Electric & Glider FLIGHT Australia

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Group shot taken at the 2016 Sailplane Expo in Armidale - Open Thermal & F5J- report starts p. 3 - Darryl Whan photo

Editorial

by Peter Pine

Welcome to the second edition of this E-magazine! Thank you to all readers who sent positive and encouraging messages after the first trial edition was circulated. The trial is now locked in!

Fred Lodden suggested we try landscape layout - he says that it is easier to read on a computer screen without scrolling up and down. Fred quoted R/C Soaring Digest as a publication that changed to landscape for that benefit, so here is the first sample - please give feedback. Would you prefer this landscape format or is portrait better for you?

Thank you also to all those people who sent content - photos and text! I now have more than needed for this edition and will need to hold some over for next time. However, keep the content coming - photos of your projects and reports on events. Write up your latest model!

The Sailplane Expo is the main report this time, and next time we will have much to report from the National Electric Flight Rally to be held at Canberra at Easter. Send in your entry for this great event urgently - and I will see you there!

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President's Message

by Max Haysom

At this time, the AEFA committee is hurriedly preparing for the NEFR 2016, a few short weeks away, and we have garnered Something Special this year, the MAAA 69th Nationals F5j Event. As we struggle to get the message out, the following came to me with credit to "anon". Read on and reflect.

The Magic Bank Account

Imagine that you had won the following *PRIZE* in a raffle:
Each morning your bank would deposit $86,400 in your private account for your use. However, this prize has rules:

The Set of Rules:

1. Everything that you didn't spend during each day would be taken away from you.
2. You may not simply transfer money into some other account.
3. You may only spend it.
4. Each morning upon awakening, the bank opens your account with another $86,400 for that day.
5. The bank can end the game without warning; at any time it can say, "Game Over!" It can close the account and you will not receive a new one. What would you personally do?

You would buy anything and everything you wanted, right? Not only for yourself, but for all the people you love and care for. Even for people you don't know, because you couldn't possibly spend it all on yourself, right? You would try to spend every cent, and use it all, because you knew it would be replenished in the morning, right?

ACTUALLY, This GAME is REAL!
Shocked ??? ....YES! Each of us is already a winner of this *PRIZE*.
We just can't seem to see it.

The PRIZE is ...*TIME*

1. Each morning we awaken to receive 86,400 seconds, as a Gift of Life.
2. And when we go to sleep at night, any remaining time is not credited to us.
3. What we haven't used up that day is forever lost.
4. Yesterday is forever gone.
5. Each morning the account is refilled, but the bank can dissolve your account at any time WITHOUT WARNING...

SO, what will YOU do with Your 86,400 seconds? Those seconds are worth so much more than the same amount in dollars. Think about it and remember to enjoy every second of your life, because time races by very quickly1

So take care of yourself, be happy, love deeply and enjoy life! Here's wishing you a wonderful and beautiful day. **Start "spending".**

Sailplane Expo 2016

The Sailplane Expo has a life of its own – it has been running now for 36 years and has seen many changes in format and a change in venue. The first Sailplane Expo was held in 1980 on the popular Saumarez field at the Arding crossroads and continued there for some 30 years. A CASA rule change forced the event to move, and current organizer, Hutton Oddy, found a field on Warrane Road west of the University, where the event is now held.

The first Expo events were organised by the three musketeers of the Armidale NEMAC Club, David Morgan, Tony Hall and myself. We had a guest of honour in the early days who presented workshops and seminars for those gathered; famous names such as Ralf Learmont, Gary Jordan, Phil Bird, Alan Lowe, Mike O'Reilly and David Hobby presented over the years. The gliding tasks were many and varied; at various times they included F3B, F5B, Scale Glider, simple winch launch tasks, DLG, Limited Electric Glider, F5J etc.

In 2016 three tasks were offered; Open Thermal (winch launch 10 minute flight in 12 minute working time), F5J Electric Glider, and DLG hand-launch. DLG did not attract enough entrants, but Open Thermal and F5J forged ahead. The weather forecast was not positive and some people pulled out of the event, but 23 turned up for Open Thermal and 17 for F5J. The weather incident that was predicted did not eventuate and flying continued over 2.5 days, only interrupted once by a storm on Saturday afternoon, and nine rounds of each task were concluded. Those flying both tasks (and there were 10 of those) were very busy indeed and put in 18 flights over the weekend.

Darryl Whan, the local photographer found us at the Bowling Club dinner on Saturday night (he has always been a great supporter of the Expo) and came again to the field on Sunday. He took copious photos and we give him thanks for many that are shown here. Sniffing a local public interest story, Darryl took a photo of me as the only "original" present in front of the gathered fliers; many did not understand what Darryl was doing and booed the proceedings, but he went on to take the photo on the first page. If you look carefully, you will see a small object in the sky above the gathered throng; it is Steve Keep's quadcopter taking an airborne photo – see a copy of Steve's photo featured on page 5.

As an aside, Alan Beck and Peter Prasser from Brisbane were in attendance, and they have been Expo supporters for many years, dating back to the days when a large contingent came from the Brisbane Model Soaring Club – and they should have been featured as "near originals" in the Darryl Whan photo.

David Spain launches for Kane Morley from Tyalgum (west of Murwillumbah) in Open Thermal. Whan photo

Jack Murphy (right) assists Don Farrar search for thermals - both of these competitors flew in both Open Thermal and F5J - they were kept busy! Whan photo.

Well, the conditions were variable with booming thermals in some slots and difficult flying in others. The flight times varied from a full 10 minutes to as little as 2:08! There were many 3, 4 and 5 minute flights – but that simply helped to spread out the scores (see Open Thermal results page 8).

Special mention must be made of Ben Christian, a local lad who practices with Hutton Oddy; he calmly carried away the Open Thermal event – probably only his second event. It is great to see a young flier coming through the ranks; I knew Ben's father, John Christian, from my 20 years ago in Armidale. In fact, John was an artist who was a partner with me (and others) in Moore Park Studio Gallery where the early Expo seminars were held. Ben only won three of the nine rounds he flew in, but all his other scores were strongly in the 900s; consistent flying carried off the event for Ben!

Steve Keep is a darned good flier who currently operates a commercial UAV business in Port Macquarie; he won 8 of his 9 rounds and still finished up 7.3 points behind Ben. That just shows you how strong Ben's 900s scores were! Karl Knack from Brisbane came in third some 228 points behind Steve.

Some mention must be made of the field organization – Hutton has instigated the Jerilderie LSF style of set-up; Open Thermal fliers organized

After gaining experience at F5J events around Sydney, Klaus Metzger from Katoomba came to the Expo with a new Xplorer - and used his experience to fly it in to third place. Well done Klaus! Large wingspan models suit this event!

in to teams, with each team having two or three winches grouped together, with their camp and pits behind. The spot landing markers are then some 30m behind the pits. This means that fliers must be guided back to the spots by their timer after launching. It was bad luck if the spots behind you were all taken by the time you moved back; moving early was a good strategy!

This organization worked well for Open Thermal fliers who were used to the method, but not so good for the F5J fliers who were forced to launch at the winch line (for safety reasons) and then move back to the spots also. However, a 180 degree shift in the wind direction on Monday meant that the F5J fliers could launch from the spots, but winch fliers had to launch downwind and then move back to the spots anyway. This also meant that approaches to spot landings were over the pits, or down the narrow 30m corridor between the pits and the spots. There were also a few corridors between camps in the pits, and some used those to approach the spots, but it added extra tension to the landing approaches.

As you can see in the results, Hutton flew in both events, so he was a busy flier. He retained overall CD authority over the event, but left the running of the events, and general CD duties, to Kevin and Betty Smeaton from Brisbane, who did an admirable job despite the work load and sometimes difficult circumstances.

Hutton must also be commended for carrying the heavy burden of organising and running the event over recent years. After David Morgan moved away from Armidale in the 1990s, the burden of organization was taken up by a disparate group of fliers calling ourselves the Sailplane Expo Trust, none of whom resided in Armidale. It was organization by remote! Hutton joined the group and became the local contact, but the group has largely disbanded now and it has all been left to Hutton, who does an amazing job. Make sure you convey your appreciation to him next time you see him!

Now to F5J – a hard fought battle in the conditions. The bunch of leaders see-sawed through the weekend, with Brisbane flier, Evan Bengtson, flying a Pulsar 3.6 PRO, largely in contention most of the time. However, he was being pushed by fellow Brisbane flier, Ken Fox flying an Xplorer. Evan was well in the lead going in to round 9, but he tried for a low launch that did not work and he ended up with only a 5 minute flight that projected Ken in to the lead.

If you look carefully at the image on the first page, you will see a small object in the sky above all the fliers - that is Steve Keep's quadcopter, taking photos of the assembled group.

Above is a photo taken by Steve using his quadcopter - it shows the magnificent site that is used for the Sailplane Expo.

Right is the quadcopter in action - Darryl Whan photo.

Evan says he learned a valuable strategy lesson; he should have launched higher and preserved his lead with a comfortable flight time. But that is the way of F5J; there is more strategy, and more spread of scores in F5J than most thermal flying events. Those who try it soon become aware of the layers of complexity that make F5J interesting.

Note from the scores a similar situation to Open Thermal (see results page 9); Ken Fox won by consistent flying. He only won one of his nine heats, but posted healthy scores in most of his other heats. Evan, on the other hand, won four of his eight heats, but two low scores let him down. You can have one throw away round in F5J, but not two!

Klaus Metzger from Katoomba has been competing in F5J events around Sydney for some time, but turned up at Armidale with a new Xplorer electric (photo page 4), and flew it very well in to third place. Well done Klaus!

Another winch launch advocate, Jack Murphy has also been trying F5J in Sydney events and now has his Pulsar 4.0PRO sorted out and flew it in to fourth place (without actually winning any one heat). Again, consistency and experience were the key!

Special mention must be made of Colin May and John Arnold who made the trip from Bundaberg in Queensland to fly in F5J. Colin cut his teeth

Yours truly launching a brand new Pulsar for newcomer, Wilf Rath from Canberra. After gaining experience at the Expo, Wilf is now heading to the NEFR at Easter, which will be held at the NAAS field. Darryl Whan photo.

on F5J at the MAAA Nats in 2015, held at the MRSSA field near Ipswich, and went home with an award for flying well with a small model. Colin flew the same 2.0m Raptor model at Armidale and would have won the limited class if there had been one. At some Australian events, awards are given for those placing well with a model of 2.5m wingspan or less. Colin has also shown his electronic skills by developing a small and inexpensive F5J logger called the Barotimer. It does nothing but log the F5J parameters, and allows emergency motor restart and competition re-launch after disconnecting and re-connecting. The Barotimer has become the economy F5J

device in Australia!

Daniel Lewis also needs a special mention; Daniel is son of Armidale club member and past president, Michael Lewis. Daniel flew a small model in both Open Thermal and F5J, and flew very well displaying great talent. Daniel would also have scored an award if Limited F5J awards had been allocated. It is worth encouraging young fliers like Daniel. People like Daniel and Ben Christian are the future of our flying endeavours in general and the Expo in particular. Let's give them every encouragement!

The Australia Day holiday falls on a Thursday next year, so the 2017 Sailplane Expo may take a very different approach. One suggestion is to run a four day event with F5J and Open Thermal run separately, but overlapping. The thought is to run F5J from Thursday morning to Friday evening, but commence winch launch on Friday at lunch time – that would mean that F5J and Open Thermal would only be interspersed for half a day. Open Thermal could then run independently on Saturday and Sunday with no pausing for F5J! The dinner could be on Friday night. Please note that this is only a suggestion and is open for discussion. Please send through your thoughts in response to this suggestion and they will be conveyed to those making the decisions.

Mark your diary for 2017 and let's make the Sailplane Expo the biggest yet as it surges forward to the 40th anniversary!

***Above** - David Pratley assists Jim Romer with Pulsar repairs after an unfortunate arrival.*

***Right** - young, promising flier from Armidale, Daniel Lewis - flew in both Open Thermal & F5J.*

***Below** - typical F5J launch - Jack Murphy (left), Don Farrar (centre), Colin May (right). Darryl Whan photos*

Sailplane Expo Open Thermal - Overall Results

[Armidale 23/01/2016]

www.GliderScore.com

Rank	Name	Team	Score	Pcnt	Raw Score	Rnd1	Rnd2	Rnd3	Rnd4	Rnd5	Rnd6	Rnd7	Rnd8	Rnd9
1	CHRISTIAN, Ben	1	8961.1	100.00	8961.1	997.1	997.1	1000.0	994.2	995.7	979.9	1000.0	997.1	1000.0
2	KEEP, Steve	5	8953.8	99.92	8953.8	1000.0	1000.0	953.8	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
3	KNACK, Karl	4	8725.9	97.38	8725.9	834.5	1000.0	930.1	985.7	994.3	982.7	998.6	1000.0	1000.0
4	BENGSTON, Evan	3	8670.8	96.76	8670.8	743.6	964.5	992.8	1000.0	1000.0	1000.0	982.8	1000.0	987.1
5	WARMAN, Clive	5	8322.2	92.87	8322.2	1000.0	603.7	993.9	1000.0	994.3	1000.0	998.6	995.7	736.0
6	PRATLEY, David	5	8289.2	92.50	8289.2	997.1	995.7	745.9	1000.0	976.9	994.2	1000.0	997.1	582.3
7	ODDY, Hutton	1	8280.9	92.41	8280.9	974.4	974.1	1000.0	988.5	995.7	1000.0	663.8	684.4	1000.0
8	MORLEY, Kane	3	8242.1	91.98	8242.1	886.7	770.1	822.1	994.3	994.3	1000.0	919.5	1000.0	855.1
9	FOSTER, Graeme	4	8093.9	90.32	8093.9	997.1	975.6	568.4	985.6	793.9	992.8	959.7	985.5	835.3
10	JOHNSON, Scott	5	8082.8	90.20	8082.8	1000.0	1000.0	627.4	770.6	977.6	857.3	968.4	1000.0	881.5
11	ROPER, Greg	3	7925.9	88.45	7925.9	998.6	1000.0	969.1	979.8	945.5	988.5	994.2	457.7	592.5
12	VIRTUE, Nigel	6	7847.9	87.58	7847.9	719.4	661.5	990.8	933.6	968.4	976.9	972.7	981.3	643.3
13	METZGER, Klaus	1	7758.2	86.58	7758.2	739.6	921.2	352.8	979.9	1000.0	958.2	844.0	979.7	982.8
14	SPAIN, David	3	7459.8	83.25	7459.8	984.1	762.2	1000.0	783.7	992.8	984.1	880.6	990.0	82.3
15	MURPHY, Jack	2	7322.3	81.71	7322.3	709.4	604.6	1000.0	994.3	865.4	694.0	1000.0	886.7	567.9
16	FOX, Ken	4	7196.0	80.30	7196.0	684.4	516.4	710.0	984.1	766.0	988.5	994.2	565.3	987.1
17	FARRAR, Don	2	7029.7	78.45	7029.7	1000.0	703.2	971.1	994.2	1000.0	752.2	864.4	212.3	532.3
18	CRANDON, David	6	6771.7	75.57	6771.7	882.4	741.9	459.3	703.4	974.0	639.4	636.4	869.4	865.5
19	BRAND, Guy	2	6365.4	71.03	6365.4	883.8	480.5	998.5	995.7	948.0	991.4	0.0	787.0	280.5
20	HARDY, Graham	6	5736.7	64.02	5736.7	992.8	600.6	401.2	825.0	681.1	597.1	266.2	934.8	437.9
21	LEWIS, Daniel	2	5247.0	58.55	5247.0	318.0	646.6	446.3	918.2	867.4	505.8	719.4	420.4	404.9
22	HEILBRONN, Russel	6	2591.8	28.92	2591.8	662.4	345.3	481.8	461.1	325.6	315.6	0.0	0.0	0.0
23	GIBSON, Paul	1	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sailplane Expo F5J - Overall Results

[Armidale 23/01/2016]

www.GliderScore.com

Rank	Name	Score	Pcnt	Raw Score	Rnd 1	Rnd 2	Rnd 3	Rnd 4	Rnd 5	Rnd 6	Rnd 7	Rnd 8	Rnd 9	Drop1	Plty
					Dur	Dur	Dur	Dur	Dur	Dur	Dur	Dur	Dur	Dur	
1	Fox, Ken	7584.3	*100.00*	8277.8	994.4	880.2	693.5	943.2	970.2	917.3	890.8	1000.0	988.2	*693.5*	*0*
2	Bengtson, Evan	7445.6	*98.17*	7957.6	1000.0	512.0	1000.0	925.9	983.8	1000.0	1000.0	991.1	544.8	*512.0*	*0*
3	Metzger, Klaus	7280.8	*96.00*	7570.3	1000.0	440.1	1000.0	1000.0	942.1	289.5	1000.0	898.6	1000.0	*289.5*	*0*
4	Murphy, Jack	6946.6	*91.59*	7414.9	982.0	481.4	781.6	827.9	468.3	972.7	974.6	960.9	965.5	*468.3*	*0*
5	Pine, Peter	6290.4	*82.94*	6456.3	545.8	1000.0	964.9	165.9	694.5	957.0	814.6	432.6	881.0	*165.9*	*0*
6	Pratley, David	6179.6	*81.48*	6493.6	659.8	543.9	377.6	986.0	1000.0	314.0	771.4	1000.0	840.9	*314.0*	*0*
7	Farrar, Don	5638.6	*74.35*	5887.6	391.3	603.4	249.0	958.8	469.9	1000.0	995.8	487.5	731.9	*249.0*	*0*
8	Spain, David	5534.4	*72.97*	5738.7	914.9	812.6	204.3	294.1	871.5	892.0	834.9	380.8	533.6	*204.3*	*0*
9	Keep, Steve	5406.2	*71.28*	5834.0	502.4	556.6	427.8	1000.0	992.5	561.2	485.2	531.6	776.7	*427.8*	*0*
10	Lodden, Fred	5246.6	*69.18*	5690.0	443.4	536.6	535.1	446.5	462.4	981.4	466.1	818.5	1000.0	*443.4*	*0*
11	Gibson, Paul	5178.9	*68.28*	5332.1	450.5	525.2	651.3	153.2	848.4	835.4	221.7	999.1	647.3	*153.2*	*0*
12	Oddy, Hutton	5106.6	*67.33*	5254.6	576.3	504.0	148.0	924.0	1000.0	679.0	701.7	444.0	277.6	*148.0*	*0*
13	Romer, Jim	4717.1	*62.20*	4717.1	788.2	0.0	0.0	361.6	896.9	933.3	0.0	970.7	766.4	*0.0*	*0*
14	Beck, Alan	4637.3	*61.14*	4775.9	397.7	350.5	582.4	681.2	138.6	972.7	471.3	517.0	664.5	*138.6*	*0*
15	Lewis, Daniel	4315.4	*56.90*	4546.6	336.7	1000.0	237.2	313.0	318.0	231.2	892.5	288.7	929.3	*231.2*	*0*
16	Rath, Wilf	3034.4	*40.01*	3034.4	0.0	0.0	531.3	252.1	519.6	897.1	0.0	297.2	537.1	*0.0*	*0*
17	Warman, Clive	1588.1	*20.94*	1588.1	975.0	613.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	*0*

F5J Rule Variations Accepted in Australia

by Peter Pine

There was some confusion over acceptable rule variations for F5J at the Armidale Expo event, so here is an explanation of those variations.

Emergency Motor Restart

The FAI rules say that only one motor run is permitted, and early devices (such as the Alti #2 Basic) only permitted one motor run. After shutting down the motor (manually or after 30 seconds) it would not start again - you were a glider, just like Open Thermal fliers are after they come off the winch. Most electric fliers believe that we should be able to restart our motors if we are in difficulty, the result being a zero score for that flight.

This feature has been championed overseas, to the extent that fliers have sent a petition to the FAI to change the draft rules on safety grounds, but nothing has happened to change the rules to date. They assert that it is reasonable to save a model in difficult circumstances (blown away down wind, about to hit an obstacle, likely to hit fliers or spectators, etc.). It is also believed that fliers will be more adventurous in their flying if they know that they have a "get out of gaol card". Fliers are more likely to chase a thermal down wind, for example. Consequently, we allow emergency motor restarts in Australia, but frankly, I have not seen the strategy used very often over dozens of F5J events. Both of the popular devices used in Australia - the Altis V.4 and 4+, and the Barotimer allow for a motor restart. They both display a row of dashes if the motor is restarted and the timer knows to give a zero score.

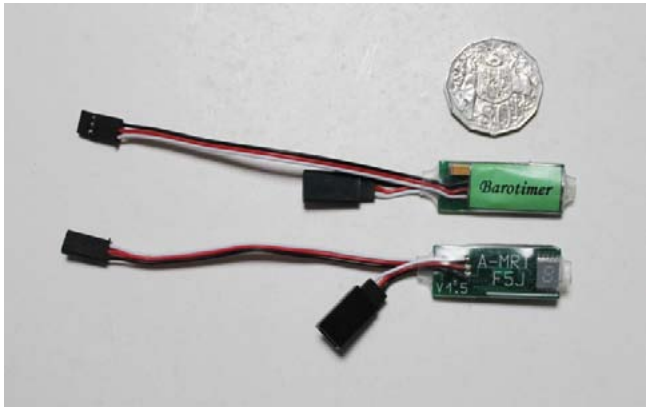
One Re-launch Allowed

If a flier has a short flight (say, 3 minutes or so) and would like to try again, we allow one re-launch with the second flight to count, even if it is worse (first flight cancelled). This is normal in Open Thermal, and we imitate that strategy. The F5J rules say launch must be from a point within 4m of the designated launch or landing spot, so a return to the launch point is required.

Now, the FAI F5J rules do not allow this. They say there will be one attempt only. However, the Altis 4, set to F5J V.2.0 firmware, allows an automatic competition restart. The device resets itself once you descend below 8 metres of height. So, you do not have to disconnect and re-connect. We have seen that this works in dozens of occasions. What we want to avoid is a device that records the initial launch height, not the second one. Neither the Barotimer nor the Altis do this, so we allow this feature in Australia using these devices, but the Barotimer must be disconnected and reconnected - it will not function if not disconnected first. Disconnection is not a rule - it is just a practical feature of the Barotimer.

The only other variation is that we do not usually have fly-offs - all rounds count in scoring.

Altis V.4 and 4+ permit emergency motor restarts and automatic competition re-launch in standard firmware v2.0 - a change to v.5.5 invokes FAI standards and no restart or re-launch can occur.



Barotimer designed and made in Australia - an economy F5J device - allows emergency motor restarts, but the throttle control must be activated three times to make this happen - a good safety feature if you use throttle on the stick - avoids inadvertent restartts!

Dave Hines F5B Memorial Trophy

by Brett Solanov

In the first edition of this E-magazine, a report of the F5B event held at NAAS was published - it was a third person report from information gleaned from participants. Here is a report from someone who actually took part in the event - Brett Solanov - and gives a different perspective.

David Hines was a long term aeromodeller, who was involved in the sport for over 20 years, during which time he flew several different categories. While he tried his hand at control-line and radio, it was the events that involved speed that called the loudest. He was instrumental in engine development and pit crew activities in team race, dabbled in RC thermal glider, sport pylon and finally discovered high performance electric flight, in particular, F5B. In this category he represented Australia at several World Championships, and played a major role in promoting the category in Oz. Three years ago, after a 10 year battle with Mesothelioma, sadly Dave passed away. What better way to remember a friend but to gather for a weekend of flying his favourite class, socialising, and competing in the interest of being the first to have your name on his trophy.....

The weekend kicked off on Friday afternoon with competitors arriving from afar to fit in some last minute practice and test flying. All were successful in their endeavours to get familiar with the newly setup course and flying site. The National Aeromodelling and Aviators Society (NAAS) in Canberra were the gracious hosts of this event, and as usual their efforts were outstanding. For a small club in terms of membership, they punch well above their weight when it comes to flying facilities, pits area and catering. Friday's flying was capped off with a superb roast dinner at the field, cooked on-site by the NAAS members.

On Saturday morning it was great to see Dave's family back at a flying field, Denise, Imogen and Lachlan made the journey to be amongst some old friends, sharing many laughs and tales of flying weekends. There were some interruptions due to technical difficulties with the timing system, and a big thank you goes to all the experts who diagnosed and corrected the problem. At the end of the day 3 rounds had been flown, but they were not all incident free.

Ken travelled from Japan to join us, and typically sets a very high standard for the Australians to chase, but this time his weekend was plagued with technical difficulties, resulting in motor swaps and ESC programming, and finally broken props and toasted components when the motor self started while the model was sitting on the ground...not great for a model with no undercarriage! Brett Solanov's new model performed well, but needed the power level reduced to gain some extra motor run time. The challenge of a multitask event, as always, is to balance the going fast while flying laps, and having enough energy left to complete the thermal task afterwards; something this new model of Brett's did not have in the necessary portions. After a couple of flights that fell short of the duration time, it was a failed motor mount that resulted in many twisted wires and escaping smoke.

The trophy donated by Dave Hines' family. This perpetual trophy will be hotly contested. Stan Rucinski photo.

Keith Flatt, as usual, wowed everyone with his model's amazing flight speed and acceleration. This is a brilliantly refined package of technical design and tuning, combined with some fast

twitching thumbs to steer it around the course. The 'Flip Flop' model met an early demise when Keith lost sight of the model having flown too close to the glare of the sun, and it dived into the ground. Keith continued flying with a backup model until technical issues grounded that model before the results were decided.

Owen Solanov was off the pace a little with his Radian, but completed every round, and at the end of the weekend had the best hit rate of all the pilots in terms of landing on the elusive spot. Owen only missed the bullseye by a small margin on one of his flights, the others were perfect. An outstanding result in tough conditions, look out in a few years when this 7 year old has more experience to call on.

The fight for the top place came down to a battle between Bill Hamilton and Mike Beatty, both previous World Championship competitors in this category. The result was not decided until all 6 rounds were completed, with Mike maintaining a lead, and becoming the first to get his name on the perpetual memorial trophy.

A huge thanks goes to all those who helped over the weekend running the course, operating stopwatches and guiding pilots to thermals, and tallying scores. The NAAS club did a fantastic job with catering over the three days, and their club facilities, which they so generously made available, were first class as usual. This is a small group of enthusiastic modellers who are keen to promote all aspects of our sport, and the events they host are well worth a visit.

Right: *Brett Solanov (author) launches for son Owen.*

Below: *Bill Hamilton identifies Japanese visitor*

Above: *Keith Flatt about to launch one of these highly powered models that fly at speeds approaching 300 km/hr*

F5B & F5D World Championships

The World Championships for Electric Gliders (multi task) and F5D Electric Pylon Race will be held this year at Lugo, Italy from 12-20 August. The first bulletin for this major event is already published and may be viewed at: www.f5wcitaly.it/index.php/bulletins

Team selection trials are held to select fliers to represent Australia at this event, and the Aussie teams have already been chosen.

F5B held their selection trial at Mansfield in the last week of January. 1st place was taken by Michael Beatty, 2nd place by Keith Flatt and 3rd place by Bill Hamilton. Bill is unable to attend, so Michael and Keith will represent us in Italy. Michael reports that all fliers were logging up to 47 laps (in racing distance), so they are not far off the pace. We wish Michael and Keith good flying!

The F5D selection trial was held in June 2015. The team selected to represent Australia was Bruce de Chastel, Tony Singleton and Alex Davey. Bruce and Tony are calling for each other, Neil Davy is calling for Alex. All are flying Bruce's Dominator design, and all have managed times below 60 seconds. At the last WC event, the Aussie team came in second with an individual placing of Beau Murphy as 3rd outright. They have a big reputation to uphold and we wish them well!

Bruce (left) and Tony (right) with the Dominator model produced by Bruce. 1.42m wingspan with a 7% thick wing - and weighs in at 1.0kg. Direct drive - Leomotion or Neu motors 2100 to 2300 Kv giving 32,000 rpm with 5.25 x 6.25" prop. Gear drive - Leomotion 4200 Kv with 6.7:1 gear and a 12x25 sawtooth prop running at 10,000 rpm. 1800-5S LiPo through a Jeti Mezon Lite 90 ESC - draws 60A in flight for a 58 second run time - at speeds up to 320 km/hr in straights, 270 km/hr in turns! Bruce has now produced over 60 of these models!

F5J FAI Recognition

Readers may not realise that the FAI recognises F5J as well F5B and F5D, and records World Cup results for F5J on their web site. There is no World Championships in F5J as yet, but the results of World Cup events held in different countries are tallied up to give a World Cup result. I mention this as several people questioned the inclusion of F5J in the Aussie Nationals and asked if the FAI even recognised F5J. Well, you can see the results of the 2015 F5J World Cup here: www.fai.org/world-cups/F5j-world-cup

You can also find the 2016 FAI rules for F5J at this location - scroll through the F5 events to come to F5J: www.fai.org/ciam-our-sport/f5-electric-flight

The FAI have also established a committee to test and catalogue acceptable height devices that can be used in F5J, but as yet they have not published any list (that I could find). Watch this space: my prediction is that there will eventually be an F5J World Championships as well as other F5 classes.

Slovakia are continuing to log the results of F5J events around the world. There are currently 186 pilots listed for the 2015-16 season and they include the results from the HSL event at Maddens Plains last November. If you flew in that event, your name appears on the table. The Picton Cup and Expo results have been sent in and will soon appear also: www.trnavaf3j.sk/Download/f5j_intertour_2016/trnava_f5j_2016_total_table.pdf

F5J in Victoria

by RCGA

The Radio Control Glider Association runs F5J events in Victoria as a half day event at the state field; they share the day with a DLG event - here is a report on the January event:

The F5j event at Digger's Rest on Jan. 17 attracted 8 pilots. The forecast was light winds but at mid-day this wind was quite strong. It slowly settled during the afternoon. Marcus Stent has now joined the group with his pre-loved electric Prego. He quickly showed us that even a balsa 3.2 metre model goes up when in lift as well as anything. In the first heat he had everyone "on toast" in a large down wind thermal. Unfortunately, his motor decided to start up and so he received a zero score. The winning time was 4.59!

The thermals were large and so was the sink. Chasing down wind at times was risky with several out landings.

Three newcomers joined in this month, Zdenek Busek and Gary Ryan from VARMS and Andrew Fenech with his electric F3b model. See Andrew's brightly coloured model in a photo (right). Alan Mayhew took out the event with his well-tried Pulsar 3.6 PRO and David Pratley came in second by only 7 points probably flying his trusty Xplorer - not much in it. Marcus Stent showed what he could do with his Prego for third place.

Alan Mayhew with his winning 3.6m Pulsar that has now had quite a few outings - practice with a familiar model helps win events!

Andrew Fenech's brightly coloured F3B model appeared for the first time - probably carrying a little extra weight with a strong wing meant for winch launch.

F5J No2 17Jan16 - Overall Results

[Diggers Rest 17/01/2016]

www.GliderScore.com

Rank	Name	Score	Pcnt	Raw Score	Rnd1	Rnd2	Rnd3	Rnd4	Rnd5
1	MAYHEW, Alan	3990.0	*100.00*	4302.1	1000.0	1000.0	990.0	312.1	1000.0
2	PRATLEY, David	3983.6	*99.84*	4492.8	983.6	1000.0	509.2	1000.0	1000.0
3	STENT, Marcus	3921.7	*98.29*	3921.7	0.0	949.5	1000.0	1000.0	972.2
4	FENECH, Andrew	3691.8	*92.53*	4432.5	1000.0	740.7	999.2	786.6	906.0
5	HOUDALAKIS, Jim	3556.8	*89.14*	3873.4	983.6	928.9	1000.0	644.3	316.6
6	WILSON, Bob	3021.5	*75.73*	3021.5	507.3	0.0	650.8	931.2	932.2
7	BUSEK, Zdenek	2170.6	*54.40*	2419.2	608.8	346.3	449.7	248.6	765.8
8	RYAN, Gary	1863.5	*46.70*	1863.5	0.0	105.0	852.0	13.4	893.1

YinganE Home-build

Peter Mather hails from Weribee on the outskirst of Melbourne and has always been interested in big gliders; he has engaged in quite a bit of cross-country work. Aircraft he has used include the Sagitta XC, and an own-deisgn called Yingani.

Then came the desire to build an electric version, hence the YinganE. The original Yingani, winch launch machine, had an all-ply and balsa fuselage, but for the YinganE, Peter went for a carbon boom in the modern style. That left a nose pod and wing mount to be fashioned out of balsa/ply. Nearby you will see images of how Peter came up with a nicely contoured nose section by whittling away a lot of block balsa - see the bin full of shavings. and the end product was a very handsome nose profile with a ply nose former and a faired in wing seat.

A picture of the completed YinganE can be seen top left. No ballast was needed for a safe CofG; numbers indicate it can go back further, but Peter started off with the balance point on the spar. All-Up-Weight came out at 2.95 kg for a 4.7m wingspan model (a bit over 15ft), with a wing loading of less than 9 oz/sqft.

The motor fitted creates an mpressive breeze drawing a bit over 43A/600W at full grunt on an oldish 4S LiPo battery, and that is plenty for the task.

In the accompanying images there is still a lick of paint to go on the canopy and some new stickers to go on the wing – we wish Peter many happy flights!

Right *- Nose being shaped - note the bin full of shavings.*
Below *- the nose pod shaved and sanded.*
Above *- the finished YinganE ready for test flying.*

Straton by Claus Grimm

The 5m wing comes in four sections with carbon rod outer joiners, but the centre rod is 14 mm chromed steel. Huge wing area: 165 sq.dm! The 2.25m fuselage comes in two sections. Weight is 8.5 Kg. Motor Himax V50-XL, prop carbon 20x8, Dymond D7550 servos, battery 5000-6S.

I launch the Straton with my DIY dolly. Yesterday, after starting the take off run it lifted off too early (uncontrolled) caused by a wind gust and lost lift. The prop struck the ground; the motor shaft is fine but the prop is gone.

A German company is behind the Straton (Staufenbiel in Hamburg), but it is manufactured in China - and they are getting better at producing quality. The glider comes ARF with all servos and motor built in, the prop complete including the spinner, all the cabling done; just add Rx, ESC and you're done. This ship is a beauty. My heart was pumping at the maiden flight, but shortly after I became so confident because she flies so predictably, has forgiving behaviour and landings are so smooth (crow configured). Aerobatics no problem. The Straton thermals very well and simply doesn't want to land!

Brian Lockett's new power plant

See the image above of the business end of Brian Lockett's Salto. We have frequently been entertained by Brian performing speed runs and areobatics with his Salto at the NEFR. Unfortunately, Brian cannot attend the NEFR this year and has had to stand down from his position on the AEFA executive due to health and work issues. We wish Brian well and thank him for his service to the AEFA - and we hope he will join us again soon.

Here are Brian's comments: *the power plant has been upgraded, and with the correct prop, the output should go over 5kw. Currently I'm getting 5.09kw on the ground but it drops to 4.1kw in the air. The image shows 16"x16" blades to give that output, but 18"x17" might be the go. Due to the size of the hub, the diameter is closer to 22"*. We look forward to seeing the new performance!

The Jack Black Memorial Flight

Jack Black was considered the father of electric flight in Australia - in the 1970s he engineered a four motor pusher glider that has recently been resurrected. This model will be flown in memory of Jack at the NEFR to he held at the NAAS field at Easter - flight scheduled for lunch time on 27 March. Come to the NEFR to witness this historical flight! Details on the AEFA web site:

www.aefanet.com

For the Jack Black story see:

www.flyelectric.com/jackblack

Steve Glasson's Hurricane

The realistic image above, and the one to the right, are of Steve Glasson's Hurricane that he modified from a .60 size VQ model, converting it to electric power. Steve now hails from Deception Bay in Queensland.

Steve recovered the model in Solartex and painted it in matte acrylics with a satin sealer sprayed with a spray can. The 1.575m wingspan model weighs in at 5kg.

After trouble with shaft flex on a Hyperion Z40 motor, Steve is changing to a Scorpion 4035-330, which has a 6mm shaft. A 17x10 Turnigy Cherry Wood prop (scale diameter) draws around 50A from a Turnigy 5000-6S LiPo pack giving around 1100W. This gives Steve about 8 minutes flight time. We wish him happy flying!

Nowra EOT - F5J Weekend

The survey conducted by Mel Gillott about the pattern of the EOT/F5J weekend sheduled for Nowra club field on 30 April/30 May revealed a strong preference amongs fliers for separate days, for different reasons. The event will now proceed with EOT on Saturday and F5J on Sunday. Contact Mel (0439) 438 088

STOP PRESS

The F5J event at the National Electric Flight Rally has now been designated the MAAA Nationals event for 2016, as part of the split Nationals being managed by VMAA. The AEFA have rearranged the NEFR program to give more heats to this Nationals event, and have invoked the following rules:

- Emergency motor restarts will be allowed with a resultant zero score.
- Only one flight attempt allowed per heat
- Only approved height devices may be used - and we have some to loan.
- There will be no fly-offs - all rounds will count except worst dropped after 4.
- A minimum of 4 rounds will be flown with one worst flight dropped.
- 7 rounds will be scheduled starting Friday afternoon - more if time permits.
- Flying is scheduled Friday to Sunday.
- Monday will be used as a catch up day if weather impedes the event.

The AEFA is determined to make this a welcoming event, open even to newcomers who will receive assistance. To take part, make sure you submit your entry form - all details and forms can be found on the AEFA web site:

www.aefanet.com

F5J Annual Tournament

Advance notice - a major F5J event is planned to be held over two days on the last weekend in October, at NAAS club field again so that it is rather central. This is mooted to become the major F5J event of the year, much like the LSF Tournament is to winch launch gliders. Book the date now!

Wanted! People to practice Electric Glider.

Peter Connell, member of the Eurobodalla flying club, (south coast NSW) has been flying a Radian and is enthusiastic to explore gliding. He has just purchased an Xenon and wishes to fly with fellow glider fliers to expand his knowledge and join the gliding fraternity - email: lynpeterc@gmail.com

2016 Glider/F5J Events Calendar - Version 10 - 3/02/16

Key - green for F5J events, red for NSW school holidays, HSL stands for Heathcote Soaring League

Date	Holidays NSW	Flying Events	Notes
25-28 March	Easter	NEFR at NAAS	AEFA Rally Canberra
3-Apr		HSL F5J Event	HSL, Sydney
8-Apr	NSW Schools break up		
9/10 April		Glider weekend including F5J	MRSSA, Harrisville near Brisbane
10-Apr		Millennium Cup	Lake George
10-Apr		Victorian Thermal	State field
25-Apr	Anzac Day		
26-Apr	NSW schools return		
30 April/1 May	EOT/F5J - pattern of events subject to survey	EOT/F5J weekend	Nowra
1-May		Victorian F5J	Diggers Rest
15-May		HSL Club Comp	Maddens Plains
29-May		Victorian Thermal	State field
11-13 June	Queen's Birthday	LSF Tournament	Jerilderie - includes trial F5J event
1-Jul	NSW Schools break up		
3-Jul		Picton Cup	Appin
3-4 July		Intersate Thermal Challenge	Pierces Creek, near Alstonville
18-Jul	NSW Schools return		
28-Aug		HSL Club Comp	Maddens Plains
10-11 September		Glide-A-Fair Thermal	Pierces Creek, near Alstonville
18-Sep		HSL F5J Event	HSL, Sydney
23-Sep	NSW Schools break up		
24-25 Sep		Millennium Cup	2-days Gloucester
1-2 October	No long weekend VIC	Mildura Thermal	Wentworth
1-3 October	Long weekend NSW	Northen NSW F5J	Pottsville - 2 days
8-9 October	Offered by MRSSA	F3J/F5J weekend	TARMAC, Toowoomba QLD
10-Oct	NSW Schools return		
16-Oct		HSL Club Comp	Maddens Plains
23-Oct		Millennium Cup	Maddens Plains
29-30 October		F5J Annual Tournament	NAAS, Canberra
13-Nov		Millennium Cup	Nowra
20-Nov		Picton Cup	Appin
27-Nov		HSL Club comp	Maddens Plains
4-Dec		Ted Swan Cup	Goulburn

South Australian Calendar just received - will be amalgamated with the overall clendar next time.

South Australian Events

March 12 and 13		F3J International	Milang
	20	Radian	Vic Park
	27	JR Aerotow	Jerilderie
Apr		Open Thermal	Milang
	17	2m and Open RES and 2m F5J	Milang
	24	Aerotow	Milang
May		Radian - may be State Champs	Vic Park
	15	2m and Open RES and 2m F5J	Milang
	29	Open F5J	Milang
June		LSF Tournament	Jerilderie
	19	Slope F3F	TBA
	26	Radian	
July		2m and Open RES and 2m F5J	Milang
	17	Open Thermal	Milang
	31	Aerotow	Milang
Aug		Slope F3F	TBA
	14	Radian	Vic Park
	21	2m and Open RES and 2m F5J	Milang
Sep-11		Open Thermal and Open F5J	Milang
	18	Aerotow	Milang
Oct 1 and 2		Mildura Open	Wentworth
	16	Slope F3F	TBA
	23	Radian	Vic Patrk
	30	2m and Open RES and 2m F5J	Milang
Nov		Aerotow	Milang
	13	Tas State Champs	Tas
	20	Radian/Stanley Slope Fest	Vic Park/Tas
Dec		Modelflight Midway Cup	Horsham
	13	Theo Inkengarg Funfly and Dinner	Vic Park

Electric Glider & EOT Postal Competitions each month

There are electric glider and EOT postal events each month. Gary Andrews manages monthly results for Radian glider and F5J. Mike Colston manages the EOT tasks (see e-mails below). You can practice these events at your own field in your own time, and e-mail the results to Gary & Mike. Each month they tabulate the results and send them back to you. It is a great way to practice flying these events; you go out flying with a purpose instead of just hacking around the sky! You can even time yourself, and you can repeat the tasks as many times as you want and send in a good score when you get one. The rules can be found on the AEFA web site (active link below) - look them up and join in the fun!

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(links and e-mails are interactive in this document - to send an e-mail from this page, click on the e-mail address)

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