



# Monthly Glider Postal events , Reports, Promo's and other stuff from the **Australian Electric Flight Association.** # 3. August 2022

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**F5J POSTAL** (please open attachment in body of email for spreadsheet).

Yet again Postal stalwart Bill Kent retains his unbeaten run, with your editor bringing up the rear. Ken Woodward puts in an appearance but missing some months drops him to 6th for the YTD.

He had this to say about his August flight:

*It was a wild ride. Model went to a great height. Crow braking to lose height. Missed the landing.*

**E-RES POSTAL** (please open attachment in body of email for spreadsheet).

Bill Kent flies on a lovely field (see pic P2) and he must love his Postals. He top scores along with back-on-form Bob Hickman and your Ed. Bill is now 13 points ahead for the year.

*I was so pleased to get the time after spending several minutes with the model really quite low.. I had a similar flight at the NEFR where other pilot's timers reported that I was about to land at less than 3- minutes before I flew out the rest of the time at less than 30m. Do enough flights, don't give up and you have to get lucky occasionally.*

*Bob Hickman*

## WHERE TO FROM HERE?

It has been obvious for some time that interest in the F5J Postal has been waning. The present format, that effectively makes the monthly flight a how-low-can-you-shut-off event and allows unlimited tries makes for interesting flights but is not representative of a typical F5J competition. Therefore less useful for practicing.

We are looking at changing this format for next year so the monthly F5J Postal will emulate an event of say, four rounds that you fly and post in one flying session per month. On any day, but only in one continuous session.

Your four scores can be entered on your phone, in our world class Glider Score software and the monthly and year-to-date results published in this magazine.

What do you think? Would you enter?

Some details still have to be finalised:

Fly 5 flights and drop worst? Allow the first flights from an actual competition also? Allow unlimited number of flying sessions in a month and pick the best? Make everyone fly on the same day and the results "public" in GliderScore? Continue with current Expert/Advanced/Sportsman segregation?

No changes to E-RES Postal are planned.

As always, your feedback, or apathy will determine the final format. Go on—start a conversation.

Our huge country has always made it difficult to hold many large inclusive events hence our competitiveness suffers as a result. Can a Postal like this help raise our standards?

More next issue. mg.



## DELIBERATE WING FOLDING (and not electric flight)

The mystery photo in EMF #1 & 2 is the folding wing mechanism for an FIC (FAI) FF power model. Basic specs 2,5cc engine 30K RPM. Folding props or geared three blade folder. 5 second motor run. They are beautiful engineered. And quite reliable!

The timer/ model timer is a modified RC servo that is programmable. Functions: Climb is vertical then motor cuts, the outboard part of wing unfolds from below the inboard part of wing and down elevator pushes the model over to level flight then glide pitch with some rudder.

Lastly the Dethermaliser (DT) kicks in at a predetermined time—and not a transmitter in sight!. All functions are programmable. And you think an F5J is complicated!

Last feature, if the launch goes wacky then there is a device in the model that can trigger the engine cut and DT.

The zig-zag bits on top of the wing are turbulators. Some wing sections on some models work better with these fitted. It would be interesting for F5J flyers to try, either straight or zig-zagged to see what would happen. They are usually fitted quite close to the leading edge to break -up the airflow over top of wing.

I think that covers the basics. No, I do not fly this event; just an observer. I did dabble in FAI power as it was called way back when the only control was engine cut and DT.

John Quigly. Minor changes by the Ed. (Greg Potter also picked the pic—Ed.)

## SSL, F5J. Milang SA 14.8.22

Our field looks fantastically green almost like a large bowling green. A couple of the members got the tractor mower out and gave it a buzz cut to prepare a square to work from that kept us away from the canola that our share farmer has planted. That is a crop that is not fun to lose a plane in as it is high and wet and sticky. Eight Members trooped along to fly into a surprisingly buoyant westerly at about 17 to 20 Kph. Everyone put in some good scores but Andrew's consistent flying won the day . 10 rounds flown in about 6 hours including some stoppage for rain.

With thanks, *Robert Gunn*

Green with envy! Southern Soaring Leagues field at Milang, SA. Note little black CD trailer which has all the field equip and the Fm broadcast gear – by Robert Gunn.

## OPINIONS & INFORMATION

Now to the question of monthly Postals. I do not think there will be a consensus of opinion on the value of Postals or not..

Now that life has changed with C-19 in some ways for the better, we can fly again. While this last four months for me has been a flying disaster, having in the back of my mind the postal programme provides me with some objective to go testing.

I would like to know why some think a postal event is irrelevant. Yes some may cheat! Yes the weather plays a part between locations! What does that matter? Personally I use the postal to get out and have a go in different weather conditions. May be those who do not like Postals go and have say eight flights every time they fly and this is their practice. Why not contribute? Flights – weather etc. Let us all know you are still active. Let us know it was one of those days where maxes were impossible that day in your part of the world. Not just the best flights.

I will fly whenever I can....repairs permitting. Just my view.

We still need to take care jq

F5J - SSL Club - Overall Results [Milang 5 Aus 14/08/2022]														
< Scores - Original >														
www.GliderScore.com														
Rank	Name	Score	Pcnt	Raw Score	Rnd1	Rnd2	Rnd3	Rnd4	Rnd5	Rnd6	Rnd7	Rnd8	Rnd9	Rnd10
1	MEYER, Andrew	8707.7	100	9194.8	*487.1	1000	1000	967.8	978.4	1000	984.1	908.1	869.3	1000
					4:50	9:57	9:52	9:58	9:57	9:56	9:56	8:40	8:36	9:59
					134m	130m	162m	125m	201m	163m	169m	172m	181m	167m
					50	50	50	35	50	50	45	50	50	45
2	SCHULTZ, Trevor	8576.5	98.49	9386	979.5	1000	946.5	837.7	942.4	979.5	890.9	*809.5	1000	1000
					9:40	9:50	9:53	9:55	9:51	9:55	9:09	8:14	9:51	9:33
					162m	182m	204m	232m	204m	213m	185m	187m	205m	162m
					50	50	50	45	45	45	50	50	50	40
3	MELDERS, Peter	8501.5	97.63	9166.3	918.8	*664.8	985.6	1000	992.7	965.5	963.7	1000	775.1	900.1
					9:58	6:51	9:26	9:45	9:45	9:45	9:40	9:51	8:19	9:54
					166m	172m	136m	160m	166m	180m	170m	159m	160m	179m
					0	40	50	25	45	50	50	45	5	0
4	WHITFIELD, Garry	8487.5	97.47	8949.2	1000	957	873.2	1000	992.7	709.7	*461.7	1000	1000	954.9
					9:53	9:52	8:17	9:58	9:22	7:18	5:40	9:58	9:57	8:51
					165m	150m	113m	117m	130m	150m	155m	200m	200m	136m
					50	40	45	50	50	0	0	35	50	45
5	POTTER, Greg	8288	95.18	8288	971	804.2	1000	935.5	1000	903.5	1000	*0	771.5	902.3
					9:57	9:01	9:55	9:57	9:58	9:17	9:53	0:00	8:27	8:46
					181m	199m	178m	181m	174m	184m	139m	0m	180m	192m
					45	0	50	45	45	45	45	0	5	50
6	STONE, Mark	8277.7	95.06	8912.8	1000	995.7	853.8	917	1000	790.1	894.5	*635.1	956.3	870.3
					9:54	9:53	8:32	8:49	9:29	7:57	9:39	6:29	8:43	8:13
					132m	127m	156m	186m	136m	152m	141m	191m	140m	160m
					40	50	45	50	50	45	0	45	50	50
7	KENT, Bill	8256.2	94.81	8896.8	971	973.4	735.6	*640.6	879.5	1000	1000	925.4	965.8	805.5
					9:56	9:55	8:05	6:31	8:42	9:17	9:53	9:17	9:57	8:13
					179m	157m	152m	183m	156m	191m	145m	174m	208m	183m
					45	50	0	40	45	50	45	45	35	50
8	BAXTER, Malcolm	8008	91.96	8715.7	886.4	*707.7	941.2	950	811.3	985.3	885.1	728	840.3	980.4
					9:50	8:00	9:53	9:58	8:20	8:58	9:51	6:58	7:58	9:50
					183m	183m	190m	176m	156m	158m	191m	160m	162m	181m
					5	0	30	50	25	45	5	50	45	50





## AVANTI 3.0M

After quite a long time in development I am glad to say the AVANTI is now in production.

The AVANTI is a 3.0 metre electric launch sail-plane with ailerons and spoilers.

The design is for those who currently fly a smaller RES model and want to move to a larger model with ailerons, without going to the cost of a molded model.

Although a "sport" model, at a weight of 1100 gm. the Avanti can also be used as an introduction model for 5Fj competition. Later this year AEFA will be trialing a 3 metre non-molded class within a F5j competition. The Avanti will fit perfectly into this class.

**Construction.** The use of carbon tubes spars and laser cut ribs without LE sheeting has been well proven with the OZeRES and Medina. This method is very quick to build and the flat bottomed section allows accurate alignment over the plan.

There are 2 fuselage options. A laser cut ply balsa pod and carbon boom. This is an easy to build option for a low cost model. Alternatively, a CLM- Pro # 121 pod and boom fuselage set, makes a perfect option if you want to minimise building time.

### Details.

Span 3.0 metres.

Electric launch.

Controls : rudder, elevator, ailerons. spoilers.

Aspect ratio 16.3

Flying weight 1100gm, with 3s- 1550 mAh. battery.

Wing loading. 20 gm./ dm. sq. ( 6.5 oz./ sq. ft.)

Wing section MS5 series.

Photos .The pink wing model is the first production model with a glass fuselage.

The red wing model is with a kit fuselage built by Bill Bland of NSW.

KITS available from [PERFORMANCEMOD-ELS.com.au](http://PERFORMANCEMOD-ELS.com.au)

Al Mayhew, Marcus Stent

**Although this is obviously a commercial enterprise I am happy to freely promote a quality Australian product. This is not a precedence. Ed**



### **PUSHING THE WEIGHT BOUNDARY**

After building many 2m RES models from around the world over the past few years to see what's out there for ERES and F3RES all of which weighed in around 500g I set myself the challenge of seeing how far I could push the limits in terms of making one very light but still sturdy enough to fly E-RES.

I chose one of the kit designs that I particularly liked and changed a few things whilst maintaining the size and planform. Mostly I chose small carbon spars and tailboom. I removed the double spoilers from the wing in favour of a single central spoiler. I removed material where I thought it was not required. I chose a 1507 drone motor instead of the 1806 used in my other models.

I was very pleased to find that the completed model weighed just under 360g.

I have flown it several times now and it performs very well.

I have some plans to go even lighter (and cheaper), pushing for 300g. I'll let you know how I go when it's done.

Greg Potter

**EMF**

## Electric Power System Safety by Robert Budniak

I just finished reading the latest Wingspan from MAAA, and one thing that was highlighted to me: over representation of electric powered models in the number of reported incidents. Whilst the nature of the incidents is not broken down, by the content of the article I am guessing that the cause is propeller strike of the pilot or operator.

Unlike our fuel powered cousins, and electric power system is armed and dangerous from the time the battery is connected.

Yet with modern programmable radios its pretty simple to add a level or two of safety.

I use several features which I'll share in this article.

The first feature that I use is that I set up my transmitter to alert me when the throttle (whether I use a switch or a stick or slider) is at the home position. My radio will not enable the transmission to the receiver until I either set the control to the home position, or I cancel the alert. If I am using multiple switching (as I show later in this article), then I set the transmitter to alert me if ALL the throttle control actuators are at the home position.

Secondly, I have set up a momentary switch that needs to be held on for 1second. Why 1 second? I originally copied this from another setup (and that was the default setting). I never changed it as it suited me. And in conjunction with the momentary switch, I have to pull the elevator stick all the way down whilst holding the momentary switch.

Performing these two simultaneous actions ensures that it is impossible to accidentally arm the motor. It's just not possible to snag clothing or lay the transmitter down to perform these simultaneous actions. You may use the momentary switch for other functions, but modern radios are so programmable that the switch can be used for multiple functions.

Once the motor is armed, my transmitter is programmed to sound a satisfying engine starting sound, and then continues to emit a beep every 10 seconds, just to remind me that the motor is armed.

But I'm not there yet.

I then have a two position switch programmed such that I have to turn it on to enable the throttle. I'm able to stop or start the motor just by moving this switch.

I know of many glider pilots who use a three position switch to turn the motor on and off. However the system that I use is different in that you have to do a final "motor on" before the throttle control works.

Until the final "motor on" switch, the transmitter is sending the throttle command to be at full off (to the ESC); it ignores anything generated by the throttle actuator.

Does that sound complicated? Possibly, but read this a few times and you'll get the hang of it. And I have ALL my planes set up the same way. The code is easy to copy from one plane to the next and I don't need to reinvent the code each time. Since every plane is set up the same way it becomes second nature how to operate the sequence.

I can with some degree of confidence plug my batteries in know that until I have carried out the actions above, my motor will not start.

And finally, I have the momentary switch programmed, such that if I hold the momentary switch for 2.4 seconds, it disarms the motor . The only way to rearm the motor is to start the sequence again.

Looking at the photos that accompanied the Wingspan article, and having seen what propellers can do to hand, arms, legs and bodies I think this little inconvenience is worthwhile. I ask, how inconvenient is it to be without a finger?

Modern RC radios are just so programmable and flexible. I urge everyone to take the time, explore your radio programming, and implement a protocol that suits you to stop any inadvertent and dangerous operation of the motor on your model.



## Upcoming Events

- The European F5J Championships are underway recently in Hungary with 74 entrants. You can follow the scores online as they are using Gliderscore to run the event. The whole world recognises that Gerry Carter's software is simply the BEST!
- The Australian F3B 2023 WC Team Trial will be held in Perth on 17-18 September. More info at [lsfaustralia.org.au](http://lsfaustralia.org.au)
- A GPS Challenge event will be held at Milang SA on 23-25 September. More info can be found on the SSL Facebook page or by emailing John Copeland [joroco60@bigpond.com](mailto:joroco60@bigpond.com)
- Mildura 2022 will be an Open Thermal and F5J competition to be held at the Wentworth Racecourse on 1-3 October. The format will be similar to that run at Jerilderie this year. This year will mark the 20th and final running of this event. It is always a great event capably run by Darrel and Michelle with help from friends. The Entry Form is attached, and more information is available from Darrel Blow [darrel@bigpond.com](mailto:darrel@bigpond.com)
- John Skinner from Tasmania will represent Australia at the F3F World Championships in Denmark from 2-8 October. John is a very experienced F3B pilot having represented Australia numerous times and we wish him every success in Denmark.
- **The AEFA F5J Trophy event will be held between 28th October and 30th October will also be the selection trial for the 2023 F5J World Championships. The format will be - Expert Class - pilots aspiring to be selected for the Australian World Champs Team; pilots who nominate to fly in this class but are not aspiring to go to the World Championships; overseas guests and some nominations by the organising committee. Advanced Class - all other pilots.**  
**Experts will only fly against Experts with no team protection.**  
**The three highest placed aspirants will be nominated to represent Australia at the World Championships in 2023.**  
**Thursday 27th October is a practice day.**  
**Location is the AB Bryant field just north of West Wyalong, NSW**  
**This is a competition open to all pilots, not just the top flyers. More info from [aefanet.com](http://aefanet.com)**
- Bordertown Scale Glider Rally, November 18-20. Held on the Bordertown Aerodrome, with overnight hangar storage available, and onsite camping. A great event. Keep an eye on the SSL facebook page or contact Garry Whitfield [thermal9@bigpond.net.au](mailto:thermal9@bigpond.net.au)

**SSL 50th Anniversary International Festival of Gliding  
Milang SA  
March 11-19, 2023**

*Join us to celebrate Southern Soaring League's 50<sup>th</sup> Anniversary with one of the biggest model glider events ever held in Australia!*

- *F5J Open International March 11 – 14.*
- *Scale Aerotow and GPS Triangle Racing March 15 – 19.*

*Meet and fly with **Phillip Kolb**, a world-class pilot. Phillip will be giving talks throughout the event.*

*Starting the celebration will be the F5J Open International, followed by a week of GPS and scale glider flying.*

*We will host the first international GPS triangle racing challenge cup in Australia. All classes will be flown over the week including Light, Sports and Scale/SLS classes.*

*During this time the skies will be opened up for general aerotow flying with some of our best tow pilots on hand.*

*Prizes and trophies will be awarded for all GPS classes and a pilot's choice award for scale gliders.*

*We are very excited to announce that (subject to some final logistical details) we have a special international guest attending, world-renowned multiple champion of several classes in model gliding, Philip Kolb. Philip will be flying with us and giving talks throughout the events about glider design and GPS flying and tactics.*

*With regards to our Milang flying field, there will be camping sites available and hangar storage for your gliders for the duration. Catering for meals throughout the week will be available at the field. In addition, there are many options for local accommodation, as we are located on the Fleurieu Peninsula and adjacent to the Adelaide Hills. You will find a range of amazing South Australian tourist attractions nearby that will appeal to the whole family.*

*As a club, we are excited to invite all model enthusiasts to join us for a week of celebration, flying and camaraderie.*

*Please follow this link to go to the Pre-Registration Form - [https://docs.google.com/forms/d/e/1FAIpQLSdBHDC5Xn0w2Covx0eRJJb-krZjyv36ooXxZTltiZ-jozUw9g/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdBHDC5Xn0w2Covx0eRJJb-krZjyv36ooXxZTltiZ-jozUw9g/viewform?usp=sf_link)*

*[e/1FAIpQLSdBHDC5Xn0w2Covx0eRJJb-krZjyv36ooXxZTltiZ-jozUw9g/viewform?usp=sf link](https://docs.google.com/forms/d/e/1FAIpQLSdBHDC5Xn0w2Covx0eRJJb-krZjyv36ooXxZTltiZ-jozUw9g/viewform?usp=sf_link)*

**Philip Kolb would like to also attend an event and give a presentation somewhere on the East Coast so the LSF seeks offers from a host club to run such an event on the weekend of 25/26 March 2023.**

Happy soaring as the weather starts to improve. Your LSF Australia Committee

## RCGA DRAFT CALENDAR 2022/23

Date	Days		Type				Event	Location	Organiser
	Open Th	F3K/5K	Fun Fly	2m eRES	F5J				
18/9/22				Fun			Fun Fly	Diggers Rest	RCGA
25/9/22									
1 - 3/10/22		OT 1				F5J1	Wentworth (Sat,Sun,Mon)	Wentworth	Darrel
9/10/22									
16/10/22						F5J2		Diggers Rest	RCGA
23/10/22				Fun			Fun Fly	Diggers Rest	RCGA
28 - 30/10/22						F5J3	F5J World Championship selection trials (Fri, Sat, Sun)	WestWyalong	AEFA
6/11/22									
13/11/22			F3K1	Fun	eRES1		eRES in the AM, 3K/5K in the PM	Diggers Rest	RCGA
20/11/22									
27/11/22		OT 2					Open Thermal	Diggers Rest	RCGA
4/12/22									
11/12/22						F5J4		Diggers Rest	RCGA
18/12/22									
25/12/22							Christmas		
1/1/23									
8/1/23									
15/1/23			F3K2	Fun	eRES2		eRES in the AM, 3K/5K in the PM	Diggers Rest	RCGA
22/1/23							Armidale Expo - Date to be confirmed	Armidale	New England

### AEFA CALENDAR 2022

<b>October</b>			
<b>9-Oct</b>	<b>HSL Event</b>	<b>Heathcote Cup F5J</b>	<b>Maddens Plains</b>
<b>28-30 Oct</b>	<b>AEFA F5J Perpetual Trophy</b>	<b>F5J Annual Tournament - World Champs Team Selection Trial</b>	<b>West Wyalong</b>
<b>30-Oct</b>	<b>SSL Club Event</b>	<b>F5J Glider</b>	<b>Milang</b>
<b>November</b>			
<b>6-Nov</b>	<b>Nowra event</b>	<b>Millennium Cup</b>	<b>Shoalhaven</b>
<b>13-Nov</b>	<b>SSL Club Event</b>	<b>F5J Glider</b>	<b>Milang</b>
<b>19-20 Nov</b>	<b>Qld State F5J Titles</b>	<b>QLD F5J Series Round 5</b>	<b>Munbilla</b>
<b>27-Nov</b>	<b>HSL Event</b>	<b>HSL Spring Club Competition</b>	<b>Maddens Plains</b>

All contributions, including free Classifieds, welcome to Mel Gillott at [red-shiftxyz@hotmail.com](mailto:red-shiftxyz@hotmail.com)

**\*\* Electro Motive Force . The emf magazine, including all back-issues is also available on the AEFA website. Thanks Ralph Dephoff.**

1. a)  $E=W/Q$ . b) *Inside* a source of emf that is open-circuited, the conservative electrostatic field created by separation of charge exactly cancels the forces producing the emf. c) Electromotive force is the characteristic of any energy source capable of driving electric charge around a circuit.

2. A force, metabolizing as a passion to get airborne in a more environmentally responsible way without unduly disturbing other humans or the wildlife by using only the power of electro (not Max Dillon) and nature.