Electric & Glider FLIGHT Australia



Edition Number 28

April 2021



The Open F5J International Event held at Milang each year is the feature of this edition - group shot at the top Big Milang field bottom left • Launch line centre • Winners right: Andrew Meyer (centre) 1st, Jim Houdalakis (right) 2nd, Mike O'Reilly (left) 3rd

Editorial by Peter Pine

The year has started with some big events! The Easter NEFR was an outstanding success, but too much material to include in this edition.



Reports in this edition are for the major F5J event at Milang, the Millennium Cup, RCGA events and the Aero-tow event at Jerilderie over Easter. Magazine production was delayed by my own participation in the NEFR - a major trip for me of 3,250km!

Thanks also to Greg Potter, Geoff Malone and Peter Mather for contributions.

Watch for another edition soon with all the action from the NEFR at Easter.

Also recommenced in this edition is the event calendar - see pages 19 and 20. Mark your diary with events that look likely for you. This calendar is also placed on the AEFA web site and updated if and when there are changes.

We bid farewell to Ralph Dephoff as President - see column to the right - and wish him well. Watch for an update on his replacement.

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Tribute to Ralph Dephoff

Trevor Smith gave three good years to the President role of AEFA and ushered in acceptance by the MAAA of the AEFA as the electric gliding NSIG.

The baton was handed to Ralph Dephoff from Kingscliff to carry on the good work in 2019. Ralph has done a good job of furthering the aims of the AEFA, which are:

To coordinate, foster and promote the flying of electric powered radio-controlled model aircraft both for recreational and sporting contests.

To liaise with state and national bodies in matters relating to electric powered model aircraft.

To coordinate rules effecting electric powered radiocontrolled model aircraft sporting contests and other activities

Ralph managed to shepherd the association through the difficult COVID year of 2020 when some major events were planned, but eventually cancelled. Not so this year, the NEFR has just been held at Easter at Cootamundra, and was an outstanding success in idyllic conditions. Ralph headed off to attend the NEFR, but had to turn back and return home for



personal reasons. These personal reasons have caused Ralph to relinquish to the president's role, even though he was re-elected at the AGM. The AEFA is currently seeking to re-fill the position.

We want to thank Ralph for his outstanding contribution and hard work. He put together the NEFR at short notice when originally it seemed that it would not go ahead.

Regular committee meetings have been held by Zoom during Ralph's presidency and he guided planning very ably. Thank you Ralph for you contribution, and we wish you well for the future.

Ralph has personally flown Radian and sports glider, E-RES (he has an Eli), F5J and 1/2A Electric Texaco. We hope he can continue to enjoy aviation experiences!

If you would like to personally contact Ralph, this is his e-mail address:

randmdephoff@gmail.com

AEFA Events Calendar

The calendar is back and there is a plethora of events planned for 2021.

See pages 19-20 for the full year calendar for 2021. It is also published on the AEFA web site and will be regularly updated. Please submit any information that can be included in future.

Open F5J International Milang, SA

The annual F5J event conducted by SSL in South Australia each year proceeded in March 2021, despite the border restraints and attracted 24 entrants. 22 flier actually competed, but no international entrants this time. Even so, it was an event for the top Australian F5J fliers, including the Australian champion. The lead swapped and changed between the top fliers all weekend.

CD Robert Gunn did an excellent job by all accounts and pushed through 20 qualifying rounds in 2.5 days. A three-round fly-off was conducted with 8 fliers; 15 minute flights this time! Marcus Stent was leading after 20 qualifying flights and Andrew Meyer came in fourth. But when the fat lady sang after the fly-off, Andrew came out on top - again! Jim Houdalakis was second to make the Victorian presence felt, and Mike O'Reilly came in third after pushing the leaders all the way. Mike was sometimes leading in the prelims - he was on top at Round 17!

Here is CD Robert Gunn's report on the event: Our field at Milang threw up its usual mixed bag of conditions. Saturday was medium winds Hot and coming from the East until a change came in the middle of the day an we had to swing the field around to fly to southerly winds. Sunday we had a dead still day with the wind literarily dead calm , beside the odd gusts or puffs



Winner Andrew Myer - first in the fly-off



Jim Houdalakis from Melbourne second in the fly-off



David Milward eagerly flying with Marcus Stent spotting



Mike Frizell spotting (left) for Chris Barrenger (right)



Garry Whitfield in heavy concentration

from the south. This continued on until about 3 in the afternoon when we were over having to do downwind landings so we once again had to change our field which meant we simply swapped landing spot for launch cones, to deal with a lot stronger North wind and gusts.

Today (Monday) we were expecting forecast strong 30k winds from the south. We flew our final 3 rounds in hardly anything like predicted. We finished the prelims about 11.15 spent 30 minutes preparing the scoring for the Fly Off and the wind came in which you will see by the couple of zero point scores.

Thanks to Model Flight for their sponsorship and Mike O'Reilly's planning and promotion. Thanks a lot to the ladies who provided lunches for 3 days, and thanks to Garry, Max, and several other SSL members who helped with set up and special thanks to our Interstate friends who made the trek displayed great sportsmanship and were good competitors.

And some comments from Mal Pring:

We flew 20 preliminary rounds, and 3 fly-off rounds.

Saturday was 15k Easterly, changed to 25-30km/ hr S/Westerly about 2pm. Sunday was dead calm until about 3pm, when a westerly change came through blowing 25-35km/hr. Monday was fairly consistently 25km/hr all day from the south west. The fly-off started about 11.30. In the fly-off, I have never seen so many models so small, even further away than I dare to go! At one stage I picked up a model returning to home, up high and very small, and then spotted a dot following him that got bigger and bigger! Oh, for some younger eyes!

The scores are up on glider score, and you can see those that did not get back from the zeros, even in the fly-offs! There was a bit of humour each name call; when the names were called out by computer each round, with "My creator, Gerry Carter" being called out! It was Gerry's first F5J event

NSW particpants below and Mal advises Chris Barrenger (7th overall) came from WA.



NSW representatives at Milang - Kevin Weston and Klaus Metzger from the HSL club





Top - Darryl Blow (left) timing for Daniel Haskell Bottom- Gavin Bowden launching



Bill Kent flying and Mal Pring spotting



Nick Chabrell pictured at Milang



Hugh Blackburn - from the Victorian contingent



David Pratley also made the trip from Melbourne



Marcus Stent first in heats, 6th in Fly-off



Mark Stone flying, Brad Merryweather spotting



Paul Moorfield, regular F5J flier - 12th place

Fligh	t Scores Results	_		_	_
Ro	ound 20	Up	date Rounds	List)	R
Re	sults to Round	20			
#	Name	Ctry	Score	Pcnt	R
1	Stent, Marcus	AUS	18855.6	100.00	
2	O'Reilly, Michael	AUS	18770.1	99.55	
3	Houdalakis, Jim	AUS	18187.8	96.46	
4	Meyer, Andrew	AUS	17985.2	95.38	
5	Millward, David	AUS	17854.7	94.69	
6	Haskell, Daniel	AUS	17361.7	92.08	
7	Whitfield, Garry	AUS	17325.3	91.88	
8	Barrenger, Chris	AUS	17118.2	90.79	
9	Pratley, David	AUS	16879.1	89.52	
10	Metzger, Klaus	AUS	16678.4	88,45	
11	Kent, Bill	AUS	16645.4	88.28	
12	Moorfield, Paul	AUS	16613.2	88.11	
13	Merryweather, Brad	AUS	16587.1	87.97	
14	Pring, Mal	AUS	16319.0	86.55	
15	Blackburn, Hugh	AUS	16234.8	86.10	
16	Stone, Mark	AUS	16033.7	85.03	
17	Weston, Kevin	AUS	15008.3	79.60	
18	Frizell, Mike	AUS	12450.8	66.03	
19	Carter, Gerry	AUS	12100.9	64.18	
20	Blow, Darrel	AUS	11593.7	61.49	
21	Bowden, Gavin	AUS	3153.7	16.73	
	Strautins, Carl	AUS	0,0	0.00	
=22	Winser, Bill	AUS	0.0	0.00	
=22	Safarik, Ladislav	AUS	0.0	0.00	

Fligh	ht Scores Results							
Ro	ound 3	Upd	ate Rounds	List	Refresh Result		ownload Repo	ort
Re	sults to Round	13						
#	Name	Ctry	Score	Pcnt	RawScore	Rnd1	Rnd2	Rnda
1	Meyer, Andrew	AUS	2775.1	100.00	2775.1	944.2	947.2	883.3
2	Houdalakis, Jim	AUS	2190.3	78.93	2190.3	1000.0	1000.0	190.3
3	O'Reilly, Michael	AUS	2103.6	75.80	2103.6	919.0	184.6	1000.
4	Millward, David	AUS	1966.6	70.87	1966.6	993.3	973.3	0.0
5	Whitfield, Garry	AUS	1914.6	68.99	1914.6	821.9	252.7	840.0
6	Stent, Marcus	AUS	882.2	31.79	882.2	882.2	0.0	0.0
7	Barrenger, Chris	AUS	766.4	27.62	766.4	0.0	229.4	537.0
8	Haskell, Daniel	AUS	541.0	19,49	541.0	541.0	0.0	0.0

Categories in F5J

The AEFA instituted categories in F5J this year instead of the Open/Limited strategy previously employed. The three categories are Sportsman, Advanced and Expert. The categories strategy is being used in the postal events, so please check the results sent out by Mel Gillott. When submitting your first score, please nominate the category that you should be in. If you want to discuss this, please contact Mel or any of the committee.

Categories were used for the first time at an AEFA event at the Easter National Electric Flight Rally. The outcome was immediately obvious; nine people received prizes and awards rather than the usual six!

Using categories is optional, but seems to be a good way to encourage the less experienced fliers. Maybe the strategy can be used in E-RES eventually to even out that event as well!

Millennium Cup – Lake George By Kevin Weston

Just a quick report on Millennium Cup event at Lake George 11 April:

On the way down from Sydney there was the biggest "pea souper" I've seen for many a year! The fog lifted at around 9.00am enough to allow the contest to begin and burnt off completely by 10.00am.

The wind was originally light from the east and swung, light to moderate from the south west later in the morning and fairly much stayed that way for the rest of the day.

The lift was light as you would expect in the morning and build up to abundant big thermals mid morning to lunch, ending with less abundant huge thermals up high to finish the day. All up, we were blessed with perfect gliding weather and many of us got to see Lake George at her best!

The Canberra club guy were wonderfully accommodating and looked after us all day many thanks guys for your hard work!! 14 odd pilots took to the skies(I think) and 12 finished the day.

I tried to talk Rob Watson into giving up his Radian for a while and get a plane that can handle the wind a little more comfortably. Rob







Klaus Metzger second - receiving trophy from Geoff above - flying below with Kevin Weston spotting



being the gentleman he is listened, smiled and said he would consider the idea!! Well humble pie does taste OK on occasions!

The interim results was.....:

- 1/- by a country mile.... ROB WATSON
- 2/- Klaus Metzger
- 3/- Kevin Weston

Report by organiser Fred Lodden

We had 12 pilots compete on the day. The weather forecast was for light winds with a partly cloudy day and a maximum temperature of 20 degrees. On the drive down from Sydney I was consistently driving in fog, from the outskirts of Sydney all the way through the Southern Highlands right the way to Lake George. Upon arrival at Lake George, it was clear that the fog was beginning to thin out a little and lift, but it was cold - around 8 degrees. The wind was very light to non-existent from the East.

We set up to launch to the East and after the pilots briefing, we got underway at about 09:30. The fog had lifted and so flight operations were not affected.

During the morning the wind swung around and eventually settled on the forecast direction of NW but it never became much more than light in strength. The odd cloud blew over and I noted that the temperature dropped significantly when the sun went away. The maximum temperature did get up to 20 degrees as forecast. We completed five rounds before calling a break for lunch at around midday and after lunch we completed a further three rounds before concluding flight operations a little before 2pm.

We did not have the computerised scoring system in operation at the field and so the recording of the results was done 'old school' using a pen and paper. This then led to the possibility of arithmetic errors creeping into final calculations of the places. But we got it done. We were able to complete the presentations.

The scores have been subsequently entered into the computerised system for including in the running tally of where each pilot stands as we head towards the awarding on the 2021 Millennium Cup.

There were two pilots who were unable to complete all 8 rounds. Wilf Rath had his plane go in quite hard and was unable to continue. Ty Hemming, a newcomer to Millennium Cup flying, initially flew an aircraft with aileron/elevator control and decided after a few rounds to convert it to rudder/elevator. Upon launch the aircraft turned hard right and spiralled in. Ty's backup aircraft had a servo seize/short and emit smoke, so he was unable to fly that aircraft either.

With the scores tallied the winner of the round is Rob Watson. Klaus Metzger was in second place and Kevin Weston came in third. Congratulations to the placegetters.

Third place Kevin Weston receives his trophy from Geoff Malone



Wayne Harris, new to Millennium Cup flying, is launching with Grant Manwaring timing





More Millennium Cup shots

Above left - Marc Ceo about to launch - his spotter must have seen some lift!

Above - catering centre for the Lake George club - hosts for the event.

Left - Robert Budniak attending to an Eli with Klaus Metzer - Marc watching.

Right - Robert gets under way with this Radian - Rob Watson timing.



See calendar pp. 19-20 for the future planned Millennium Cup events.



Eli is a very popular E-RES model. Send in details of your favourite .



The Radio Control Gliding Association (RCGA) is entrusted with developing the sport of soaring within Victoria, Australia. And as such, the RCGA helps nurture the soaring community in Victoria and the various disciplines that have developed within the gliding fraternity.

RCGA News

Events have started again in Victoria. In April RCGA ran a combined event; 2.0m E-RES (the new, popular event) and F5K (which is electric powered hand-launch gliders). The report says:

It was an excellent days flying with 7 in 2mERES, 4 in F5K and another few pilots coming along for a fun fly.

The weather cooperated and we enjoyed light thermals in the overcast conditions with light to medium winds all day.

F5K

1st Marcus Stent, electified CX2 2nd Hugh Blackburn, e-CX5 3rd Dave Millward, e-CX5

2M eRES

1st Marcus Stent, OZeRES 2nd DaveMillward, Slight 3rd Hugh Blackburn, Fresh RES

RGCA Events

As flying begins again in 2021, the RCGA has established an event program of events that continue until June 2021. The events have been added to the calendar on P.XX, and also can bee accessed on the RCGA web site, but here is a summary:

1-2 May	F5J at Horsham
16 May	Open Thermal at Diggers Rest
30 May	F5J at Diggers Rest
12-14 June	LSF Tournament Jerilderie
27 June	F5J at Ballarat

We wish Victoria well as they resume activities!

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F5K 18April2021 - Overall Results [Diggers Rest 18/04/2021]

www.GliderScore.com

Rank	Name	Score	Pcnt	Raw	Rnd1	Rnd2	Rnd3	Rnd4
Rallk	Name	Score	FCIIL	Score	AllUp 4:00*3	AllUp 4:00*3	AllUp 4:00*3	AllUp 4:00*3
1	STENT, Marcus	3598	100.00	3598	1000	641	957	1000
				Time Flights/# Heights LndgOut	7:03 4:00 0:00 3:03 63 0 65 n y n	5:28 4:00 0:00 1:28 78 0 61 n y n	7:45 2:06 1:39 4:00 65 56 58 n n n	12:00 4:00 4:00 4:00 74 62 62
2	BLACKBURN, Hugh	3513	97.64	3513	670	1000	1000	843
				Time Flights/# Heights LndgOut	5:01 3:14 1:47 0:00 74 63 0 n n y	7:46 3:46 4:00 0:00 64 65 0 n n y	8:17 2:58 2:08 3:11 64 63 66 n n n	10:0 4:00 4:0 2:0 65 66 6
3	MILLWARD, David	3170	88.10	3170	876	841	552	901
				Time Flights/# Heights LndgOut	6:13 1:00 1:14 3:59 47 59 73 n n n	6:38 2:38 4:00 0:00 55 72 0 n n y	4:44 0:00 2:20 2:24 0 69 68 y n n	10:20 4:00 4:00 2:20 62 52 50 n n
4	RYAN, Gary	1998	55.53	1998	437	410	459	692
				Time Flights/# Heights LndgOut	2:57 1:36 1:21 0:00 54 60 0 n n y	3:30 1:40 1:50 0:00 75 55 0 n n y	3:50 1:30 0:00 2:20 66 0 62 n y n	8:00 4:00 4:00 0:00 60 60 0 n n y

The 2m E-RES Team



Left to Right: Marcus Stent, Gary Ryan, Hugh Blackburn, David Pratley, Bruce Claperton, Alan Mayhew

For more news from RCGA, go to their web site at: http://www.rcga.org.au

2mERES Diggers 18April2021 - Overall Results

[Diggers Rest 18/04/2021]

Rank	Name	Score	Pcnt	Raw Score	Rnd1	Rnd2	Rnd3	Rnd4	Rnd5	Rnd6	Rnd7	Rnd8
1	STENT, Marcus	7000.0	100.00	7779.2	*779.2	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
				Time Landing	3:47 20	5:00 20	4:59 20	5:00 20	4:59 20		5:00 20	5:01 20
2	MILLWARD, David	6896.9	98.53	6896.9	1000.0	1000.0	990.6	1000.0	*0.0	1000.0	906.3	1000.0
				Time Landing	4:51 20	4:59 20	4:57 20	5:00 20	0:00 0	4:59 20	4:30 20	4:59 20
3	BLACKBURN, Hugh	6733.6	96.19	7386.6	*653.0	996.9	987.5	990.6	974.8	987.5	984.4	811.9
				Time Landing	3:07 20	4:59 20	4:56 20		4:31 0	4:55 20	4:55 20	3:59 20
4	MAYHEW, Alan	6694.6	95.64	7357.0	*662.4	1000.0	984.4	993.8	993.7	895.1	1000.0	827.6
				Time Landing	3:06 20		4:55 20		5:03 20		3:10 20	4:24 0
5	PRATLEY, David	6492.3	92.75	7168.5	1000.0	987.5	937.3	993.8	830.9	749.1	*676.2	993.7
				Time Landing	4:57 20	4:55 20	4:59 0	4:58 20	3:51 0	3:20 0	2:22 0	4:57 20
6	RYAN, Gary	6237.8	89.11	6632.8	736.3	996.9	*395.0	921.6	1000.0	598.7	1000.0	984.3
				Time Landing	3:29 20	4:59 20	2:06 0	4:54 0	4:18 20		3:10 20	4:54 20
7	CLAPERTON, Bruce	5773.5	82.48	5773.5	883.3	921.6	1000.0	1000.0	984.3	984.3	0.0	*0.0
				Time	4:20		5:00		4:54	-	0:00	0:00
				Landing	20	20	20	20	20	20	0	0

Some monsters from the LSF Aero-tow weekend at Jerilderie held over Easter - report next page







Jim Houdalakis attending to his 8.0m monster - and below shots of it landing





Jerilderie Aero-Tow 2021

Another great Easter glider event is the annual LSF Aero-tow at Jerilderie where giant scale gliders gather and are aero-towed up in to the sky for thermal flights. The 2021 event enjoyed the same magnificent weather as at the NEFR at Cootamundra and a large number of giant models gathered.

"RC Aeromodelling AU" has produced a magnificent half-hour video of activities at Jerilderie this year - click on this link to view: https://www.youtube.com/watch?v=_XpaW312OP8

At about 10 minutes in to the video you can see Jim Houdalakis (Milang second placegetter) flying his self-launching 8.0m scale glider; the motor comes up out of the back of the fuselage and powers the glider in to the air.

There are several self-launchers shown, even one with a ducted fan power pod on the back of the fuselage. There is also one with electric power that is aerotowed in to the sky, but then flies around under its own power, being quite manoeverable and performing crisp movements.

Variety is the key-note, with some electric gliders being flown, and even one free flight! An amazing Multiplex Cortina flying wing is featured (I am pleased to see some people still using Multiplex radios too, like I do!). David Hobby comes up with his aero-tow glider at about 16 minutes. I think I caught a glimpse of Carolyn Michael as well, who has always appreciated large scale gliders.

There are more, very well framed images, of gliders featured at Jerilderie on the VARMS Facebook page - some 53 magnificent photos taken by Dino if you can access Facebook. I will give you some samples here.

Personally, I found the noise from the tow planes off-putting, but I guess you can't have one without the other!

The Search for a replacement for the Radian event at SSL by Greg Potter



SSL has run it's own unique Radian competition virtually since the Radian appeared on the market and was destined to become a popular starter model for many RC flyers as well as a fun flyer for experienced glider fliers.

Our event is an all up format which only needs one helper to time and record. Points are awarded based on the order in which you land. No individual timing and no separate heats required regardless of the number of entries which has been as high as 24 in the past.

With the demise of the Radian and no clear replacement appearing (all newer versions have become progressively worse with the Night Radian being a complete disaster area) we began a search for something to keep this great fun event going at SSL.

Then the OZeRES design appeared from the team of Mayhew and Stent. Designed and manufactured in Australia, 2m span, RES, simple to build, everything we needed. I proposed the idea to the club and as a result 17 members placed an order with the OZeRES team. Then the discussion began around how to make the event as close to the original 'one model' philosophy as possible. The issues were many, models would be different weights when completed and people would choose different power train options based on what they had in the workshop or what they could fit in their budget. The idea of mandated a specific motor, prop and battery combo was not going to fly, so what to do?

In a discussion with one of the members we came with the concept of using Ecalc to come up with a climb rate figure as close to 5m/s for each individual model. Something which only needs to be done once (unless something changes). That way we did not have to measure batteries or motors at the field. Ecalc takes into account the model weight, wing area (which is the same for everyone), the battery capacity and discharge rate, the motor (ie KV, internal resistance, weight etc), the ESC and the propeller brand and size. Ie as many of the variables as possible. This should ensure that the models are as close as humanly possible to being all the same in terms of the initial 30 second climb phase. After that it is down to pilot skill which is the whole point of our competitions.

Tweaking the prop size and/or the battery to come up with a calculated climb rate of 5m/s or less is a fairly easy process and can be done before you actually buy any components. In 30 seconds a 5m/s climb rate gives you a potential altitude gain of 150m, which on the face of it would seem to be plenty.

The added advantage of this plan is that now there will be upwards of 17 E-RES models able to fly in the AEFA E-RES comp as well as the SSL Radian replacement event.

Stay tuned for reports from the first events with the new models.

Greg's Laser Cutting Service

Greg has 100's of plans converted and ready for laser cutting the parts. Not just gliders; he has vintage models, scale models, etc. There are too many to list, so if you plan to build anything check with Greg first. He may have it all ready to cut and supply you with a short kit of accurately cut parts to make your build quicker, easier and more accurate. Email him at:

gpotter@opalibusiness.com.au



Did you know it is illegal to ship LiPo batteries by air These stickers are available at the PO - signature required

My Quest to Find and Build a Vintage Glider By Geoff Malone

Geoff is a member of Belconnen Model Aero Club and Lake George Soaring League, Canberra, ACT

He lives in Canberra. He has been a modeller for some 60 years and commenced RC flying about 40 years ago. Some 36 years ago he joined the Society of Antique Modelers (SAM1788) Australian chapter.

Geoff says:

One of the events flown by SAM is Vintage glider. The rules for this event state that this must be a glider pre 1950. I searched and examined many possible gliders that fitted the criteria. Then one day, on a YouTube video, I saw John Woodfield's slope soarer, a beautiful sleek and elegant glider that he flew from the cliffs near his home in England. I immediately decided that this would be the one I would build.

Further research identified this glider as a 1946, *Fillon Champion* with a wingspan of 111 inches. Fillon was the name of the gentleman that designed and draw the original plan/ drawing for this model back in 1946 as a free flight model. Now to find a plan! I discovered that Aeromodeller Magazine in England, many, many years ago, had featured this glider in an article with a A4 plan. Although the magazine is no longer published, all plans that are featured in the magazine, are still available from their plans service. I proceeded to connect to their site and search their plans library and located a full size plan of the *Champion* glider. I immediately ordered the plan and waited for delivery to me here in Australia.

Finally, some weeks later, the plans arrived consisting of three full size sheets. I proceeded to take these to my local plans service (Office Works) and had the plans enlarged to 120 inch wing span as this was to be my final construction size. Initial perusal of the plans indicated the following:

- The Fuselage was open oval formers with external longerons
- All the way around the fuselage to the rear of the main wings was fully sheeted
- There was no elevator or rudder information as it was designed as free flight model



• The main wings were swept back tapered, under cambered with curved tips for the last third of their length

• There was a complex shoulder section as part of the fuselage that the wing joiners slotted into

• A fixed tow hook was located at the end of a front skid

• The tailplane was also an under cambered section

So many things to consider and design to enable this to be a successful radio controlled model! Being a fixed main wing design made it imperative that it had a full moving tailplane, operated by internal bell crank and push rod to enable fine trimming of incidence for a good flat glide. I draw in a new stabiliser post to provide a split point to provide for a hinged rudder that would have a closed loop cable system.

Redesign elements taken care of, it was down to the building. I started with the most critical fuselage former being the one containing the slot in wing joiners that I constructed out of 1.8mm aluminium sheet. These had built in dihedral and were located by a three-layer ply sandwich leaving slots in the centre section.

I proceeded to cut out all the other oval fuselage formers including notches to locate the final external longerons. Assembly of these relied on a jig that held the bottom longeron, front skid and nose support section. With all the formers in place and aligned I added the crutch formers that would flow into the main wings. I proceeded to sheet back to the rear of the main wing. This was done by soaking balsa sheets in water and a small amount of bleach before folding them around the fuselage, pinning/securing and glueing with a water based glue.

This technique was also used to create all wing tips, stab, rudder and the rear skid all in one piece by laminating eight 1mm layers of balsa around a ready-made former before cutting them and gluing them to the frame. The shoulder block and bell crank that would hold the full moving elevator was glued in the stab followed by the fitting of a control push rod. A plastic tube was installed to run the closed loop rudder cables through at a later date.

All the longerons were then glued in place. I carried out some final sanding and smoothing of sheeted areas and transition to longerons ready for covering.

I first masked off and spray painted the sheeted surfaces on the front half of the fuselage. I covered the shoulder/crutch formers for the main wing with black solar film and yellow Micafilm that required adhesive to be painted on the balsa. I did the same with the back half of the fuse that was covered in a one piece of yellow Micafilm starting at the bottom and overlapped at the top.

I completed stabiliser, rudder and skid in black Solarfilm and covered the two plug-in elevator sections in yellow Micafilm. I then covered the two main wings with a combination of yellow Micafilm, black Solarfilm and large clear laminating film on the centre panels. This covering added considerable strength and rigidity to the main wings. Covering complete!

I fitted standard size servos for both the full moving elevator and a closed loop cable rudder system. I added a battery, switch and 4 channel receiver. I carried out control surface movement checks and CofG balancing before taking the glider out for its maiden flight.

I launched it via a bungy system and glided off the top. A little up trim and I was away thermaling with a beautiful and majestic vintage glider.

This was a very challenging scratch build, only for the experienced builder. It took about 240 hours over a period of five months whilst in Covid isolation, but it gave me great satisfaction in completing the *Champion* model and finally seeing it fly so beautifully.

Another Fillon Champion about to slope soar

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Peter Mather conversion

My most recent effort has been turning the 4-servo wing from a Whip slope soarer (planted firmly in the side of the hill at Camperdown last year, writing off the fuselage) into an electric assist plank-wing sloper.

I built the fuselage big and roomy with no internal formers, to allow plenty of space to move the battery for a good CG.

I have test flown the model, christened the Whip It? and it goes like stink and handles well, still needing a lot of reflex, so I am gradually moving the CG back to find the sweet spot.

The motor is from a written-off FMS Super EZ, 40A ESC, 1800mAh 3S battery, AUW 1150gm. Should be good fun off the slope.











Introduction by Charles Powell

Charles, who hails from Canberra, has finally ventured in to F5J. He pushed through the build of this "Introduction", laser cut kit from Germany, so that he could fly for the first time in F5J at the NEFR at Easter.

He achieved his goal and finally flew F5J at Easter. Well done Charles!

NEFR Report

Please note - the National Electric Flight Rally, major event on the AEFA calendar has been held each Easter for 35 years - the report on the NEFR held at Easter this year is too copious to include in this edition, but will be presented soon in a special EGFA edition

Sufficient to say that the event this year was a great success in near perfect weather - numbers down slightly as expected, but still a good roll up and a large array of events completed - it was good fun for all!

Breaking News - Picton Cup now at Picton 27 June and 5 December Book the dates - hybrid E-RES/ Millennium Cup rules to test some ideas! "-Dad you need to come home" "-I can't Son I'm in Hospital" "-Mom is trying to sell your RC stuff"



Best Practice

Are you new to electric flight? The AEFA web site has a page devoted to "Best Practice" when building, assembling and flying electric powered aircraft. Go to the page and read through the recommendations - the article has been reproduced from the BMFA (Bristish) journal:

http://www.aefanet.com/best-practice

Full NEFR Report next edition



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De Havilland Beaver by Robert Griffiths

Robert, who hails from Murwillumbah, built his own computer controlled foam wire cutter. He designed and cut all the part for this Beaver. The model is all foam and carbon fibre except for the timber motor mount and servo mounts. 48" wingspan, 1350 gm weight, 2x3 cell batteries mounted vertically behind the engine mount, Scorpion motor. The batteries are connected in parallel through a load balancing circuit. The easiest way to get high spec., high amperage schottky diodes is to strip an old computer power supply. Robert did this to bring the CofG forward; Beaver designs are usually tail heavy.

2021 Glider/F5J/E-RES Events Calendar

Produced by the AEFA to promote F5J, E-RES & Gliding No.2/17-3-21

Key - green for F5J & E-RES events, HSL-Heathcote Soaring League, SSL-Southern Soaring League

Date		Flying Events	Notes
January			
17-Jan	RCGA Event	E-RES & F5K Glider	Diggers Rest
23-25 Jan	Sailplane Expo	F5J Only & E-RES - 2.5 days	Armidale

February			
7-Feb	RCGA Event	F5J Glider	Diggers Rest
9-Feb		Millennium Cup	Goulburn
21-Feb		QLD E-RES Round 1	Warwick, QLD
21-Feb	RCGA event	F5J Glider	Diggers Rest
7-Feb	HSL Event	HSL Summer Club Competition	HSL Maddens Plains

March			
6-8 Mar	F5J International Australia -	SSL Milang - F5J only	Milang, SA
14-Mar	HSL Event	Heathcote Cup F5J	Maddens Plains
20-21 Mar		QLD F5J Series Round 1	Munbilla, QLD
21-Mar	RCGA event	F5J Glider	Diggers Rest

April			
	AEFA National Electric	Jamboree of Electric Events	Cootamundra State
2-5 April	Flight Rally	including F5J & E-RES	Field
11-Apr		Millennium Cup	Lake George
11-Apr	RCGA event	Open Thermal Glider	Diggers Rest
18-Apr	RCGA event	F3K, F5K, E-RES rotated	Diggers Rest
25-Apr		QLD E-RES Round 2	Munbilla, QLD

May			
2-May HSL Event		HSL Autumn Club Competition	Maddens Plains
1-2 May RCGA event - Midway Cup		F5J Glider - Vic State Champs	Horsham
15-16 May		QLD F5J Series Round2	Dalby (TBC)
16-May	RCGA event	Open Thermal Glider	Diggers Rest
16-May		Millennium Cup	Appin
30-May	RCGA event	F5J Glider	Diggers Rest

AEFA Event Calendar by Peter Pine

The calendar is alive and well again after being in lockdown during the Covid period; note the large number of events already planned for 2021! See the calendar displayed over two pages.

This time, E-RES events are included as well as F5J (and other thermal events).

Please let me know if there are any errors, and advise me of any events that need to be added; the calendar is a work in progress and is regularly revised.

Also please note that the calendar is assembled with the best of intentions and an attempt to obtain the latest information about events. However, there may be changes and cancellations of events, so please check with the relevant organisers before travelling to an event to make sure that it is still taking place. The AEFA cannot take responsibility for complete accuracy of the information on the calendar; it is simply to advise you of the possibilities so that you can make your own investigations and register according to the organiser's conditions.

Disclaimer: The AEFA does not condone the breaching of CASA or MAAA rules. It is your responsibility to make yourself aware of the rules applicable to the site where events are held and to comply with these rules. The AEFA takes no responsibility for penalties incurred if you exceed the CASA limits and height restrictions for the field location where advertised events are held.

Note - you can access the AEFA Calendar any time on the internet - click here (even though it is not a Google calendar):

http://www.aefanet.com/google-calendar

So, keep a check on changing events on the internet.

June			
12-13 June		QLD E-RES Round 3	Kingaroy, QLD (TBC)
12-14 June	Queen's Dirthdou weekend	LSF Tournament F3Jl Glider -	Jerilderie
12-14 June	Queen's Birthday weekend	including F5J & E-RES	Jerndene
?	Annual event	Picton Cup Round 1 F5J	HSL
27-Jun	RCGA event	F5J Glider	Ballarat
July			
7-14 July	West Wyalong National	Inicudes F5J (10-12th) and	West Wyalong
7-14 July	Championships	EOT events (13-14th)	
24-25 July		QLD F5J Series Round 3	Monto, QLD

August		
21-22 August	QLD E-RES Round 4	Maryborough (TBC)
22-Aug	HSL Winter Club Competition	HSL Maddens Plains

September			
3-19 Sept		Manilla Slope Fest	
11-12 Sept		QLD F5J Series Round 4	Dalby, QLD (TBC)
25-26 Sept	State Flying Field	Millennium Cup	Cootamundra

October		
17-Oct	Millennium Cup Round	Maddens Plains
24-Oct	QLD E-RES Round5	Munbilla, QLD

November			
5-7 Nov	AEFA F5J Perpetual Trophy	F5J Annual Tournament	Cootamundra
14-Nov		Millennium Cup	Shoalhaven (Nowra)
20-21 Nov		QLD F5J Series Round 5	Munbilla, QLD
28-Nov	HSL Event	HSL Spring Club Competition	Maddens Plains

December			
?	Annual Event	Picton Cup Round 2 F5J	HSL

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Electric Glider & EOT Postal Competitions

There are electric glider and EOT postal events each month. Mel Gillott is managing glider results in 2021. Phil Stevenson 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 Mel & Phil. 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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