

# FREE FLIGHT DOWN UNDER

NEWSLETTER OF THE AUSTRALIAN FREE FLIGHT SOCIETY INC

VOLUME 50 NUMBER 1  
AUTUMN 2018

**FAB FEB  
2018**

**INSPIRATIONAL  
FIC STORY FROM  
16 YO CHINESE  
FLYER**

**E-36 CONSTRUCTION  
PROJECTS**





## FRONT COVER:

Phil Mitchell tames the beast at Lost Hills during the North American Cup fly-off. Phil's M & K carbon flapper performed well in all 3 world cup events.

*Photo by Brian Furutani USA*

# Free Flight Down Under March 2018

Volume 50, 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](mailto: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.

© 1999 Australian Free Flight Society. Material may be reprinted without permission provided acknowledgement is made of Free Flight Down Under as the source and no other specific copyrights are indicated in the material.

## Contents

President's Report.....	3
From the Editor.....	3
More History of FFDU.....	4
Lost Hills California Fab Feb report.....	5
Zizhe Yin's Story.....	17
E-36s in the USA.....	20
70 <sup>th</sup> Nationals Notes.....	22
The Martian Maggot.....	24
Kit Scale.....	25
New E-36s on the block.....	26
Jokes Page.....	27
AFFS program for Narrandera.....	28
Calendars for 2018.....	30



## 2018 Program



Early articles for the June edition of Free Flight Down Under would be much appreciated.

Editor

**PRESIDENT'S REPORT**

I think this will be my last column as President as I plan to stand down at our AGM next month. The big event in recent times was the World Championships held in Hungary. The Australian Team was made up largely of AFFS members. While we did not produce another World Champion, a significant number made the fly-offs and are to be congratulated for their efforts.

Of course the completion of the World Championships ushers in the commencement of the selection cycle for the team to represent Australia at the next World Championships to be held during 2019 in the USA. The selection cycle commenced on 1 Dec 2017 and finishes on 30 Nov 2018. There have been no changes to either the events

that qualify as team selection trials or how the final order of merit is arrived at. If anyone does have queries, please contact me or our secretary Phil Mitchell.

The problems for AFFS remain a shrinkage of membership numbers who wish to fly FAI events and a general reduction in members overall. This is despite some publicity in various newsletters, MAAA publications and personal encouragement. Free Flight seems not to have the pull that Radio Control and Drones have on the younger flyers. In Queensland there are over 150 juniors affiliated with MAAQ but only one flies free flight. We have fostered the beginner events such as P30 and, more recently E36, in the club of which I am a member but it is almost impossible to get young people interested for any length of time.

One of our members undertook to develop a Facebook page for AFFS and I hope we will see how he has got on at the AGM. Our Vice President, Matt Hannaford is a firm believer in the value of having a Facebook page for AFFS.

The agenda for the CIAM Plenary Meeting on which there are some Free Flight Items is available on the FAI/CIAM website. I have mentioned some of the proposals in a previous column and invited comment. To make ourselves heard at CIAM, I have to inform Kevin Dodd of our voting wishes before early April so he can represent our views at the CIAM Plenary Meeting.

I would like to thank our Secretary, Phil Mitchell (and Noels) for the tireless work he puts in for AFFS, our Vice President, Matt Hannaford, who is a bundle of energy with many ideas, Albert Fathers, our Treasurer who keeps us solvent, our Newsletter Editor, Malcolm Campbell who has developed a worldwide reputation as photographer and newsletter editor and last but not least Vin Morgan who maintains the scores for the selection process and distributes FFDU around the world.

I hope to see you all at Narrandera where we are expecting flyers from China, America, New Zealand and possibly some other countries to attend. And I hope to meet up at the Nationals at West Wyalong.

*Happy flying, Graham Maynard  
President, AFFS*

## **AFFS Entries close 1<sup>st</sup> April. See program on page 28**

**FROM THE EDITOR**

It's been a busy time for me over the Christmas "break". Actually, retirees don't have breaks, unless physical, because we are always on holidays.

With family commitments attended to, Kathy and I turned our attention to preparation for Lost Hills and, once back from there, it was out to the building board to put together a couple of E-36s.

My check list now has me busy getting planes together for Narrandera and West Wyalong and, in the midst of such frenzied activity, it was time to put

together "Free Flight Down Under" and "The BFFS Digest."

And that brings me to a point - notice the content of this edition and how few were the contributors. We need more contributors, regular contributors with assigned tasks that I can rely upon. It can't be that hard? Maybe you can send competition reports from your State, technical articles, opinions, or if you're a prolific builder your latest creations?

Think about it. We need substance between the covers. But I don't want to keep begging for articles.

*Cheers, Malcolm Campbell*



## Dave Thomas cast more light on our AFFS History

FFdu was originally the newsletter of the NSW Free Flight Society and was started by Barry Lee and Allan Edwards, although I am not sure of the year. Allan and Merv Buckmaster also started the AFFS, drawing up its original constitution and being the first convenors. Allan and Barry did many years on FFdu. I was Contest Director of the 1983 Free Flight World Championships in Goulbourn, NSW and at the end of that I was asked to be Convenor (President) of the AFFS by Merv, who wanted out, his health not being good. Then AFFS was small and had only run one or two championships. I agreed and 1984 was the start of the new championships run by Jan and I at Canowindra. Allan and Barry asked in 1983 if I would also publish FFdu. Again I agreed, and thus I decided that it would become the journal of the AFFS, costing \$5 a year which also was the membership fee for AFFS. Allan and Barry gave me the old Gestetner roneo machine, some stencils and off Jan and I went – Jan being a much better typist than me. We built the subscription numbers up from less than 100 to more than 250 in the following years. Aus

post had strict rules about postage and it took many hours of collation, stapling, wrapping, postal sorting and label writing by hand. After a few years we acquired a second hand photocopier when the school I was in upgraded their copier but it still took a long time. Only in the early 90's did we use the school's now big Xerox which made life a lot easier; 250 copies, collated and stapled in less than an hour. I continued as Convenor, there was no other officer position in the AFFS, until 94/95 and then Jon Fletcher took over as Convenor for a couple of years, and I think Adrian or Vin took over FFdu (not sure which did it first after Jan and I).

So yes, Barry Lee was the founder of FFdu, and did it for many years (I would guess at least 10) before I took over – they got it correct in his Hall of Fame nomination. Since that time he has done the NSWFFS bulletin, The Free Flyter, and been registrar for NSWFFS.



Dave Thomas, May 2017

**FREE FLIGHT DOWN UNDER - NOW IN ITS 49<sup>th</sup> YEAR**



**JIM FULLARTON**

**9-11-1917 to 27-12-2017**

After reaching 100 in early November, it was saddening to learn that Jim Fullarton passed away peacefully on the night of 27 December 2017.

His son Andrew was with him. Jim had received several aeromodelling visitors that day so his departure came as a shock. Word came from Peter Lloyd and Adrian Bryant.

Jim Fullarton was an amazing man who contributed so much to aeromodelling. I

think he has left a record in the sport that may never be broken, actively flying into his 100<sup>th</sup> year.

And he set his DT so fine, passing just weeks after his 100<sup>th</sup> birthday celebrations.

RIP Jim Fullarton, a true Aussie aeromodelling legend.



## WE TRAVELLED TO LOST HILLS IN FEBRUARY



© Brian Furutani

*Report by Malcolm Campbell*

Twelve Aussies attended Fab Feb 2018 - Albert Fathers, Craig Hemsworth, Vin Morgan, Roy Summersby, Tahn Stowe, Gary Pope, Paul and Kathy Rossiter, Phil and Noels Mitchell and Kathy and I made the trip over. Tahn, Gary, Kathy and I stayed in motels; the others joined the RV enclave on the field. Five Kiwis also flew over – Rob Wallace, Paul Squires and Connie, and Antony and Laraine Koerbin. The Kiwis also stayed in motels. I couldn't be everywhere on the field, so my report only covers what I saw and did in a very busy week. For us it was to be one of the most social gatherings we've ever been to, and the flying conditions were excellent although a little tricky most days.

Roger Morrell clearly summed up the flying conditions in his SEN email: *"The weather was probably different from any other Fab Feb year in that each event was different, all with unusual conditions. There were longer periods of dead calm in the mornings, some periods what looked like perfect weather without much wind but could be extremely turbulent, some great traditional thermal conditions and*

*finally some periods of deadly doldrums that one normally associates with October rather than February. These conditions provided for challenging flying conditions, often with large fly-offs but we enjoyed great contests with fair sporting results."*

**Tue Feb 6:** We arrived in USA at 6 am, picked up our hire car and drove through LA's heavy peak hour traffic to Ventura Beach where we caught up on some sleep and sampled some touristy things.

**Wed Feb 7:** A good sleep and a late breakfast put us in the zone for driving so we departed for Lost Hills on Hwys 126 and 5, via Wasco where we purchased supplies. There was a room mix up at Days Inn so we deposited our gear in the assigned room and drove off to the field by 4.30 pm. We had drinks and nibbles with the Mitchells, Van Nests and Mike McKeever and drove off the field on dusk. With batteries on charge it was off to Denny's for a 7 pm dinner. We caught up with the usual gaggle of Brits and had dinner with Antony and Laraine Koerbin.

**Thu Feb 8:** We were off to the field by 8 am with sunny conditions and an indication of warm to hot weather. Two flights of my CLG and I cleave the tail off, so I'm not quite in the groove. I put up 3 flights of my "long" F1A on the calm weather setting and, while I also flew the #2 model 3 times, an intermittent servo connection had me worried. With light winds, there was no point testing the windy weather models so we returned to the motel for lunch. We also sorted out our room. The one allocated to us was hot and noisy, and it was not the room I had reserved. Ian Kaynes had exactly the same problem and he was moved to a better room. I too asked to be relocated and we ended up in a larger very good room that suited us fine although it would cost a little more. It was just above the breakfast room and not far from the Koerbins. We took it easy that afternoon and then met up with the Koerbins and Henning Nyhegn in Antony's room, for evening drinks, then dinner with the Koerbins at Denny's.

**Fri Feb 9:** This would be the last day of practise so we were at the field by 7.30 am and into the air by 8 am.



RVs come in all sizes



RV Central, with flying sites above and to the right



Kathy was busy, launching and timing for me, Antony Koerbin and Rob Wallace

I put in 3 flights with my R1 model in zero wind thinking this won't be fun tomorrow if it continues. We caught up with Kathy and Paul Rossiter, Paul Squires and Connie, and the rest of the Aussies, after morning tea at the RV camp. Out again to fly my #2 model and now concerned I have a stab servo problem, so I put it away as I don't want to lose it. It did turn out to be a transport issue; a plug had vibrated loose on the trip over. My F1H towed up well, twice, and then

pulled hard left in my next 3 attempts. Why? The boom had previously been sleeved and the glue appeared to have let go. This was caused by incorrect packing for the way over. The handle of my yagi had pushed down hard on the fuse carrier, and the damage to the wooden carrier had impacted on the sleeved part of the F1H fuse – scratch one model from both comps. We went home for lunch then went to Registration before returning to the field to fly my

windy weather models. All the Aussies were still out on the field practising. It was then drinks to dark, home to Days Inn, batteries on charge and dinner at Denny's with 5 Kiwis and Canadians Tony Mathews and Cameron Ackerley. It was a good night.

**Sat Feb 10:** This was the Isaacson Winter Classic weekend, and there is always something for everyone, with many competitions running concurrently. The New Zealand



Didier Chevenard FRA launches his F1E model



Randy Secor's beautifully built Crescendo GAS model



Mexican food on site was delicious and affordable



Michael Seifert (F1B) defies gravity in F1B launch



World Cups for F1A, B, C, P and Q were flown as were HLG, E36, Vintage Gas, NOS Gas, AMA Gas, Gollywocks, and CLG.

It was going to be windier, as there was no dew on the grass. Flying F1A, R1 had 2 – 3 m/sec wind and R2 was windier. By R3 mistakes were being made. I don't think I've ever seen so much major damage in F1A, with bunting on the line, tangles and crashes on or close to the flight line as thermal gusts carried unwary flyers quickly downwind.

Albert Fathers and Tahn Stowe fell victim to flight line turbulence, each retiring one model. By the end of R4, wind speed and carnage had increased, so the CD put a hold of one hour on proceedings. This was lengthened to a 90 minutes, at the end of which R5 was reduced to 2 minutes to avoid landing in the orchard. This spoiled what could have been a great ending but the organisers have to respect the orchard owners' wishes. There were

now many going up and off but those who circled enthralled the onlookers. Lauri Malila used his C/L F2D skills to keenly deploy his model at the top of several high-speed consecutive loops. The normally placid Roland Koglot also needed his long legs to keep up with his model and his fully loaded launch was high and spectacular, if not over-vertical.

Unlike the wild antics in F1A, F1Cs stayed relatively harm-free although the times from high launches suggested a lot of unkind air was around.

**Sun Feb 11:** Roy Summersby started the week strongly, maxing out. There was some breeze for the F1C 10 minute fly-off and Roy uncharacteristically set his timer for 5 minutes! All that great work in the rounds was lost.

F1As flew off near the tree orchard and a few then flew into the orchard, which is now quite mature. Phil Mitchell placed 4<sup>th</sup> in F1A, one of 4

flyers who crested 400 secs, with just seconds between them. Tahn Stowe was the best of the remaining Aussies in 27<sup>th</sup> place.

Alexander Andriukov almost characteristically broke a motor and returned to launch in the last 15 secs to place second, a mere 5 seconds behind Canadian Tony Mathews. Vin Morgan had an excellent FO, to finish 4<sup>th</sup> behind 3 world class flyers.

Paul Rossiter was also in the F1B FO but then misfortune struck. To improve visibility for his timer he added his 3 gm flasher, just behind the CG and just far enough back to induce a stall to ruin a potentially very good flight. Craig was troubled by a prop hub assembly and was unlucky right from the start, with a low score in the 4 min R1.

We then rushed off to the F1H flight line. We both had CLG to fly today and Kathy also had F1H, with her simple balsa model. When last flown it was in trim but there was little



**Enes Pecenkovic launches his wife Jasna's Super Talon**



**Kathy Burford, Albert Fathers & Vin Morgan chatting**



**Roy Summersby balances his F1C**



**Paul Squires and Clint Brooks, P30 winners**

breeze and she hated that. We used a nylon line as a VIT for R1 and it didn't come away from the model on launch, causing it to circle to the ground for an attempt, with Kathy in the middle of the many circles it scribed to land at her feet. We changed lines and I spent the next 2 rounds untangling a really screwed up towline. After a relatively frustrating 5 rounds with many wind changes and only one max we had just one hour to put in 6 CLG flights. There was not enough time for good flights and the air had cooled.

Our models were out of trim and it took 6 flights before I had mine going reasonably well, with an 84 sec flight. This was after my best model was side-lined with wing damage after hitting a mylar pole.

The Americans developed a very lively competition for TLG, calling it 5 x 5. Five rounds of just 5 minutes each, in which everyone must launch or score a zero. The next round would start when everyone had come back

from their retrieves. This looked like a lot of fun, with Jim Parker, Mike McKeever, Ken Bauer, Stan Buddenbohm, Tim Batiuk and Don De Loach competing in the square. There were more who I don't recall but it did rely on some co-operation! We should try it here one day?

More non-FAI classes were contested but sadly Tahn Stowe's Scramble, for which he had ferried over 4 Carpets, did not take place, as there was simply too much happening. Tahn managed to sell two so that made him happy. This event needs a firm start time to justify Tahn's efforts.

That night we went to a Chinese restaurant at Wasco with the Kiwis to celebrate Paul Squires' birthday. Connie had organised a cake. Surprisingly, there was a full table of French flyers, another of the Israelis, the Canadians and also a few Americans. In fact the flyers were the dominant patrons, and we

overloaded their service capability! It was a fun night, once we got seated.

**Mon Feb 12:** Monday was cold and windy and very few were out practising. We went down to watch the \$1,000 E36 challenge. There were about 10 in it; maybe they could have had more on a nicer day? What I did notice were fast and high climbs with all models sporting Hyperion or Cobra motors, with a variety of propellers. Derick McGuckin showed me a racing drone motor he is planning to test. It looked mean with a 4mm threaded prop shaft. I also saw others with 500 mAh batteries and heard of ESCs of 15 A or more!

Ralph Ray was outstanding with his Apache, and he not only dominated this event but also the other 2 events that he used the same model for. His achievement became more outstanding when it was revealed he was only using 5 of the 10 sec motor run allowance! The Apache had minimal roll on the way up and the pylon models varied their amount of



**The Ladies Tea Party was a resounding success**



**Paul Rossiter casts a spell on his F1B. It worked!**



**Jackie Wang CHN in her first F1B comp**



**Phil Mitchell gives Michael Kosonozhkin a lift back**



roll, but they all transitioned at good height. Some had programmed in a Soft Start so their motors built up power slowly prior to launch. I think I'd like that at the other end.

Kathy and I then went off to trim our little 12" CLGs with Paul Squires and Lee Hines, for Lee's special event, although this never eventuated.

We must be getting old or possibly cold, as this was the first year we didn't drive up Holloway's Hill to watch the F1Es. This year they had 17 entrants, an outstanding record-breaking number, and Geralyn Jones (Charlie's wife) came 5<sup>th</sup>, after being in 3<sup>rd</sup> place before the last round.

We went back to the motel for a late lunch then back to the field for a third time, for 4 – 6 pm drinks. There was a very good roll up including over a dozen Chinese who had a strong competition presence this year. We were home again and at the motel by 7 pm for another "Dinner at Denny's" with the Koerbins.

**Tue Feb 13:** At last, a slow start for us after a lot of early starts – today was the Ladies Tea Party (LTP), an event that has gone from strength to strength each year. While cool and windy, it was at least sunny. I had breakfast with Lee Hines. Kathy and I left for the field at 10.30 am to help set up the LTP and then I took refuge in Phil's van for coffee, as the female chatter intensified. I picked up some goodies for our club members from Walt Ghio (Nelson plugs and fuel tube) and watched some flying, taking a breather myself. I saw/heard Jes Nyhegn explode a wing joiner out of his F1A on launch. Pretty noisy but only the wing was damaged, and he had a spare.

I returned to the RV camp to register for the Canadian Cup, buy some bits from Yuri Blazhevych, and then had lunch with Phil Mitchell. Brian Van Nest and Charlie Jones were the standout husbands for Valentine's Day – both buying red roses for their wives. In previous

years this had coincided with acquisitions of new models! With the LTP over we headed home at 3.30 pm to set up our "Bosnian Smorgasbord", for 5.30 pm in our motel room. It was a resounding success and we were so glad our room was large, because we had 11 participants –Jasminka and Enes Pecenkovic, Sally and John Clapp, Laraine and Antony Koerbin, Connie and Paul Squires, and Mike Roberts, as well as Kathy and I. Why a Bosnian Smorgasbord? Well, Jasminka and Enes had brought along a variety of Bosnian delicacies for us to try on our arrival to Lost Hills, so many in fact that it formed the foundation for a very pleasant get-together.

#### **Wed Feb 14:**

The weather appeared better for the Canadian Cup but there was sink around. The light breeze that accompanied the start caused many to circle on the line and not move away. That proved frustrating. I had



Early morning fly-off for Roy Summersby to place second



Winning launch by Yuri Shvedenkov in the last seconds



The characteristic Andriukov launch procedure



Kathy Burford was kept busy launching in F1A

to fly again, when taken out by a circling flyer.

Jackie Wang (our favourite Chinese tri athlete) extended her resume by flying F1B for the first time. She had a great launch style and was prepared to wait to get good air. Sadly one launch didn't transition well and the model looped into the ground. Craig Hemsworth was still not up to form and missed the fly-off.

Once again, there were low numbers in all fly-offs, indicating another tough day. Being the Canadian Cup it was customary to resolve the event on the day. Well, that didn't happen, but the first FO took place from A, B and C.

Phil Mitchell and Antony Koerbin made the 6 mins in F1A. Paul Rossiter, Paul Squires and Vin Morgan got into the first FO but only Paul Rossiter made the 6 mins in F1B. The model Paul flew in the FO wasn't fully

trimmed, as the VP failed in his best model during R5.

Roy Summersby made the first F1C FO. Poor Xin Pu Sheng forgot to change his DT time and, he was in stupendous air when his model DT'ed at 4 mins. His 750 gm+ model landed at 5 m 56 s. He almost made it!

**Thu Feb 15:** Today it was cool (about zero I recall) and there was a light breeze. I took the other entry into the field further along the



Ken Bauer, Alex Andriukov, Jim Parker & Brian Eggleston



The Aussies enjoyed the Chinese Dumpling Party



XinPu Sheng and Jackie Wang at the Dumpling Party



Yuan Gao, chief cook at the Dumpling Party



Robert Lesko won the North American Cup for F1A



The Brits always enjoy a party. Seen here at Gabby's



Holloway's Road and then had to bush-bash across the rough ground to get to where the fly-off was. Hire cars are good at this. I saw many F1C flyers launch and listened to Yuri Shvedenkov try for ages to get his motor started. Eventually it was running sweetly and he launched in the last 3 seconds, to win! Roy did very well, finishing 22 seconds behind the reigning F1C World Champion. Many F1B motors broke in the cold and one poor French F1B flyer missed by 3 seconds to get his model into the air. An elated Richard Nouvian (FRA) cracked 500 seconds to win from Kulakovsky and Stefanchuk, with Paul Rossiter's second fiddle model 14<sup>th</sup> on 313 seconds.

Once again the F1A fly-off was against the trees, in very light winds, but the launch technique by the good LDA flyers was still allowing them to exceed 100 metres. Some were to land in the trees, including Phil Mitchell, but his model was luckily undamaged, found on the ground

between the trees. Both A and B had the major places only seconds apart so they were great endings to these events.

After the fly-offs I did some testing and went back to the motel to do some repairs before food and grog shopping at Wasco. We came back to the field by 4 pm when the Chinese contingent had set up a Chinese dumplings training camp. Many Including Tanya Buskell, Noels and both Kathys, even some of the men, took on the training challenge and got to eat their own creations. Yuan Gao and XinPu Sheng, amongst others, master-minded the cooking and it was a highly successful afternoon event. Dumplings, fish balls and a spam-like meat were cooked, and it was all very nice. Their rice wine was something to drink with respect, and many tried it. To top off a great afternoon the Chinese cleaning machine sprang into action at the end of the meal to leave the area cleaner

than when they arrived – an amazing and much appreciated effort.

As this was also the night for a Mexican meal at Gabby's restaurant, the Koerbins, Kathy and I decided to turn it into a progressive dinner, arriving at Gabby's to find it packed with flyers, with only one table remaining empty for us to claim! The food was good, cheap and excessive and their cleanskin red wine was surprisingly good. We finished the night with sweets at Denny's, although most who attended the final stop in the progressive dinner shared sweets with their partner.

**Fri Feb 16:** Maxmen began with F1B and F1C on the same flight line and a perfect and warm 70°F day. Many maxed R1. There was lots of abundant lift and associated downers so all flyers made sure of the air before launching. There were some long waits and the usual mass launches. I spent time in both camps and scores were close.



**Craig Hemsworth and Vin Morgan were seconds apart**



**Vin, Craig and Albert watch Craig's flight**



**Paul Rossiter and Vin Morgan winding**



**Paul and Kathy Rossiter stay focused**



**Mike Roberts USA launching his Babenko folder**



**Xin Pu Sheng CHN launches a similar model**



**Paul Rossiter launches in R5**



**Vin Morgan launching in a later round**

Roy had a great run spoilt when his model moved out of the lift in R6 and he dropped nearly 30 seconds. F1C was decided in the second FO, with Artem Babenko winning convincingly from Guy Mennano and Yury Shvendenkov, all recording over 400 seconds.

Craig Hemsworth, Vin Morgan, Paul Rossiter and Paul Squires relentlessly maxed all rounds. New Yorker Ron Felix broke a dihedral joint during flight but the outer panel remarkably remained extended, somehow, and he went on to max. It folded in again after landing! And George Batiuk fell off his motor bike but saved his model.

More drama for Paul Rossiter in the lead-up to the FO. He was on pole 37 for the FO and all his gear was at the other end, and they had 30 minutes to relocate. It couldn't happen so Paul flew with minimum support gear and the same model that let him down in the North American Cup. It developed the same stall in MaxMen,

so he didn't get into FO2. Vin, Craig and Paul Squires made the 6 mins and did very well in failing light to place just 12 seconds apart. Vin and Craig were separated by only 3 seconds. The first three places were filled by good flyers, but not the ones you see often see up there.

The America Cup banquet was held at the Community Centre that evening, and all tables were filled.

Albert and Craig had to leave early the next morning so poor Albert missed the MaxMen F1A event. This was caused by the rental company not accepting their RV back on the holiday Monday, so they left their vehicle with family and headed home Sunday. As it turned out the lifeless early rounds the next day would not have appealed to Albert whose legs were giving him trouble.

**Sat Feb 17:** Blue skies, 30°F and no breeze greeted us when we were setting up for F1A. Towing up I found

the expected inversion layer had what wind there was blowing in the opposite direction above two thirds line height. Not much fun for older flyers, this condition extended through the first 3 rounds, with R1 and R2 flown in a virtual calm. I was pleased to feel tension on the line in the early rounds although the air was unkind to me in R1, even with a good launch.

It was actually a beautiful day, for watching. The air was trickier than the previous day with consistent light and variable winds, making for lots of drops. I made two extraordinary flights where the model once picked lift from 40 feet to max and the next time fluttered around like a falling leave to score 3m 8s. Thankfully my remaining 4 flights were solid maxes.

There were 23 in the 6 min fly-off, including Phil Mitchell, and 9 in the 10 min fly-off, and 5 made the 10 minutes! The third fly-off would take place at 7 am Sunday where Aviv





Cameron Ackerley &amp; Christian Schwartzbach fly close



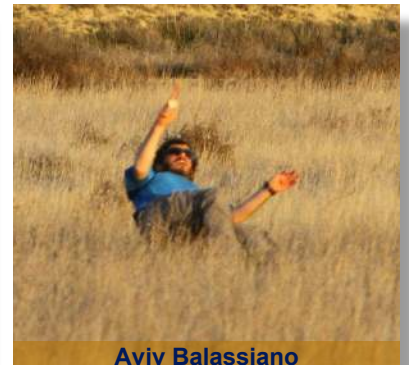
Aviv Balassiano gets ready for the second fly-off



Enes Pecenkovic



Per Findahl



Aviv Balassiano

Modern day F1A flyers maximise the energy in their launch, and put their bodies on the line

Balassiano would dominate to fly nearly 3 minutes longer than Lauri Milila and Jim Parker!

We had a quadrangle dinner with the Van Nests, Parkers, Buskells, Mike McKeever, Per Findahl and Sergey Marakov's daughter Sasha. The food and company were great but even the locals said it was a cold night. We made it home for a warm shower by 9.30 pm.

**Sun Feb 18:** Once again a blue sky greeted us but it was cooler with 4 –

7 m/sec winds predicted. These were the flying conditions Kathy likes for F1H, if her model was trimmed. Well, I had it sorted by R5. At 9 am the wind was 10 – 11 m/sec and tumbleweeds were starting to blow. The keen ones lined up waiting for directions and then spiked a contest by driving to the far end in the lee of the tree orchards.

The wind seemed to moderate and CD Bill Booth soon appeared, to start the contest. This was for F1G, H, J and

F1Q. Julie May Parker wasn't happy when she crashed her F1Q. The winds were between 3 and 8 m/sec with short lulls. Some H flyers limited their circling and most straight towed. Per was maxed out by R5 but then an errant launch saw his model fly knife-edge across the flight line ripping the wing joiner out of the fuse. Undeterred, Per sat down with the Brits and some 5 minute epoxy to reappear and max out to win the event!

*Results follow and this article continues on page 23*



Old glider buddies Lee Hines and Norm Smith chew the fat

Amazing little F1G flyer Xiangxue Ji turned 9 during Maxmen, placed 2<sup>nd</sup>

**KIWI CUP F1A 62 flew**

Place	Family Name	Given Name		R1	R2	R3	R4	R5	FO 1	Total
1	Balassiano	Aviv	ISR	240	180	180	180	120	473	1373
2	Kosonozhkin	Mikhail	RUS	240	180	180	180	120	429	1329
3	Halbmeier	Dirk	GER	240	180	180	180	120	422	1322
4	Mitchell	Phil	AUS	240	180	180	180	120	404	1304
27	Stowe	Tahn	AUS	227	180	180	180	120		887
39	Wallace	Robert	NZL	240	180	180	180	57		837
42	Campbell	Malcolm	AUS	175	162	180	155	120		792
57	Fathers	Albert	AUS	119	65	122	180	DNF		486

**Kiwi Cup F1B 52 flew**

Place	Family Name	Given Name		R1	R2	R3	R4	R5	FO 1	Total
1	Mathews	Tony	CAN	240	180	180	180	120	487	1387
2	Andriukov	Alexander	USA	240	180	180	180	120	481	1381
3	Vivchar	Igor	UKR	240	180	180	180	120	473	1373
4	Morgan	Vin	AUS	240	180	180	180	120	452	1352
30	Rossiter	Paul	AUS	240	180	180	180	120	164	1064
40	Hemsworth	Craig	AUS	154	180	180	180	91		785
42	Squires	Paul	NZL	240	103	180	146	97		766

**Kiwi Cup F1C 19 flew**

Place	Family Name	Given Name		R1	R2	R3	R4	R5	FO 1	Total
1	Savukhina	Larisa	RUS	240	180	180	180	120	397	1297
2	Mathis	Richard	USA	240	180	180	180	120	383	1283
3	Babenko	Artem	UKR	240	180	180	180	120	373	1273
7	Summersby	Roy	AUS	240	180	180	180	120	310	1210
19	Pope	Gary	AUS	240	DNF	DNF	DNF	DNF		240

**Kiwi Cup F1H 17 flew**

Place	Family Name	Given Name		R1	R2	R3	R4	R5	FO 1	FO 2	FO 3	Total
1	Balassiano	Aviv	ISR	300	120	120	120	120	300	420	420	1920
2	Jensen	Blake	USA	300	120	120	120	120	300	420	262	1762
3	Reshef	Ziv	ISR	300	120	120	120	120	300	150		1230
12	Mitchell	Phil	AUS	125	120	120	120	120				605
17	Burford	Kathy	AUS	102	71	57	120	30				380

**Kiwi Cup F1G 20 flew**

Place	Family Name	Given Name		R1	R2	R3	R4	R5	FO 1	FO 2	Total
1	Brocks	K Peter	USA	300	120	120	120	120	300	300	1380
2	Gorban	Evgeny	UKR	300	120	120	120	120	300	280	1360
3	Jones	Ryan	USA	300	120	120	120	120	217		997
12	Squires	Paul	NZL	122	120	120	120	120			602

**Kiwi Cup F1J 10 flew**

Place	Family Name	Given Name		R1	R2	R3	R4	R5	FO 1	FO 2	Total
1	Faux	Kenneth	GBR	300	120	120	120	120	300	420	1500
2	Ashworth	Hayden	USA	300	120	120	120	120	300	46	1126 1st Junior
3	Kanegawa	Shigeru	JPN	300	120	102	102	120			744
7	Stowe	Tahn	AUS	39	120	120	120	120			519
8	Summersby	Roy	AUS	67	120	50	120	120			477



The David and Goliath of RVs



Bud Romak and Henning Nyhegn at the Banquet



## North American Cup

## F1A 61 flew

Place	Name	Nat	R1	R2	R3	R4	R5	FO1	FO2	Total
1	Lesko Robert	CRO	240	180	180	180	240	360	404	1784
2	Findahl Per	SWE	240	180	180	180	240	360	400	1780
3	Halbmeier Dirk	GER	240	180	180	180	240	360	398	1778
11	Mitchell Phil	AUS	240	180	180	180	240	360	265	1645
14	Koerbin Antony	NZL	240	180	180	180	240	360	211	1591
32	Stowe Tahn	AUS	240	152	180	180	240			992
35	Fathers Albert	AUS	198	180	180	180	240			978
51	Wallace Robert	NZL	240	180	180	180	87			867
54	Campbell Malcolm	AUS	183	179	180	57	240			839

## North American Cup

## F1B 57 flew

Place	Name	Nat	R1	R2	R3	R4	R5	FO1	FO2	Total
1	Nouvian Richard	FRA	240	180	180	180	240	360	501	1881
2	Kulakovsky Oleg	UKR	240	180	180	180	240	360	490	1870
3	Stefanchuk Stepan	UKR	240	180	180	180	240	360	465	1845
14	Rossiter Paul	AUS	240	180	180	180	240	360	313	1693
18	Squires Paul	NZL	240	180	180	180	240	280	0	1300
19	Morgan Vin	AUS	240	180	180	180	240	276	0	1296
52	Hemsworth Craig	AUS	240	180	180	87	209	0	0	896
54	Morrell Roger	NZL	240	180	180	109	136	0	0	845
57	Wallace Robert	NZL	0	0	0	173	0	0	0	173

## North American Cup

## F1C 21 flew

Place	Name	Nat	R1	R2	R3	R4	R5	FO1	FO2	Total
1	Shvedenkov Yury	CAN	240	180	180	180	240	360	417	1797
2	Summersby Roy	AUS	240	180	180	180	240	360	395	1775
3	Parker Faust	USA	240	180	180	180	240	360	381	1761
19	Pope Gary	AUS	240	180	180	132	240	0		972



## MaxMen

## F1A 63 flew

Place	Name	Nat	R1	R2	R3	R4	R5	R6	R7	FO1	FO2	FO3	Total
1	Balassiano, A	ISR	240	180	180	180	180	180	180	360	600	385	2665
2	Malila, L	SUI	240	180	180	180	180	180	180	360	600	221	2501
3	Parker, J	USA	240	180	180	180	180	180	180	360	600	218	2498
21	Mitchell, P	AUS	240	180	180	180	180	180	180	210			1530
29	Campbell, M	AUS	217	180	180	180	180	180	180				1297
37	Koerbin, A	NZL	240	180	180	180	180	151	147				1258
38	Wallace, R	NZL	240	180	180	180	180	180	112				1252
55	Stowe, T	AUS	240	124	88	180	180	180	102				1094

## MaxMen

## F1B 64 flew

Place	Name	Nat	R1	R2	R3	R4	R5	R6	R7	FO1	FO2	FO3	Total
1	Malkhasyan, S	USA	240	180	180	180	180	180	180	360	473		2153
2	Nishizawa, M	JPN	240	180	180	180	180	180	180	360	450		2130
3	Lu, H	CHN	240	180	180	180	180	180	180	360	445		2125
22	Morgan, V	AUS	240	180	180	180	180	180	180	360	268		1948
23	Hemsworth, C	AUS	240	180	180	180	180	180	180	360	265		1945
25	Squires, P	NZL	240	180	180	180	180	180	180	360	256		1936
38	Rossiter, P	AUS	240	180	180	180	180	180	180	268			1588
53	Wallace, R	NZL	240	180	169	157	163	180	180				1269
57	Morrell, R	NZL	240	180	180	180	115	180	180				1255

## MaxMen

## F1C 20 flew

Place	Name	Nat	R1	R2	R3	R4	R5	R6	R7	FO1	FO2	FO3	Total
1	Babenko, A	UKR	240	180	180	180	180	180	180	360	480		2160
2	Mennano, G	USA	240	180	180	180	180	180	180	360	414		2094
3	Shvedenkov, Y	USA	240	180	180	180	180	180	180	360	403		2083
14	Summersby, R	AUS	240	180	180	180	180	153	180				1293
19	Pope, G	AUS	240	180	105	180	84	142	180				1111

## MaxMen

## F1G 6 flew

Place	Name	Nat	R1	R2	R3	R4	R5	Total
1	Baruch, A	ISR	120	120	120	120	120	600
2	Ji, X (JR)	CHN	108	70	120	120	120	538
3	Nouvian, R	FRA	120	38	120	120	120	518

## MaxMen

## F1H 8 flew

Place	Name	Nat	R1	R2	R3	R4	R5	Total
1	Findahl, P	SWE	120	120	120	120	120	600
2	Jensen, B	USA	120	88	120	120	120	568
3	Lavis, B	GBR	120	59	120	120	120	539
7	Burford, K	AUS	41	40	51	71	120	323

## MaxMen

## F1J 2 flew

Place	Name	Nat	R1	R2	R3	R4	R5	Total
1	Parker, F	USA	120	120	120	120	120	600
2	Sahkgberg, P	USA	0	64	62	120	120	366



Stan Buddenbohm winds up



F1H winners

2. Blake Jensen USA 1. Per Findahl SWE 3. Brian Lavis UK



F1G winners

2. Xiangxue Ji CHN 1. Abraham Baruch ISR 3. Richard Nouvian FRA



## Fab Feb Participation Experience

### Zizhe Yin's Story



**Roger Morrell (SEN) said:** "This year, 19 Chinese flyers took part in the Fab Feb contests at Lost Hills. This group included 8 junior flyers and were accompanied by some parents and coaches. This was written by 16 year old Zizhe Yin who flew F1C in the events with little prior experience and none in major competition of this size. Most of his previous competition flying had been in flying

R/C models. What is very interesting is that he talks about learning all the aspects of flying a free flight model and something as complex as a F1C model. Zizhe Yin and his teammates did very well flying at Lost Hills, the weather was good but especially challenging at times for people who had never been to Lost Hills before. They clearly had great time and learnt a lot."

I am Zizhe Yin from China, Beijing and I am 16 years old. I have flown model airplanes for over eight years since elementary school. I used to fly RC models and it is my first year participating the Free Flight events. I am in contact of a local model club in Beijing and I am trying my best to keep flying every year.

As one of the China team members, it is my first time attending international free flight competitions, the three contests which were together called the Fabulous February events- the Kiwi & Issacson cup, the North American cup and the Bob White Maxmen International Cup had gave me unforgettable experiences and made me matured a lot.

This time I am using a modern F1C model which has foldable wings and a 2.5cc engine with about 30k RPM rotational speed. It had not been a long time since I got to know F1C, even though I was bit familiar with F1 contests, I had not dealt with real models. Before participating the contests in America, I went to a flight field in JiangXi province to practice the basic skills including preparation, posture, maintenance etc. Not until I got to Lost Hills Flight field had I realized I had only three complete flights, and it was a tough job for me as there were two days before the Kiwi Cup begin.

All I can do in those two days was to adjust the models and my mood.

The engine needed some modification and so did the wings, rudder, tailplane stuff. During Feb 8th and 9th I had my skills in F1C enhanced a bit, I learned how to keep track of the model's flying and landing position by using a binocular. I have learned the importance to be familiarize with using a binocular since someone in the contest was not able to track the model and it took them half a day or more to find the model.

At February 10th I arrived the flight field with my coach early in the morning to do some preparations. The largest difference I found between a free flight contest and the P3A contest (which is a F3A-type event designated for junior

flyers in China) is that all I have to do in a P3A contest is to be there and complete two flights which takes no more than ten minutes, but in a free flight contest I have to stay concentrate for five to seven hours in order to finish the whole contest if I do not want to leave a big DNF on the scoreboard.

For each round in the first event, I have to hang the cables, add fuel and lead them into the engine few minutes before the round begin and wait for the opening of the window to be announced. Meanwhile I did not have a wind speed sensor, I was under my coach's indications to start the engine and launch the model. Whenever he told me to go, I have to start the engine as fast as possible and launch it. Thanks for the efforts I made on the previous practices, I was able to start the engine in a couple seconds. When the model landed in the third round, its tail tube broke. I was under great anxiety even though my coach told me it is sometimes common to land on tough grounds and there are millions of uncertainties.

Things were getting worse in the remaining rounds. As the contest director announces twice to make the fifth round delayed up to 90 minutes due to unexpected winds, the flight duration was also reduced to 120 seconds. I had a utterly failure in the launching process, in which the plane completed a loop few seconds after it sprints into the

sky. What gratified me was that the model successfully hit 120 seconds even though it's initial altitude was only about thirty to forty meters.

I had two days' leisure and model-adjusting time for the next contest in which I had a bit modification on the rudder, but no matter how I tried to adjust, similar nervous feeling emerged in the North American Cup. In the third round on February 16th, I had a negligence in checking the cables and there was a error happened where the dethermalizer was not connected to the tailplane. It seemed like a sudden stream of sadness emerged in my mind because I saw the model performed a beautiful arc and 'kissed' the ground within three seconds, when the motor was still working. I was extremely frightened meanwhile I had my second model ready and finished the three

remaining rounds. Nothing was needed to complain about that because that was my own fault. Therefore, the cost of hundreds of dollars had made me learned the lesson. Fortunately, I did not had the whole model damaged.

When it was the time for the third contest, I just want to say that one would better not change the whole pattern in doing something into another one unless he have been already proficient in another one. I used to use my forefinger to push the switch, while I accidentally wanted to use my forefinger. Even though I thought that it could bring me some comfort, I was completely wrong. My arm was suffering and the model was launched deviating at least 30 degrees from the perpendicular line. It was still acceptable in the first two rounds but matters got worse in the fourth





round. The altitude of the model was so low that even though there were upflows everywhere it was still blocked by the wall of one hundred seconds. There upon I once had a thought to stick pieces of abrasive paper on the tube where I was holding it yet it was fruitless efforts. I had no choice but to still use me forefinger, it looks likes kind of joke isn't it ? My legs were shaking drastically whenever the model was not climbing straightly, and every time I cannot chase the air currents when everybody else was launching their models to the sky due not being able to start the engine on time. When I saw the model was performing greatly there was no reason not to feel relieved. Although I entered the contest anxiously I was able to finish it feeling relaxed, which I think is my biggest breakthrough.

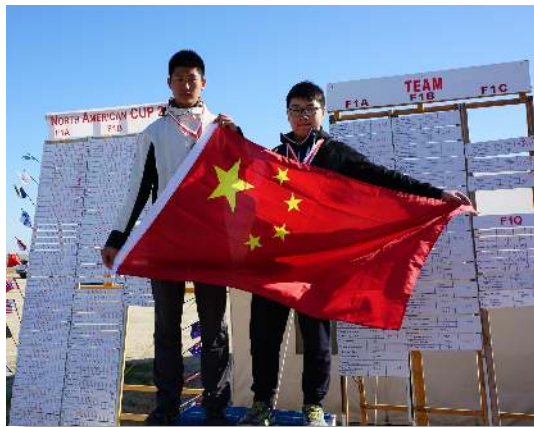
Only experienced participating all

the seven regular rounds had I realized that the contest had only begin from the fly-offs. As I had been volunteered as a timer for the Maxmen F1A event fly-offs, it was virtually thrilling and exciting to see so many flyers having their models launched super high, even some planes glided for over ten minutes though the required flight duration was only eight minutes and those planes had got into the mountains which I am sure that's at least a kilometer from the starting line. Plus I have admiration for those participants who had been timing for any rounds.

These few days had been shocking. In spite of being exhausted, I was enriched by delightfulness. Only when I had my mentality well adjust had I been able to get to know the real joy in free flight. When I can prepare and execute the flight by the efforts that

I made myself, seeing my plane gliding for over six or eight minutes or even after a insane climbing(never mind my plane had only climbed up to 130 meters in which those world champs always do 150s ), seeing those fascinating circling, the accurate radius due to a series of modification on the rudder, the encounter in the upward air currents when the plane does not looks to land in ten minutes time, so far as to the other's praises, I can hardly tell which one is repulsive to me. Even if I did not have all the max flight time accomplished and cannot get into the flyoffs, it was still a kind of feeling that I can never get to know without entering those contests.

From now on my love in free flight had just been cultivated, and I think it can fit existing with my love in radio-controls. Therefore, the Fabulous February is just a start.



## E-36 titbits



Nifty thrust adjustment



Cobra motor, 7 x 6 folder and  
Texas Timers C20 adaptor  
March 2018 Free Flight Down Under



Deans plug & RDT

**HOT**

**Watt's up with USA E-36s? We discovered some real joules at Lost Hills, and their electrifying performance amazed us. Have they spiked a power race to the top?**

**HOT**

Speaking to people from various countries at the Fab Feb week in Lost Hills it is obvious that E-36 has become a fast-growing class all over the world. What is also obvious is those involved like pushing the boundaries, so many hot motor and large battery combinations are being experimented with.

I watched one of the E36 events noting a variety of designs being flown. Pylon models are most popular with Don De Loach's Pearl 202 and Pearl 222 prevalent, with laser-cut short kits available.

Kit builder Clint Brooks (CB Model Designs) most successful design is the late John Oldencamp's Joulebox, now in version III guise. Clint also markets the Apache II, his own design that evolved after Ralph Ray encouraged its development while

he and Stan continued with Stan's variant. Clint offers a number of kit configurations with some deluxe versions supplied with the full power train.

Mike Pykelny (StarLink FliteTech) supplies a variety of power trains and timers, and Texas Timers also supply excellent E36 timers and accessories.

Power pioneer Ralph Ray flies the original Stan Buddnbohm Apache design (now with some subtle changes) and his model dominated all three classes he flew in. Ralph's model climbs at 80 degrees and doesn't roll like most pylon models do. He also stamped his mark on the class by winning all three events with only 5 sec engine runs! Everyone else took the full 10 seconds.

Ralph and Stan easily keep their Apaches stable with a rapid climb but prefer not to push past 5 seconds; the pylon models more easily maintain their pattern for the full 10 seconds suggesting a more stable design. The Apache is the only non-pylon design flown. Stan now has an Apachelon (mit pylon).

Motors and ESCs are getting bigger with Cobras, Hyperions and racing drone motors being tried. ESCs of 12A and over are now being used and I even saw 500 mAh batteries (300 was considered adequate for a couple of flights once!)

So here are a few photos of what's hot. I suspect models and ideas shown here may enthuse the competition for the Nationals.



**RALPH RAY - Apache**



**CLINT BROOKS - Joulebox III**



**DON DE LOACH- Pearl E-202 and E-222**





**LEE HINES - Joulebox II**



**MIKE PYKELNY - Pearl E-202**



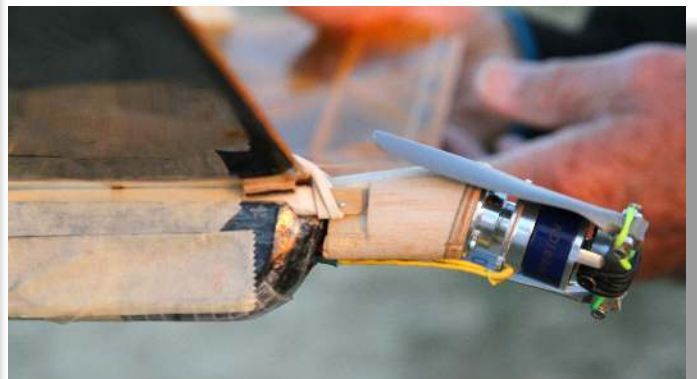
**CLINT BROOKS - Apache II**



**JACK MURPHY - Leaping Lizard**



**GEORGE MORRIS - Pearl E-222**



**Not pretty but very effective - Stan's Apache**



**Hyperion and 7 x 6 folder - Stan's Apache, on its back**



**Batteries of 450 - 500 mAh have been tried**



# 2018 NATIONALS

## Adrian Bryant Flying Field Information



### Location

The Adrian Bryant field is at 1390 Clear Ridge Road West Wyalong. The road to the field will be sign posted. (Entrance is on the right hand side of road)

### Camping

A full camp kitchen is available, including male and female toilets / showers, some external power and water points for vans. There is a dump pit for black water on the north east side of the amenities block. Cost \$10 per head per day. Prior booking please, SMS Roy 0413 588 720 or [roydi132@optusnet.com.au](mailto:roydi132@optusnet.com.au)

### Day Scramble Friday 27 April

Timings for the day scramble 7.30-8.30am. Parking and spectator areas will be marked. Pilots must be in location by 7.00am with your timekeeper. Timekeepers must have a stopwatch and pen. A timekeepers briefing will be held prior to the start. Observers and timekeepers should bring a chair.

### Night Scramble Saturday 28 April

Timings for the scramble 6-7pm. Parking and spectator areas will be marked. Pilots must be in location by 5.30pm with your time keeper. Timekeepers must have a stop watch and pen. A timekeepers briefing will be held prior to the start of the scramble. Spectators should bring refreshments and nibbles if you want something before dinner while watching the scramble. Bring a chair, makes things a lot more comfortable than standing for an hour!!!!

### Social Bush Tucker BBQ Saturday 28 April

**Tickets** for the Bush Tucker BBQ will be available at the registration desk \$20 Seniors \$5 Juniors. Entry to the BBQ will be by ticket only. Tickets will be collected by a member of the FFS.

**Menu:** Dinner is lamb cooked on a spit with bush cooked veggies, greens, a bread roll and a glass of Australian red to assist digestion. Some soft drinks will be available for kids.

**What to bring:** Always bring a chair to any free flight function. Absolutely essential for this BBQ. A small table would also be handy if you have one but not essential. Just makes eating easier. If you want nibbles and other refreshments before and during dinner bring them.

**Timing:** The dinner will be served after the night scramble commencing approximately 7.30pm.

### General Field Rules

- Entrance gate must be kept shut unless told otherwise
- Dogs must be on a lead at all times (it is a sheep farm)
- No Smoking on the field
- Motorised retrieval may be used on the field.
- In competitions vehicles must go around the back of flight line so not to obstruct timekeeper's line of sight, CD will advise.
- No rubbish to be left on field.



## 70th NATIONALS NOTES - Free Flight



### GENERAL

These notes are intended to clarify some rules and processes for the successful running of the 70th Nationals in West Wyalong 23rd-30th April 2018.

**Registration** Nats HQ is the Indoor Stadium in Operator Street West Wyalong. The registration process for the Nats will consist of checking each entrants MAAA card and handing over the "Goodies Bag". Nats HQ will be open from 9.00am -3.00pm and 6.00pm-9.00pm each day until and including Friday 27th April 2018.

Please be sure to pack your MAAA card !!

### Celebration Dinner and BBQ

If you have indicated you wish to attend either or both of these social activities. Tickets will be available only at Nats HQ. BBQ \$20 each and \$5 for juniors. Celebration Dinner \$25 each and \$10 for juniors.

### EVENT CANCELLATIONS

**Free Flight:** All events to run.

### SAFETY

#### Free Flight Night Scramble

All aircraft being flown in the 70th Nats Night Scramble, shall be fitted with lights in a manner that enables all persons present to be aware of the location and flight



path when within 30 metres of it. Any contestant whose aircraft is not fitted with lights that comply with this requirement will NOT be permitted to fly. Spectators shall be upwind of the launch point and at a sufficient distance from it to make it unlikely that the safe distance requirements of CAR (1998) Part 101 will be breached during the flight.

### EVENT SPECIFIC RULES

There are rules for events being run at the 70<sup>th</sup> Nats that are not covered in the current MAAA published rules. The rules for **E 36** follow.

#### I. E-36 POWER

**I.1 Contest Format:** The contest consists of three flights.

##### 1.2 Characteristics of the model:

36 inch projected wingspan maximum.  
120 gm minimum weight ready to fly.  
No auto surfaces permitted. After launch, only one movement of stabiliser or wing, for DT only.

#### 1.3 Power requirements:

Any type electric motor allowed, two cell lithium battery limit. Folding props allowed.

#### 1.4 Flight Time:

Three (3) flights will be flown, with flights of 120 sec max.

Motor run will be 10 secs.

**1.5** In the event of a **fly off**, the motor run will be reduced to 5 seconds. Subsequent fly-offs will continue with a 5 sec engine run until a tie break occurs.

#### 1.6 Attempts:

- An attempt is a flight less than 20 seconds.
  - A motor over run is an attempt.
- The second attempt is an official flight.



### *MaxMen report continued from page 13*

Kathy's R5 was nice, maxing from good height and landing at 3.5 minutes, about 2 km away.

One other outstanding performance on the day was from 9 year old Chinese F1G flyer Xiangxue Ji who finished in second place just one minute behind Israeli Abraham Baruch. Xiangxue loaded and wound her own motors in a half tube and launched with authority. She was a charming little girl and shows real promise.

So after the Maxmen presentations we said our goodbyes at the RV camp, and went back to the motel to start serious packing. After all there were E-36 kits and electronic bits for nine club members to squeeze into our luggage. And Kathy had also won a pound of rubber on the Isaacson weekend. It pays to leave some space in your bags. Later we had drinks in our room with the Kiwis who joined us at Denny's, again. Sunday at Denny's is always sad as so many flyers have already departed

**Mon Feb 19:** Departure day, we said our goodbyes to fellow Days Inners Javier Abad and Henning Nyhegn and wished Antony and Laraine Koerbin safe travels for their trip up the coast to San Francisco. It was much colder on Monday and windy although I believe Tony Mathews checked out the Taft field that day and said it was calm. The temperature dropped as we headed south along Hwy 5 towards the Grapevine, making the big haul up the hill through the top of the pass at 4,100 feet. Trucks thankfully have their own share of the road here so we don't get in their way and they don't hold us up. Snow flurries danced around the car and slid across the road like sand as the temperature moved down to about 1 deg C.

We had a makeshift lunch of leftovers at Long Beach where it was a bit windy for sightseeing, although we observed the Queen Mary and the establishment of the Formula 1 GP

circuit, being assembled for the Grand Prix event mid-April.

Finally, we topped up the rental, dropped it off and headed for LAX where when had dinner with Gary and Tahn and later saw the Rossiters and Roy just before boarding. The Rossiters shared our flight and Roy flew Qantas. I think Tahn and Gary's flight had been delayed a couple of hours. The flight home was good and I never slept so much in cattle class. The Rossiters were up the pointy end of our plane, in luxury, but suffered on the last leg home on the 5 hour trip to Perth where they were squeezed into a little 737. Our trip lasted nearly 14 hours and we arrived home to temps 3 times higher than our last cold day in LA.

Kathy and I may not have enjoyed the competition success of previous years but we have **never** enjoyed Feb as much as this year – it's not all about the flying, it's the people.

*Malcolm Campbell*

15 years ago Vin Morgan and the late Art Lonegan had an interesting repartee about BOM rule and how that dreadful situation could be rectified. Needless to say Vin's reply was priceless. We have a few veteran flyers left in our ranks and I was hoping I would get some profile articles. Needless to say, I was tickled by this true blue Aussie story from Brian Grebert, which I print unedited. I was asking for flyers to send me profiles and this is the first one I've received after Dave Shackelford's interesting article in December. Perhaps it will encourage others to follow suit?

## THE MARTIAN MAGGOT (My first power model)

By Brian Grebert (FAI AUS 5778)

May I introduce myself, my name is Brian Grebert, I'm aged 71 years (My nicknamed is Brizo or Grub, derivations of my first name and surname given to me whilst serving in the Military) In my youth, I grew up in Moe, a rural country town in the Latrobe Valley, Victoria.

I first became interested in model aircraft as a 12 year old in 1958. It all started out by buying cheap and nasty "Chuck Gliders" & simple all balsa "Rubber Powered" models from a local Newsagent.

My first serious attempt at building decent Free Flight models were the Montgomery Models tow line gliders, the Cloudbuster 36" and then the Apache 50". The biggest problem I had with the Apache was the "Wings would fold & break when being towed up. I eventually realized that the speed the "Tow Runner" ran was the main culprit (The Cloudbuster 36" did not suffer from this problem). My next model was a Frog Ventura 42" (Fore runner to the A1 class)

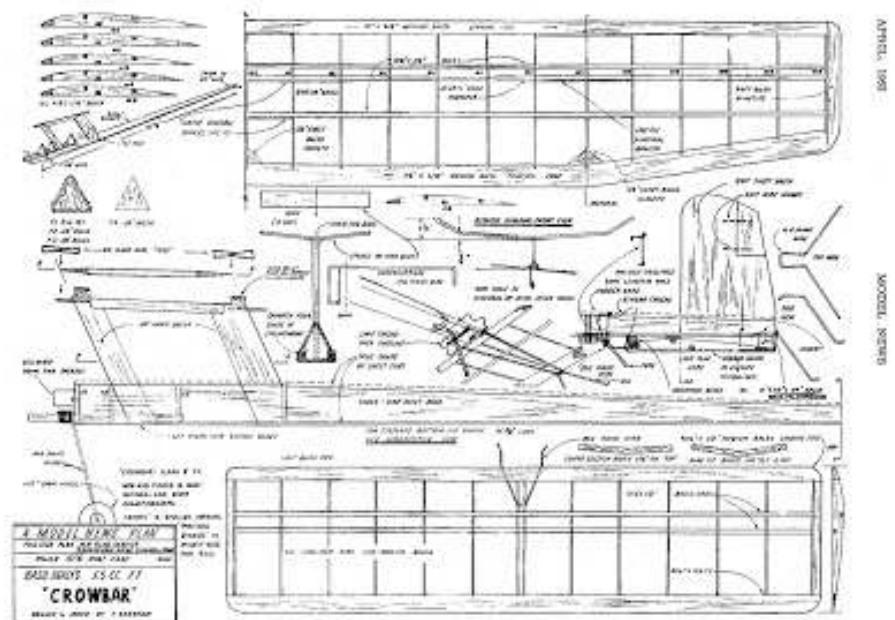
I joined a local "Club" which was called Moe and District Model Aircraft Club" (MADMAC). This club was affiliated with "The Gipslan Associated Aero modelers" (GAA - Gipslan being a region in eastern Victoria). Club members would travel to Melbourne by train to shop at Victoria's leading hobby shops, back then namely "Central Aircraft", "Model Dockyard" & "Hearns Hobbies".

It wasn't long before I was able to con my "Old Man" (Dad), to buy my first model aircraft motor, it was a Gordon Burford Taipan 2.5 cc diesel & all the extras to make it fly. My first aircraft using this motor was a

"Hearn's Hobbies" Control line Sabre Trainer

In the early 1960's, I came across a "Plan" in an Australian model magazine showing a Pylon Power F/F called the "Crowbar", designed by a distinguished Aussie modeler of the time "Basil Healey". So I decided to

have a go of building my modified version of it, powered by the Taipan 2.5 cc, thus was born the "Martian Maggot" (So named after watching a "Warner Brothers" cartoon on a Black & White TV, featuring a very cheeky Alien (Marvin the Martian) flying a cigar shaped rocket ship called the "Martian Maggot")



Basil Healey's CROWBAR



Frame from the original "Warner Brothers Cartoon"



After flying "Tow Line Gliders", I still did not know the tricks of F/F ie like **having your name & address on the A/C**, Fuel Shutoff Timers, DT's etc. The "Martian Maggot's" fuel tank system was the same as my early C/L trainers, a metal box containing about 4 minutes of fuel. Well on its first flight, it took off in a gentle circular climb (not vertical) and it was last seen just under the "Cloud Base" motor still running, heading away from the launch area which was a local "Cow Cockys" (Dairy Farmers) paddock. It "Flew Out of Sight" (OOS) and then some more. Bye Bye "Martian Maggot" I thought.

It did not take long for the news of the lost Model Aircraft to gain public attention. The local Rag, "The Moe Advocate" newspaper sponsored its own "Lost & Found" advertisement in its next edition, they were even prepared to pay for a "Reward" if it was found, so as to make a news story out of it.

Also a Local AM radio Station 3UL (Warrigul), gave "Free" lost advertisements on air for a couple of days after it went missing.

A few days later, the "Martian Maggot" & I were reunited together. The aircraft was in one piece, not even a hole in the tissue covering. It turns out that a distant Dairy Farmer many miles away from the launch site found it in his paddock & heard the 3UL Radio report and knew where to find its owner. He wasn't interested in a Reward.

After many more successful flights, the "Martian Maggot" became just "Maggot" because of the left wing losing its tissue covering with an encounter with a tree. (On recovering it, I couldn't be bothered repainting the "Martian" back on it).

The photo shows a damaged "Maggot" after

it was launched from the Moe Racecourse in the middle of the town (this time with about 30 seconds of fuel & my name and address on it, still no D/T). The wings moved on the pylon causing the aircraft to crash under power into a house holders "Chook Pen". The Maggot was repaired and we both had many more flights together.



**Rebuilt Martian Maggot**

## Roy spent some time with Kit Scale, and liked it



Laser-cut kits build up quickly but it pays to identify all the bits, and to remove all the laser burn marks

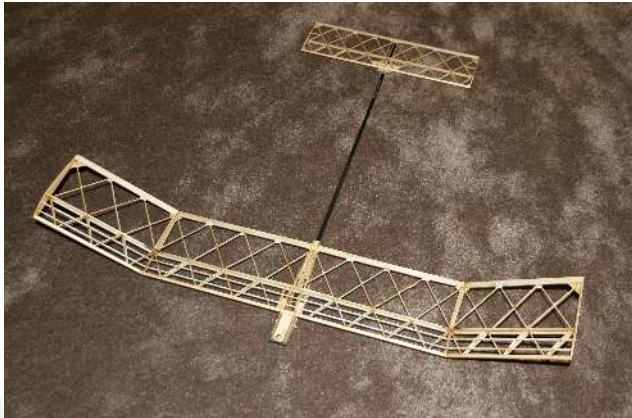


The end result looks quite nice.  
When will we see it fly Roy?





Roy Summersby - BLIZZARD



Kathy Burford - APACHE II



Malcolm Campbell - JOULEBOX II/III

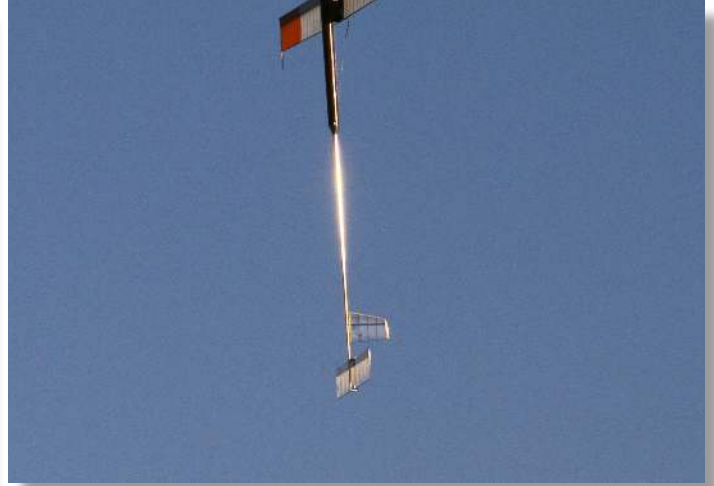


Graham Maynard - ELMANN 3





Albert Father's 58" 1946 Korda Open Glider



This may help explain why some F1Bs climb higher and faster

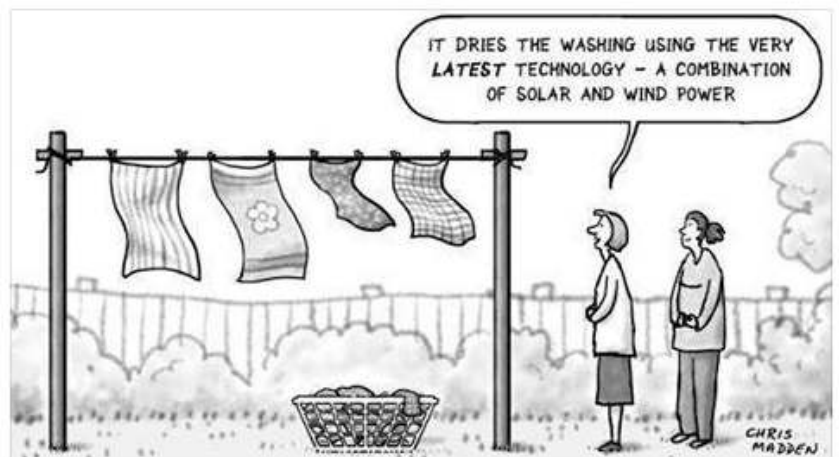
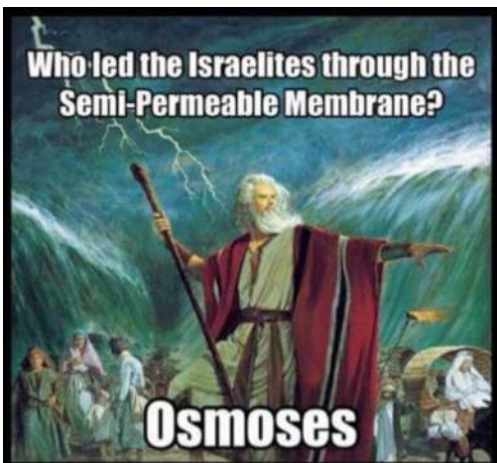
## JOKES PAGE below the line

Every woman's dream is  
that a man will take her  
in his arms,  
throw her into bed...  
and clean the whole  
house while she sleeps.

I don't understand  
how I can remember  
every word of a  
song from 1964,  
but I can't remember  
why I walked into  
the kitchen?

943TheRock

My wife asked me  
to pass her Lip  
Balm, instead, I  
gave her Super  
Glue by mistake.  
She's still not  
talking to me.



IN WINE  
THERE IS WISDOM,  
IN BEER  
THERE IS FREEDOM,  
IN WATER  
THERE IS BACTERIA.





## 41<sup>st</sup> Australian Free Flight Society Championships

### Tui Cup Widgiewa Cup Narrandera 2018

#### Tui Cup (NZ World Cup Event)

Monday 16 April	F1A/B/C	5 x 1 hour rounds	0800 - 1300
Tuesday 17 April	Flyoffs F1A/B/C		0710 - 0800
	AFFS Combined %	3 flights no rounds	0800 - 1200

#### Widgiewa Cup (World Cup Event)

Wednesday 18 April	AFFS Combined % Open Fly-off		0710 - 0720
	F1A/B/C	5 x 1 hour rounds	0800 - 1300
Thursday 19 April	F1A/B/C Fly-offs from Wednesday		0710 - 0800
	AFFS F1G*	5 x 1 hour rounds*	0800 - 1300
	AFFS F1H*	5 x 1 hour rounds*	0800 - 1300
	AFFS F1J*	5 x 1 hour rounds*	0800 - 1300
	Evening AFFS AGM (Narrandera Club)		1900

#### AFFS Championships (World Cup Event)

Friday 20 April	F1A/B/C	5 x 1 hour rounds	0800 - 1300
Saturday 21 April	F1A/B/C Fly-offs from Friday		0715 - 0800
	AFFS Combined Vintage	3 flights no rounds*	0800 - 1200
	AFFS Combined HLG/CLG/TLG		0800 - 1200
	AFFS Russ Hammond/Ivor F Scramble		0900 - 0930

Evening. Presentation Dinner 1800  
Venue: Morundah Hotel Bus from Narrandera provided.

Sunday 22 April Moving Day to West Wyalong Nationals.



**General Notes/Comments:**

- 1) Sunrise 16 April 2018 0708hrs Sunset 1820hrs.
- 2) \*F1G/H/J - *First* Round will be "High Time"  
NOTE: (6 min max *first* round only.  
NB time above 2 min max will only be used to resolve ties)
- 3) # F1A,F1B & F1C - *First* round duration will be 4 minutes (Weather permitting)  
CD to determine duration of round 5 (4 minute max weather permitting)
- 4) COMBINED VINTAGE - *first* flight will be "High Time" & must be launched before 0830 (6 min max first round only. NB time above 3min max will only be used to resolve ties) Entry in more than one class allowed however only 1 (best) score to count for AFFS Champion. . Note that the vintage cut-off date is 1956. Vintage classes get bonus points (2 per year pre 1956) as per MAAA rules 2009.
- 5) WORLD CUP EVENTS - are flown from a flight line in five one hour rounds.  
Please assist by volunteering to time keep.
- 6) Flyoffs for F1A, F1B & F1C will be 10 minute duration.
- 7) 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.
- 8) 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)
- 9) COMBINED % OPEN – is 3 flights (no rounds). Score is the percentage of the max for that class. HLG and CLG are allowed but are only allowed 3 flights i.e. no discards. Two attempts are permitted for each flight (a 20 second attempt rule applies).
- 10) HLG/CLG/DLG are combined into one event. Only 1 set of scores allowed per competitor All flights from the box marked by 4 cones.
- 11) Radio Dethermalization (RDT) is allowed in all events.
- 12) PLACEGETTERS models, lines, motors etc. may be processed. There will be spot checks and check timekeeping on the field.
- 13) All Competitors must be in possession of a current MAAA/FAI licence.
- 14) AFFS Annual General Meeting. Please forward agenda items, nominations etc. to the Secretary, Phil Mitchell by 1 April 2018. PO Box 44 Terrigal or [filnoels@bigpond.net.au](mailto:filnoels@bigpond.net.au)
- 15) The Presentation Dinner will be on the evening of Saturday 21 April 2018 at the Morundah Pub. There will be a bus from Narrandera. Cost (including bus) will be \$35. We need to know numbers in advance so please make your bookings for the dinner and pay with your entry.
- 16) 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.
- 17) Smoking on the field is not allowed. If you smoke in a car the doors have to be closed.
- 18) Risk/Hazard Management issues will be addressed at compulsory event briefings (see following notes).
- 19) All entrants flying in the Tui Cup must attend a compulsory Event briefing on Monday 16 April 2018 at 0745 hrs.
- 20) All entrants before flying in the Widgiewa Cup & AFFS events must attend daily compulsory event briefing(s) 17,18,19,20 & 21 April at approx. 0745 hrs.



Narrandera flight line, on sunrise



# BRISBANE FREE FLIGHT SOCIETY

## 2018 Flying Calendar



Month	Date	Start	Event	Location
January	✂ Sat 27 <sup>th</sup>	12pm - 4pm	Club general meeting plus "show and tell"	John's place
March	IND Sun 4 <sup>th</sup>	3pm - 6pm	Delta Dart State Champs (club sponsored)	BSHS
	CP Sun 11 <sup>th</sup>	7am - 3pm	2 min models (3 flights) + CLG (6 flights)	Coominya
	Sun 25 <sup>th</sup>	7am - 2pm	Dale's Fun Day (general flying and limited RC)	Coominya
April	CP Sun 8 <sup>th</sup>	7am - 12pm	All in % - multiple entries (3 flights ea)	Coominya
	Mon 16 <sup>th</sup> - Tue 21 <sup>st</sup>		<b>TUI CUP, WIDGIEWA CUP and AFFS CHAMPS</b>	<b>NARRANDERA</b>
	Thu 23 <sup>rd</sup> - Fri 30 <sup>th</sup>		<b>70<sup>th</sup> NATIONALS</b>	<b>WEST WYALONG</b>
	IND Sat 28 <sup>th</sup>	3pm - 6pm	HLG/Catapult State Champs	BSHS
	☞ Sun 29 <sup>th</sup>	7am - 12pm	<b>F1G State Champs</b> (5 flights), All in % - multiple entries (3 flights ea)	Coominya
May	☞ Sat 5 <sup>th</sup>	7am - 12pm	<b>F1C State Champs</b> (2014 rules: 5 flights and 5 secs)	Dalby
	☞	1pm - 4pm	<b>Open Power State Champs</b> (3 flights)	Dalby
	☞ Sun 6 <sup>th</sup>	7am - 12pm	<b>F1J State Champs</b> (5 flights)	Dalby
	☞ Sat 12 <sup>th</sup>	7am - 12pm	<b>F1A State Champs</b> (5 rounds - first Rd 4min)	Dalby
	☞ Sun 13 <sup>th</sup>	7am - 12pm	<b>F1B State Champs</b> (5 rounds - first Rd 4min)	Dalby
	IND Sat 19 <sup>th</sup>	3pm - 6pm	F1L (EZB) State Champs	BSHS
June	IND Sat 2 <sup>nd</sup>	3pm - 6pm	Hanger Rat State Champs	BSHS
	☞ Sun 10 <sup>th</sup>	8am - 1pm	<b>F1H State Champs</b> (5 flights), E36 (3 flights)	Coominya
	Sat 16 <sup>th</sup> - Sun 17 <sup>th</sup>		Reserve days if May F1A and F1B events postponed	Dalby
	✂ Sat 23 <sup>rd</sup>	12pm - 4pm	AGM with BBQ lunch	John's place
	CP Sun 24 <sup>th</sup>	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 7 <sup>th</sup>	3pm - 6pm	P18 State Champs (club sponsored)	BSHS
	☞ Sun 8 <sup>th</sup>	8am - 2pm	<b>Open Rubber &amp; P30 State Champs</b> (3 flights each)	Coominya
	Sun 22 <sup>nd</sup>	8am - 2pm	Dale's Fun Day (general flying and limited RC)	Coominya
August	IND Sun 5 <sup>th</sup>	3pm - 6pm	Peanut Scale State Champs	BSHS
	CP Sun 12 <sup>th</sup>	8am - 2pm	BFFS Mini Power and QDP (3 flights each)	Coominya
	Sun 26 <sup>th</sup>	8am - 2pm	Club Fun Day Vintage, Sports models and Limited RC (Prizes, no points)	Coominya
September	☞ Sun 9 <sup>th</sup>	7am - 2pm	<b>Scale, HLG and CLG State Champs</b>	Coominya
	Sat 15 <sup>th</sup>	7am - 12pm	F1A & F1C <b>Team Selection Trial</b> (5 rounds)	Dalby
	Sun 16 <sup>th</sup>	7am - 12pm	F1B <b>Team Selection Trial</b> (5 rounds)	Dalby
	CP Sun 23 <sup>rd</sup>	7am - 3pm	Col's Vintage Rally (accumulation of points for each class)	Coominya
October	Sun 14 <sup>th</sup>	7am - 3 pm	LSq/100 (3 flights), No Frills Wakefield (5 flights)	Coominya
	Sun 21 <sup>th</sup>	7am - 3 pm	100gm coupe, P20 and E36 (3 flights each)	Coominya
November	Sun 18 <sup>th</sup>	12pm - 3pm	BFFS Xmas Party and prizes presentation	Malcolm & Kathy's

☞ 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 34 34 90





# NSWFFS Contest & Fixture Calendar 2018



Date	Event	Venue	Time	C/D
Dec 30 Jan 2	New Years Eve BBQ & Fun Fly No Comps, just fun flying	West Wyalong – flying anytime. If you want to stay on the field, book in with Roy Summersby		
Jan 14	New Year Recovery Day	Richmond	7.00am – 1.00pm	
Jan 19	General Meeting	Check Newsletter	7:30pm	
Jan 28	Scramble, Scale Rally, HLG/CG	Richmond	7.00am – 1.00pm	Terry Bond
Feb 10-18	Maxmen, etc USA	Lost Hills		
Feb 11	Combined % + Scale Fun Fly	Richmond	7:00am – 1:00pm	Matt Hannaford
Feb 25	Combined F1G, H, J + P30	Richmond	7.00am – 1.00pm	Gary Pope
Mar 3-4	Hunter Valley Champs	Muswellbrook		
Mar 11	State Champs P30 + Comb Vintage	Richmond	7.00 – 1.00pm	Gary Pope
Mar 16	General Meeting	Check Newsletter	7.30pm	
Mar 18	Gary Goodwin's Hinton Day	Hinton	7.00am---1.00pm	0414 292 050
Mar 25	State Champs Scramble + Combined % Control Line flying, BBQ Lunch	Richmond BYO Food	7.00am-1.00pm	Terry Bond
Apr 8	Big Kev's Abomination Day	Richmond	7.00am – 1.00pm	Peter Jackson
Apr 16-21	AFFS Champs etc	Narrandera	See FFDU	
Apr 23-30	Nationals & Southern Cross Cup	W. Wyalong	Nats' Webpages	MAAA
May 18	General Meeting	Check Newsletter	7.30 pm	
May 19-20	Veteran's Gathering	Muswellbrook		
May 25-28	Vic State Champs F1A,B,C,G,H,J, O/Rubber O/Power, P30, HLG	Bridgewater	For program see FFDU	Vin Morgan 03 9387 2531
June 9-11	NSW State Champs F1A, B, C, O/Power + O/Rubber	W. Wyalong AB Field	8.00am-1.00pm	Dave Thomas
June 17	Scale Practice	Richmond	7.00am-1.00pm	Jim Christie
July 6-8	Scale Rally Weekend. Scale comp Sat 7 <sup>th</sup> , Sun 8 <sup>th</sup> ½ Hour scramble, Fun Fly + C/L flying	Richmond 7.00 am till dark Saturday is the Trans Tasman BBQ Lunch, BYO Food		Tahn Stowe
July 15	State Champs F1G,H,J (Combined)	Richmond	7.00am-1.00pm	Matt Hannaford
July 20	General Meeting	Check Newsletter	7.30 pm	
Aug 5	Combined %, Multiple Entries.	Richmond	7.00am- 1.00pm	Bruce Hao
Aug 19	Scale Rally, P 30, Combined Vintage	Richmond	7:00am – 1:00pm	Tahn Stowe
Aug 25-26	Cowra Oily Hand Weekend	Cowra		
Sep 9	½ Hour Scramble +Fun Fly B-B-Q Lunch	Richmond BYO Food	7:00am – 1:00pm	John Corby
Sep 14	Annual General Meeting	Check Newsletter	7:30 pm	
Sep 23	Combined % 5 flights	Richmond	7.00am - 1.00pm	Matt Hannaford
Oct 7	Combined % Multiple Entries	Hinton	7:00am – 1:00pm	Gary Goodwin
Oct 27-28	Wings Over West Wyalong All Disciplines FUN FLY	West Wyalong AB Field	7.00am-till Dark	Plenty of room for ALL
Nov 11	Brian Alcock Bi-plane Day ½ Hour Scramble + Scale Rally	Richmond	7:00am – 1:00pm	Peter Jackson
Nov 16	General Meeting	Check Newsletter	7.30	
Nov 30	Friday Xmas Party	Richmond	7.00am – 1.00pm	Terry & Lyn
Dec 9	½ Hour Scramble, Combined Vintage with SAMS & Fun Fly	Richmond BBQ Xmas	7:00am – 1:00pm Lunch BYO FOOD	Terry Bond

**Notes:** 1. All scrambles start as close to 8.00 am as possible  
 2. Sport FF, CL & RC flying welcome on AB Field at West Wyalong. Plenty of room.  
 3. BYO FOOD, DRINK & CHAIR to all BBQs at Richmond



## West Australian 2018 Free Flight Contest Calendar



DATE	CONTEST CLASS	LOCATION	TIME	CONTACT
4 March	Combined Open	Meckering	9.00 am	Chris Behr – 9448 9922
18 March	Combined Open	Meckering	9.00 am	Paul Rossiter – 9316 0250
1 April	HLG/CLG State Championships Power Scramble State Championships	TBA	TBA	Greg McLure – 9457 8680
22 April	Combined Open	Meckering	9.00 am	Chris Behr – 9448 9922
13 May	P30 State Champs / Roy Farren Cup Combined Open / Free Flight Cup	Meckering	9.00 am	Paul Rossiter – 9316 0250
3 June	SLOP State Championships Mike Beilby Cup Combined Open / Free Flight Cup	Meckering	9.00 am	Phil Letchford – 9295 2161
17 June	Rubber State Championships Wamac Cup Open Glider	Meckering	9.00 am	Chris Behr – 9448 9922
8 July	Open Power State Championships Combined Open / Free Flight Cup	Meckering	9.00 am	Rod McDonald -9316 2762
29 July	Nostalgia Combined Open / Free Flight Cup	Meckering	9.00 am	Paul Rossiter – 9316 0250
18 – 19 August	F1A, F1B and F1C State Championship (TT) FIA Team trials F1A, F1B and F1C (TT) Combined Open / Free Flight Cup	Meckering	9.00 am	Paul Rossiter – 9316 0250
22 – 24 September	Free Flight Electric F1Q/E36 Old Timer Electric and Limited Height Glider	Meckering	9:00am	Paul Rossiter – 9316 0250 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; E-36 electric; CO<sub>2</sub>; 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. CO<sub>2</sub> 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 5 rounds, with the first round 4 minutes.