

FREE FLIGHT

DOWN UNDER

NEWSLETTER OF THE AUSTRALIAN FREE FLIGHT SOCIETY INC

VOLUME 49 NUMBER 1

AUTUMN 2017

FAB FEB 2017

**CARING FOR
YOUR MILLS**

TAILORING CHOKE AREA

**WORLD CHAMPS
REMINDER**



FRONT COVER: NSW flyer Gary Goodwin did particularly well during his first visit to Lost Hills, making 3 fly-offs (2 in F1B and 1 in F1G) and placing 4th in the Kiwi Cup F1G event. Gary has Lost Hills down on his 2018 calendar already!

Free Flight Down Under

March 2017

Volume 49, Number 1

This edition of **Free Flight Down Under** is edited by Malcolm Campbell, 77 Freshwater Circuit, Forest Lake, Australia 4078. email: 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. Please keep photos separate and no smaller than 200 kb each.

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Contents

President's Report.....	3
From the Editor.....	3
AFFS AGM forms.....	4
SCC entry form and program.....	6
AFFS, DAM entry forms and program.....	8
Tui Cup entry form.....	11
CD and Helper form.....	13
Fab Feb 2017 report.....	14
The West Wyalong roof.....	30
Caring for your Mills.....	32
Soldering advice.....	33
Tailoring the Choke Area.....	35
An Old Friend.....	38
World Champs reminder.....	42
State Calendars for 2017.....	44



PRESIDENT'S REPORT

I hope all members had a Christmas that they would wish for and now we get on with the New Year. Some of you have already begun your flying year in USA but reports are that there was some inclement weather which caused problems and made the events less than enjoyable. Memories of Narrandera 2015.

Our team for the next World Championships in Hungary has been selected and for this year I suspect they will use our premier events as practice and preparation for the WCs. For those not on the team we still

have a full program in State events, West Wyalong events and Narrandera. This is not a team selection year but it is still great fun to be out flying.

As I have mentioned previously this year is an MAAA Rules Committee meeting. I have previously called for any proposed amendments thought necessary but have only received one from Jim Christie to make a grammatical correction to one clause in the Vintage rules. I have floated an idea to amend the specifications of rubber used in catapult glider launching because of the problems of getting .25 inch rubber as required in the present rules. The alternatives are to specify a weight of rubber as in the UK or a cross section equal to that of the present rubber made up of smaller cross sectional strands as in the USA. So far opinion is divided. If you fly CLG and have an opinion let me know before March 12.

The entry forms for the Narrandera events will come with this newsletter and I ask that you seriously think about volunteering to act as CD on days you are not flying. As our numbers get smaller it is essential that the administrative load of running our contests is shared. Our secretary does a mountain of work in organising the events as does Noels but we need CDs especially for World Cup events.

I am still waiting for the final proposals for rules changes to be presented to the CIAM meeting later this year and as soon as I get them I will distribute them for voting on Australia's position.

Please support Malcolm as much as possible in his editorial work because FFDU is read widely and Malcolm's work brings AFFS great kudos as a free flight organisation.

Happy flying

*Graham Maynard
President, AFFS*

FROM THE EDITOR

A group of us have just returned from Lost Hills and a full report appears in this FFDU. 27 countries attended, the number of entries were much the same as last year but Maxmen was down because of the lead up rain and delayed start. Fab Feb is a very good experience, just like a mini World Champs, without all the stress.

So it's a big competition report but at least that will stop the covers from sticking together! In this edition, I had to resurrect old articles to fill the covers. I looked back

on last year's Autumn FFDU and it was full of interesting articles. Where are all the contributors?

E36 looks like being big this year in Queensland. At last count, we have 10 kits in the process of being assembled. Already at least 6 are flying in competitions and those who are flying them really enjoy them. They're quiet, clean and quick to build, and they only fly for two minutes. Worth a shot?

Cheers, Malcolm Campbell

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**Help keep Free Flight Down Under
interesting. Send me an article!**

Australian Free Flight Society Inc

A Special Interest Group of the **Model Aircraft Association of Australia**

NOTICE OF ANNUAL GENERAL MEETING 2017

The AGM will be held at the Narrandera Services Club Narrandera on the 6th May 2017.

Any submissions for inclusion in the Agenda for this meeting must be received by 22nd April 2017.

Nomination forms for election of Office Bearers and Proxy Voting forms must be signed and returned to the Secretary no later than 22nd April 2017.

The Secretary, AFFS Inc
Phil Mitchell
PO Box 44
TERRIGAL NSW 2260

Phone: 02 4384 3217
email: filnoels@bigpond.net.au

Australian Free Flight Society Inc

A Special Interest Group of the **Model Aircraft Association of Australia**

PROXY VOTING FORM for 2017

I, AUS number.....

will not be able to attend the AFFS Annual General Meeting and give my proxy to:

..... AUS number.....

Signature:

The completed form should be posted to:

The Secretary, AFFS Inc
Phil Mitchell
PO Box 44
TERRIGAL NSW 2260

Phone: 02 4384 3217
email: filnoels@bigpond.net.au

Proxies duly signed should arrive no later than 22 April 2017.

Australian Free Flight Society Inc

A Special Interest Group of the *Model Aircraft Association of Australia*

Executive position Nomination Form for 2017

I, AUS number.....

Signed by nominator:

wish to nominate

AUS number..... for the position of

Signed by nominee:

☐ President *please tick ✓*

☐ Vice President

☐ Secretary

☐ Treasurer

☐ Public Officer

☐ Editor

This nomination is seconded by

AUS number..... Signed

The completed form should be posted to:

*The Secretary, AFFS Inc
Phil Mitchell
PO Box 44
TERRIGAL NSW 2260*

Phone: 02 4384 3217

email: filnoels@bigpond.net.au

Nominations duly signed and seconded should arrive no later than 22nd April 2017



southern cross cup

1 - 2 May 2017
West Wyalong NSW



World Cup - Open International for F1A, F1B and F1C also Open Power and Open Rubber

PROGRAM AND VENUE DETAILS

Monday 1 st May	<i>F1B</i>	<i>5 x 1 hour rounds</i>	<i>0800 - 1300</i>
	<i>Open Power</i>	<i>3 flights</i>	<i>0800 - 1300</i>
Tuesday 2 nd May	<i>Flyoffs for F1B and Open Power</i>		<i>0730</i>
	<i>F1A</i>	<i>5 x 1 hour rounds</i>	<i>0800 - 1300</i>
	<i>F1C</i>	<i>5 x 1 hour rounds</i>	<i>0800 - 1300</i>
	<i>Open Rubber</i>	<i>3 flights</i>	<i>0800 - 1300</i>
Wednesday 3 rd May	<i>Flyoffs for F1A , F1C and Open Rubber</i>		<i>0730</i>

NSWFFS Adrian Bryant Field is located at 1390 Clear Ridge Road West Wyalong and will be signposted

Information

1. WORLD CUP EVENTS - are flown from a flight line in five one hour rounds. Please assist by volunteering to time keep.
2. Flyoffs will be organized after the event (start time, CD and timekeepers) but held the following morning. Durations for F1A, B & C will be 10 minutes. For other events unlimited (conditions permitting).
3. OPEN EVENTS - are 3 flights to a 3 minute max with no rounds and one unlimited flyoff the next day.
4. Radio Dethermalization (RDT) is allowed in all events.
5. PLACEGETTERS models, lines, motors etc. may be processed. There will be spot checks and check timekeeping on the field.
6. All Competitors must be in possession of a current MAAA/FAI licence.
7. Motorized retrieval by car, motorcycle, pedal and electric bicycle is allowed. Smoking on the field is not allowed. If you smoke in a car the doors have to be closed.
8. Camping is allowed on the field with prior notification.
9. Sunrise at West Wyalong on May 1 is at 06:36. Sunset 17:31.



southern cross cup

1 - 2 may 2017



World Cup - Open International for F1A, F1B and F1C also Open Power and Open Rubber

Information

Entry Fees

Registration Fee \$10.00
 Open Power & Open Rubber \$10.00 each
 World Cup events (F1A, F1B, F1C) pay \$30 once to enter any or all F1 classes
 There are no entry fees for Juniors

Send entries to: Roy Summersby, 132 The Esplanade, Umina Beach, NSW 2257 AUSTRALIA.
 Please make cheques or money orders payable to NSWFFS Inc in \$A.
 Prior entry AND payment by the **14th April 2017**. Late entry fee \$20.
 Overseas entrants may pay on the field.

F1A, F1B & F1C are World Cup Events. We need timekeepers for each pole, and we need your help.
 Please indicate if you can assist with timekeeping or CD'ing any event.

Enquiries: roydi132@optusnet.com.au

Name:FAI number:

Address:

.....

.....

Tel:E-mail:

Mobile No:

Timekeeping: Yes / No CD'ing Yes / No.....

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



40th Australian Free Flight Society Championships and Dave Anderson Memorial Narrandera 2017



P R O G R A M

Dave Anderson Memorial (DAM) (World Cup Event)

Thursday 04 May	F1A# & F1C #	5 x 1 hour rounds	0800 - 1300
Friday 05 May	F1A & F1C Fly-offs from Thursday F1B #	5 x 1 hour rounds	0700 - 0730 0800 - 1300

AFFS Championships 2017 (World Cup Event)

Saturday 06 May	DAM F1B Fly-off from Friday Start AFFS	0700 - 0730
	Combined % open 3 flights	0730 - 1200
	F1G* 5 x 1 hour rounds*	0800 - 1300
	F1H* 5 x 1 hour rounds*	0800 - 1300
	F1J* 5 x 1 hour rounds*	0800 - 1300
	Evening AFFS AGM (Narrandera Club)	1930
Sunday 07 May	Rest Day/Reserve Weather Day (No Flyoffs)	
Monday 08 May	% Open Fly off from Saturday	0700 - 0710
	F1A # 5 x 1 hour rounds	0800 - 1300
	F1C # 5 x 1 hour rounds	0800 - 1300
	P30 3 flights, 120s max	0800 - 1300
	Open Rubber (P.Twiss Memorial) 3 flights	0800 - 1300
Tuesday 09 May	F1A, F1C, P30 Fly off from Monday	0700 - 0730
	F1B # 5 x 1 hour rounds	0800 - 1300
	Open Power 3 flights	0800 - 1300
	Combined/HLG/CLG/TLG	0800 - 1200
Wednesday 10 May	Fly offs from Monday: Open Rubber	0700 - 0730
	Fly offs from Tuesday F1B & Open Power	0700 - 0730
	Combined Vintage 3 flights	0730 - 1200
	Oz Diesel 5 flights	0730 - 1200
	Scramble	0830 - 0930
Wednesday 10 May	Evening. Presentation Dinner for AFFS & DAM Venue: Morundah Hotel. Bus from Narrandera provided.	1900 for 1930

* **F1G, F1H & F1J** First Round will be "High Time". (6 min max first round only. NB time above 2 min max will only be used to resolve ties)

F1A, F1B & F1C First round duration will be 4 minutes (weather permitting) CD to determine duration of round 5 (5 minute max weather permitting) . F1C engine run 4 seconds.

David Anderson Memorial

Narrandera 4 - 5 May 2017

ENTRY FORM

Please be advised that entry for the DAM event attracts an entry fee of \$40. This is a flat fee that covers entry into one or more World Cup categories. The DAM event is in addition to and separate from the AFFS Championships.

Those wishing to enter the DAM in addition to the AFFS Championships, who have not yet sent entries for the AFFS should complete both entry forms, and \$40 should be added to the fee calculator on the AFFS entry form for the DAM event.

All entries should be sent by 22nd April 2017.

For flyers wishing to enter the DAM event only please send the following information.

Name

Address

Age (if Junior)

FAI No.

Phone No

Email

Events entered F1A ☐ F1B ☐ F1C ☐ *Please mark events entered with an X*

Send entry to: Treasurer AFFS Inc
7 Esperance Close
Elanora Queensland 4221

or email to fathersplace@smartchat.net.au

Payment may be made by Cheque made out to Australian Free Flight Society Inc sent to the above address or by Bank transfer to:

Name: Australian Free Flight Society
BSB: 033174
Account No: 331732

Please advise the Treasurer by email to fathersplace@smartchat.net.au if paying by bank transfer.

Entry by 28 April would be appreciated. Overseas entrants may make payment upon arrival.



AFFS CHAMPS

ENTRY FORM



40th Annual Australian Free Flight Society Championships World Cup - Open International F1A, F1B, F1C

Narrandera, NSW

6 - 10 May 2017

Name:FAI No:.....

Address:Age (if Junior).....

Phone:E-mail

Events entered

Event	Tick
1. F1A World Cup Event	
2. F1B World Cup Event	
3. F1C World Cup Event	
4. Combined % Open	
5. Open Rubber (P.Twiss Memorial)	
6. Open Power	
7. Scramble (Ivor F Memorial Trophy)	
8. P-30	

Event	Tick
9. F1G (Coupe d'Hiver)	
10. F1H (A1 Glider)	
11. F1J (see note 14 in Program)	
12. Combined HLG, CLG, DLG	
13. Combined Vintage. (entry in more than one class allowed)	
14. Oz Diesel	
Dinner	
AFFS sub for 2017/18	

Fees:	World Cup events F1A, F1B and F1C	\$40
	Any number of other AFFS events	\$30
	Any number of WC and AFFS events	\$60
	Presentation Dinner	\$35/person
	AFFS membership including FFDU for 2016/17	\$30
	Posted paper copy of FFDU	\$10
	There are no fees for juniors	

Fee calculator

Select entry one entry option, membership option, dinner if attending	Fee	
World Cup events only	\$40	
AFFS events only	\$30	
World Cup and AFFS events	\$60	
Dinner	\$35/person	
AFFS membership for 2017/18 (includes electronic FFDU)	\$30	
AFFS membership for 2017/18 with posted paper copy of FFDU	\$65	
Total fee		

TO HELP THE ORGANISATION, PLEASE SEND PRE-ENTRY BY 22nd APRIL 2017Send completed entry form with money (cheques payable to Australian Free Flight Society **not** FFDU)to: Albert Fathers, Treasurer AFFS
7 Esperance Close Elanora QLD 4221 AustraliaOr by bank transfer to: Name: Australian Free Flight Society
BSB 033 174
Account No. 331732

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: fathersplace@smartchat.net.au



TUI CUP

12th May 2017, Narrandera, Australia

ENTRY FORM

Name
 Address

 Age (if Junior)
 FAI No
 Phone No
 Email

Events entered F1A ☐ F1B ☐ F1C ☐ Please mark events entered with an X

Please send completed entry forms before 22nd April to:

Robert Wallace
 956 Riverslea Road South
 Hastings 4122 New Zealand

or to ffonzrjw@xnet.co.nz

ph +64 2743 44027

Entry Fee is \$40.00 Australian for 1 event. Those wishing to enter 2 events, the entry fee is \$60 Australian total.

Entry fees to be paid in Australian Cash at Narrandera, Australia. Registration will be available on the field prior to 12th May. It is hoped to have a rest day on Thursday 11th May between events, so please pay registration before that date if possible.

It is also hoped to have an early lunch at the Morundah Pub on Saturday 13th May. For those interested, please indicate numbers that would be attending.



Morundah Pub Lunch:

AFFS General Notes/Comments:

- 1) Daylight Saving NSW finishes 02 April 2017
- 2) Sunrise 04 May 2017 is at 0652 (Civil Twilight 0626)
- 3) *F1G/H/J First Round will be "High Time". (6 min max first round only. NB time above 2 min max will only be used to resolve ties)
- 4) # F1A,F1B & F1C First round duration will be 4 minutes (Weather permitting)
CD to determine duration of round 5 (5 minute max weather permitting)
F1C engine run 4 seconds.
- 5) Open Rubber fly-off held over to Wednesday morning to avoid fly-off congestion Tuesday morning
- 6) P30 morning fly-off retained due to class popularity and number of Juniors flying
- 7) Combined Vintage first flight will be "High Time" & must be launched before 0800
(6 min max first round only. NB time above 3 min max will only be used to resolve ties)
- 8) Oz Diesel first flight will be "High Time" & must be launched before 0800
(6 min max first round only. NB time above 2 min max will only be used to resolve ties)
- 9) Generally earlier starts for fly-offs & non FAI events but latest finish is 1300 hrs!
- 10) WORLD CUP EVENTS - are flown from a flight line in five one hour rounds. Please assist by volunteering to time keep.
- 11) Flyoffs for F1A, F1B & F1C will be 10 minute duration. Open Power,Rubber & P30 flyoffs will be unlimited duration.
- 12) OPEN EVENTS - are 3 flights to a 3 minute max with no rounds.
- 13) 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.
- 14) Old style F1J/Class 1 Power models – restricted to a plain bearing motors of 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)
- 15) P-30 is 3 flights to a 120 sec. max. No rounds.
- 16) 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 (a 20 second attempt rule applies).
- 17) 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 that the vintage cut-off date is 1956. Vintage classes get bonus points (2 per year pre 1956) as per MAAA rules 2009.
- 18) HLG/CLG/DLG are combined, not separate events. All flights from the box marked by 4 cones.
- 19) Oz Diesel (1.5cc plain bearing diesel, no VIT, AR etc., see FFDU2002/3), 10 sec motor run, 5 x 2 min flights.
- 20) Radio Dethermalization (RDT) is allowed in all events.
- 21) PLACEGETTERS' models, lines, motors etc. may be processed. There will be spot checks and check timekeeping on the field.
- 22) All Competitors must be in possession of a current MAAA/FAI licence.
- 23) AFFS Annual General Meeting: Please forward agenda items, nominations etc. to the Secretary, Phil Mitchell by April 21, 2017. Po Box 44 Terrigal or filnoels@bigpond.net.au
- 24) The Presentation Dinner will be on the evening of Wednesday 10 May at the Morundah Pub. There will be a bus from Narrandera. Cost (including bus) will be about \$35. We need to know numbers in advance so please make your bookings for the dinner and pay with your entry.
- 25) Motorized retrieval (car, motorcycle) 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.
- 26) Smoking on the field is not allowed. If you smoke in a car the doors have to be closed.

EXPRESSIONS OF INTEREST

CONTEST DIRECTORS & ASSISTANTS



The AFFS Committee is seeking Expressions of Interest from suitably experienced persons to carryout duties associated with running of our competitions to be held at Morundah between 4th May and 10th May 2017.

CONTEST DIRECTORS

Essential Criteria:-

- Must hold current MAAA Sporting Licence.
- Must have good working knowledge of FAI & MAAA Rules.
- Must be decisive and experienced in running FAI and MAAA events.
- Must be available ½ an hour before the start of competitions & fly-offs, and remain on the field for the duration of the nominated competition day.

Desirable Criteria:-

- General knowledge of field constraints and issues.
- General knowledge of score keeping functions.
- General knowledge of basic First Aid.

ASSISTANTS

Desirable Criteria:-

- General knowledge of basic First Aid.
- General knowledge of timing & score keeping functions.
- Must be available ¼ an hour before the start of competitions

and remain on the field for the duration of the nominated competition day.

Both positions will be remunerated at the rate of **\$35.00** per full competition day.

Interested persons should submit Expressions of Interest addressing the above criteria in writing by 22 April 2017 to:-

The Secretary AFFS
PO Box 44
TERRIGAL 2260 NSW

Or email to: [Mail: filnoels@bigpond.net.au](mailto:filnoels@bigpond.net.au)

Phil Mitchell

Secretary AFFS

Fab Feb 2017

the drought has broken for California



"It never rains in California, but girl, don't they warn ya? It pours, man, it pours." Well maybe not for us, but it was wet.

Report and photos by Malcolm Campbell

Before we left Brisbane I was watching the Lost Hills weather and there was light rain about. Locals suggested we might be lucky enough to avoid it and end up right in the middle of some excellent weather. We had been lucky for the last six years, with increasingly better weather each time we visited Lost Hills for the best free flight experience in the world.

This year, our luck ran out with Southern California experiencing lots of rain, enough to break a six year drought. And Lost Hills didn't escape it. Fortunately the event organisers did an excellent job to ensure all key events were flown in the allotted time, and we did get some dry breaks in the weather, ensuring we could get onto the field.

Australia was well represented – Phil Mitchell, Tahn Stowe, Albert Fathers and myself in F1A, Vin Morgan, Craig Hemsworth, Gary Goodwin and Gary Odgers in F1B, with Roy Summersby and Terry Bond in F1C. Terry, Tahn and Roy also entered F1J, Gary Goodwin F1G, with Phil, Kathy and myself in F1H. Kathy and I threw in a few CLGs to fly. Tahn also brought over a boxful of brand new carpets for the first Power Scramble ever flown on American soil. Antony Koerbin came over from New Zealand for F1A, and Paul Squires brought F1B, F1G and P30 models. For two small countries we had good

representation. In all, 27 countries competed, almost on par with the World Champs.

As is the case, some arrived early and looked around and others stayed on for an extended holiday. Terry and Karen, and Antony and Paul did the latter. Phil and Noels arrived the same day we did, and made an early and muddy arrival on the field. Kathy and I preferred a beach holiday, in the rain. After that, we drove across from Oxnard via Hwy 126 crossing a 5,200 foot mountain pass where there had been mud slides, rock falls and road damage, much like everywhere else in Southern California. The countryside was greener than I'd ever seen it in previous visits.

Wednesday 8th February By Wednesday evening, we were all at our respective Lost Hills accommodation. The two Kiwis, Kathy and I were at Days Inn (luxury) and Tahn and Gary were in Motel 6 (FF Central) whereas the rest of the Aussies had RVs on the field. This was everyone except for poor Albert who had to return to Australia the day after his arrival because of a medical issue.

Phil had the wildest ride in, on Tuesday. He met up with Brian Van Nest at the entry road, and Brian suggested it was 4WD territory and said he'd scout ahead. Brian texted him saying *"Don't come in"* but Phil decided it was OK (texting *"I'm right*

behind you") and proceeded to follow, and made it! By Wednesday, more rain had filled the wheel ruts with water. We looked at the road that afternoon and decided *"No"*. And then we caught up with Antony Koerbin and Paul Squires for "Dinner At Denny's". My time clock was still out of sync, and I spent most of the night awake.

Thursday 9th February No rain at night and cloudy but warm in the morning, Thursday looked a little better so we slithered out along the gypsum soil road and put up a few flights before the wind got up. The organisers thought it would be still too wet on Saturday for a safe competition, but it was OK for some more test flying. Little groups of flyers were scattered all over the field. We chatted with the Poms, Aussies and Kiwis for an hour before unpacking. The Chinese had bogged their RV and that became their base for the day's flying until the ground dried out. Winds were 5 – 7 m/sec by lunch time so we took our food to Phil and Noels RV and later headed off to the big Walmart at Wasco for food and grog shopping. Another Denny's meal and a good sleep, at last.

Friday 10th February It rained all night and Friday was definitely not a day for the field. So we had a late breakfast with the Clapps (John and Sally) and the Ulms (Al and Pat). News filtered through via the Parkers that registration for the Ike events would be off the field at the Lost Hills Community Centre. We still drove out to look at the mud pie that was a road and then dropped in at Motel 6 to talk to other flyers before going to the Community Centre to register. Preliminary online entry by a very high percentage of entrants and the convenience of the community centre as a venue made for a very efficient process. Later I set up my models and Antony and Paul joined us for drinks and nibbles in our room before celebrating Paul's birthday dinner at Denny's – where else? It's raining again.

Saturday 11th February Rain stopped overnight and there were dry patches of bitumen amongst the puddles on **Saturday** morning. The drive in was interesting, to say the least. The first half was treacherous and slippery but the final half was being graded by a Holloway's grader and that was definitely a no go zone. We took to the grass for that bit. We spent some time talking and picking up a number of orders from Stan Buddenbohm, Charlie Jones, Clint Brooks and Vasily Beschasy so, when my wallet was empty, we went flying for a few hours. Morning tea with Phil and Noels and Jeff Ellington, then some more goodies pick-ups and out to the glider pen to test our CLGs. A few were out there but it was too cold and windy. We had our lunch with Terry and Karen and were home by 5pm. Pizza Hut for dinner.

Sunday 12th February So the **Ike weekend** was run on Sunday and Monday. F1A, B and C numbers were very good, as the majority of flyers were international, but the stick and tissue and old timer classes suffered

low numbers. Sunday was the nicest day so far, with sun, light winds and quite warm by midday, although it was cool when we arrived and chilly when we left (normal Lost Hills pattern). The flight line was established in the middle of the field with As, Bs and Cs segregated along the line, and we all managed to stay out of the pistachio plantation even though extreme heights were being reached in the big thermals. I used all four models I brought over to complete the 7 rounds – and I thought I'd prepared well? Vin Morgan had a flight he'd rather forget in F1B and Terry Bond planted a Babenko folder a metre from where Roy Summersby was sitting. Roy didn't even blink.

In F1A, Phil Mitchell led the Aussies but dropped 8 secs in R5 whereas Tahn bombed R3 and I wrecked my chances with 2 sub maxes. Antony Koerbin was the standout maxing out, making the 6 minutes and a respectable score in the 8 min fly-off to finish 19th. The Israelis were very strong in F1A and some have adopted

the Jama Roll launch, achieving spectacular height. 31 out of 56 made the first fly-off and Brit Chris Edge was unlucky in it, DTing off the top, in failing light. **Ten** flyers made over 400 secs in the second and final fly-off, flown early the next morning, delaying the start of the second day's events.

F1B had Craig Hemsworth, Vin Morgan, Gary Goodwin and Kiwi Paul Squires. Vin was severely punished by a faulty servo that collaborated with his on-board timer to DT him after 32 seconds in R3. He was so high, it took 40 seconds to come down. Otherwise, he'd maxed out. Gary was in his first ever international maxout and hooked left in the fly-off. Out of 48 flyers, 31 made the first fly-off, with 20 making 6 minutes, flown in poor light. They too came back the next morning to decide the winner. Lone Aussie Craig placed 14th in the final fly-off, and 6 recorded over 400 secs. Ukrainians Kulakovsky and Vivchar were 1st and 3rd with Israeli Mark 2nd.



Sergey Makarov ready to go



Tahn Stowe helps Antony Koerbin in the Kiwi fly-off



Mikhail Kochkarev also ready to go



Kiwi Antony Koerbin did very well in F1A



Jean Luc Bodin winds hard in F1B



Another steep launch from Craig Hemsworth



Highest Aus achiever in F1B, Vin Morgan walks back



Blake Jensen launching in F1B, Tiffany O'Dell times



Our friendly Kit Kat man Yuan Gao did well in F1C



Roy Summersby launches in the North American Cup

As A, B and C contests were run on the same day, it was impossible to take note of all that was happening, particularly as I was flying and taking photos. So F1C is a bit of a blur, except for Terry's spectacular arrival. I witnessed that while waiting to tow up. Mike Roberts did a more comprehensive "arrival" DTing close the ground, folding his rapidly descending folder. Both Terry and Roy were taken out of contention when bad air had them down early in the 4 minute R7. F1C was put on hold for an early morning fly-off. The F1C

fly-off the next morning was a Babenko affair, with Reinhard Truppe taking 1st place 10 secs ahead of Babenko, with Mike Roberts, new to folders, in 3rd place. 16 had entered F1C, 7 had maxed out and only 2 went over 400 secs in the early morning air.

Back to Sunday afternoon - Kathy and I went running over to the glider pen at 2.50 pm, only to learn that last flights were to be in by 3 pm. No chance of trimming or waiting for air, we just banged up a few flights to indicate we'd been there. Rather disappointing.

Monday 13th February Monday was warm, sunny and very light winds. I put away my F1H after the timer started to misbehave, and Kathy faced a daunting task trying to get her old balsa model to the top of the line. This was not the case for the CT CF bunters; they relished the light buoyant air milking out thermals with apparent ease. R1 was a Champagne "Time To The Ground" affair and Phil extended his timer as much as he could, to achieve a magnificent 10 min 36 sec flight. Wily old Mike McKeever set the bar earlier with an

amazing 11 min 47 sec flight! No one else came close to these times but, after 5 rounds, 11 out of 18 had maxed out, including all 4 Israelis. 9 then maxed the 3 minute fly-off and 8 the 4 minute fly-off in rather generous flying conditions. Once the R1 times were considered, Mike McKeever cleaned up from Phil Mitchell with Aviv Balassiano 6 minutes in arrears, thanks to Mike and Phil's amazing R1 times.

Gary Goodwin and Paul Squires teamed up in F1G. With 17 entries in good air, this promised to be a hot contest, although the boys failed to

read the special condition of the first round being "time to ground". It didn't matter to Paul after R2 but Lost Hills virgin Gary found himself in top company maxing out, making the 3 minute fly-off and then placing 4th after the final fly-off, just 9 secs behind top US flyer Tiffaney O'Dell and only 33 secs behind winner Evgeny Gorban. There were many world class flyers behind him.

Terry, Tahn and Roy formed the Aussie F1J team. 12 entered and 10 flew; this would have gladdened the heart of Mike Roberts who is trying to promote this class. Terry had a bad

launch in R1, dropping 10 secs and maxed the rest. Roy Summersby was unaware of the shortened rounds and missed flying in R1. So Faust Parker maxed out, with Terry picking up 2nd from Mike Roberts 3rd.

SCRAMBLE: For some, the premier event of the day was Scramble. This was the first time the Aussie Scramble had been flown in the United States, and it was enthusiastically received. A few rule changes were made to protect the health of those not previously attuned to the rigours of Scramble. The time was shortened to 30 minutes and a team of retrievers



Gary Goodwin and Paul Squires in F1G



Terry Bond launching Ken Bauer's F1H



Per Findahl watches his F1H launch



Another gun barrel launch for Roy Summersby



Phil launches and keeps an eye on his F1H



Terry Bond launches his F1J with Karen timing

were permitted. Even a blind eye was turned on a tall US 1/2A flyer who used an RDT. Scramble commenced late in the afternoon before prize giving, and it was fun.

The US Scramble was the brain child of the one and only Tahn Stowe. It was promoted fairly heavily in Roger Morrell's SEN emails and photos appeared in Flickr explaining the event to an unfamiliar audience.

Tahn made 5 new Flying Carpets and fitted them with Mills 0.75 motors; the Carpets wonderfully decorated in international themes.

Tahn was actually hoping to sell the Carpets on completion to avoid transporting them home. I believe he sold three, one to Canada, another to Denmark and the third to Australia. Another is on eBay and Than is keeping the winner for himself. Volunteer "Carpeteers" were solicited from the flyers and some brief training given before the event. Carpet pilots were John Buskell, Per Findahl, Henning Nyhegn, Ken Bauer and Dominic Andrist. Some had never started a diesel before. Jim Parker (F1A) flew a conventional 1/2A model that he built when he was 16. It had

not flown for many many years. Norm Furutani, organiser of the Ike weekend and a past top US flyer in Wakefield, flew a Cox-powered stagger wing sheet model. The five Aussie models sported diesels, the two US models Cox 049s.

So seven competitors faced the starting whistle for some rollicking good fun. Many took it in turn to retrieve the model and a few near misses added to the spectacle. A still afternoon allowed the models to circle high overhead and most of the retrieves were short. Terry Bond was the ideal choice as a CD, and he did



Tahn did some wonderful work building 5 new carpets



Per Findahl enjoyed the experience



First time with a diesel for Ken Bauer



Phil Mitchell knows Scramble but never with a Carpet



Jim Parker built this model when he was 16!



Norm Furutani was afraid of hitting me



Henning Nyhegn had fun in the Scramble



Per Findahl and Lauri Milila placed 2nd in Scramble

the job with dignity and aplomb, in his characteristic booming voice.

Tahn acted as a tutor during the event, happy when things were going right but frustrated when some flights were done under full power, some over compressed and some roughly handled. He diplomatically pulled them into line, but it was tough on Tahn – he'd expended quite a few dollars and hours of time to make this thing happen. But everyone else had a full 30 minutes of fun, including the spectators. I would have brought mine too, but there was no room. I'm

almost certain it will be run again next year, with a bigger entry list.

After the prize giving and as the sun fell below the horizon and the temp dropped, we gathered around Terry's RV for an enjoyable drink and nibbles with the six happy Aussie RV flyers. We left under headlights, and the track out wasn't too bad apart from the early part where it was a bit firmer driving on the grass. Tonight another dinner at Denny's, with Brits Alan Jack, Mike Lester, Mike Fantham and Chris Edge; in bed by 10 pm.

Tuesday 14th February The weather was excellent on Tuesday,

warm with full sun and a light breeze. I put in some time testing models alongside Craig, Vin and Roy, while Kathy caught up with some washing. I picked her up later in the morning for the annual Ladies Tea Party in the RV quadrangle, and it was a lavish affair this time; plenty of food, more people and more tables, and entertainment! Phil Mitchell did a clever Australian gig, involving Brian Van Nest and a few props including budgie smugglers. A few Aussie poems were recited, Brian cut Phil's throat and then had a bucket of water thrown over him, people got to see our colourful currency and no one



Kathy and Noels always enjoy the Ladies Tea Party



Phil Mitchell struts his stuff at the LTP



Evgeny Gorban strolls back up Holloway's Hill



Peter Brocks launches his F1E, Brigitte times

was hurt. It will be a hard act to follow. I reckon Phil better start now if he wants to beat his 2017 effort.

I went up to Holloway's Hill to catch the F1E action. Wind direction was fickle so they flew from off the hill, out towards the RVs. It wasn't the most beneficial direction for long flights but it enabled me to get some great clear shots. Seven flew and Swiss F1A flyer Dominic Andrist won from Peter Brocks and Bob Sifleet. I did some more flying later in the afternoon before pre dinner drinks in our motel room and another Denny's meal, this time with Enes and Jasminka Pecenkovic.

Wednesday 15th February This was probably the nicest day of the week, with full sun and light winds, perfect for the North American Cup. Peter Allnut and Tony Mathews had done a great job setting up the competition and all went very well. In R1 there was a 180 degree wind shear at 20 metres that caught a few F1A flyers but it only persisted for the first 20 minutes. I was the only Aussie to make the 4 minute first round

along with Kiwi Antony Koerbin. Tahn Stowe also dropped R1 badly but maxed the rest. Antony and I continued to max until I got caught out in the final round, when the wind dropped right off and the puffs came from all directions. There were big thermals but for straight towers like me, the breeze was adequate but it wasn't always in the direction I wanted. I was crowded out by those circling overhead and I was frustrating to see big gaggles of F1Bs launching under other F1As in lift. I went in what I thought was adequate air, and it held for a while before dropping out of light lift for 2 min 4 secs, in the 4 minute round. That hurt. Phil missed the fly-off by a mere 3 seconds, leaving Antony to fly the Kiwi flag. He did very well, getting the 8 minute fly-off. There were 55 flyers and 26 maxed out. Amazingly 21 made the 8 minutes, such is the quality of the top models and top flyers. The North American Cup was decided in the second fly-off, with Jama Danier 1st using a conventional LDA carbon model, followed by Sergey Marakov and Aviv Balassiano,

both flying carbon flappers. Bad luck story was Roland Koglot who bumped his RDT button during the final fly-off to get a 75 sec score! Phil Mitchell may have just missed the fly-off but he did an excellent job of CDing that part of the event.

F1B and F1C were also flown this day so, once again, this is where the story telling gets difficult, as I was flying A and taking photos. AUS had 4 B flyers, Craig Hemsworth, Vin Morgan, Gary Goodwin and Gary Odgers. Gary #2 was flying a near vintage Wake and was in awe of the high calibre competition. He managed two maxes. The remaining AUS flyers maxed the 5 rounds. It was good to see Tony Mathews flying in his own event as well as helping CD it. He was busy but he still managed a good score, only dropping the final round. And Gary Odgers finished ahead of 4 international flyers!

Performance of modern day F1Bs is staggering, with a few North American Cup flyers sporting full carbon wings, some had elliptical tips and others using the very special



NA Cup winners in F1A: Aviv, Jama and Sergey (L to R)



NA Cup winners in F1B: Jean Luc, Oleg and Charlie



NA Cup winners in F1C: Artem and Faust, Xin Pu absent



NA Cup team winners in F1A

Stefanchuk section, with a “porpoise” LE and a big droop towards the trailing edge. Good rubber gets them all up high but the glide with this new section is exceptional.

Hard luck story in F1B was Craig Hemsworth who flew R5 with a 3 min DT when the round was 4 mins. He felt sure he’d set the correct time. He ended up plummeting down to 32nd position! Paul Squires did very well, recording 6½ mins in the fly-off to take 14th place and Gary Goodwin continued to shine as the new rookie, getting 29th place from a 4 min 11 sec flight. Vin Morgan was our standout performer, placing an excellent 4th behind Oleg Kulakovsky, Charlie Jones and Jean Luc Bodin. Vin flew for over 7½ minutes, Kulakovsky and Jones flew nearly 9 minutes! In this event, 52 flew and 32 made the unlimited fly-off, such was the quality of the field.

F1C was well represented with 17 entrants from 9 countries. From memory, there were only 2 conventional models, the rest were

folders, all from the Babenko factory, meaning they were all black! Half the field maxed out and the fly-off was so close. Faust Parker won with 7 ½ minutes, just 3 secs ahead of a much improved Xin Pu Sheng, and Artem Babenko snatched 3rd place just 1 second ahead of 4th place getter Larissa Savukkina. Roy placed 5th and Terry was way back in 12th, after dropping the first round.

Peter Allnut wound up the very successful North American Cup with customary red roses for the ladies for Valentines Day and copious quantity of bubbly for the thirsty flyers. As usual, the nibbles were first class, and very little was left when the lights were turned out.

Thursday 16th February Thursday, a lay day, was cooler with clouds and rain expected by mid-morning. We drove out to the field early to be greeted by vehicles driving out, one of which was Terry and Karen’s RV; they were moving to “higher ground”. A rainstorm was moving in from the mountains. Needless to say, we did

not drive in and, with rain and winds expected for the next two days, we didn’t hold any chance of Maxmen starting on Friday. Roy, Vin, Craig and Gary O also drove their RVs to the Lost Hills RV park where they then stayed for the rest of the competitions.

So what could we do now? We went back to Denny’s and shared sausage, egg, bacon, ham, hash brown, toast and pancakes. Yum. Too much for one, but just right for two. We followed this up with a two hour afternoon nap before fronting up to Gabby’s for a Mexican meal. Gabby’s had been booked out for us and about 45 people enjoyed an economical and cheerful Mexican meal. The Aussies had the rowdiest table but everyone had fun. Wine and beer was cheap – I think they had to restock after we left.

It was wisely decided that Maxmen would not commence until Sunday, and the Reserve Day would be utilised for the Mini classes. Many international flyers would miss



North American Cup team winners in F1B



North American Cup team winners in F1C



Some of the Aussies at Gabby’s Mexican Restaurant



Gary Goodwin joined the Brits and Kiwis in a private booth

Monday as they had planes to catch, us included.

Friday 17th February Friday was overcast and cool, with more rain forecast. Gary Goodwin, Paul Squires and Tahn Stowe drove down to LA and straight into chaos, with 5 inches of rain falling. They managed to visit two aircraft museums and would not be back until after 7pm, battling the heavy traffic and dreadful road conditions for 6 hours in their return journey. We drifted from Motel 6 to the RV park and back again, trying to relieve the boredom. We organised drinks and nibbles for Antony Koerbin, Blake Jensen and Tiffaney

slippery and muddy, although Jeff Ellington came out in a 4WD and Michael Seifert drove briskly in in a large SUV, possibly FWD. Later, the Kiwis drove out but only looked at the field. The Pecenkovics said the road in was better than Friday but they were worried what in coming RVs could do to it. I filled in the day walking around to the RV Park and Motel 6, not much to do. Gary G drove Craig, Roy and Vin out to check the field mid-afternoon.

The Banquet was once again held at the Lost Hills Community Centre, and everyone appeared to be enjoying themselves. The roll up was

F1Bs, with often over 20 models in the same patch of air. Antony and Tahn dropped another round and I lost 8 secs in R4. Phil remained clean and advanced to the fly-off. While I was retrieving my final round flight, light rain started to fall. It would be light rain for all the fly-offs. Of the 53 entries in F1A, 29 made the fly-off. Jasminka Pecenkovic maxed out with a straight tow model, to be in her first ever fly-off. Her husband Enes was also in the same fly-off. She went on to record a very credible 7 min 14 secs in the 8 min fly-off. 15 made 8 minutes and an elated Anders Persson won the 10 minute fly-off from Aviv Balassiano and Vasily



Terry, Roy and Gary behaving themselves at the Banquet



Tanya Buskell and GERALYN JONES having a bit of fun

O'Dell, and that was the highlight of the day. We then had dinner with Antony at Denny's. The rain had stopped, but not in LA.

Saturday 18th February We awoke to some blue sky on Saturday, with a dry road and light winds. This gave us some hope for Sunday, providing our little FWD car could handle it. It was still doubtful at noon. I visited the RV park for a distraction. They were hopeful of flying but any more rain and it would be all off. I picked up a heap of flash F1B bits for Ted Burfein and gave them to Roy whose duty it was to fit the bits into various NSW flyers' flight boxes.

Kathy and I took a run up to Blackwell's Corner, the pistachio nut place, to look more closely at the Dust Bowl historic pickup truck, and to take photos of it for Henning. We also checked out the field. It still looked

about the same as last year. No one stayed late with an early start on Sunday for the A, B and C classes.

Sunday 19th February No rain, blue sky, some clouds at 6 am – if our luck holds we can fly today! I'm sure they'll reduce Maxmen to 5 rounds. It was still a slippery run in and the Aussie RVers were ferried into the field in cars. We set up 200 metres in from the RV enclave and this proved difficult in the first round for some, as early models flew over the RVs and were lost by the timers. The wind shifted to the east midway through the round and then settled into a northerly for all remaining rounds, 180 degrees from the initial direction. Phil and I got the 4 minutes, Antony and Tahn just missed. Quite a few dropped rounds although the air was magnificent in R3 and R5 with F1As initiating mass launches from the

Beschasny. Phil Mitchell recorded 4 min 40 sec in the cool light rain and failing light to place 8th.

We watched the F1C fly-off and the start of the B fly-offs but left before either was resolved as Kathy did not have a raincoat and I was starting to worry about the state of the road. Craig Hemsworth had the misfortune to make the F1B fly-off but had to leave before it flew because of pre-arranged family commitments. Vin Morgan also made the fly-off and placed 20th. There were no Aussies in the F1C event as Terry and Roy had their support vehicles off the field. 11 flew in F1C with only 5 making the fly-off, and this was won by Larissa Savukhina from Artem Babenko and Xi Pu Sheng. It was great to see this talented woman win F1C. Again at Lost Hills. Babenko models filled the first 4 places. Xi Pu Sheng, who competed in Australia at Narrandera



Museum piece at Blackwell's Corner - a Dust Bowl vehicle



Phil Mitchell tries to get a leg up on Didier Chevenard



Kiwi Paul Squires teamed up with Gary Goodwin in B and G



Phil Mitchell leaning into another hard launch



Tahn Stowe looked happy, every day



Malcolm's model never strayed from the flight, for 3 min



Malcolm Campbell, Michael Seifert and Bernd Silz



UK F1C flyer Ken Faux was always happy to meet people

and West Wyalong last year, is definitely a rising star in China, and on the world stage.

Bill Booth did a wonderful job controlling the event under difficult weather conditions with all classes flying together. The As had their final fly-off after the Bs and Cs had flown, to best utilise resources and available time. Dropping all events from 7 to 5 rounds was a wise move, as everything had to be completed on the day.

So, while the fly-offs were finishing, we drove to the Truck Wash place and had about 20 kg of accumulated gypsum removed from our hire car, the little trio of Indians doing a booming business with the free flighters. We then had Jasna and Enes Pecenkovic, Paul Squires and Antony Koerbin over for lengthy pre dinner drinks session and then we joined the Kiwis at Denny's for our last meal together, while the Pecenkovics caught up with a large group of European friends a few tables away.

I shared a late Days Inn breakfast with Kimo Kulmakko, Javier Abad and Antony Koerbin, said our goodbyes and headed off to pack the car for the

trip to LAX. It was now warm, sunny and with a light breeze., a perfect day for the Minis, although there was breeze at the field. These were, as expected, poorly attended as many entrants had planes to catch or jobs to go back to, but there were still 6 in F1G, 6 in F1H and 3 in F1J. The results for each class did not contain many of the usual names.

Conclusion It was unfortunate about the weather, as there is usually a lot of socialising done after each day, on the field. But no one wanted to risk the trip out in the dark. We did but only on Wednesday night. So we compromised by having people over to our motel room for drinks and nibbles, caught up with many at Denny's and also at the two formal functions. We were privileged to be accommodated amongst FF royalty at Days Inn, with Ian Kaynes (CIAM) in the room on one side and Alex Andruikov the other. There was a continual stream of customers to Alex's door, day and night. Alex looked happy.

The organisers did a wonderful job under difficult circumstances, with all bar one F1E event being completed. Only a few got bogged (I didn't) and

no models were lost. Many vowed to return and that included our Gary Goodwin who had a ball. Tahn's smiling face was everywhere and, after a 6 year absence, he has definitely extended his international fan base with his Academy Award winning display of Flying Carpets and the Scramble event.

F1A was certainly the standout class for performance improvements since last year. Strong, fast, well-trimmed LDAs recording 118 metre launches were spectacular. You really have to be very fit to get the height, and the LDAs now launch and glide very well. Bs were much like last year, although a few more were sporting full carbon wings, some with very special sections giving a superb glide. Cs are very consistent and better behaved, although they will still go where you point them, so you have to point well. The height they attain and their low sink rate is amazing.

And of course Lost Hills remains the mecca for international free flight, with the level of competition and socialising afforded in a relaxed atmosphere, making it very hard to beat.

Malcolm Campbell



There are always great sunsets at Lost Hills field



Happy Hour Central at Days Inn



The Big Picture of the flying field on a test day, taken from F1E's Holloway's Hill. Zoom in to see the action

FURUTANI PHOTOS

Brian Furutani covers a lot of ground over the Ike / Kiwi weekend at Fab Feb, taking very good photos. Here are just a few that I liked.



It didn't look good at the start of the week



On field discussion on the first Saturday



The grass was green but the ground was soft



At last some flying starts



Yes, D Gas means BIG



A new lean and mean Tim Batiuk gets away in TLG



F1H winners Phil Mitchell, Mike McKeever, Israeli proxy



Scramble winners Per Findahl, Dominik Andrist & Norm Furutani



Craig Hemsworth hurls one up



Roy Summersby "on rails"



Dainty launch from Terry Bond



An energetic launch!



Antony Koerbin 1...2...3



The Israelis perform on field repairs



Another big gas model fires up



Tahn Stowe did not have much luck in F1J



KIWI CUP RESULTS

KIWI CUP

F1A 56 flew

Family Name	Given Name	Country	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7	Flyoff 1	Flyoff 2	Total	Place
Bezak	Ivan	SVK	240	180	180	180	180	180	240	360	507	2247	1
Koglot	Roland	SLO	240	180	180	180	180	180	240	360	471	2211	2
Findahl	Per	SWE	240	180	180	180	180	180	240	360	465	2205	3
Koerbin	Antony	NZL	240	180	180	180	180	180	240	360	321	2061	19
Mitchell	Phil	AUS	240	180	180	180	172	180	240			1372	32
Stowe	Tahn	AUS	240	180	180	134	180	180	240			1334	40
Campbell	Malcolm	AUS	240	180	180	167	180	180	89			1216	50

F1B 46 flew

			Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7	Flyoff 1	Flyoff 2	Total	Place
Kulakovsky	Oleg	UKR	240	180	180	180	180	180	240	360	470	2210	1
Mark	Gilad	ISR	240	180	180	180	180	180	240	360	463	2203	2
Vivchar	Igor	UKR	240	180	180	180	180	180	240	360	435	2175	3
Hemsworth	Craig	AUS	240	180	180	180	180	180	240	360	352	2092	14
Squires	Paul	NZL	240	180	180	180	180	180	240	275		1655	26
Goodwin	Gary	AUS	240	180	180	180	180	180	240	117		1497	29
Morgan	Vin	AUS	240	180	72	180	180	180	240			1272	45

F1C 16 flew

			Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7	Flyoff 1	Flyoff 2	Total	Place
Truppe	Reinhard	AUT	240	180	180	180	180	180	240	453		1833	1
Babenko	Artem	UKR	240	180	180	180	180	180	240	443		1823	2
Roberts	Mike	USA	240	180	180	180	180	180	240	349		1729	3
Bond	Terry	AUS	240	180	180	180	180	180	213			1353	8
Summersby	Roy	AUS	240	180	180	180	180	180	182			1322	10

F1G 17 flew

F1G	17 flew		Round 1	Round 2	Round 3	Round 4	Round 5	Flyoff 1	Flyoff 2	Total	Time to Ground		Place
Gorban	Evgeny	UKR	120	120	120	120	120	180	240	1020	267	1287	1
Fibish	Tuvia	ISR	120	120	120	120	120	180	217	997	221	1218	2
ODell	Tiffaney	USA	120	120	120	120	120	180	216	996	173	1169	3
Goodwin	Gary	AUS	120	120	120	120	120	180	207	987	196	1183	4
Squires	Paul	NZL	120	105	120	120	120			585	151	736	13

F1H 17 flew

F1H	17 flew		Round 1	Round 2	Round 3	Round 4	Round 5	Flyoff 1	Flyoff 2	Total	Time to Ground		Place
McKeever	Mike	USA	120	120	120	120	120	180	240	1020	707	1727	1
Mitchell	Phil	AUS	120	120	120	120	120	180	240	1020	636	1656	2
Balassiano	Aviv	ISR	120	120	120	120	120	180	240	1020	275	1295	3
Burford	Kathy	AUS	63	79	120	36	26			324	63	387	17

F1J 10 flew

F1J	10 flew		Round 1	Round 2	Round 3	Round 4	Round 5	Flyoff 1	Time to Ground		Place
Parker	Faust	USA	120	120	120	120	120	600	189	789	1
Bond	Terry	AUS	110	120	120	120	120	590	110	700	2
Roberts	Mike	USA	120	120	120	78	120	558	237	795	3
Summersby	Roy	AUS	DNF	120	120	120	120	480	0	480	6
Stowe	Tahn	AUS	0	10	DNF	DNF	DNF	10	0	10	10



NORTH AMERICAN CUP RESULTS

North American Cup

F1A	55 flew		Round 1	Round 2	Round 3	Round 4	Round 5	Flyoff 1	Flyoff 2	Total	Place
Danier	Jama	CAN	240	180	180	180	240	480	393	1893	1
Makarov	Sergey	RUS	240	180	180	180	240	480	385	1885	2
Balassiano	Aviv	ISR	240	180	180	180	240	480	381	1881	3
Koerbin	Antony	NZL	240	180	180	180	240	480	312	1812	14
Mitchell	Phil	AUS	237	180	180	180	240	0	0	1017	27
Stowe	Tahn	AUS	191	180	180	180	240	0	0	971	37
Campbell	Malcolm	AUS	240	180	180	180	124	0	0	904	45
F1B	52 flew		Round 1	Round 2	Round 3	Round 4	Round 5	Flyoff 1		Total	Place
Kulakovsky	Oleg	UKR	240	180	180	180	240	537		1557	1
Jones	Charlie	USA	240	180	180	180	240	526		1546	2
BODIN	Jean Luc	FRA	240	180	180	180	240	468		1488	3
Morgan	Vin	AUS	240	180	180	180	240	457		1477	4
Squires	Paul	NZL	240	180	180	180	240	383		1403	14
Goodwin	Gary	AUS	240	180	180	180	240	251		1271	29
Hemsworth	Craig	AUS	240	180	180	180	240	210		1230	32
Odgers	Gary	AUS	237	148	180	180	134	0		879	48
F1C	17 flew		Round 1	Round 2	Round 3	Round 4	Round 5	Flyoff 1		Total	Place
Parker	Faust	USA	240	180	180	180	240	450		1470	1
Sheng	Xin Pu	CHN	240	180	180	180	240	447		1467	2
Babenko	Artem	UKR	240	180	180	180	240	430		1450	3
Summersby	ROY	AUS	240	180	180	180	240	397		1417	5
Bond	Terry	AUS	214	180	180	180	240	0		994	12



MAXMEN RESULTS

Maxmen

F1A	49 flew		Round 1	Round 2	Round 3	Round 4	Round 5	Flyoff 1		Total	Place
Persson	Anders	SWE	240	180	180	180	180	480	410	1850	1
Balassiano	Aviv	ISR	240	180	180	180	180	480	403	1843	2
Bezchasny	Vasily	UKR	240	180	180	180	180	480	379	1819	3
Mitchell	Phil	AUS	240	180	180	180	180	480	280	1720	8
Campbell	Malcolm	AUS	240	180	180	172	180			952	30
Koerbin	Antony	NZL	203	178	180	180	180			921	40
Stowe	Tahn	AUS	236	180	180	180	113			889	43
F1B	36 flew		Round 1	Round 2	Round 3	Round 4	Round 5	Flyoff 1		Total	Place
Andriukov	Alex	USA	240	180	180	180	180	480		1440	1
Kulakovsky	Olag	UKR	240	180	180	180	180	444		1404	2
Stefanchuk	Stepan	UKR	240	180	180	180	180	408		1368	3
Morgan	Vin	AUS	240	180	180	180	180	263		1223	20
Hemsworth	Craig	AUS	240	180	180	180	180	0		960	29
Goodwin	Gary	AUS	240	131	180	180	180			911	31
Squires	Paul	NZL	208	143	180	180	180			891	34
F1C	11 flew		Round 1	Round 2	Round 3	Round 4	Round 5	Flyoff 1		Total	Place
Savukhina	Larissa	RUS	240	180	180	180	180	480	585	2025	1
Babenko	Artem	UKR	240	180	180	180	180	480	567	2007	2
Sheng	Xin Pu	CHN	240	180	180	180	180	480	454	1894	3

FAB FEB POSTSCRIPT

They build them big in America. F1C flyer Guy Menano trotted out his huge Super D Gas Model after the rounds and immediately had Roy Summersby's attention. With a Nelson 65 and 11 foot span, this metal foil and black monster sure attracted attention.

Guy tells me he really wanted to increase the chord a bit but 1,250 sq ins seems to do the job. Waiting for a definite wind direction before launching away from the crowd and without a DT, this juggernaut roared skyward and cruised majestically around the field.

Weighing in at 5 lbs, Guy was pleased to do a motorbike retrieval.

OK, Gary Odgers and Col Collyer, you like this sort of model - start building!



No substitute for cubic capacity



Hard work glide testing one this size!



It got Roy's attention



The only way to bring it back



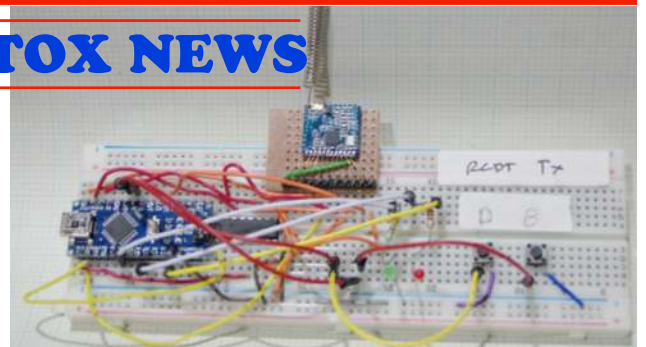
DTOX E Type

Less than 5 grams, self contained (complete with servo), gets power from BESS so no extra battery required. Comes pre-programmed with 8 choices for both motor run and DT times. These include standard E36 & F1S times plus some shorter ones for trimming purposes. Selection of times is

via push button sequences which are verified by the 3 LEDs.

Simple to operate... push 'Start' button. The motor starts, then release 'Start' button as you launch the model and the timing sequence begins. Power to the motor is cut when the selected time is reached, and the DT activates, releasing the arm, when the selected DT time is reached. (Your model now descends gracefully after maxing out :)) Provision is made for both energy limit and RDT input to override the selected times.

DTOX NEWS



The next generation **RDT**, from DTox laboratories of course. Range tests so far indicate very strong reception from the transmitter a whole 300 mm away on the table. just need to tidy up the wiring then find a model big enough to accommodate it and the next stage of testing will begin.

And Yes! ... there IS a Dtox beacon on the way!

West Wyalong Roof Repairs

Building Committee Report - Roy Summersby and Gary Goodwin

One of the big assets at West Wyalong is the house. As well as being a focal point for both social activities and for competition activity, it is producing good dollars to our general funds.

After inspecting the roof my recommendations are a bit more than replacing the iron. I propose a total re roof which would include;

- Roof battens - old ones will be split, that is why the nails are popping.
- Roof sheets.
- Insulation under sheets.
- Gutters.
- Down pipes to tanks, etc.
- Fascias & Barges covered with metal sections.
- Bringing up to date any electrical in the roof. This is much easier to do when the roof is off.

Now how to fund this?

Adrian Bryant has suggested a scheme called crowd funding. While I can't see outsiders just throwing money at us, we should explore this idea.

In the short term, my idea is that we set up a 'thermometer board' with an aim of raising say \$25,000. Our Treasurer says we can do this & control it by keeping good records & give regular updates. We could run this for say 12 months and see how it goes. I have asked for an estimate for the roof but I haven't heard back yet, so \$25,000 is a bit of an educated guess.

Now as you know I have been selling some of Big Kev's kits etc on eBay. We are using these funds for the building of about 150 ft of shelves for the library at WW. So far I have raised \$2,807 and there is more to come. Now the shelving won't cost anything like that so I am proposing that the balance, let's say \$1,500 of Big Kev's money and the \$1,000 donated by Brian Alcock's family kicks off the West Wyalong Roof Repair Fund.

I am sure there are quite a few passionate modellers out there that will add to the fund once it gets going and the word is spread in the modelling fraternity.

How will it work?

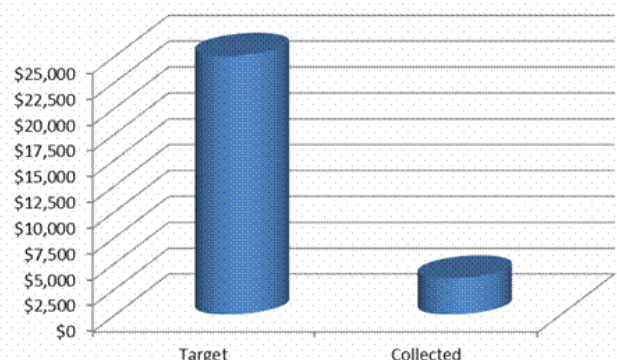
The Roof Restoration Fund (RRF) has been kicked off with the following:

1. Proceeds of the sale of Big Kev's model kits	\$1,500
2. Donation by Brian Alcock's family	\$1,000
3. Donation by Roy Summersby	\$1,000
Total in the RRF at 24 January 2017	\$3,500

If you want to contribute to the RRF simply make a deposit as follows:

Reference	Your surname and RRF e.g. SUMMERSBY RRF
Bank	Commonwealth
BSB #	062 293
A/C #	0090 1281

IMPORTANT - Please remember to get the Bank Teller to put the reference on the Deposit. If not, we won't know who made the deposit nor will we know it was for the Bryant Field West Wyalong RRF.



Each contribution will be called out at the regular meetings of the NSWFFS and be published in the NSWFFS Newsletter and Free Flight Down Under (FFDU). The Total collected by the fund will be displayed in a chart in the regular reports published by the NSWFFS.



"Why are there RC kits for sale in Free Flight Down Under?" I hear you say. A reasonable question, and Roy Summersby has a reasonable answer.



Roy says: I know this is not the right place to sell these items, but you might know someone that just wants one or two of these. Or maybe you can put one away for your old age? These are Radio Control Kits from a deceased estate.

I am happy to take sensible offers as I don't know the value of these items. All kits are new in the box, some complete with engines. Zoom in on the images and take a look.

All proceeds going to the West Wyalong roof fund.

CONTACT: Roy Summersby 02 4341 0072 roydi132@optusnet.com.au

Looking after your Mills



CLEANING A MILLS .75

Put a prop on it (do not attempt to turn it over), get a solid glove or a rag and a heat gun.

Heat the motor by holding onto the prop (a wooden one is better) you will need a fair amount of heat so play the airstream onto the barrel all round and the crankcase.

When the old castor oil starts to smoke or you can hear it "frying" slowly try to turn the prop.

Spray some WD40 or Lanox, Inox into the ports and slowly turn it over. If it wasn't "easy" to roll over, heat it up again.

Once you are able to "flick" it, then you should remove the prop and disassemble the motor. (be careful not to lose the liner locating pin which is in the crankcase in a slot on the front of the flange of the liner.)

If you do loose it or it is missing just cut another one from some fine piano wire.

Put everything in a cleaning solution making sure you clear out all the transfers (a shish kabob stick works well, not a metal tool)

I use CLR (a caustic concrete cleaning product) available from Bunnings.

I pour some into a plastic container and dilute it 50% with water.

Leave the parts in for only a few minutes (I tie the small parts with soft wire hanging over the edge of the container so I don't have to go fishing)

Remove all the bits and scrub thoroughly under hot water using a toothbrush. Redo any stubborn bits.

Dry everything then oil it all then reassemble it (make sure the step in the piston faces the front.)

If you use a resealable container for the CLR mix, you can keep it for the next one you need to clean.

Cheers

Tahn Stowe



REBUILDING A MILLS .75

The Russian sourced Doonside Mills LOOK very good, however they are let down by the wrong internal engineering as indeed the Russian copy of the Elfin 1.49 is.

I hear from others that Ivor was very disappointed with the Russian quality and went as far as he could to rectify the ensuing problems. Remember Ivor was not an Engineer but an English School teacher by background so it would be

unreasonable to expect him to have the skills of those who have been designing and making model aero engines for years.

Addendum:

The Mills to avoid (at all costs?) are the Aurora Mills made in India, the Russian made Mills and the CS (Chinese made) Boddington Mills. Also the second series Doonside Mills which were simply the Russian made ones boxed up. You can tell a genuine Doonside Mills as they all have "Taipan Aust" stamped inside the back plate.

I know some people have had some success with the inferior copy Mills but a large number have had much heartache with con rods hitting the crankcase, con rods breaking, pistons rapidly wearing out, contra pistons backing off or jammed solid, crankshafts breaking, stripped threads in the spinner nuts, sloppy and leaking main shaft bearings, port machining wildly out

and hence timing and many more faults.

All genuine Mills .75's had dichromated magnesium crankcases. Serial numbers are always stamped on top of the lugs. Read by holding the spinner nut in the right hand and read left to right top to bottom. Always a five digit number starting from around 30,000 running up to about 90,000.

Genuine Mills .75's never had anodised aluminium parts which Aurora Mills have and had a pressure diecast magnesium back plate with integrally cast webs. "Mills England" cast into the back plate face. Aurora Mills and Russian Mills back plates are machined natural aluminium and slotted for a rectangular bar style wrench.

Genuine Mills .75's came in two variants. The S version with air bleed cut out and the P version without. The S and P venturi assemblies are quite different

though use a common needle and spring and tank assy. The S venturi body is a single piece extensively machined, the P venturi is made from two pieces through drilled on assy.

Mills .75 Mk I's had either a tear drop style tank or thumbnail style. Early ones were threaded into the aluminium tank top so they could be unscrewed for cleaning. Of all the replicas just Irvine chose to adopt this system.

All later Mk I's and all Mk II's used a pressed aluminium tank top with two fold over tabs to retain the tank bowl. Early tanks tops were thinner than the later ones. The pressed sheet aluminium tank top was one weak point of the Mills .75 design. They were retained by a steel fuel entry nipple on the S type venturi, but on the P type by the screw in needle valve housing and fuel pick up piece.

Some people try and turn the hex. of this piece to tighten the loose tank top and promptly start to close off the venturi bore. To rectify a loose P type tank top I start by marking the underside of the venturi slightly as the needle housing can be screwed in from either side, unscrew it using the correct size tube/box spanner (have seen at least two hex. sizes) then machine a suite of thin aluminium spacers of varying thicknesses and try them for fit between the tank top and underside of the venturi. Allow about 60 degrees of rotation to fully tighten the needle body is about right.

Next hold the venturi body in a bench vice with wooden jaw protectors and tighten just enough to stop it moving. Get a 3 mm (0.118") and a 1/8" drill then using the correct tube/box spanner tighten the needle body to lightly

clamp up the tank top and set it in the right position - fuel filler hole on the port side.

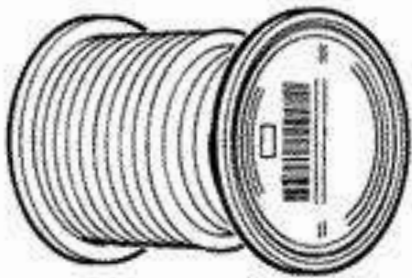
Then fully tighten the needle body and look down the venturi as you do this. When the induction hole appears to be approaching the in line position try the 3 mm drill shank for fit. As you reach the correct position eventually the 1/8" drill shank will just fit through. To retain the tank bowl do not attempt to turn over the two tabs 90 degrees, just 45 degrees will do. Note that there are two flats machined in the flange of the tank bowl where the tabs fit. Use a piece of hard wood to bend these tabs.

Cheers

Jon Fletcher

Some Hints for Soft Soldering Metals

by Stan Hinds



As the descendant of generations of sheet metal workers – I'm the drop-out - perhaps I could offer George Car a few tips on soft soldering (FFDU, Spring 2011).

He doesn't mention what flux he was using. If it was cored solder I'm not surprised at his problem. Electrical cored solder is fine for electrical work but the other cored solder 'for metals' – usually 'no lead' – is rubbish in my opinion. I tried it once and I see I've written on the

pack 'eventually OK with killed spirits'.

Killed spirits is by far the best flux for metals. It is called 'Baker's Fluid' in the hardware shops and is hydrochloric acid 'killed' with zinc, so it is an acidic solution of zinc chloride. Always use eye protection when using it because the hot iron makes it spit.

So the method is to scrape the job thoroughly – nice bright scratches – put on some spirits with a stick, dip the tip of the iron in the spirit to clean it (not always necessary if the iron has been previously tinned with iron), touch the hot iron to the job to heat it, and add solder to the iron and job junction.

If the solder doesn't flow the job is too cold or is dirty. Having a blob of solder on the iron tip (which has

previously been well tinned with solder) frequently helps to get heat to conduct into the job. If dirt is the problem, try one drop of spirits on the hot job – the spirits is spat everywhere. If the solder still won't flow – most unlikely – start all over again. It should flow over the fluxed parts and form a **fillet**. A big, hot well tinned iron helps a lot.

When finished, wash thoroughly in running water. Spirits will corrode anything it's left on, including your fingers etc. I suspect 'Baker's Fluid'



could get banned like lead/tin solder – but it's not as dangerous as battery acid. Some years ago I bought a large stock of good old solder when I heard that only lead-free was going to be allowed.

Apart from strength, the type of solder used with spirits flux doesn't

make much difference. Even junk cored solder could be used, although I would melt this on the hot iron to get solidified drops of solder free of junk core flux, and then use this with spirits.

For bigger jobs use a flame to heat the job – even for smaller jobs

pencil butane torches are good. For hard soldering a flame (propane) torch is essential – but that's another story!

Cheers

Stan Hinds

FUN WITH SOLDER

by Jon Fletcher



Jon Fletcher when shopping prior to writing this article. He discovered the following gems of information:

1. Whilst shopping yesterday I did a bit of research on tins for harvesting tinfoil for tanks. Noticed that as well as "Nescafe 43" 500 gm tins "International Roast" is also supplied in 500 gm ribless sided tins. Half the price too. Both are paper label

wrapped so easy to get to the raw tin plate. The labels adhesive patches left on the can can be removed by applying "Desolvit", a citrus based solvent for removing sticky deposits. Even found that after thinning and applying Scotch 77 to my "Peacemaker" frame to apply the Mylar to, I could clean up the brush and jar with "Desolvit" for further use.

2. Lead less solder formulations are going to be very poor mechanically and unsuitable for soldering tanks unless you use "965" – see below. I have always used 50/50 Plumber's solder available in stick form. Bit stronger than 60/40. No resin cored flux to clean up too. If you ever use resin cored solder the resin flux is easily removed with a 50/50 mixture of acetone and methylated spirits.

3. Found by reading the CIG Industrial Products Reference Manual book that the strongest soft solder they offer is called "965". It has 50 % more tensile strength than the 50/50 solder and melts at a slightly lower temp. Being high in tin content (96.5% tin, 3.5% silver) the bad news is a reel costs over \$100! I have a tank that I use on my test stand that I soldered together with this. The original persistently leaked at the seams despite being soldered with 50/50 stick solder.

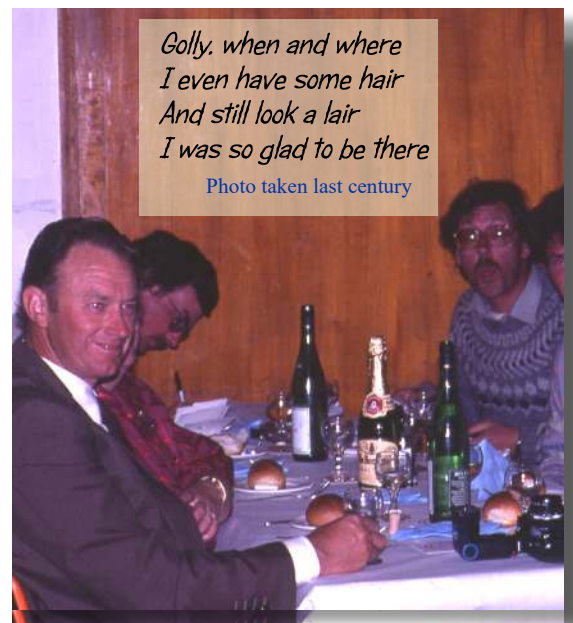
Cheers

Jon Fletcher

ED: Since this article was written, I'm guessing that the tin size of coffee has mysteriously shrunk to something like 360 gm, but at the same price as the old 500 gm tin of course!



Golf and lightning don't mix.
Add Free Flight to that!



*Golly, when and where
I even have some hair
And still look a lair
I was so glad to be there*

Photo taken last century

TAILORING ENGINE CHOKE AREA

– OR –

GETTING THE LITTLE BUGGER TO BEHAVE

By Maris Dislers



Intro

I had one of those “light bulb above the head” moments the other day when seeking to understand and then solve why the D-C Merlin before me was not behaving as it should. At the desired half-speed setting in the scale model that it powers, its response to needle valve adjustment was poor, running speed wandered about and would change markedly with the nose pointed up or down from horizontal. You could say this engine sucks! Except the problem is that it doesn’t.

The theory bit

Going back to “suction” fundamentals, fuel feeds into an engine by atmospheric pressure seeking to fill a partial vacuum inside the engine. This has two components. The piston’s upstroke in a two-stroke type acts a vacuum pump. It’s not really enough for reliable performance. Enter the venturi effect, where air passing a restriction in the carburettor speeds up, giving a pressure drop at that spot. If the fuel supply point is at there, you get better fuel delivery. This restriction can be a spraybar or a narrower part of the carburettor

throat, such as the Cox-style peripheral jet carburettor. Was the Merlin’s carburettor geometry correct, I wondered?

I measured Merlin’s carburettor along with a bunch of other small diesels. There were wild differences in effective choke area across this lot (on a square millimetre area per cc of swept volume basis). For example, the venerable Mills P.75 has exactly the same choke area as its larger 1.3cc sibling. They both can’t be right/optimum! That suggests manufacturers have taken great “production” liberties, or do not really appreciate that choke area is an important factor in good running performance. I was left none the wiser by their example, but I’ll stick my neck out and say more than a few are outright wrong for the range of running speeds that could reasonably be expected. Especially smaller engines, where good power output has been at a premium and diesels, which offer a wide range of useful running speeds.

The question of what constitutes the right choke area for an engine running on “suction feed” is not exactly straightforward. It depends on whether you’re chasing maximum power, utter running consistency in manoeuvres, or somewhere between. You’d think it was treading old ground, but the few published tables of recommended choke area for a given engine size are not that helpful for a Merlin running at half speed. So I turned to the sophisticates who set up F2B aerobatics engines. They approach the problem by considering the desired operating RPM and then arrive at a choke area for the engine

capacity under consideration. That struck me as a sensible way to go.

The “eureka” bit for me was understanding that the velocity of air going through the carburettor has to be right for the application and that no carburettor of fixed choke area can deliver this across the range of possible running speeds, or for all possible user applications. We should be tailoring this to suit our particular needs. I said to myself – paraphrasing a well known phrase – **“it’s all about the velocity, stupid!”** So how could I progress down that path?

It seems the desired velocity is pretty much the same irrespective of engine size or carburettor design, so a working value derived from engines that behave well for the intended purpose should be transposable to a poor runner. Making the necessary adjustments to optimise choke area for the desired RPM should make the dud engine also run as expected.

I worked through quite a few known “good” performers leading me to condense things into a simple “rule of thumb” equation which tells you what running speed should be with a given engine setup;

$$\text{Target operating RPM} = C \times \frac{\text{Effective choke area (in sq. mm.)}}{\text{Engine swept volume (in cc)}}$$

“C” is a constant that varies in value depending on what you want. Here are my recommendations;

See Table 1

Rearranging the equation allows you to calculate the choke area

Desired characteristic**Constant**

Smooth flight path with minimal change of attitude. Minimal loss of power potential. Tolerable change in RPM with nose up or down.

1800

Good all round performer with some loss of power potential. Copes well with mild manoeuvres or pitch up & down.

3600

Very steady and adjustable running speed with significant loss of power potential

5000-6000

Table 1

needed for the desired running speed and characteristics of an engine;

Intended operating RPM × Engine swept volume(in cc) ÷ C = Effective choke area(in sq. mm.)

Using my Merlin as an example, I plan to run it at 6000 RPM and want at least decent behaviour in a FF scale model ;

$$6,000 \times 0.75 \div 1,800 = 2.5 \text{ sq. mm.}$$

The ex-factory choke area of **5.7 sq. mm.** is clearly way too big. Almost as big as the 2.5cc Oliver Tiger's! I made up a tubular venturi insert from K&S aluminium tubing and fitted a NVA with fatter spraybar, reducing choke area to 1.8 sq. mm. just to be sure. The result was a drop in peak RPM on that prop (as expected), but at the desired RPM it had much better needle adjustment, consistent running and a reduced tendency to flood. In summary, the modification was a vindication of the equation and a significant gain for minimal work. It worked a treat in the air.

Putting theory into practice

If you've stayed with me so far, you can now assess whether your chosen engine will behave itself at the intended RPM. **It could be that it's not so flattering behaviour so far hasn't been your fault!** If needed, you can make the necessary changes so that you emerge on the flying field with a happy engine and looking like you really have these little lickers sucked.

Step 1 is to measure the carburettor bore and if it has a

spraybar through the middle, the width (cross section measurement) of the spraybar or needle (if it has one those, like a Mills) where it passes through the carburettor choke. A vernier calliper will do the job.

Then calculate the effective choke area. Easy with a simple, unobstructed circular hole, where you can use the equation **Area = Pi x radius squared**. That's more difficult with a spraybar, as you need to deduct its effective area within the choke from the total.

Approximations using a simple "rectangle" with dimensions of spraybar diameter and carburettor bore diameter (being the part of the spraybar in the carburettor throat) can lead to significant errors when the spraybar takes up a generous portion of the total area. You can end up with an apparently minimal or negative choke area! It's much easier to consult a spreadsheet table such as the one given in the Barton forum at <http://controlline.org.uk/phpBB2/viewtopic.php?t=7919>. Change spraybar diameter and extend the table in the spreadsheet if needed.

Step 2 is to estimate running RPM, or do a trial run and measure it. You can now apply these numbers to the first equation and see whether your engine is about right. If not, it's time to make a change for the better. Almost invariably, choke size is larger than necessary, possibly enough to harm running characteristics.

The simplest way to alter venturi choke area (spraybar type) is to

block half of the choke with a piece of wood - an old remedy. That's a dramatic change and happens to be about right for the D-C Merlin example, but check you're not going too far by calculating the impact first. Or you can fit a fatter spraybar. For example, using a Brodak 049 NVA (3 mm diameter spraybar) in a DC Dart (2.5 mm standard spraybar) reduces effective choke area dramatically from 3.15 sq. mm. to 1.72 sq. mm. That will put it in a position to run much more reliably from 6000 RPM and up with no appreciable loss in power output potential.

Engines with Cox-style peripheral jet carburettors and those with a needle seating at the carburettor boundary (like an ED Pennyslot) are more difficult. You really need to replace the carburettor with a smaller size, sleeve the existing one, insert a "wick" or change to a "lighter" propeller to produce the same thrust at higher RPM.

Conclusion

Applying this method will not cure a worn out crankshaft bearing, leaking backplate gasket, sloppy NVA fits and other sources of air leaks. You need to get those basics right first. Of course engines will operate sort of all right with different "numbers". However, I reckon that a tailored carburettor size will give you more control of engine running characteristics at your chosen RPM range and make flying all the more enjoyable. Give it a go!

Cheers

Maris Dislers

ROY'S GADGET – The Answer

It is a Gear-less Transmission for Model Planes. Notice, no gears, but it has three attachments.

Has anyone out there used one?

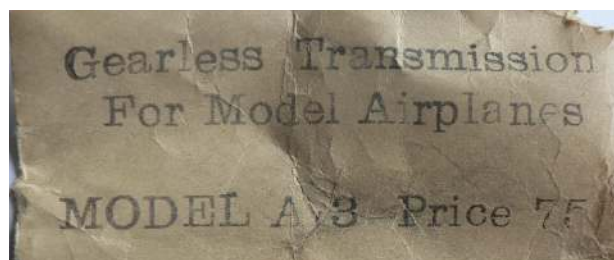
And in what?

And did it work?

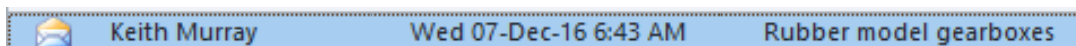
They are very light and of three different sizes.
My guess is twin small nacelle. Price 75 pence!

Roy Summersby

PS A good conversation piece.



And the winner was:



Free flight modellers from last Century

Photos from Kevin Brenton's CD



Dave Lacey and Jeremy Woolley



Vin Morgan, towline in hand



UK glider team comprising Andy Crisp, Steve Philpott and Martin Gregorie. CIAM rep Cenny Breeman on right. The occasion - the World Champs at Goulburn in 1983.

**AN OLD FRIEND PAYS A VISIT.
MIKE PETTIGREW TALKS (RAMBLES ON) ABOUT DAYS GONE BY.**

I returned to competitive free flight in 2016 after an absence of just over 38 years and to my surprise was recently re-introduced to the **VMAA F1C** Perpetual Trophy and became its temporary custodian again.

This trophy, possibly one of the few Australian perpetual trophies not locked away forever in someone's cupboard, came back into my possession this year at the Victorian state champs where the winner was the flyer most prepared to put up with the light, but soaking, rain. I was sporting a moon boot because of a newly reconstructed ankle and I launched my F1C while seated on a bar stool and it was a day best forgotten in many ways. My thanks, however, to Yvonne and John Quigley for their help and retrieves.



I hadn't seen the **VMAA F1C** trophy for 39 years; I won it in 1975 and 1976 and then shared it with Howard Gostelow in 1977. I now remember that 1977 contest: We'd both maxed out for the seven rounds but elected not to fly-off as we were heading to the world champs a month or so later and as the weather was deteriorating we thought it prudent not to risk models by chasing ar

I thought no more about that trophy for many years after that event and was surprised when after a long gap in time, it came to pay me a visit in 2016. I now have the unusual honour of being the only modeller with their name on it multiple times over a 41 year span.

The newly updated and polished trophy was handed to me a week or so ago and for the first time; as I looked at the long list of names engraved into the trophy I realised what a wonderful slice of modelling history it represents.

The thought came to me that where else can you find the history of a major modelling event in one neat and quite attractive package? Clearly; we need more such trophies!

It brings back memories so here's a bit of history

The "**VMAA PERPETUAL TROPHY - CLASS 3 POWER RATIO**" was first presented in 1957 to Don Boughton, a fine modeller that many of us older generation will remember. Don won it three times in the first four years, but his run of success was interrupted by Max Nicoll in 1958. I knew Max; a tall bespectacled gentleman and an excellent modeller. Max used to hang around a bit

Continued on the next page

with Norm Bell, another of our early greats but Max and to some extent Norm, had moved over to what some free fliers call the dark side, because by the time I arrived in Melbourne from Sydney they were often found with RC transmitter in hand. I saw them both from time to time - generally at the state champs or some other event but that is now many years ago. I remember also meeting Don a few times and I am happy to hear he is still out and about.

A great modeller by the name of Ford (Redford) Lloyd, one of my F1C flying companions when I first arrived in Victoria, won the event from 1961 to 1965 inclusive.

By the end of 1965 however; Power Ratio contests were a thing of the past and the VMAA Perpetual Trophy sat unused somewhere from 1965 until 1973 when the VMAA made the decision to transfer it to F1C and in that form was first won by the late Bob Allison. I knew Bob having first met him at the VFFS Boundary Road field; we flew a few contests together, but then lost track of him after I stopped flying F1C.

I should digress to talk about Ford Lloyd who was, of course, Peter Lloyd's dad. Ford was a big influence on me because his article in an Australian model magazine on how to build and fly the FAI "Eclipse" in 1964 was the genesis of my move from radio to free flight in 1965. An Eclipse built by a group of us (then) radio flyers as a consortium, together with a little Jetex model called a Fizzlequick that Basil Healy talked me into building, with an surprising result at the 1965 Canberra Nationals, made me see the light whereby free flight became more important to me than radio. That, however, is another story I might dump on you unsuspecting modellers one day.

Anyhow; Ford was one of the most keen and enthusiastic free fliers I have ever known. He and I spent many hours crossing paddocks all those years ago, models in hand, talking about whatever came to mind at the time. I've lost count of the times he'd stop half way back from a retrieve, look me in the eye and announce "Man, this is living!" He'd have a grin from ear to ear. What a wonderful flying companion and power flyer he was. Sadly, Ford has also moved on to a bigger and better flying field.

I won F1C at the Vic state champs a few times after Bob Allison and then withdrew from modelling because of business pressure and a growing family and so I lost track of this trophy. It vanished from my sight and I forgot it existed.

But, to my surprise, it does still exist.

I can see by reading the names and dates that Howard Gostelow, still a Victorian at that time, went on after me and won it more times than I did and then, apart from a few exceptions, the modellers from NSW came south of the border each year and dominated the event thereafter.

This trophy by its age and the names of the winners listed on it has become a who's who of F1C flying in eastern Australia. There aren't too many of the big names missing.

In that sense: What a wonderful piece of history!

Vin and Leigh Morgan have done an excellent job of researching the event results and bringing the trophy up to date because one naughty person didn't hand it back for a while so it was almost lost from modelling forever.

Continued on the next page

Dave Thomas put his hand up as the naughty person and while I don't know if that's right or not, it doesn't really matter; the trophy is back in circulation again.

Dave Thomas won this trophy enough times to own it anyhow, but that's probably a story he might like to tell you all one day. Dave is one of the small group of Australian F1C flyers that led the evolution of F1C models in Australia from the sort of things I flew way back in the early and mid-70's to machines of the modern era.

I could go on and as you can see; there's so much history in this piece of silverware and there are many more untold stories that can come from it.

I'll end my ramblings with a question: does anybody know who won F1C at the Victorian State Champs in the years listed below?

1985, 1986, 1990, 1991, 1992, 1995, 2000, 2001 and 2004?

There are still a few names missing from the trophy and it would be nice to fill the last of them in! It could be, of course, that the event might not have been flown in some of those years but it would be nice to know.

Wouldn't it be good for the hobby if we could find and preserve our missing history in other such trophies! They will be out there somewhere; we just need to find and preserve them.

Mike Pettigrew
AUS 4941.



and how it could affect the Hobbyist

Over the years many readers may have imported specialised items which are just not stocked locally. Readers, too, may have noticed the recent campaign by some of the larger Australian retailers, amongst others, to levy GST on all imported goods, replacing the existing scheme of exempting importations of a value of less than \$1000. The first indication of the adoption of such a policy that this writer saw was in July last year, buried within a newspaper article discussing GST matters that were concerning freight forwarders.

Apparently the Australian Taxation Office has proposed, effective 1st July 17, a new scheme to levy GST on all imported goods. This will require overseas suppliers of consignments with a value of less than \$1000 to register with the ATO, to levy the tax and remit it to the ATO. Federal MPs and Senators should be able to advise readers of the details of the scheme.

This writer has, from time to time over the past five decades, made small purchases from overseas of items - which were not stocked in Australia - for use in several

recreations and so is familiar with that process. It is not surprising that the arrival of the internet has made such activities far easier, making directly available to us items unavailable in this country.

However, it may just be that the proposed complexity of collecting the GST may encourage many of the smaller suppliers of very specialised items to decline to trade at all with Australian addresses and so avoid the incurred workload of the ATO's "paper war". After all, we do comprise a very small proportion of their trade.

This letter is not so much to extoll the virtues of the present scheme, rather it is to raise awareness of the proposed manner of collecting the GST and the risk of many small interests "falling through the cracks".

I intend to ask my Federal parliamentary members whether they approve of the new scheme and of its ramifications. Perhaps you, the reader, will ask too?

Tim Harlock



**I'M OPENING A GYM
CALLED "RESOLUTIONS".
IT WILL HAVE EXERCISE
EQUIPMENT FOR THE FIRST
TWO WEEKS AND THEN IT
TURN INTO A BAR FOR THE
REST OF THE YEAR.**

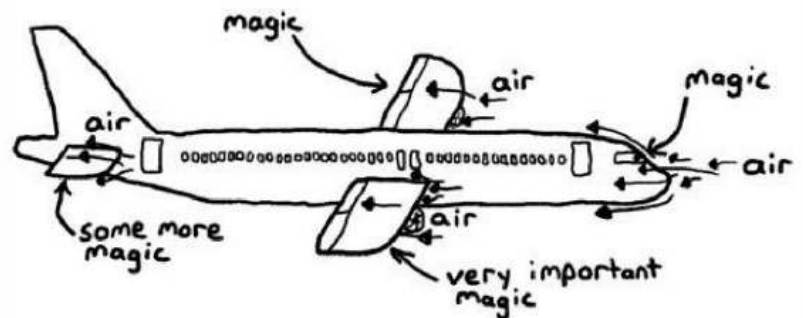
*Tonight's forecast
99% chance
of wine 🍷*

**Honk if you love
JESUS.**

**Text while driving
if you
want to
meet
him.**



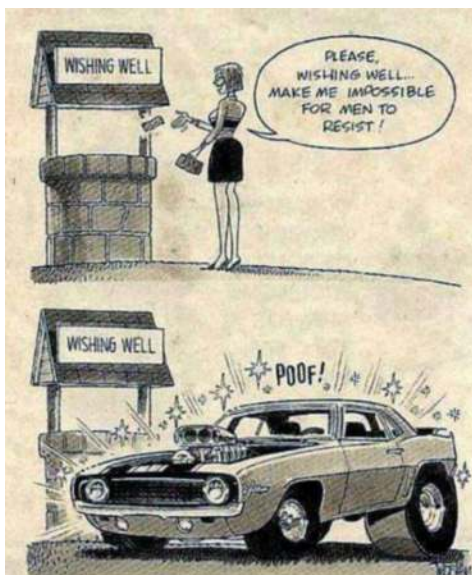
**BEHIND EVERY ANGRY
WOMAN, STANDS A
MAN WHO HAS
ABSOLUTELY
NO IDEA WHAT
HE DID WRONG!**



I'm just a social drinker.
Everytime someone says "I think I'll
have a drink."
I say "Social II!"



**Back in my day, we didn't have
as many warning labels on
things. People weren't so
freaking stupid.**



Autumn in Argentina

by Paul Lagan

written 25 Jun 2011

A TIMELY REMINDER WITH HUNGARY THIS YEAR

Introduction. As most FFONZ Newz readers will already know, there was a very small NZ team at the 2011 FF World Champs. Roger Morrell, presently residing in California, qualified in F1B by virtue of being a NZ citizen and recording some excellent 2010 World Cup (and Omarama) scores and Chris Murphy and I were the only two resident NZers who had qualified and who wanted to go. My decision was helped by having won \$1500 of travel in a School raffle! I flew both F1A and F1B but, as previously stated, I put most of my efforts into F1B. Chris flew F1A and had a wide range of models to choose from, including three electronic timer equipped which he had recently acquired. We were very ably managed by Roger's wife Lindy who as "Queen Manager" impressed me and many others with her consistency and application.

I won't go into a blow-by-blow account of who did what as it is easy nowadays to access result data on line, and both Roger and I sent regular "Letters from Argentina" back by email to all those FFers in NZ (and elsewhere) who might have been interested. Similarly, I won't comment or criticise the organisation and conduct of the event save to record that a FFWC is a huge undertaking and that I personally was very impressed with the dedication and cooperation of those in control. Since several weeks have passed since the Champs, what I will do here is to convey some of my lasting impressions of the event and of the current state of the art in an attempt to give readers who may aspire to fly at future World Champs some clues

toward getting into the "Possibles" group.

Probables and Possibles... It is now apparent to me that there are four groupings of flyers who go to a World Champs and that the top three groupings really have about as much to do with the hardware (models) they use, as do champion golfer's clubs or Tour d'France rider's bikes. The top group ("Probables") are those who have the skills, experience and practice to regularly make it through to the final fly-off rounds and who have as much chance as others in their group of making a winning flight. This group generally are confident of the models they use and tend not to follow whims or trends – they have a lot of experience with what they have and usually see little need to change or experiment. Notwithstanding this "confidence" these flyers are still very perceptive and should there be a dramatic and obvious development they can adapt quickly – evidence the huge swing to LDA models in F1A. It is rare for a NZer to get into that Probables group – mainly because we simply don't fly often enough competition at top level but also because of a mistaken belief that to get up to top level we need to buy or build the "latest" and subsequently are forever chasing an elusive dream. This is compounded by not really knowing just what sort of performance is required from our models to be near the top but more so by not being on field and comparing ourselves with "Probables".

However, Free Flight is a great sport because the Probables don't always win. There is always a chance that the aces will collapse/get bad air/be at the wrong end of the line/etc. and that someone who is having the day of his life will rise to the top – a "Possible". It is this zone that NZers could reasonably hope to achieve. To be there, again, does not require the very latest hardware but it does firstly require ability to string together 7 maxes in normal FF

contest air. And I don't mean calm frosty air – big contests are never flown in those conditions. One needs to get out and fly/practice in early, late and midday summer air and know how to max in wide ranging conditions. One needs to develop the ability to see other models in good air and/or to use sensing devices to pick good air – particularly in "doldrum" periods. Secondly, one needs at least one model that one can confidently fly in a summer evening/morning fly-off. The "rounds" model(s) and the fly-off model(s) can be the same basic shape etc but how they are trimmed and how they are flown need two very different approaches. If one cannot achieve those criteria then one slips down into Category 3 - the "Unlikelys". And there, I'm afraid, is where many NZers linger.

However, it could be worse! There is another small group called the "Nevers" who really don't fly FAI FF much at all and who may fluke qualification on a team and/or who really know that they have no chance but who just go along for the ride. With our "qualification" scores here in NZ it is relatively easy for a "Never" to qualify – after all if a flyer can only achieve 1000 secs in a 7-round contest in a given year then he is certainly way, way below the standard of 95% of flyers at a World Champs. What is unfortunate is that many of the "Nevers" and most of the "Unlikelys" think that if they qualify then all they need to do is buy the latest offering from a Ukrainian "factory" and they will bridge the performance gap. Dream on!

Back to Argentina... Enough soap boxing! Some positive thoughts from the WC that may help more NZers get into the "zone". There were many windy periods at Embalse in practice days and at the World Cup warm-up event. I was very impressed at how well many flyers (and their models) handled the wind – particularly in glider. The lesson here is that as we don't get to fly many contests in the

wind, we need to practice and trim for such conditions. With short DTs (or RDT) it is possible to fly in the wind on quite small fields. We were often flying in conditions that in NZ would have caused most to pack up. Fortunately for us it was only windy for a few rounds of F1A and F1B in the World Champs proper as we were retrieving our own models on foot.

Thermal detection systems were mostly secondary to careful observation of what everyone else was doing and in all events there were some really nasty periods in the afternoon when models launched at the same time went into widely different air. However, in rubber (and power) one does need to have some form of temperature/drift measuring device to look at if only to relieve the boredom when waiting for that thermal!

It is now apparent that, in all three classes, the climb bench mark is around 100 metres. There may only be a few who could get that sort of altitude in glider (though there were several who could get over 90 metres) but in power and rubber it is commonplace amongst the "Probables" (and some "Possibles").

There are several ways of measuring climb altitude – the best being one of the tiny on-board altimeters. Some of these can be easily interchanged between models so if you want to know what altitude you are reaching borrow an altimeter from a friend.

In Wakefield, most models flown nowadays are up around 1.7 m span – wind and calm. In glider, very few are extreme span, even in that calm. The high AR gliders are harder to set up for a really hard launch and it seems that with LDA sections the middle-size gliders of old are about the limit in span now for a really good fast launch. In power, the jury is still out on the folder vs. flapper debate though the folders do get higher. Many are using fixed wing models in power to good effect.

Fine trim is very important at the top. Most of the aces are tweaking their models all the time and in still conditions (we didn't get a lot of this) a very wide glide circle is preferred – something about 90 secs a circle is not unusual in rubber and power and 60 secs in glider. Again, the aces know from experience how to dial in (literally) trim changes to suit

conditions. Just how many turns of that screw or just how many grams of weight to shift to convert a model from optimum still to optimum rough air trim have been learned and recorded or memorised.

Finally, it is apparent that those who do best at the ultimate fly-offs are those who still have some "gas in the tank" after a long hard day in the field. With a big, supportive team and motorised retrieval it is possible for a normal person to remain reasonably fit and alert from dawn to dusk but in most NZ teams at a World Champs these days it's really hard to keep "up" for a whole day. Not only does one need to know how to pace oneself. One also must be physically fit and rested. The fit bit can only be achieved by training well before the event (running, walking, biking) and the rested bit requires that plenty of time is allowed between arrival in the overseas venue and the World Champs themselves. It is also very important to have good domestic arrangements at the event (good sleeping, eating and opportunity for time out) or else extreme tiredness can creep up on one.

Paul Lagan

Page 32

Australian M O D E L Hobbies

Nov.-Dec., 1950



Courtesy of "Air Log"

Australian 1951 Model Plane Championships

★ 1951 NATIONALS, A COMMONWEALTH JUBILEE EVENT

★ JUBILEE CHAMPION OF CHAMPIONS TROPHY
(Provided by Commonwealth Government)

★ Full accommodation available for all male contestants at low cost

Major Free Flight Dates for 2017

Roy Summersby has drafted up a list of all major events for 2017. Not all is set in concrete so, if you have any corrections, additions or feedback, contact Roy on roydi132@optusnet.com.au or by phone on 02 4341 0072 or mobile 0413 588 720

News Years Bash	29 Dec to 1 Jan 2017.....	West Wyalong
Maxmen.....	11 to 19 February.....	Lost Hills CA
Vic State Champs.....	24 - 26 March.....	Derby, near Marong
Q'ld State Champs, F1A and F1B.....	8 and 9 April.....	Dalby
SCC.....	1 and 2 May.....	West Wyalong
DAM, AFFS and Tui Cup.....	4 to 12 May.....	Narrandera
Q'ld State Champs F1C, OP and F1J.....	20 and 21 May.....	Dalby
NSW State champs F1A, B and C.....	3 and 4 June.....	West Wyalong
Richmond Scale Rally.....	1 and 2 July.....	Richmond
World Championships.....	6 to 13 August.....	Hungary
Cowra Oily Hand.....	26 & 27 August.....	Cowra
Vic State Champs F1 A, B and C.....	West Wyalong
Wings Over West Wyalong Weekend.....	21 and 22 October.....	West Wyalong
New Year Bash.....	29 Dec to 1 Jan 2018.....	West Wyalong

Richmond Scale Rally

1 & 2 July 2017



CONTACTS: Roy Summersby 02 4341 0072 [Mail: roydi132@optusnet.com.au](mailto:roydi132@optusnet.com.au)
 Tahn Stowe 02 9664 6198 [Mail: stowes@ozemail.com.au](mailto:stowes@ozemail.com.au)



BRISBANE FREE FLIGHT SOCIETY

2017 Flying Calendar

Month		Date	Start	Event	Location
January	✂	Sat 28 th	12pm - 4pm	Club meeting plus "show and tell"	John's place
March	IND	Sat 4 th	3pm - 6pm	Delta Dart (club sponsored) State Champs	BSHS
	CP	Sun 12 th	7am - 3pm	2 min models (3 flights) + A1 (3 flights) + CLG (6 flights)	Coominya
		Sun 26 th	7am - 2pm	Dale's Fun Day (general flying and limited RC)	Coominya
April	IND	Sat 1 st	3pm - 6pm	HLG/Catapult State Champs	BSHS
	CP	Sun 2 nd	7am - 3pm	100gm coupe, P20 and E36 (3 flights each)	Coominya
	🏆	Sat 8 th	7am - 12pm	F1A State Champs (5 rounds - first Rd 4 min)	Dalby
	🏆	Sun 9 th	7am - 12pm	F1B State Champs (5 rounds - first Rd 4 min)	Dalby
		Sat 22 nd		F1A Reserve in case 8th blown out	Dalby
		Sun 23 rd		F1B Reserve in case 9th blown out	Dalby
	🏆	Sun 30 th	7am - 12pm	F1G State Champs (5 flights)	Coominya
May	IND	Sat 6 th	3pm - 6pm	F1L (EZB) State Champs	BSHS
	CP	Sun 7 th	7am - 12pm	All in % - multiple entries (3 flights ea)	Coominya
		Mon 1 st - Tue 2 nd		Southern Cross Cup	West Wyalong
		Thu 4 th - Fri 12 th		Dave Anderson Memorial, AFFS Champs and Tui Cup	Narrandera
	🏆	Sat 20 th	7am - 12pm	F1C State Champs (2014 rules: 5 flights and 5 secs)	Dalby
	🏆		1pm - 4pm	Open Power State Champs (3 flights)	Dalby
	🏆	Sun 21 st	7am - 12pm	F1J State Champs (5 flights)	Dalby
June	IND	Sat 3 rd	3pm - 6pm	Hanger Rat State Champs	BSHS
	🏆	Sun 11 th	8am - 3pm	F1H State Champs (5 flights) + A1 Club event (3 flights)	Coominya
	✂	Sat 24 th	12pm - 4pm	AGM plus "show and tell"	John's place
	CP	Sun 25 th	8am - 2pm	Club Fun Day KKK, Frog, and ½ Hour Walking Scramble plus Vic Smeed (Prizes, no points for V Smeed)	Coominya
July	IND	Sat 8 th	3pm - 6pm	P18 State Champs (club sponsored)	BSHS
	🏆	Sun 9 th	8am - 2pm	Open Rubber & P30 State Champs (3 flights each)	Coominya
		Sun 23 rd	8am - 2pm	Dale's Fun Day (general flying and limited RC)	Coominya
August	IND	Sat 5 th	3pm - 6pm	Peanut Scale State Champs	BSHS
	CP	Sun 13 th	8am - 2pm	BFFS Mini Power and QDP (3 flights each)	Coominya
		Sun 27 th	8am - 2pm	Club Fun Day (Prizes, no points) Vintage, Sports models and limited RC	Coominya
September	🏆	Sun 10 th	7am - 2pm	Scale, HLG and CLG State Champs	Coominya
	CP	Sun 24 th	7am - 3pm	100gm coupe, P20 and E36 (3 flights each)	Coominya
October		Sun 8 th	7am - 3 pm	Col's Vintage Rally (accumulation of points for each class)	Coominya
		Sun 22 nd	7am - 3 pm	LSq/100 (3 flights), No Frills Wakefield (5 flights)	Coominya
November		Sun 19 th	12pm - 4pm	BFFS Xmas Party	Bremer Waters

🏆 Outdoor State Champs IND Indoor State Champs CP Club points apply ✂ Club meetings

CONTACTS:

📞 John Lewis 07 3848 4280

📞 Malcolm Campbell 07 3278 7164

📞 Albert Fathers 0755 343490

NSWFFS Contest and Fixture Calendar 2017

Date	Event	Venue	Time	CD
Dec 30 Jan 2	New Years Eve BBQ & Fun Fly No Comps Just Fun	W Wyalong	Flying anytime. If you want to go, book in	
Jan 15	New Year Recovery Day	Richmond	7.00am – 1.00pm	
Jan 20	General Meeting		7:30pm	
Jan 29	Scramble, Scale Rally, HLG/CG	Richmond	7.00am – 1.00pm	Terry Bond
Feb 12	Combined % + Scale Fun Fly	Richmond	7:00am – 1:00pm	Matt Hannaford
Feb 25-26	Hunter Valley Champs	Muswellbrook		
Mar 12	State Champs P30 + Comb Vintage	Richmond	7.00 – 1.00pm	Gary Pope
Mar 17	General Meeting		7.30pm	
Mar 26	Gary Goodwin's Hinton Day	Hinton	7.00am-- 1.00pm	0414 292 050
March 24-26	Vic State Champs F1A, B, C, G,H and J O/Rubber, O/power, P30 and HLG	Derby, near Marong	For program, see FFDU or phone Vin Morgan on 03 9387 2531	
Apr 9	Big Kev's Abomination Day	Richmond	7.00am – 1.00pm	Peter Jackson
May 1-2	Southern Cross Cup F1A, B, C Open Power & Open Rubber	W Wyalong	For program, see FFDU CD: Dave Thomas	
May 4-10	AFFS Champs	Narrandera	See FFDU	
May 19	General Meeting		7.30 pm	
May 21	State Champs Scramble + Combined %, Control Line flying, BBQ Lunch	Richmond BYO Food	7.00am- 1.00pm	Terry Bond
June 3-5	NSW State Champs F1A, B, C, O/Power and O/Rubber	W Wyalong	8.00am-1.00pm	Dave Thomas
June 18	Corby Starlet and Scale Practice	Richmond	7.00am-1.00pm	Jim Christie
July 1-2	Scale Rally Weekend. SAT: Scale comp SUN: ½ Hour scramble, Fun Fly, C/L flying & BBQ Lunch	Richmond BYO Food	7.00am till dark Trans Tasman CD: Tahn Stowe	
July 16	State Champs F1G, H and J (Combined)	Richmond	7.00am-1.00pm	Matt Hannaford
July 21	General Meeting		7.30 pm	
Aug 6	Combined % (multiple entries)	Richmond	7.00am- 1.00pm	Bruce Hao
Aug 20	Scale Rally, P30 and Combined Vintage	Richmond	7:00am – 1:00pm	Tahn Stowe
Aug 26-27	Cowra Oily Hand Weekend	Cowra		
Sep 10	½ Hour Scramble + Fun Fly BBQ Lunch	Richmond BYO Food	7:00am – 1:00pm	John Corby
Sep 15	Annual General Meeting		7:30 pm	
Sep 24	Combined % (5 flights)	Richmond	7.00am - 1.00pm	Matt Hannaford
Oct 8	Combined % (multiple entries)	Hinton	7:00am – 1:00pm	Gary Goodwin
Oct 21-22	Wings Over West Wyalong All Disciplines FUN FLY	W Wyalong	7.00am till dark. Plenty of room for all	
Nov 12	Brian Alcock Biplane Day ½ Hour Scramble and Scale rally	Richmond	7:00am – 1:00pm	Gary Pope
Nov 17	General meeting		7.30	
Dec 1	Friday Xmas Party	Richmond	7.00am – 1.00pm	
Dec 10	½ Hour Scramble and Combined Vintage with SAMS plus Fun Fly.	Richmond BBQ Xmas Lunch	7:00am – 1:00pm BYO FOOD CVD: Terry Bond	

- Notes**
1. All scrambles start as close to 8.00 am as possible
 2. Sport FF, CL, & RC Flying welcome on Adrian Bryant Field at West Wyalong. Plenty of room.
 3. BYO FOOD, DRINK & CHAIR to ALL BBQs at RICHMOND

West Australian 2017 Free Flight Contest Calendar

DATE	CONTEST CLASS	LOCATION	TIME	CONTACT
5 March	Combined Open	Meckering	9.00 am	Chris Behr – 9448 9922
19 March	Combined Open	Meckering	9.00 am	Paul Rossiter – 9316 0250
2 April	HLG/CLG State Championships	TBA	TBA	Greg McLure – 9457 8680
As above	Power Scramble State Championships	As above	TBA	As Above
23 April	Combined Open	Meckering	9.00 am	Chris Behr – 9448 9922
14 May	P30 State Champs / Roy Farren Cup	Meckering	9.00 am	Paul Rossiter – 9316 0250
as above	Combined Open / Free Flight Cup	as above	as above	As Above
4 June	SLOP State Championships	Meckering	9.00 am	Phil Letchford – 9295 2161
as above	Mike Beilby Cup	as above	9.00 am	As Above
as above	Combined Open / Free Flight Cup	as above	as above	As Above
18 June	Rubber State Championships	Meckering	9.00 am	Chris Behr – 9448 9922
as above	Wamac Cup	as above	as above	As Above
as above	Open Glider	as above	as above	As Above
9 July	Open Power State Championships	Meckering	9.00 am	Rod McDonald -9316 2762
as above	Combined Open / Free Flight Cup	as above	as above	As Above
30 July	Nostalgia	Meckering	9.00 am	Paul Rossiter – 9316 0250
as above	Combined Open / Free Flight Cup	as above	as above	As Above
19 – 20 August	F1A, F1B and F1C State Championship	Meckering	9.00 am	Paul Rossiter – 9316 0250
as above	FIA Team trials F1A, F1B and F1C (TT)	as above	as above	As Above
as above	Combined Open / Free Flight Cup	as above	as above	As Above
23 – 25 September	Free Flight Electric F1Q/E36	Meckering	9:00am	Paul Rossiter – 9316 0250
as above	Old Timer Electric and Limited Height Gliders	as above	as above	Chris Behr – 9448 9922

- 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 3 flights except FIA events which are flown in rounds.