | \$40 | |
| Dinner | | | 13 | \$40 | |
| Total | | | | | |

Send completed entry form with money (cheques payable to Australian Free Flight Society **not** FFDU)

Vin Morgan, Treasurer AFFS to:

644 Canning Street, Carlton North, Vic 3054 Australia

Name: Australian Free Flight Society Or by bank transfer to:

033 174 BSB 331732 Account No.

Overseas people can pay on arrival but it would help organization if entries are returned so we know numbers – especially for the dinner. Forms or entry details can be e-mailed to: vin.morgan@utas.edu.au.



SOUTHERN CROSS CUP 2013 (25th - 27th March)



WORLD CUP - OPEN INTERNATIONAL FOR F1A, F1B AND F1C ALSO OPEN POWER AND OPEN RUBBER INFORMATION

Entry Fees - (There are no entry fees for Juniors). Registration Fee \$10.00. World Cup Events (F1A, F1B & F1C) \$30.00 for any number. Open Power & Open Rubber \$10.00 each.

Send entries to: Tahn Stowe 3/152 Brook Street Coogee 2034 AUSTRALIA Please make cheques payable to NSWFFS Inc in \$A

Late entries will be accepted on the field prior to the event. Payment will also be accepted immediately prior to the event however it would assist the organization if entry forms could be received by 15m March 2013.

| Events F1/ | A, F1B & F1C are world Cup Events. We need timekeepers for each pole, and we need your help. |
|---|--|
| Please ind | licate if you can assist with timekeeping or CD'ing any event. |
| Enquiries: | stowes@ozemail.com.au |
| Name: | FAI number: |
| Address: | |
| | |
| | |
| | |
| Tel: | E-mail |
| 000000000000000000000000000000000000000 | |
| | |

| Event | Fee REGISTRATION | Amount \$10 |
|-------------|---------------------|-------------|
| F1A | \$30 | |
| F1B | \$30 | |
| F1C | \$30 | |
| Open Power | \$10 | |
| Open Rubber | \$10 | |
| | | TOTAL |

This is the boring tale of my F1 C US Team Selection for 2013 in France. It started when I arrived in Lost Hills to find both tires on my XR 100 Honda low (not flat) so wanted to get out in the early morning to blow them up and get in some dead air trimming. After blowing up the tires my rental car would not start so had to get a jump from the nice guys at Halloway Gypsum.



Out to the field for testing and the car dies again; another jump and left it running while flying. Next morning, dead again at the motel so had to wait 6 hours for a replacement which put testing way behind schedule. I got three models going ok and gave up on the LDA as I just could not find trim that would keep it from pitching down when the speed got high. The same issue as others have found. Too bad, as the glide looked really good.

The first F1 C day I chose to fly my 100" Achterberg and leave the 104" in the car. The format for this years selection had changed from a single two day 14 round contest where the top three made the team to two 7 round contests, where the winners of each contest made the team and the flyer with the best combined scores for both would be the third member. We had a 25 minute per hour flight window and several of the midday rounds had all of us waiting until the very end of the round because the air was hot and very still, then everyone fires up and launches. In round five, seven of us dropped in this condition. I flew the last two rounds to get the best score I could but knew I would need to win or go home the next day.

The day one fly off had only three with Don Chesson winning over Randy Secor and Faust Parker. Day two is all or nothing for the rest of us. Again I am flying the 100 and in round two I noticed fuel weeping from the filler hole so I knew I had a bad one-way valve. I chose to dump the fuel load since I didn't know how much had leaked, refuelled and launched immediately for a max. I came back to the car and replaced the valve and for some reason I readied the 104 and took it to the flight line too. In round 3 I fired up the engine and it sounded lean. I had to open the



needle valve ½ turn to make it run, but down about 1000 RPM. I knew this wasn't right but launched anyway and needless to say it went over rich and flamed out at about 100ft, turned over and was headed to the ground. I slapped the RDT button and whew; it DT'd and floated to the ground in 16 seconds so it was just an attempt. I grabbed the 104, hooked up the lines and fueled and fired for a max. The heart is racing now.

I flew the next few rounds with the 104 and kept working on the 100 in between flights; finally figuring out there was crud in the needle valve so blew it out with fuel and all good. Flew the 100 in the last round in big wind but no problems so another max and into the fly off. There were five of us in the fly off and three of us need to win as we





had poor first day scores. There were two folders, a flapper, a flapper/folder and my straight winged models. I had asked Henning to help me with the air pick using his temp/wind instrument but the air was still and cool.

Everyone launched about 4 minutes into the 10 minute flight window, but I waited hoping to get some warmer air. After a couple of minutes, Henning said the air was still cool and had not changed so I fired up and launched. The model burped at about 100ft, slowed and then caught fire again but at a more shallow angle of climb which resulted in an over bunt and loss of altitude......I am done.

The timers announced it was an over run so I slapped the RDT and grabbed the 100" model that just needed fuel; shoved it in the starter and launched. I was so disappointed I didn't even look at the model and went to retrieve the 104 and bring it back to the line. The 100 was still gliding but I honestly did not think I had a chance given the lack of high tech.

I picked up the model and wiped off some of the dirt and returned to the flight line where I was met by Victor Stamov showing me his stopwatch and smiling, telling me I had won. You bet, those are real tears.

See you in France.



SOME WORDS ON RUBBER:

I made up 10 motors from the pound of October '12 Super Sport I bought for my testing. 5 each were made up at 24 and 26 strands. I blew 2, 1 each at 24 and 26 strands, at the high end of pull but before the max pull length I had calculated. This batch is a little different from the June '12 batch in a couple of ways. It is slightly thicker at .043" verses the .042" I measured for the June '12 rubber. It also has a slightly higher stretch ratio of 9.4; actually it was 9.6 but I subtracted 0.2 from my calculated stretch ratio for a safety factor. The June '12 batch had a stretch ratio of 9.0. This is a bit odd as you would think being slightly thicker it would have had a lower stretch ratio.

The overall total energy was higher than the June '12 batch and once again it has very very good burst energy at 24 strands and still maintaining very good cruise energy. I think it is another very good batch of Super Sport and I plan to buy more although I may buy it at 1/16" to try and see if I can stand working with twice as many strands.

Being slightly thicker it made up shorter motors than the June '12 rubber. It should wind to 450 to 460 turns with lot's of torque and have motors runs in the 42 to 45 second range when made up at 24 strands.

Please past this info on to your F1B sportmen.

Jim Bradley

TRIMMING F1Cs

John Cuthbert

Two years ago I produced a paper for the Free Flight Forum entitled "Fast Track to F1C" in which I outlined my thoughts and techniques in getting started in F1C. This paper is a natural follow-up to the first, describing the process of achieving a fully trimmed F1C ready for competition.

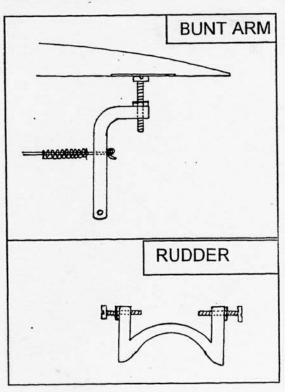
THE SET UP

As with all the FAI classes, but particularly with F1C, the road to success starts with the features and set-up of the model, which are determined in the workshop, not on the flying field.

- 1) Metal to metal adjusters. Due to the vibration created by high revving modern F1C engines it is imperative that the adjusting surfaces (rudder and tailplane) are constructed in hard metal; steel not aluminium. I still see today flyers using plywood stops and packing resulting in inconsistent climb patterns and transitions (see diagram for bunt arm and rudder stop).
- 2) Lines to moving surfaces. I started by using traditional monofilament to the moving surfaces, but after experiencing severe problems in extreme flying conditions, i.e. -15 degrees C in Norway to 42 degrees C in Portugal (where the length of the lines changed) I reverted to my old F1A setup using soft lines and springs to create the tensions. Each line is made of three components:
- (A) a short length of monofilament at the timer end which because of its stiffness will allow the lines to retract into the fuselage in a straight line avoiding foul ups.
- (B) this is connected to the spring.
- (C) a longer length of soft line connected to the other end of the spring and out to the rear of the fuselage for rudder, D/T, bunt arm and pull down lines. The other major advantage of using a softer line at the rear is that the line creates very little resistance as it turns through 90 degrees in the confined space at the rear of the fuselage. The line I use is called BRAID of 30lb breaking strain.

This line is used in carp fishing to make up hook lengths.

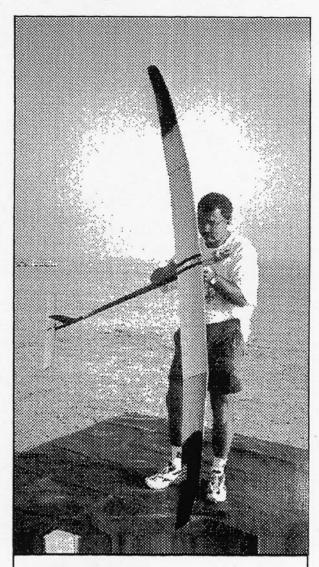
- 3) High tailplane mount A successful bunt transition can only be achieved by having the tailplane mounted 12 15 mm above the fuselage, allowing sufficient movement to create crisp and positive changes in model directions.
- 4) Wing adjuster It is most important that you have the facility to finely adjust the wing incidence, particularly in the later stages of trimming. (See drawing overleaf)
- 5) Wing warps and incidence All of my smaller (2.2 metre span) models are set up with the same warps, i.e. inner panels flat and differential wash out in the tips, typically 3mm on left tip and 2mm on right tip. On the high aspect ratio wings (2.6 metre span) I build in a little wash out in the inner panels (0.5 1.0mm). Prior to trimming, the inner panels are set up with the same incidence in the model room. I use the technique of inverting the model and packing up the rear of the fuselage until the fixed wing is level, and adjust the other wing to make the fixed wing. Use a small spirit level to achieve this.



- 6) Set timer for 2 second run Connect all lines to timer with rudder on second function. Start engine and when you are happy that it is running sweetly release the timer start. DO NOT RELEASE THE MODEL. Observe clean engine cut, bunt sequence and D/T.
- 7) Reset timer for 2 second run and launch The moment of truth. Remember all those times you have practiced the starting of the engine and launch technique. Although your heart will be pounding, those practice times will now pay dividends. Observe the model. As you are directly beneath the model you are in the best position to determine its direction. It should have a looping tendency with a soft bunt and gentle D/T.
- 8) Set engine for 3 second run Using the knowledge you gained from the first launch start to adjust the V.I.T. (half a turn on a 10 BA adjuster) and rudder (if necessary). Too much left rudder manifests itself by the model crabbing left and trying to go over onto its back. Keep to the 3 second engine run until the model is going up straight.
- 9) Set engine for 4 seconds Having achieved a straight climb on three seconds, the 4 second run will indicate the need for fine adjusting of V.I.T. and rudder as the model will be accelerating to maximum speed on this run.
- 10) Set engine for 5 second run It is at this point, just when you think everything is right, that a phenomenon peculiar to F1C starts to happen. When you are very close to the optimum V.I.T. setting the model may indicate a power pattern where it will half roll to the right and then drop its nose, giving the indication that it is under-elevated. The temptation is to screw up the V.I.T. and start to go backwards. In fact the model is still over-elevated and a further small V.I.T. adjustment down will kill the roll and create a straight climb. I have observed several power flyers who reach this stage and then work backwards, becoming more and more confused.
- 11) Adjust bunt The original setting of '1 second plus 1 second' should have produced a soft bunt. By adjusting these trimmings, particularly the first movement down to 0.5 seconds and second movement reduced to 0.7 0.8 seconds, should result in a crisp, positive bunt at the top of the climb.

I personally prefer to bunt as late as possible to use the speed of the model to gain further height before bunting. Unfortunately when you are launching in a crowd, the timekeeper cannot hear the engine stop and therefore he or she tends to time the bunt - resulting in an overrun. This is far from satisfactory. There need to be some guidelines on this: too much is left open to interpretation. When launching alone timekeepers always follow the model. Why? The best method is to observe the launch and then look down and stop the watch when you hear the engine stop. That way you are not influenced by what the model is doing. Down from my soapbox and back to the trimming.

12) <u>Set the glide to 15 seconds</u> Probably will stall; increase glide time while adjusting to optimum glide. I have found it much



John and his foil-covered five-break wing F1C model at the 1999 World Championships. The organisers provided groundsheets for each launch position to minimise dust being blown about by propwash.

easier to adjust the glide down from a stalling position than the opposite.

Adjust right rudder to give 45 second 13) glide circles This is the setting I use for rounds models and flying in thermals. Obviously for out and out performance you will need to increase the glide circle.

So there it is: one man's approach to successful trimming of F1Cs. It works for me and I do not crash models during trimming. It also works for others; I have talked two new F1C flyers through this technique resulting in well trimmed, undamaged models. One of them has recently beaten all the established F1C flyers in Britain in competition - DAMN IT! Taught him too well.

A NOTE ON TIMING ELECTRIC FF MODELS



In the last issue of FFDU, George Car related his experience timing my F1Q model and highlighted the difference in the electronic timer cutting off the motor and the motor run time measured with the model at height in the air.

This raises some potential problems and so I checked things when I got back home and it turns out there are indeed some potential issues. Firstly, at the end of the motor run time, the controller sends a zero speed signal to the electronic speed controller (ESC). However many speed controllers seem to incorporate a smoothing function (presumably to eliminate the effect of any noise or jitter) and so in such cases there is a small delay before the motor is stopped and the break enabled. The rate at which the motor stops then depends upon how hard the breaking function is applied and this in turn is related to the resistance of the FET's stream multiple times. The timer then

windings and also the size (diameter) and mass of the propeller. On my F1Q model it takes about 0.4 - 0.5s for the prop to stop. Secondly, my model reaches a height of about 120m at the end of the motor run (measured with an altimeter) and so the sound takes about 0.35 seconds to reach the ground. Finally, there is the reaction time of the timer that is probably around 0.1 - 0.2 seconds. It is hard to know when a person timing a model actually decides that the motor has stopped: is it when the brake first kicks in or when noise of the braked motor stops? If the former the potential timing error is about 0.6 seconds, but if the latter then there is a potential maximum timing error of about 1 second. This quite a lot compared to a typical motor run of around 10 seconds! This problem is commonplace in F1C and F1J where motor runs are much shorter, though the motors tend to stop much more abruptly with flood-off and brakes.

However, this still didn't fully explain the apparent 1.6 second discrepancy noted by George and so I went back to check the programmer used to send the timings to the timer in the model and found the last second. In developing the timers and programmers, I had improved them from the initial prototype to eliminate any error in transmitting the data from the programmer to the timer. This was done by introducing a "start" character and then sending the data

in the ESC, the resistance of the motor checks for the correct start character and then compares two sets of data. If either the character is wrong of if the data streams are not identical then the data is rejected and the user prompted to send it again. On the day of the flights that George timed I had forgotten that I had an early prototype timer in the model that didn't incorporate the error checking and was programming it with a final version programme that did! The effect of the mismatch was to add 1 second to the motor run time as a result of the different ways the data is encoded!

> So I think that the matter is now fully resolved. For the competition flights the timer was actually programmed for 10 seconds (though the programmer indicated 9 seconds) and George and his friend timed the motor run at 10.6 seconds, the 0.6 coming from the factors mentioned above. However, this still leaves the problem of the time it takes for the propeller to stop after the signal from the timer. One solution is to for the timers to agree to stop timing the motor run as soon as the motor appears to go into break mode. Alternatively, one probably needs to check how long it takes for the ESC to stop the prop on the ground and subtract this from the programmed motor run time, just to be on the safe side.

> > by Paul Rossiter

World's Longest Tomboy Flight?

as seen in Duration Times



It's maybe 1995; I'm at a FF contest at Taft in the fall with a storm front moving through. It's not raining, but there's a low overcast and the air is turbulent. I like to fly Tomboys for sport, with a small diesel on the nose.

I was through contest flying for the day at around 2;30 in the afternoon. Time to pull out the Tomboy and have some fun. Around 2:45 I launch it. The model climbs out nicely and drifts north towards the hills. Remember this little bird has a 3 cc fuel tank on it, and the motor can run how long? 2 minutes? 3 minutes max?

I have my Walston transmitter in the Tomboy so I figure I can ride my Trail Bike and find it wherever it lands. It's about 2:55 now and the model has been sucked into the cloud---punched right up into the gray. But hey, I've got my Walston! Well by 3 o'clock I'm at the top of the hill and there's all kinds of electrical interference and I'm not getting a reliable signal or indication from the Walston.

It's getting colder; it's getting darker—and the White Elephant Saloon or the Cookhouse and a drink in the bar and dinner at 6:30 are starting to look pretty good—need to cleanup anyway.

So at 5:00, I give up the search and go back to the motel to shower and get the grime and dirt off and get ready for dinner. At 5:45 my cell phone rings just as I step out of the shower. It's a call from my wife in Glendale.

She tells me she's just received a call from the prison at Taft. The front desk said that one of their guards had seen an airplane glide down out of the sky and strike the side of one of the prison buildings at 5:15 pm. That point is about two and half miles or more south of the place where the model disappeared into the clouds.

The offending model airplane had been brought to the

front desk in the prison reception area. They had my name and phone number on the airplane and I could "come and get it".

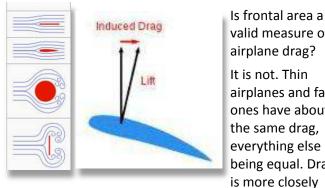
Well I dressed in a hurry and jumped in the car to get my Tomboy back---and was only one drink behind the crowd when I got back to town for dinner.

Now my question is: Since I saw it take off (when it left my hand) at 2:45 pm -and saw it go into the clouds at around 2:55---and the prison guard saw it come out of the clouds and glide into the prison building at 5:15----did I just have one of the world's longest Tomboy flights?

Inquiring minds in Glendale want to know. Mike

D'Alembert's Paradox

seen in Duration Times 178



valid measure of airplane drag? It is not. Thin airplanes and fat ones have about the same drag, everything else being equal. Drag

related to total surface area and shape than frontal

But the fat body has to move more air out of the way and move it farther.

Doesn't that require more energy? Not necessarily.

Air speeds up as the body pushes it aside and the pressure it exerts on the front of the body drops. Then, once the thickest portion of the body has passed, the air converges behind it.

Velocity decreases and pressure rises, increasing pressure on the rear of the body and pushing it forward as you might squeeze a watermelon seed out from between your fingers.

If air weren't viscous, the work done in moving air aside would be recovered as it converges behind, and there would be no drag at all.

This oddity of physics was discovered by the French mathematician, Jean d'Alembert (1717-1783). It is known as D'Alembert's Paradox.

Reality is more complex. Air develops a boundary layer, which contains turbulent air that is dragged along with the body, thickens toward the tail, forming a wake. The wound that was opened in the air as the body arrived does not heal completely after it has passed.

The scar left behind is drag.

Summarized from an article by Peter Garrison in FLYING, May 2002.



FROM THE FREE FLIGHT TECHNICAL COMMITTEE



As promised in the last issue of FFDU included are the proposed changes to the Free Flight rules to be presented to the MAAA Rules Committee. There has been very little response to calls

for any suggested changes. This could mean that we got it almost correct last time or no one is very interested in rules. I hope it is the former.

As the submission has to be into the MAAA by early February any further comments must be submitted to FFTC members by January 31 2013.

CHANGES:

Add to Free Flight General Rules Section 2

1.14 'The use Radio Dethermalisers (RDT) is permitted in outdoor free flight classes as allowed in current FAI rules.'

Sporting Code Section 4 (Available on FAI web site)
Vol 1 Free Flight Models
Gliders Para 3.1.2
Rubber Para 3.2.2
IC power Para 3.3.2

6. OPEN FREE FLIGHT EVENTS

Amend as follows

- 6.2 'Contests will normally consist of five flights unless previously advised otherwise by the event organisers.'
- 6.3.2 'Contests will normally consist of five flights unless previously advised otherwise by the event organisers.'
- 6.4.4 'Contests will normally consist of five flights unless previously advised otherwise by event organisers.'

Reason. The majority of comments on these rules favoured five flights especially when flown at Nationals. Competitor was changed to contestant in 6.4.4 for the sake of consistency.

5. FREE FLIGHT VINTAGE

Amend as follows

5.2 Characteristics of Vintage Models

5.2.1 General. Vintage models must be as the original with no modifications, which would improve the flying characteristics of the model. Modifications to improve durability and safety of the model and minor alterations to detail construction will be permitted.

Models with functioning retractable undercarriages may be flown with the undercarriage in the retracted position or a fixed (extended) undercarriage of similar shape and size may be substituted.

Modern composite materials may not be substituted for original wooden components but may be used for local reinforcements or repairs.

No change or modification shall be permitted if, in the opinion of the Contest Director, such changes would improve the flying quality of the model.

11 OZ Diesel

Insert into 11.4 the following after the first sentence: -

'The timing of the motor run is taken from when the model is launched until cessation of the last audible power (combustion) stoke of the motor. Propeller run down is not recorded as part of the engine run time.'

Reason. It is a characteristic of diesel engines that they often produce a burble at engine shut off. In many cases the timer reacts to the last power stroke and clicks the watch thus missing the burble, which at present is part of the engine run. As Oz Diesel rules preclude the use of pressure fuel feed and propeller brakes, one cannot use flood off or a brake to get a reliable shut off. This proposed rule is from the American AMA rules and on discussing it with Oz Diesel flyers some are for it and some are against it. Opinions are welcomed for or against inclusion of this rule for Oz Diesel only.

I have been surprised that there have been no proposals for electric powered model rules. If anyone would like to propose some rules such as E36 from USA and UK. They can be submitted to the MAAA rules Committee for inclusion. I am very happy to receive comments for or against these proposed changes directly or through your State FFTC representative. Remember we only get the opportunity to amend rules every three years.

TRANS TASMAN 2014

The Trans Tasman event shall be held in New Zealand in 2014 in modified form. New Zealand has difficulty in selecting full teams and past efforts to assess comparative performances of teams of different sizes to get a fair result has been difficult. New Zealand has proposed a modified contest with teams of three from each country. Each team must include at least two disciplines. There is no requirement for each country to have the same mix of disciplines in their team.

How the mix of the Australian team will be decided will be the subject of discussions within AFFS and FFTC.

The schedule of team selection events has been as in the past and an application for approval by MAAA has been sent. There been no specific approval of the selection schedule from MAAA so far. I would suggest that interested flyers attend the usual selection events in order to be in the best position for team selection.

Graham Maynard FFTC





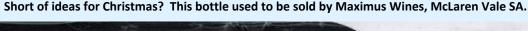
\$35 per set

2 Sets of new Vivcher F1B prop blades Balsa/Glass with M4 x 0.5—8.00 fittings Phone Roy on 02 4341 0072

....Another Den Sparker yarn.....

Graeme Flood, of Tallangatta, Vic, recently recounted a memory he has of Den – they had flown together for some time in Victoria.

Dennis had a magnificent BE2e, which he used to fly regularly. Whenever he flew the model, he would put a hand-written note in the cockpit. The note was written by an old-timer Dennis knew, a long time ago, and was to the effect that the model was an exact replica of the BE2e that the old timer had flown, in action, on the Western Front. One evening, Dennis launched the model into the almost dead calm, which, after flying straight for a while started an open circle to the right. "Ohoh, exclaimed Dennis – it shouldn't be doing that! It should fly left!" Presently, in the calm air, the model, not gaining any height, circled back to where Dennis was standing. He was able to pluck it out of the air, and motor still running, tweak the rudder and let it go again. This time, it circled left. "Ah, that's better!"





WEDDING DRESS FOR SALE
Worn once by mistake
Call Stephanie

Due to current economic conditions the light at the end of the tunnel has been turned off

FOR SALE BY OWNER. Complete set of Encyclopaedia Britannica, 45 volumes. Excellent condition, £200 or best offer. No longer needed, got married, wife knows everything.

FREE YORKSHIRE TERRIER.
8 years old, Hateful little
bastard. Bites!



bending wire so this was another challenge. The Parabellum rear mounted machine gun; this only took me a day!!! I still have a Spandau to make for the front; I might be able to do this in less time, as I now have some practice on guns.

Now for the painting; I was once again in the excellent hands of fellow modeller and friend, John Pennells. I had to make a stencil for the lozenge pattern. This only took another day to cut accurately. With a bit of colourful language, we managed to get the result that you see in the accompanying photos. I suggest that everyone should in their lifetime subject themselves to a lozenge paint scheme.

My power plant is going to be an

My thinking, or perhaps I wasn't thinking, was to build a simple scale model, one that I could take to Richmond and fly as a sport model. I decide on a Brandenburg seaplane or what is called technically a Hansa Brandenburg W29. Well, it looked simple, they all do untill you get right into them. I had a 1/48 scale plan as well as a 1/15 scale control line plan. The 1/15 scale plan made a 900mm wingspan model, just a nice size. Not only was I happy with the size, but it also has a nice parallel chord wing, and together with three boxes, two for floats and one for a fuselage, there would not be much more to do.

No doubt there would be a few problems along the way. As I have said before; no scale model is quick and easy. I was well into the balsa before I had found other articles on this aircraft, and I was surprised to find that almost everyone built was different. Some had different shape wings, some different shape tails and all with different engines as well as markings. The only thing in common was to be the lozenge pattern paint scheme on the upper surfaces; boy was I looking forward to that! Another interesting bit for me to make, were the wire supports to keep the wings away from the floats. I am not the best at







R1.00, this is a 1.00cc diesel engine designed and made by Steve Rothwell. It has had a P.A.W. throttle fitted, and I hope to control this by a Texas Timer. The theory is to have the engine cut back to idle after 30sec.

A little history, of the full size aircraft.

What I can gather, it was designed by Ernst Heinkel in 1916 and entered German Service in 1918. Twenty six aircraft were built from this design, but only six before the collapse of the German Empire. It proved to be an excellent aircraft and influenced German seaplane designs by other German companies. Wingspan 13.49, Length 9.35m, height 3.00m, power plant one Benz Bz111 6 cylinder, 150hp. Finland after the war, obtained the manufacturing license for the W33, a little different from the W29 and produced

a total of 120 aircraft which were called A22.

VINTAGE WORDS FROM GEORGE CAR

Some Enchanted Evenings

George Car has been catching up on missed pleasures from his youth.......

I recently emailed a friend – 'look at this web site, some chap has scanned old mags, in colour – many with excellent centrefolds – and put them on the web for downloading. Can't imagine why my parents didn't buy any for me – I would have just loved them in my early teens. He replied tersely – he didn't think he'd bother with them, chap at his stage in life, lovely wife etc........

Well, I've spent some wonderful evening reading the mags, and been truly delighted (sure beats watching telly!) I didn't have Meccano as a child, and wasn't aware of Meccano Magazine (but was jealous of the kids up the road who did have Meccano sets....). At that time (late 60's, early 70s) MM was probably in its heyday – and published by Allied Press with editorial board and contributors any Aeromodeller reader would recognise. Lots of Malmstrom plans, and others, covering a good range of small introductory rubber, control line and early RC models, culminating in a Smeed RC design I hadn't heard/seen before (despite the –almost- exhaustive lists of Smeed designs that have come out since Vic passed away). It's quite a cute model, and if our club does start a friendly single channel contest, I may well build one....

In addition to the aircraft designs, there are a range of boat and car models, with F/S plans – even some electronics, by our old friend, Ron Warring! All are entry level, very attractive, practical – and just the thing for grandkids......(well, that's the reason I started looking at the mags, just planning ahead a couple of years, when the little darlin's may well be foisted on us during the kindie/school vacations......). The projects are perfectly suitable for building with youngsters – and you never know, they might actually open their eyes to things other than "Info Tech".....

But the MM are much more than that! Meccano started their mags in 1916 with a few issues a year self-published and of course focused on their products and associated projects. Soon, the mags began to publish information articles on engineering – trains, ships and civil engineering achievements of the era. The 20s and 30s were really the pinnacle of the engineering era starting in the mid 1800s. There are articles on the steam turbine, microscope, radio astronomy, air achievements and all aspects of science and engineering - how light bulbs are made type of article, very detailed content supported by pictures. Real gems – gee, I wish I had had them in my youth!

By the early 20s, MM came out monthly, full colour covers and packed with wide ranging content. An early editor also published a range of books – science/engineering for boys types. This in an era of Boy's Own books, Flying Aces, the adventures of Biggles – the end of the British Empire, capital warships and a bold era in Flight. MM continued to be published by them until the 60s, when they were edited and published elsewhere – probably the heyday of such magazines (aircraft, boats, electronics, scouting etc). Falling sales halted this in the 70s, and the magazine was published inhouse again, quarterly, until the 80s when it ceased altogether.

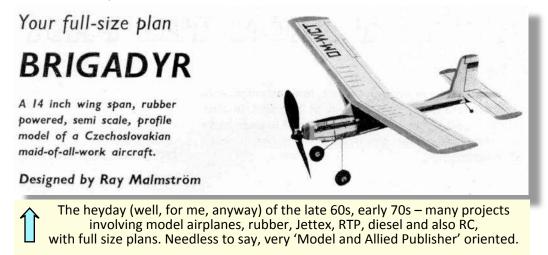
Throughout, there was a focus on Meccano, with projects (ranging from models through to working clocks made from the various kits). But the magazine reflected the interests and social mores of the day – for example, early MM issues carried a jokes page, many of which would be unacceptable

today! There are book reviews intended to suggest to the readers a wider purview of the natural world. Issues way ahead of their time were also described – an article on the burgeoning world human population in the 20s (the population has increased far ahead of prediction), and one on the depletion of world fish stocks in the 30s (about right, they give figures showing a 90% decrease in biomass of commercial fish species, since shown correct). There are also many stories and photos sent in by readers from around the world (mainly UK, colonies and dominions) that reflect local issues (even a few from the tiny town in Africa where I lived – very nostalgic!). Issues carried news items of current engineering projects – such as the dirigible developments by Zeppelin and the R100/R101, and also adventures – such as the Cape-to-Cairo car journey undertaken by Court Treatt in the mid 20's (which, apparently, his wife Stella documented in a movie – anyone know where to get hold of a copy?). The adverts carried are, in themselves, an intriguing reflection of the times – just look at those in the WW2 years. Overall, A very rich tapestry of engineering achievements and social attitudes of the day. Needless to say, they have been used in social studies of the era.

This does, however, bring me to a serious point that Jon Fletcher pointed out a few years ago. We all know Jon as an aeromodeller, but he was a production engineer in his working life (and continues to be – model engine and clockwork timer repair and parts manufacture), and his training was in the UK in the heyday of 'British Engineering'. On one occasion, he was in the US, visiting the parent company, discussing the young engineers then being employed. The issue was, while perfectly able to do the calculations by computer needed for the work, the young ones didn't have a feel for job, and simply couldn't really grasp the reality of the engineering aspects necessary to get the practical job done. After much discussion, they put this down to the fact that these days, youngsters don't muck about fixing cars/motorbikes, taking apart typewriters, assembling Meccano projects etc. during their school years. Instead, for any science/engineering minded kids it's all much more abstract – virtual models on computer and computer games, cute documentaries on TV (and for third world kids – lack of the real objects about them in the first place). (Jon did have Meccano as a youngster, but didn't like it much – too restricted by the fixed pitch of the holes, and ill-fitting screws/nuts, which tended to shake loose and disappear into the Hoover.......).

So, for an enchanting thing to do in the evenings – read MM! http://pdfmm.free.fr/

Incidentally, I did email-reply to my friend – "huh! I've caught you jumping to conclusions! Have a look at web site, trust me, you'll love it". And he did.



Supporting images follow on the next pages.....



This model won the "WAKEFIELD CUP"



To the enthusiastic model builder this kit provides the opportunity for constructing a machine capable of long duration flights. All the Balsa Wood parts are CUT OUT and a carved airscrew with free wheel's mechanism and tensioner device is provided. All wire parts are bent to shape and soldered where necessary. The outfit includes all dope, glue, etc., and full sized working drawings. International Model Aircraft Lcd. have purchased the exclusive world rights of this model and are making the kits under the personal supervision of Mr. Judge, the designer-pilot of the Wakefield Cup winner.

PRICE 30'-

MODEL AIRCRAFT

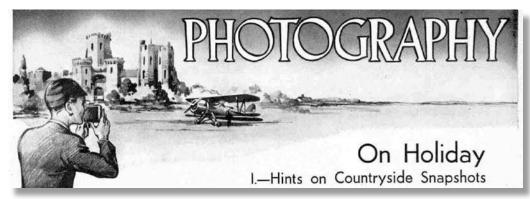
All FROG Model Aircraft are covered by World Patents granted and pending. Made in England by International Model Aircraft Ltd.

Sole concessionaires:

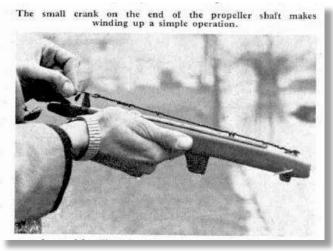
LINES BROS. LTD., Tri-ang Works, Morden Rd., London, S.W.19



An advert from the 30s-now, could you resist this one? FROG sold precut kits, ARFs and



MM carried a large variety of how-to articles on practical pursuits – all designed to get a young chap out there and doing things – bicycling (later – a series on motor scooters), camping, photography – but mainly of course, model railways (Hornby and Dublo) and Meccano models. They included detailed technical content.





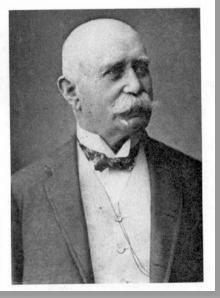
A rubber powered submarine? Yes folks, and it dives and resurfaces! Just the thing for the grandkids? - a design by Lt. Commander Greenhalgh RN now there is name from the aeromodelling past.

GREAT ENGINEERS No. 23

COUNT FERDINAND VON ZEPPELIN (1838-1917)

by A. W. Neal

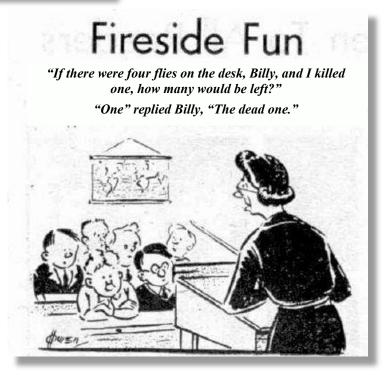
IT IS easy to see why, when man began to make determined efforts to fly, so much attention was paid to lighter-than-air vehicles. Aerodynamics were virtually unknown, for there was no real need for them. The balloon had been in existence for centuries and it appeared that this approach to getting about in the air would always be safer than heavier-than-air craft. Hot air as a lifting agent gave way to gas inflation, and from that point it was but a short step to the



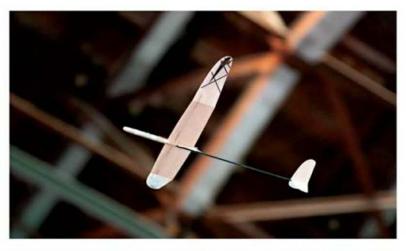
Throughout the series there are biographies of great engineers, and detailed accounts of engineering and adventure achievements – gee, I've learned a lot! One evening, over a bottle of wine, I'll tell you the Whitworth thread story.....it has a connection with Perth, West Australia, you know (or you could just visit our maritime museum some day).



Wartime issues continued having full colour covers, however the print quality inside was lower, the paper has yellowed more than previous issues, and there were fewer pages. Still, they did carry articles to their usual high standard – such as the included article on this aircraft, and of course much detail on war time engineering. Adverts often carried a sentence indicating supply was very limited "but we will do our best to satisfy your order".

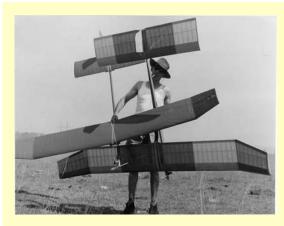


Humour in every issue, was all much of the same type (variations on a few joke themes – stingy Scots, English accents, the colonies and puns feature frequently) and well suited to the day (I can recall men of my father's age repeating similar themed jokes): Employer to interviewee for office boy position: "Well, I guess I will take you on, son. But, I must say, if I had had another applicant, you wouldn't have got the job – fancy coming to an interview in torn clothes, black eye and all dishevelled!" Boy: "Well sir, if you think this is bad, you should see the other 3 who were standing outside when I arrived....... " (a depression era joke).



Stan Buddenbohm's indoor discus-launch glider defines grace as it floats by in a Tustin CA blimp hangar. These models can fly for up to 30 minutes. Brian Furutani photo.

Seen in the Feb, 2011 issue of Model Aviation. It is quite a few years since I have seen this event at the Nats, but I hadn't realised indoor discuss HLG has had such a big step up in duration! (about 20 fold)......or maybe sub editor's slip?



Flying surfaces sure were big on the old Class III ships. Concern about UV damage to the flyer was almost zero, apart from the hat. I guess the smoke was to light the fuse DT? Not much grass about.

John French's models, from the Good Old Days

1968 - 2012

Perhaps a lot of us can relate to this?

1968: Long hair

2012: Longing for hair

1968: KEG 2012: ECG

1968: Acid rock 2012: Acid reflux

1968: Trying to look like Marlon Brando or Liz

Taylor

2012: Trying NOT to look like Marlon Brando or

Liz Taylor

1968: Seeds and stems

2012: Roughage

1968: Going to a new, hip joint2012: Receiving a new hip joint

1968: Rolling Stones2012: Kidney Stones

1968: Screw the system2012: Upgrade the system

1968: Passing the drivers' test2012: Passing the vision test

1968: Whatever 2012: Depends

PARAPROSDOKIANS are figures of speech in which the latter part of a sentence or phrase is surprising or unexpected; frequently humorous.

- 1. Where there's a will, I want to be in it.
- 2. The last thing I want to do is hurt you. But it's still on my list.
- 3. Since light travels faster than sound, some people appear bright until you hear them speak.
- 4. If I agreed with you, we'd both be wrong.
- 5. We never really grow up, we only learn how to act in public.
- 6. War does not determine who is right only who is left.
- 7. Knowledge is knowing a tomato is a fruit. Wisdom is not putting it in a fruit salad.
- 8. They begin the evening news with 'Good Evening,' then proceed to tell you why it isn't.
- 9. To steal ideas from one person is plagiarism. To steal from many is research.
- 10. Buses stop in bus stations. Trains stop in train stations. On my desk is a work station.
- 11. I thought I wanted a career. Turns out I just wanted pay cheques.
- 12. In filling out an application, where it says, 'In case of emergency, notify: I put 'DOCTOR.' (I didn't get the Job...?)
- 13. I didn't say it was your fault, I said I was blaming
- 14. Women will never be equal to men until they can walk down the street with a bald head and a beer gut, and still think they are sexy.

he story finally concludes, one that should give you warm and fuzzy feelings as you read this childhood yarn about the big boys who flew model planes. It is set in the 1950s, in Queensland. This story, written through the eyes of a young boy, is part of a soon to be released book, "The History of Stafford", by Dennis Gray. Sit back, enjoy. Who knows, you may even identify someone in this article. It may even be you!

Malcolm Campbell



The Model Aeroplane Club.

A while later the sailplane championships were on and I stood next to my man as he held and launched the young bloke's sailplane, while the youth ran like billy-o to get the maximum height out of the launch.

It ascended like a homesick angel and at about two hundred feet (60 metres), soared away majestically climbing and climbing. It rapidly became a white speck, standing out like a distant seagull, under the dark grey base of a nice, lumpy cumulus cloud.

A man with a pair of binoculars said, "I can still see 'er and she's 'eadin orf towards the Grange".

The owner was in a state of nervous excitement... as was I. His was concern... mine was exuberance at my man's skill in weight and balance.

A cove with a BSA motorbike offered to transport the young bloke on the retrieval mission. I satisfyingly noted that the rest of the colourful competitors were either on the ground, or getting close to a landing.

Another man loaned the retrieval team his telescope and off they roared, in a billow of smoke... helmetless and shirttails flapping, for the high vantage point of Eildon hill.

Three quarters of an hour later a dispirited duo returned. They'd "lost 'er". My man went over to the young bloke to commiserate and the young bloke started to cry. He was the second teenager I'd seen cry.

The other had been not far away from where we were standing. It was at another big flying day. He had a hanky to dry his tears, when after a bit of a search, it was realized someone had pinched his brand new push bike he left near the creek bank. He'd only gotten it the day before. Col was," gunna KILL the cow if he ever found him!" ... Col was my hero.

At the presentation of prizes for the various divisions in the comps at four o'clock, the young bloke stood shyly with his head down a bit, nervously fiddling with his silver trophy, as he made his speech and said he was happy getting the cup but he'd rather have his plane.

After a year of faithful service to my man; I got an incredible reward... "better than a million pounds". He gave me his magnificent, one foot long, red and yellow, chuck glider, after it busted a wing half off, striking a stump on landing.

I belted off home with this wounded, broken winged, bird to show my mother. She was pretty chuffed for me and said, "I'll buy a tube of Tarzan's grip from the paper shop tomorrow and daddy can fix it".

I took charge of the repair job, but after the glue set and the pins were pulled out with my teeth, we found that wing was at a bit of a different angle to the goodie and she could only spiral and tumble to the ground, which was a disappointment, as she'd been a real goer.

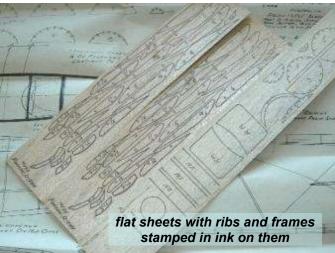
The pleasure I feel about those days, was the mateship of the generations of those club members. The old blokes didn't seem to be of a higher status to the barefoot teenage enthusiasts. None got up us kids.

They'd ask us to "not touch", but they didn't appear to have the pompous committeemen types, who like chucking their weight about that one comes across.

The only sort of unfriendly one, was a Jetex man, who didn't like us getting too close crowding him as he performed the ceremony of refuelling.

The other thing to remember is... no one from the surrounding streets complained about the noise of unmuffled engines screaming and howling all day. They







accepted it and were happy that young coves were out enjoying themselves. Now I'm older and reminisce, I see things don't change. We have the new age "management industry" now... experts who do a course and get a diploma and reckon they know it all.

At nine I was a real expert on models and real aeroplanes... MY father was a pilot. I watched aero modellers repair their damaged planes in the paddock and listened to their conversation on little knacks on construction.

All the models I saw were made by craftsmen, but I reckoned anyone could make a model plane Easy.

When I was thirteen, I bought a small two and sixpenny rubber job kit. It came in a flat cardboard box and comprised of lots of thin rectangular lengths of balsa, a couple of flat sheets with ribs and frames stamped in ink on them, a long length of rubber band, a plastic prop and other sundry components.

The plans may have written instructions on them, but I wouldn't have bothered reading them. I placed the plan on our pine breadboard so I could pin the components in place and impatiently slashed out the frames ... Not always keeping right on the printed guide lines. Near enough was good with me. I went for speed rather than accuracy. I never was particular in keeping inside the lines when colouring in either... "A few spill-overs were OK by me".

I pinned the ribs and stringers to the plan on the bread board and generously sploshed Tarzan's Grip over the joints and waited for it to dry. There was a bit of a problem when I tried lifting the wings off the plan. They were attached with the spilt over glue at a number of places. I had to cut them loose. Sometimes there were ragged triangles of the paper plan still left on the bottom of the wing... other places had a scoop out of the balsa. Not all the ribs were perpendicular to the breadboard... most had a bit of a lean one way or the other and a couple weren't quite lined up forwards and aft on the plan's line.

The odd gap between components was filled with extra Tarzan's grip. Once the wings, empennage and body were built and fitted together, I cut most of the glue and paper from the balsa where there had been the unfortunate sticking, covered her with the tissue paper and applied the dope with a finger, like I saw some coves doing when repairing a tear out in the paddock years before. Of course I didn't have any acetone to remove it and it had stuck to my fingers. I had to rip the tenacious membrane off with my teeth and steel wool over the next hour or so. Till it was all off, it was as annoying as a stone in a shoe where the rough edges rubbed against the neighbouring fingers. My aeroplane was a little bit knobbly and corrugated in places. The airframe wasn't a perfect square section... "That was OK, it was my first try ... the next would be better".

When she was ready to fly, I gently launched her from the top of the steps of the house we were in, and my master piece flubbled down to the ground. There is no recognised word to describe the path it took. It didn't fly, float, tumble, fall, spin or flutter. It did all of them at the same time. I was

disappointed. I launched her a few more times seeing if I could work out a fix. I tried weighting a wing down with a bit of plasticine... no joy. I tried some on the tail... still no path that could be seen as aeronautical. It just flubbled. Finally I became enraged at "the stupid thing" and murdered it by crushing it into a tight ball and flinging it, with a considerable amount of swearing, in the rubbish bin and stormed off.

My next try was a few years later at boarding school when there was a bit of a model aeroplane craze in vogue. One kid who could actually build and fly control liners became our mentor. It would be nice to say I had learned something from the first awful failure. But, once again, "near enough"... and ambition to finish reigned supreme. I reckoned I'd make a control liner like Col used to fly. One of the stumpy stunt jobs that had no real body... just an engine, lots of wing and a tail. Of course I wanted the most flamboyant, big, bulky one available from the catalogue we all spent hours pouring over. I got one that suited a one point five to a two point five cc engine. I had a one point five. Of course, perfection and patience wasn't practised and I made a few shortcuts and modifications. Naturally, the poor underpowered, overweight, wrinkly, ugly thing couldn't fly. Maybe with a TEN cc engine it could have been dragged through the air by brute force, but the one point five just pulled it about two metres from launch to crash site.

After a couple of more wacks on the bandaid covered fingers... I tended to use a lot of arm action rather than the nonchalant finger flicking style starts I'd begun with. Mate! ...Those props hurt and I didn't care if I looked like a Nervous

Nellie. Again rage took hold of me when "the rotten mongrel" refused to fly and I ranted, "Why ME?" I finally took it down the oval and set fire to "the useless cow of a thing" and announced I wasn't making models any more and I had a one point five cc engine for sale.

I had the opportunity to lie in bed at night and think things over and realized that that rubber-job champ of years before was pretty good at what he did. I had to admit his perfectionism had to be admired. Most of his aeroplanes were built with the absolute minimum of material to keep them as light as possible, but were still strong to get the best performance and win the competitions.

HE was by his deeds... an expert to be respected.



A collection of ages, when all were equal. Col is sitting up straight with his cap on.



VINTAGE FRENCH STYLE - don't you love the designs

Photos by Frederic Nikitenko









31

FREE FLIGHT MEGA EVENTS CALENDAR 2013

| January 3 to 8 | 66 th Australian Nationals F1G, F1H, F1J, F1B, Open Power, F1A, F1C, Open Combined Vintage, P-30, Oz Diesel, Scale, Scramb | |
|-------------------|--|--|
| February 9 -11 | Ike/Kiwi W/Cup F1A, F1B, F1C, F1P, F1Q, F1G, F1H, F1J, P-30, F1 | Lost Hills, California, USA E |
| February 12, 13 | Pan Am Canada W/Cup F1A, F1B, F1C | Lost Hills, California, USA |
| February 14 to 17 | MaxMen International W/Cup F1E, MM Registration, F1A, F1B, F1C, F1P, F1G, F | Lost Hills, California, USA 1H, F1J |
| March 9 to 11 | Victorian State Championships F1B, Open Power, F1A, F1C, Open Rubber (Shaw C Scale, P-30, Oz Diesel, HLG/CLG | Springhurst, Vic Cup), |
| March 25 to 27 | Southern Cross Cup F1B, Open Power, F1A, F1C, Open Rubber | Narrandera NSW |
| March 27 to 31 | Australian Free Flight Society Championships F1B, Open Power, F1H, Combined Open, Combined Vintage, F1A, F1C, Open Rubber, Scram -30, Oz Diesel, F1G, F1J, HLG/CLG | Narrandera NSW ble, |
| April 20, 21 | Queensland State Championships F1A, F1B | Dalby, QLD |
| May 25 | Queensland State Championships F1C | Dalby, QLD |
| June 1 to 3 | WA State Championships F1A, F1B, F1C F1C | Meckering, WA |
| June 8 to 10 | New South Wales State Championships F1A, F1B | Narrandera, NSW |
| July 26, 27 | W/Cup F1A, F1B, F1C, F1G, F1H | Beauvoir sur Niort, France |
| July 29, 30 | W/Cup F1A, F1B, F1C, F1Q Euro-Challenge F1G, F1H, F1J | Moncontour du Poitou, France |
| August 3 to 10 | World Championships, F1A, F1B, F1C | Moncontour du Poitou, France |
| August 17, 18 | WA Special Trial F1A, F1B, F1C | Meckering, WA |
| September 19, 20 | Queensland Special Trial F1A, F1C, F1B | Dalby, QLD |

Australian Free Flight Society Inc.

President Paul Rossiter kathymay@ozemail.com.au (08) 9316 0250 Vice President Roy Summersby roydi132@optusnet.com.au (02) 4341 0072 Secretary Tahn Stowe stowes@ozemail.com.au (02) 9664 6198 Treasurer Vin Morgan vinmorgan2@iprimus.com.au (03) 9387 2531

Brisbane Free Flight Society

| MONTH | DATE | START | EVENT | LOCATION |
|-----------|--|-------------------|--|--------------|
| FEBRUARY | Saturday 16 th | 12 noon | Club general meeting plus "show and tell" | John's Place |
| | Sunday 24 th | 8am - 1pm | Dale's Fun and Friend's Club day | COOMINYA |
| | | | (P20, CLG and Special Ladies event, sport flying & lin | nited RC) |
| MARCH | Saturday 2 nd & 3 rd | | C/L State Champs + C/L & F/F fun | MARYBOROUGH |
| | Sunday 17 th | 8am - 1pm | 2 Minute Class models – "All In" Club Contest | COOMINYA |
| | | | (5 flights) | |
| | Mon 25 th –Sun 31 st | | Southern Cross and AFFS Champs | NARRANDERA |
| APRIL | Saturday 6 th & 7 th | | DALBY COMBINED DISCIPLINES NOSTALGIC | DALBY |
| | | - | FUN FLY. (All categories + Indoor) | |
| | Saturday 20 th | 7am - 2pm | F1A State Champs (7 rounds) | DALBY |
| | Sunday 21 st | <i>7</i> am - 2pm | F1B State Champs (7 rounds) | |
| MAY | Saturday 4 th | 3pm - 6pm | Indoor Glider(HLG/Catapult (S/C) and 6" HLG) | BSHS |
| | Sunday 5 th | 8am - 11am | P30 State Champs | COOMINYA |
| | The same of the sa | 8am - 10am | Scale | |
| | | 10am - 1pm | HLG and CLG State Champs (best 3 of 6 flights –each | 1) |
| | Saturday 25 th | 7am - 12pm | F1C State Champs (5 Rounds) | DALBY |
| | | 12 - 1.30pm | LUNCH | |
| | | 2pm - 5pm | Open Power (3 Rounds) | |
| | Sunday 26 th | 8am - 1pm | F1J State Champs (5 rounds) | DALBY |
| JUNE | Saturday 1 st | 3pm - 6pm | Indoor (P-18 S/C) | BSHS |
| | Sunday 16 th | 8am - 1pm | F1G State Champs (5rounds) | COOMINYA |
| | Sunday 30 th | 8am - 1pm | ½A Power (Queensland rules - 5 flights) | COOMINYA |
| | | 100 | A1 Sailplane(Queensland rules - 5 flights) | |
| JULY | Saturday 6 th | 3pm - 6pm | Indoor (Frog Event) | BSHS |
| | Saturday 13 th | 12 noon | AGM plus "show and tell" | John's Place |
| | Sunday 14 th | 8am - 1pm | 100gm Coupe Event (Club event) | COOMINYA |
| | Sunday 21 st | 8am - 1pm | Dale's Fun and Friend's Club day | COOMINYA |
| | | | (P20, CLG and Special Ladies event, sport flying & lin | nited RC) |
| AUGUST | Saturday 3 rd | 3pm - 6pm | Indoor (Peanut (S/C) and No Doc Scale) | BSHS |
| | Sunday 11 th | 8am - 1pm | QDP | COOMINYA |
| | Sunday 25 th | 8am - 1pm | Reserve Day – General flying | COOMINYA |
| SEPTEMBER | Saturday 7 th | 3pm - 6pm | In <mark>door(F1L/Mini Stick/Delta</mark> Dart) | BSHS |
| | Sunday 8 th | 8am - 1pm | F1H State Champs (5rounds) | COOMINYA |
| | Thursday 19 th | 7am - 2pm | Special Team Trial F1A and F1C | DALBY |
| | Friday 20 th | 7am - 2pm | Special Team Trial F1B | |
| | Saturday 21 st | 7 - 10am | Lsq/100 (3 flights) | DALBY |
| | | 10am - 1pm | Open Rubber State Champs | |
| | Sunday 22 nd | 7am - noon | No Frills Wakefield (5 flights) | |
| OCTOBER | Saturday 5 th | 3pm - 6pm | Indoor (Hanger Rat) | BSHS |
| | Sunday 14 th | 8am - 1pm | Col Somers Vintage rally, Power Ratio Sport event | COOMINYA |
| | | | (3 flights) | |
| | Sunday 21 st | 8am | Vic Smeed Day & KKK (Reserve day) | COOMINYA |
| NOVEMBER | Saturday 2 nd | 3pm - 6pm | General Indoor Flying | BSHS |
| | Sunday 3 rd | 8am - 1pm | Frog Precision, Combined % (Reserve day) (3 flights) | COOMINYA |
| | Saturday 24 th | 12 noon | Xmas party and prize presentation | TBA |

CONTACTS: * John Lewis 3848 4280 * Malcolm Campbell 3263 9339 * Albert Fathers 0755 343490

We are always in need of CDs! Volunteers welcome!



2013 CALENDAR



NSWFFS Contest & Fixture Calendar 2013

| Date | Event | Venue | Time | C/D |
|-----------|---|--------------|-----------------|---------------|
| Jan 3-8 | Nationals | Narrandera | 7.00am | 5 Wanted |
| Jan 18 | General Meeting | Harris Park | 7:30pm | |
| Jan 20 | Scramble, Scale Rally, HLG/CG | Richmond | 7.00am – 1.00pm | Jim Christie |
| Feb 10 | State Champ, P30.+ Comb Vintage | Richmond | 7:00am – 1:00pm | Gary Pope |
| Feb 24 | Combined % | Richmond | 7.00am1.00pm | Tahn Stowe |
| Mar 2-3 | Hunter Valley Champs | Muswellbrook | 1 | |
| Mar 9-11 | Victorian State Champs | Springhurst | | |
| Mar 15 | General Meeting | Harris Park | 7:30 pm | |
| Mar 17 | 1 Hour Scramble, Combined % | Richmond | 7:00am – 1:00pm | Roy Summersby |
| Mar 25-31 | Southern Cross CupAFFS Champs | Narrandera | | SCC. T.B.A. |
| April 28 | State Champs HLG/CG. Rocket Glider, Plus Combined Vintage | Richmond | 7.00am—1.00pm | Jim Christie |
| May 4-5 | Veterans Gathering | Muswellbrook | | |
| May 5 | State Champs Scramble, Combined %, Control Line flying BBQ Lunch | Richmond | 7:00am – 1:00pm | Roy Summersby |
| May 17 | General Meeting | Harris Park | 7:30 pm | |
| May 26 | P30, Diesel Duration, + Comb Open | Richmond | 7:00am – 1:00pm | Roy Summersby |
| June 8-10 | NSW State Champs F1A,B,C | Narrandera | 8.00am3.00pm | Jim Christie |
| June 16 | Combined Vintage, HLG/CG, P30 | Richmond | 7:00am – 1:00pm | Gary Pope |
| June 23 | Russell Forth Scramble | Illawarra | | |
| July 6-7 | Scale Rally, Sun 14th ½ Hour | Richmond | 7.00am | Tahn Stowe |
| | scramble, Fun Fly C/L flying & BBQ | | | Roy Summersby |
| July 19 | General Meeting | Harris Park | | |
| July 21 | Combined % | Richmond | 7:00am – 1:00pm | Jim Christie |
| Aug 11 | Combined %, Multiple Entries. | | 7.00am- 1.00pm | Terry Bond |
| Aug 25 | ½ Hour Scramble + Tomboy Mass Launch. Mentor C/L. Fuller Day Stomper, Zoot Suit & Dixielander | Richmond | 7:00am – 1:00pm | Tahn Stowe |
| Sep 8 | Scale Rally, P30, Vintage Rubber | Richmond | 7:00am – 1:00pm | Chris Dudley |
| Sep 20 | Annual General Meeting | Harris Park | 7:30 pm | |
| Sep 29 | State Champs F1G,H,J Combined | Richmond | 7.00am—1.00pm | Roy Summersby |
| Oct 13 | Diesel Duration, P30, HLG/CG | Richmond | | Tahn Stowe |
| Oct 20 | State Champs Combined Vintage, ¹ / ₂ Hour Scramble, BBQ Lunch | Richmond | 7:00am – 1:00pm | Gary Pope |
| Nov 10 | Combined % Multiple entries | Richmond | 7.00am- 1.00pm | Roy Summersby |
| Nov 15 | General Meeting | Harris Park | 7:30 pm | |
| Nov 17 | Mills Trophy Scramble | Illawarra | | |
| Dec 1 | F1G, H J,(Combined) | Richmond | 7:00am – 1:00pm | Gary Pope |
| Dec 15 | 1/2 Hour Scramble, Combined Vintage with SAMS + Fun Fly. BBQ Xmas Lunch | Richmond | 7:00am – 1:00pm | Terry Bond |
| Note | All scrambles start as close to | 8.00 am as | possible | |

Victorian Calendar for 2013

The outdoor state championships will be run by the Werribee Wanderers. More information will be available closer to the event.

Werribee Wanderers Fly-ins will be held over weekends at Springhurst.

VFFS outdoor days (Eynesbury Field) will be held when favourable weather is forecast. This may be midweek if the would-be participants agree. Further details will be published in due course. Keep in touch with CDs published in Flypaper and/or the VFFS webpage for up-to-date information OR get your email address added to the outdoor activity email list.

Outdoor activities for months beyond May will be published at a later date.

The location and means of access to the Eynesbury Field are detailed on the VFSS web site.

Indoor Events are held at the Donvale Indoor Sports Centre [Manningham DISC] Springvale Rd. Donvale [Melway 48 F4] between 12-45 pm and 4-30 pm.

Jan 3 - 8 Nationals at Narrandera Feb indoor DISC General flying day. 17 March 9-11 State Champs, Springhurst. Sat 9 F1B, Open Power Sun 10 F1A, F1C, Open Rubber (Shaw Cup), Scale Mon 11 P-30, Oz Diesel, HLG/CLG 25 - 31 Southern Cross Cup and AFFS Champs at Narrandera Garnham Trophy, first half yearly competition: P30 rules [3 X 120 seconds] at April Eynesbury Field. 21 indoor DISC State Champs for F1L, and F1D also F1M and LRS Mini classes F1G, F1H, F1J at Eynesbury Field May 4-5 Werribee Wanderers fly-in, Springhurst June 8 - 10 NSW State Champs at Narrandera 16 indoor DISC Reduced scale Wakefield and Sandfly Formula for Arthur Smith Trophy. 22-23 Werribee Wanderers fly-in, Springhurst July 18 indoor DISC State Champs for Bostonian, also Hangar Rat. Aug Sept Oct 20 indoor DISC State Champs for Peanut Scale; also Open Scale and CLG Nov 2-3 Werribee Wanderers fly-in, Springhurst Dec 9 Grand Indoor Scale Day at Sandringham Athletic Centre, Thomas St. Hampton, between 10 am and 4 pm. 15 indoor DISC General flying day

West Australian 2013 Free Flight Contest Calendar

| DATE | CONTEST CLASS | LOCATION | TIME | CONTACT |
|--|--|------------|----------|----------------------------|
| 3rd – 8th | 66th Australian nationals | Narrandera | | |
| January | | | | |
| | | | | |
| 3rd March | Combined Open | Meckering | 9.00 am | Chris Behr – 9448 9922 |
| | | | | |
| 17th March | WAFFS Free Flight Cup | Meckering | 9.00 am | Paul Rossiter – 9316 0250 |
| $25^{\text{th}} - 28^{\text{th}}$ | | NT 1 | | |
| | Southern Cross Cup (TT) | Narrandera | | |
| March 29 th March 1 st | AFFS Championships (TT) | Narrandera | | |
| April | AFFS Championships (11) | Narrangera | | |
| Арт | | | | |
| 14 th April | HLG/CLG State Championships | TBA | TBA | George Car – 6161 9381 |
| As above | Power Scramble State | TBA | TBA | George Car – 6161 9381 |
| 220 400 10 | Championships | | | 3.6. |
| | 1 | | | |
| 28 th April | Open Rubber State Championships | Meckering | 9.00 am | Chris Behr – 9448 9922 |
| As above | Slop State Champs | as above | 9.00 am | |
| | Combined Open | as above | as above | |
| | | | | |
| 19 th May | P30 State Champs / F1G Cup | Meckering | 9.00 am | Rod McDonald - 9316 2762 |
| as above | Combined Open / Free Flight Cup | as above | as above | |
| et ard - | | 26.1 | 0.00 | |
| 1 st – 3 rd June | F1A, F1B and F1C State | Meckering | 9.00 am | Phil Letchford - 9295 2161 |
| 1 | Championships (TT) | 1 | 1 | |
| as above | Combined Open / Free Flight Cup | as above | as above | |
| 23rd June | Escargot Trophy | Meckering | 9.00 am | Adrian Dyson – 9295 4418 |
| As above | WAMAC Cup | as above | 9.00 am | Adrian Dyson – 9293 4418 |
| as above | Combined Open / Free Flight Cup | as above | as above | |
| as above | Combined Open / Free Fright Cup | as above | as above | |
| 7 th July | Open Power State Championships | Meckering | 9.00 am | Colin Crowley – 9534 4022 |
| as above | F1B Crowley Cup | as above | as above | 20111 01011101 7001 1022 |
| as above | Combined Open / Free Flight Cup | as above | as above | |
| | and the special state of the s | | | |
| 21st July | Fuller, Nostalgia and F1Q | Meckering | 9.00 am | Paul Rossiter – 9316 0250 |
| As above | Combined Open / Free Flight Cup | as above | as above | |
| | | | | |
| 17 th – 18th | FIA Team trials F1A, F1B and F1C | Meckering | 9.00 am | Chris Behr – 94448 9922 |
| August | (TT) | | | |
| as above | Combined Open / Free Flight Cup | Meckering | 9.00 am | |
| | | | | |
| | | | | |

NOTES: 1. WAFFS Free flight Cup is a series of events for the following classes:

A/1 glider; Coupe rubber, 1/2A Power; P-30 rubber; E-30 electric; Co2; Chuck Glider (including CLG). Competitors may fly one or many classes on each day and throughout the year. Your best scores from the nominated set of flights (normally three in number unless otherwise agreed prior to the event) on three different days, adjusted to a percentage of the perfect score using the appropriate K-factor, are combined to determine your total score for the series.

- 2. Combined Open is for all classes. Competitors may fly one or many classes on each day and throughout the year. Your best scores from the nominated set of flights (normally three in number unless otherwise agreed prior to the event) on three different days, adjusted to a percentage of the perfect score using the appropriate K-factor, are combined to determine your total score for the series.
- 3. Results from the specific events may be nominated in advance to count toward the combined events.
- 4. Sport flying is welcome and encouraged on all competition days.
- 5. E-30 to have 2 minute max.
- 6. CO2 to have 2 minute max and 3 cc tank.
- 7. Chuck glider and CLG to have 3 flights, but 20 sec attempt to apply outside State Champs. CLG may use no more than a 6" loop of 1/4" rubber.
- 8. All events marked (TT) are events where scores count towards the Australian Free Flight team selection. Interstate participation is encouraged. All events for Team Trials are 7 rounds.
- 9. All competition events are 5 flights except FIA events which are flown in rounds.