

# *Electric & Glider* **FLIGHT** *Australia*



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National Electric Flight Rally 2016 group shot - F5J, LEG, Radian, Foamy Pylon, Scale, EOT - Reports in this edition

## Editorial by Peter Pine

Welcome to the third edition of this E-magazine! This edition is devoted mainly to the National Electric Flight Rally held each year at Easter. It is a jamboree of electric flight events with enough interest for competent fliers, and a range of low key events as well to satisfy less competitive fliers.

The 2016 event was held at the NAAS field just south west of Canberra near Tharwa. It was such a popular choice for the 2015 event that an overwhelming majority of members voted to return in 2016. The NAAS club is one of the most hospitable and supportive groups you could find. They even built a shower that competes with the Taj Mahal for majesty to cater for our campers! Thanks to John Armarego, Stan Rucinski and his team. Charles Powell requires special mention for the literally thousands of photos he took on the weekend, many of which are featured in this edition.

Keep the contributions rolling; many are included this time, but we need more. Tell us about your events and your projects. Please send all photos and content to me at the following e-mail address:

[ppine@northnet.com.au](mailto:ppine@northnet.com.au)



## President's Message by Terry Scolari

Welcome to the 3rd edition of Electric & Gliding Flight Australia (EGFA), our new E-magazine. Our National Electric Flight Rally for 2016 has been run and done, with a full report in this edition.

Anyone that has organised a large event understands the amount of work required to make the event a success. On that note (without mentioning names), I'd like to thank all the members of the AEFA Committee and NAAS Club that put so much work and effort into making the event the success it was.

For me personally, it was great to catch up with old mates and make some new ones. The weather was great with lift there if you could find it.

Jamboree events such as our National Electric Flight Rally schedule individual events over 2 or 3 days therefore contestants entering multiple events get to fly 1, 2 or even 3 different categories each day. This type of event favours unpredictable weather as you will most probably be flying over more than one day and hopefully get one good flying day in. The down side to this style of event is that you have to make a commitment to fly over the whole weekend to have any chance of posting a place-getting result. Over the years we have had



some feedback about running the event this way, however, so far the majority of flyers wish to keep the event the way it is.

In relation to checking the opinion of flyers, AEFA will be conducting a survey over the next few weeks to obtain feedback from flyers around what is important to them and also seeking flyers opinions on the venue for our 2017 National Electric Flight Rally. Keep an eye out for the survey and please have your say by completing it. *(results next edition. Ed.)* One last thing, before I sign off for this edition, and that is AEFA is always looking to help clubs run electric events so if your club is thinking about running an electric or glider event, please contact any of the committee for assistance as we have spot landings markers, PA Systems, data loggers and scoring programs that we can loan to clubs to help out.

Until next time, cheers and many thermals!

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## Apology

In the last edition of EGFA (No.2), the guests-of-honour who delivered seminars at the Sailplane Expo in Armidale were listed, but John Borrill was omitted. Sorry John!

John is well known to Sydney fliers - he is an expert glider flier and had many tips to give fliers at the Expo. One I have never forgotten is his advice, "Be early - at the event and on to the field for your heat - rushing fliers rarely do well". It was good advice that I have headed and tried to practice - and it works!

## NEFR 2016 F5J - MAAA Nats

The F5J event at the NEFR this year was designated the MAAA Nats as part of the split 2016 Nationals administered by the VMAA. It attracted 27 entrants including fliers from SA, VIC, NSW and QLD.

Seven rounds were flown over three days with other events interspersed between. Three groups were flown per round of F5J with 7-10 fliers per group. Conditions varied from good thermals to challenging flying. There were 13 heats when no-one realised a 10 minute flight or close to it, and 5 of them were heats where the winner flew 5-6 minutes. This is what serves to spread the scores in F5J like no other event; it is rarely a few points separating placegetters. The protocol of the event itself ensures this - unlike LEG which is always so close!

Everyone was delighted when 9-year old Owen Solanov lead the event for the first few rounds flying a 2.0m wingspan Mantaray designed by Ray Pike - see this link for more information: <http://www.flyelectric.com/manta-ray.html>

And look here to see the version the same as Owen was flying - kitted by his Dad: <http://www.flyelectric.com/mantaray-greg.html>

Owen ended up 10th overall (and 2nd in the under 2.5m class) as windy heats took their toll on

his lighter aircraft, but it was still a fine effort by a budding contest flier. This reinforces the principle that you do not need a high-tech, expensive aircraft to compete in F5J.

That factor was further reinforced when the whole event was won by wily flier from Adelaide, Mal Pring, flying his own design model. Mal calls his electric glider the Skyliner 31 because it is the 31st model he has designed. The fibreglass fuselage comes from a Step2, Model Flight kit of yesteryear, and Mal has added his own flying surfaces built up from timber to make a 3.4m soarer - and soar it does. Well done Mal!

Alan Mayhew from Melbourne came second flying a Pulsar 3.6m. He tried another model for a few rounds, but mostly flew his familiar Pulsar.

Mel Gillott from Nowra came third flying a Maxa, making it an interstate affair; first three places from SA, VIC and NSW! Mel has now become very familiar with his Maxa and has started winning (HSL 09/15) and placing in events. Note that all three placegetters are now very familiar with their aircraft - that principle seems to keep coming up in this event!

So join the F5J revolution and try the event. I have helped several inexperienced fliers to join in an event, and they did not find it too hard. You may not win at first, but learn the process and enjoy it. See the calendar on p.20 for the next F5J event.



*F5J launch - Stan Rucinski, Russell Wiltshire, Al Dally.*



*Mal Pring landing his own-design soarer with spoilers deployed - heading for another winning flight.*



*Pulsar with wing tip plates by Stan Rucinski*



## LEG at the NEFR

Limited Electric Glider is dwindling in popularity and it looked like it would be dropped from the program, but it attracted 7 entrants in the end and ran smoothly for CD Alan Mayhew.

This is the event that requires a 5-minute flight with as little motor run as possible. Most fliers start with a 4 second burst and see if they can maintain flight for 5 minutes, and use 1 second squirts of power to make sure they achieve the target.

A lightweight, high-powered glider is required, and the number of fliers with that type of glider is diminishing. Bob Hickman is a good example with an "Old Faithful" glider overpowered with a Hacker B40 geared motor. Drawing high amps in his all-balsa glider causes the fuselage to twist on launch, but Bob has the event down to a fine art and managed to win the event again with motor runs of 4-8 seconds.

The event suits fliers who like the cut and thrust of close competition, as the results are always very close. It is quick to run with very short motor runs, and back-to-back heats are possible (with all 7 flying together); Brett Solanov came second and Vernon Rodrigues came third

Time will tell if interest in this event continues. It will probably be offered again at the 2017 NEFR, so join in if the event attracts your interest.

## Radian glider at the NEFR

The Radian event is a low-key, fun event that serves as a great introduction to glider competitions. All entrants launch their Radians together as the hooter sounds, climb for 15 seconds, and then try to fly for 5-minutes. The object is to land on the field right on the 5-minute horn. Fliers call out their number as they land. The first person down receives one point, the second two points, etc. All those who land right on 5-minutes receive the maximum score, which is equivalent to the number of people flying.

At the 2016 NEFR, 25 people flew in Radian; what a sight it was to see 25 Radians climbing out together! And it is so quick to run, multiple flights are conducted back-to-back; so much so that 16 rounds were flown over the weekend. Radian pilots managed lots of flying!!

Two classes were awarded certificates and wine; expert for those who are accomplished fliers, and sportsman for those with less experience. Bob Hickman, that inveterate glider flier, won the event again, Rob Watson (who also is no slouch with a Radian often placing in F5J) came second, and Alan Mayhew came third.

In the Sportsman class, Ken Hopgood came first, Shane McMillan came second and Ron Grosser came third - well done chaps! Practice Radian each month for the postal, and enter next year!



*Bob Hickman, champion Radian and LEG pilot.*



*Owen Solanov, a gifted flier at 9 years old, just like his Dad. Owen lead the F5J event for the first few rounds flying a 2m glider. He placed 10th in the end out of 25 fliers, and 20th in Radian.*



## EOT at the NEFR

CD Mike Colston ran four Events in Electric Old Timer at the 2016 NEFR; 1/2A Texaco (8 entrants), Texaco (11 entrants), Duration (11 entrants) and Height Limited Old Timer (HLOT) (9 entrants). Unfortunately there were not enough entrants to run Nostalgia, although there were a couple of flights on Friday afternoon with the Nostalgia models.

In 1/2A Texaco, after three rounds were flown, most entrants had three maxes and a flyoff was required. The take off time was staggered according to the model's age bonus and a maximum flight time was set at 20 minutes. After 20 minutes, five of the six models were still in the air. The models were landed and percentage of capacity remaining in their packs measured. The winner still had an incredible 76% battery capacity remaining.

A similar pattern emerged in Texaco with 9 models competing in the fly off. In this case the maximum time was set at 15 minutes due to time

*Montage above of the most common view of EOT models heading skyward, often at a great rate! Charles Powell photos*

constraints. After 15 minutes, 8 of the 9 models were still airborne and it was once again decided by remaining battery capacity. In this case, the winner had an amazing 84% left. How do they do it?

Duration was more hotly contested with 8 of the 11 entrants qualifying for the fly off. The flight time for the fly off was 14 minutes on a 25 second motor run. Only four models were still in the air after 14 minutes and the result was determined on the basis of the amount of motor run used in the fly off. The winner used just 19 seconds of motor run for the 14 minute flight.

The final event was HLOT which proved far more challenging. A fly off was not required as no pilot managed three maximum scores. Four rounds were flown and the worst round, discarded. Total flight time for the best three rounds was calculated with the highest total winning. The winner scored 1222 points out of a possible 1260 points! The top three places for each task follow:

### 1/2A Texaco

1st Bob Wilson;  
2nd Mal Pring;  
3rd Alan Mayhew

### Texaco

1st Mal Pring  
2nd Bob Wilson  
3rd Phil Stevenson

### Duration

1st Bob Wilson  
2nd Phil Stevenson  
3rd Gary Andrews

### HLOT

1st Phil Stevenson (1222 points)  
2nd Mal Pring (1208 points)  
3rd Bob Wilson (1180 points)

As you can see, the same names appear again and again at the top of the table. These are the pilots who hone their skills with constant practice. Perhaps you should join the postal comp as a way of encouraging you to practice your EOT skills!

## Foamy Pylon at the NEFR

Each year sufficient people nominate for Bob Hickman's Foamy Pylon event to make sure it runs. This year 7 fliers fronted for the event and it ran very smoothly and quickly to Bob's effective strategy.

The strategy involves pilots calling for one another in quickly staged heats of 4 minutes with 3 or 4 fliers in each heat. Each pilot requires two battery packs so that back-to-back heats can be run. The efficient light system concocted by Phil and Mark Connolly is put to good use with four coloured LED bright lights to flash the turns.

Two rounds were flown on Friday, and two more on Saturday. First place was taken out by competent flier, Brett Solanov. Second was Bob Hickman himself, and third place went to new competitor, Maciek Rucinski. Brett is right front in the white shirt in the accompanying group photo, Bob is centre back in blue, and Maciek is centre front with red and black shirt.

## Annual-General AEFA meeting

A dinner was held at the Vikings Club at Greenway on the Saturday night (and a great meal it was too), and a new executive was announced. There is still good state representation (QLD, NSW, VIC, SA all represented) - see the last page for a list of the new executive. Contact these people with any suggestions you may have!



*The happy group that competed in Foamy Pylon at the NEFR - 7 fliers in all with helpers to the right.*

## Stan Rucinski's Video of the 2016 NEFR

A collection of the best photos from the event - click on this link:  
<https://www.youtube.com/watch?v=cwU0MvZrJQ8>

And thanks to Charles Powell for all the images published here!

## Electric Scale at the NEFR

Scale is never highly subscribed at the NEFR, but it adds colour to the Saturday program as models are displayed for low-key static judging, and then flown one at a time with a commentary from CD Bob Hickman.

Seven entries presented in 2016. A sure-fire placegetter would have been Phil Stevenson's Comet racer - beautifully built and decorated, twin engines, retracts. The just over 2m wingspan model was powered by twin Turnigy SK3-3550 motors (MVVS type outrunner in a case) and 6500-4S Airstrike LiPos. All onlookers were holding their breath as the motors fired up and the Comet taxied down the strip, only to fly briefly and tip stall in to the ground totally demolishing months of work. Our condolences to Phil - it was a magnificent effort!

The event was won by a well-presented WWI biplane by Brian Oakes. It was a large model, beautifully detailed and resplendent in a white finish with on-board sound to add authenticity to start-up, take-off and flight. Brian flew it realistically and well to win convincingly.

Second place went to a new model by yours truly; a Waco biplane built from a Dave Platt kit. The construction was commenced by a Victorian modeller and finished by myself; I was nearly divorced as blue paint spread all over our house! The novel feature of this model is that the whole nose comes off to give access to the battery compartment (the original tank bay); that is cowl, electric motor, and ESC come off all in one bundle and key back on to the nose via the engine bearer stubs (details in a feature in the future). Power was from a Cobra 4120-22 and an Airstrike 2500-4S LiPo.

Third place went to a Bird Dog entry from David Lucas. This model was built by a Lismore modeller and was over-powered by a Scorpion 3026-1190 motor on 3S. The throttle range was reduced dramatically at the Tx, but it still flew very fast, which was suitable in the wind of the day.

See the images of entries here and on other pages, and plan to enter this low-key event in the future. Start building now!



*Phil Stevenson's ill-fated Comet racer that impressed all with its scale realism, and broke hearts when it crashed. A great effort, Phil!*



*Brian Oakes prepares his magnificent WWI biplane for the scale event - has operating sound and flew beautifully and realistically despite the wind.*



## Other notes from the 2016 NEFR

**Electric Scramble** is one of the fun events we run on the Friday afternoon; fliers have a 45 minute window in which to post as many flights as possible of 2 minutes or less. Flights under 30 seconds do not count, and the model must return to the point of launch each time, so accurate flying is an advantage. This year quite a few Radians entered and featured in the placings; Rob Watson 1st, Terry Scolari 2nd. Phil Stevenson came 3rd. It is a fun event and each placegetter received a certificate and a bottle of wine! Try it next year for fun!

**Spit Roast** - the NAAS club specialise in a spit roast on the field - legs of lamb cooked in many Weber barbecues and served with hot vegetables, followed by hot pudding, also cooked in the Webers. This year it ran very late on the Sunday night, but was a great meal when it arrived. Hopefully the club will redress this issue in future if we have the spit roast again.

**Annual Dinner** - a three course, sit-down meal was consumed at the Vikings Club in Greenway on the Saturday night. It was a great meal and a jovial time; some fliers are hard to recognise when they are cleaned up! This is in the spirit of the event, when long-standing colleagues can meet together, enjoy their flying of choice, reminisce, enjoy meals, and have a few quiet drinks together!

**New Executive** - the AEFA Annual General Meeting takes place at this dinner, usually between the main course and sweets. I think Terry Scolari set a new record for the briefest of AGMs ever! The new executive is elected if necessary, but this time we had just the right number of people nominated, so the new executive was simply announced. See the last page for the complete executive, but in summary Terry Scolari has taken over as President, your truly has returned to the executive as Events Coordinator, and Mal Pring and Bob Hickman have joined as ordinary members. This maintains the spread across the states with representation from QLD, NSW, VIC and SA. WA has gone quiet - we would appreciate a rep. from that state, so if you feel so inclined, get in touch. Exec. meetings continue by Skype and a review of the NEFR is under way with a survey coming out soon.



*Waco biplane by yours truly - a great project from a Dave Platt kit!*



*A Cessna Bird Dog entered by David Lucas - looked realistic in the air!*

## Jack Black Memorial Flight at the NEFR

Squadron Leader Jack Black served in the RAF during the war, and then flew commercial airlines for Swiss Air. In Europe, Jack came in to contact with the fledgling electric flight movement, and in particular, the Militky Cup that is held at Pfaffikon each year. Jack brought his enthusiasm for electric flight and Multiplex radios back to Australia and inspired a small group of fliers around Sydney to go the electric way. He regularly demonstrated electric gliders at the Saiplane Expo in Armidale and the Hunter Valley Championships in Muswellbrook in the early 1980s, as well as at events around Sydney. Unfortunately, we lost Jack prematurely to a brain tumour in the mid-80s.

One of Jack's creations was a large glider with 4 pusher motors; he took Multiplex Alpha wings and added a sturdy centre section with four, geared, brushed pusher motors from MPX. He custom-made a fuselage and tail surfaces. Peter Cranfield was one of the early colleagues of Jack, and had his four-motor glider stored in his loft. We resurrected it; added two big servos, a vintage STW brushed speed controller and two 2200-3S LiPos in parallel in the nose so that it would balance! At the 2016 NEFR, we conducted a memorial flight of this great glider. Peter Cranfield attended and spoke of his memories of Jack and the good old days of agricultural equipment. John Adams, now resident in Darwin, wrote a



tribute to Jack and it was read out at the event. Ralph Dephoff launched the model (top left). Other shots from Charles Powell show the model climbing out and about to land. The transmitter was passed around; Peter, Peter's daughter Chelsea and Ray Murray all had a fly! Rest in peace Jack; we regard you as the Father of Electric Flight in Australia - you would enjoy our rally.





**More NEFR Photos** (thanks Charles Powell)

**Above:** Mike Colston and giant Lanzo Bomber.

**Right:** David Lucas waits to launch in F5J.

**Below:** Foamy scale entry - a Focke Wulf that had retractable undercarriage, but belly landed to save the fragile legs on the grass strip.

Jack Murphy launches in F5J - Jack came with two models so that he could match the conditions.



A colourful Radian - helps discern your own model amongst the crowd in the Radian event!





**More NEFR images**

**Pylon action to the left**

**Top:** Brett Solanov giving a model the heave ho!

**Bottom left:** Vernon Rodrigues also puts all in to launching Rob Watson's Komet

**Right:** Mal Pring and Roy Calnan from SA discuss pylon results.



**Radian mayhem:**

**Left** - Ralph Dephoff waiting to join the melee

**Above** - Many Radians launched together - I think 25 was the number in the biggest heat! A fun event that all enjoy.



*Loganholme club field includes separate, manicured areas for general aviation, for helicopters and gliders, and for control line - all happily sharing a huge parkland area*



*A drone being prepared for the Search & Rescue event at Kingaroy - an attempt at VTOL and transition to forward flight - check Youtube for more samples of people who have achieved this!*



*Gordon Scamp from Brisbane with two EOT models that he has recently completed - both pylon model (Lanzo Bomber & Playboy) and both electric! Pictured here at the Pine Rivers.*

## Stop Press

### New F5J event added to the calendar

**Calling Brisbane electric glider fliers, and those from southern Queensland and northern NSW**

An F5J event has been scheduled for the Loganholme Club (LARCS) that has magnificent fields on the southern edge of Brisbane, with a regular height clearance of 1,000 feet.

Come and try F5J - data loggers available for loan  
- low key event guaranteed - club catering food  
- a joint event by the AEFA and LARCS

### Sunday 16 October

register by 9:30am - flying commences 10:00am  
Event open to all members of the MAAA



*Jilles Smits is our LARCS contact for the F5J event - pictured here with his Graupner Maxi at the great LARCS field.*

## Millenium Cup Glider Event

By Fred Lodden

*The Millennium Cup is a low key glider competition for 2-channel, 2-metre gliders all launched on a standard winch to attempt a 6 minute flight and spot landing (low spot scores as per F5J). (Ed.)*

Early this year, we held the second round of the 2016 Millennium Cup at the Goulburn field. We had 18 pilots enter the competition. The forecast was for temperatures in the high 20s and very light winds from the E going around to the NE. As we set up the equipment there was just the lightest wind blowing from the east. The day developed pretty much according to the forecast. After the early morning low cloud had lifted we had a mostly sunny day with just the odd cloud about. With the light winds the air was clearly being affected by thermal activity as at ground level it would cycle from calm and warm to be shortly followed by an increase in the wind.

As an exercise I had Excel do a bit of analysis of the results. Taking 350 points as a good flight (within 10 seconds of the target six minute flight score, even without a landing) there were 54 flights that met that 350 point or more criteria out of the 126 flights completed on the day. Ivar Stromberg had one flight recorded as a nil score because he was in good lift and decided to go for a 10 minute LSF flight in lieu of the 6 minute Millennium Cup flight time. Unfortunately he suffered a double whammy as he ended up 17

seconds short of the 10 minutes and a Millennium Cup flight in excess of 6:30 is invalid and is recorded as a zero. :(

At 12:15, after the completion of five rounds, we broke for lunch. After lunch we recommenced flying and at the end of the seventh round we had a pilots vote to determine if we wanted to continue to a eighth round - but the consensus was to conclude flying operations. So on the day we completed seven rounds. We had very few damaged models. I don't think there were any failures on launch but there were a few issues on landings mainly due to some hot approaches and the aircraft dorking/spinning/flipping/cartwheeling after touchdown.

With all the results entered into the computer, the winner of the Goulburn round was Fred Lodden. In second place was Barry Burke and in third place was Jack Murphy. Congratulations to the place getters.

*(in 2016 there are 7 rounds of the Millennium Cup at Appin, Goulburn, Lake George, Salt Ash, Gloucester, Maddens Plains and Bombaderry - for information consult the HSL web site).*



*Typical set-up at a Millennium Cup event - standard winch with a line retrieval device used by all. This image shows Barry Burke from the Appin club launching - 2nd place at Goulburn.*



*Jack Murphy launches for Fred Lodden, article contributor and winner at Goulburn. Fred is President of the HSL club in Sydney and one of the organisers of the Millennium Cup events each year.*

**Note:** The next round of the 2016 Millennium Cup was held at the Lake George club on the 10th April 2016.

## F3J International at Milang SA

*F3J is similar to F5J - 10 minute flight in a 10 minute window, but height penalties are not used. Instead, an extreme launch is the goal! (Ed.)*

27 pilots lined up over 12 and 13 March for this event run to F3J rules (excepting using winches for launch).

We were fortunate to have excellent weather over the two days. Hot, but not too hot. Humid but no rain. A breeze, but never too strong. Pilots came from as far away as New Zealand so it was great to have them there.

Seven rounds and half of round 8 were flown on the Saturday. The 12 preliminary rounds were completed and followed by three fly-off rounds on the Sunday.

Everybody was well catered for with the van coming out from the Milang Bakery each day and with water and soft drinks available on the field. Scoring was handled by Manny Stoupos and we must all thank him for doing that. This took away the distraction of having pilots try to keep this up to date as well as flying.

The pilots were organised (by themselves) into teams of four, so everybody was busy for practically the whole time. Not much time for socialising during the flying, but we made up for this during the lunch break and also by meeting up for dinner each evening.

At the end of the preliminary rounds (with each pilot's worst score not counted) the top seven pilots went on to fly three 15 minute fly-off rounds.

They were:

- Joe Wurts (10,993.52)
- Kevin Botherway (10,987.44)
- Nick Chabrel (10,981.26)
- Mike O'Reilly (10,973.18)
- Theo Arvanitakis (10,968.04)
- Jim Houdalakis (10,994.03)
- Jamie Namcarrow (10,898.47)

By this time there was a healthy wind and visibility was reduced due to the hazy sky. In the fly-off some pilots went a very, very long way downwind to the extent that they walked some distance from the landing spots to keep their gliders in view. This didn't work out too well for one pilot who had a long walk to retrieve his glider.

The final result was

1. Joe Wurts (2,994.38)
2. Mike O'Reilly (2,971.99)
3. Theo Arvanitakis (2,971.79)

Congratulations to Joe Wurts and to all who took part. Particular thanks go to those who put in the effort behind the scenes to make this a great competition for everybody. Thank you for that.



*The Milang flight line - fliers worked in teams - about 7 fliers each heat - clear skies and great thermals, some way down wind!*



*The placegetters at Milang - Joe Wurts from NZ centre, Mike O'Reilly from Adelaide left, and is that really Theo on the right?*

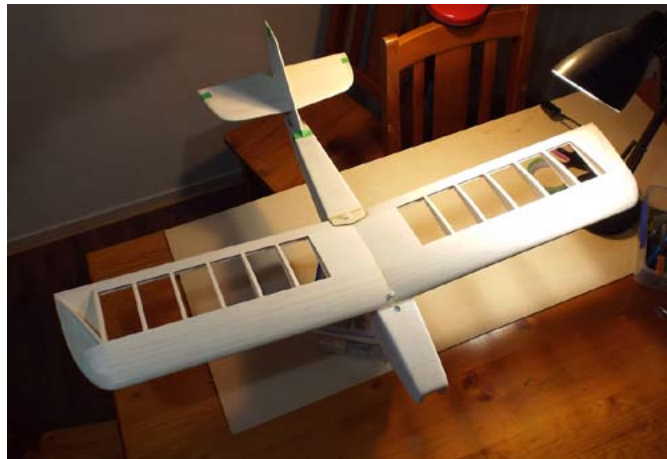
## Bento Sports Model

by Miroslav Olenjin

Here is 'Bento'! This is a high-wing electric trainer has been the latest addition to my fleet. I have designed it as a recreational model and also to teach my children to fly RC models. After the first ten or so flights I can affirm it is very much like I planned it to be - smooth, stable, controllable and forgiving. I named it 'Bento' due to its benevolent characteristics, but also because I like Japanese cuisine - teriyaki chicken bento, yum!

Sturdy balsa and ply construction is covered with Graupner's SolarFilm. With the wingspan of 102 cm and weight of 770 grams, Bento is not too heavy but not a featherweight either, which helps it handle some moderate winds. Yet, when the motor is turned off, it sails almost like a glider. Its large wing, based on the modified Selig S3021 airfoil, which has been thickened to around 15%, produces plenty of lift. Wing dihedral of 5 degrees combined with the mass of a low positioned battery provides perfect stability.

To keep things simple, the plane has no ailerons. Two Hitec HS-81 servos control the tail movements via thin carbon push rods, and any old non-computer radio, like my reliable Futaba Sport, can be used. The 3S 2200 mAh battery provides enough power for around 20 minutes of circling above the field and various simple aerobatics. One very well mannered model indeed!



*Bare bones Bento shows its clean lines*



*Close up nose and wing fixing detail - note Miroslav's very competent building skills*



*Finished model with very attractive decoration by Miroslav, who now resides in South Australia*

**More photos can be found here:**

<http://www.rcgroups.com/forums/showthread.php?t=2500482>



*Miroslav pictured here with his own-design sport model that serves its purpose - build one yourself!*



## EDF bungee launch ramp

by John Roche, Lismore MFC

My EDF jet is a HobbyKing Meteor. The wheels were too frail for our grass strip, and anyhow it looks really great in the air without wheels and belly lands very smoothly too. However it was difficult for me to hold with one hand for hand launches, which caused much damage from many failed launches, so a bungee ramp was devised. There are several to see on the Internet, and I settled on my design as seen in the photos.

I used good stiff 32mm diameter PVC pipe. The main track is 180cm long, the front legs 50 cm long and the rear legs 12cm long. It needs four T bends, two 90 degree bends plus two 45 degree bends at the top of the rear legs, plus some duct tape. The bends on top of the two front legs have had the lip removed to give a smooth ramp with no bumps. I used a single red bungee from HobbyKing doubled over to make it strong and compact, plus some venetian blind cord which starts off as a 3m single cord, then splits into two. The shorter 2m cord goes to the plane and the longer 4m cord to the foot release pad. Touch all knots with thin CA.

The foot release pad is just two pieces of board with a pivot in the middle, with a bolt through the base which has some scrap brass tube epoxied over it to make it smooth. There are only two strong steel camping pegs needed. The hook on the plane is a simple picture hook screwed in the

belly just in front of the wing with internal ply reinforcing. Total cost was around \$AU40.

Now every launch is consistent, stress free and successful. I have learned that:

- twenty five paces of stretch of the bungee is sufficient
- expect to fly the jet at a low level until the cord has come free
- get the motor running before pressing the release to ensure the ESC and motor synchronise, then increase throttle immediately after release
- the longer cord needs a piece of bright ribbon to help it stay clear of the tail and to help you visually.

The only down side is that bringing in and setting up the ramp, which breaks down into six pieces, is a bit of effort compared to a hand launch, but for this particular plane I found the bungee necessary. I have a bigger and hopefully better EDF coming and now I'm ready to launch it with my ramp and hopefully prevent a few crashes at launch!



## Model of the month!

Featured here is a Fairchild F24-41A cabin model that was converted to electric from glow by Peter Budd of Murwillumbah.

There is a story to tell about this aircraft. The original full size version was built in the USA in 1943. It had a wingspan of 40 feet and a maximum take-off weight of 2,750lb.

This actual aircraft was shipped to the UK and used by the RAF for communications in 1943-45. In 1952 it was shipped to Australia in dismantled condition along with a batch of 11 aircraft. Peter Budd purchased the aircraft in 1979 and had it totally stripped down and refurbished by Mothcair Aviation based on the Murwillumbah air strip. Some components were repaired and recovered with Ceconite heatshrink, synthetic fabric. It was registered as VH-BLB as a 4-seat light aircraft.

It was test flown in 1980 and flown extensively by Peter Budd and his family until it was sold in 2001 as the only 41A version of this aircraft in Australia. This is a scale model of an aircraft that Peter actually owned and flew! It originally had glow power but now flies with the Far North Coast Electric Fliers in Pottsville as an electric model!

The model is a 1/7th scale of the original and spans 1.8m. It weighs in at 3.5kg. Power comes from a Cobra 3525-12 brushless

outrunner swinging a 14x7" propeller with a 2500-4S LiPo supplying the urge through a 60A SBEC speed controller. It flies very realistically and looks a picture in the air. It must give Peter a burst of pride to see his own aircraft flying as a model. The top image shows



a somewhat younger Peter Budd in front of the original, full-size aircraft. The other images show the model on the ground at the Pottsville field, and in the air on a low pass. The red ribbon flapping in the breeze is an arming switch that allows Peter to power up the model when he is ready to fly, after assembling the model by adding the battery to its compartment where the fuel tank used to be positioned, plugging in the wings and adding the operating struts. A great model, Peter, and a joy to see in the air!

**Aus Heli RC** Aus Heli Rc are now authorised dealers for CopterX and JS Model.

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## Plans for large scale gliders

Jilles Smits, who is an active member of the Loganholme Club on the southern outskirts of Brisbane, spends his time using his draughting abilities to draw up plans for large scale models of gliders that he makes feely available to all who would like to use them - including a 3-view and files for laser cutting the parts. As Jilles says:

Below is a link to my modest website. It shows the designs available. Building drawings are free including files for laser cutting the parts. The designs are not for the beginner builder and some details are left to the builders preferences. About half of the designs are actually built and those fly very satisfactory.

<https://sites.google.com/site/jillesgliders/home>

To be added in the near future are a 40% Moswey 3, a scale 1:3 Slingsby T21 Sedbergh and a 1:3.125 (4.8meter span) ASW15B



**Top right:** Jilles after a maiden flight with one of his own designs.

**Above:** A KA6E under construction in Jilles own workshop - now has been flown!

## 2016 Glider/F5J Events Calendar - Version 11 - 28/05/16

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

Date	Holidays NSW	Flying Events	Notes
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		F5J Central Queensland	Bundaberg
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
8-9 October	Offered by MRSSA	F3J/F5J weekend	TARMAC, Toowoomba
10-Oct	NSW Schools return		
16-Oct		HSL Club Comp	Maddens Plains
16-Oct		LARCS F5J	Loganholme, Brisbane
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

## Book the Date

### F5J Annual Tournament

This event is a 2-day F5J event at NAAS club field near Canberra scheduled for 29-30 October (great flying weather at that time of year) that is bound to become the major F5J event of the year. It will become an annual event with perpetual trophies for Open F5J and Limited F5J.

Watch for more news of this event. See who will become the F5J champions for Australia! It will be a national event that attracts the peak F5J fliers in Australia and results will be forwarded to the Slovakian leader board as our major event.

### Changes to the Calendar

An event has been slotted in for **Bundaberg on 18 September** - still to be confirmed, but this an attempt to introduce an F5J event for central Queensland. Some Bundaberg fliers have already tried the event and are keen to introduce it to their friends. Book the date and let's make this a good introductory event.

The **Pottsville F5J event** that was scheduled for the October long weekend has been cancelled and replaced with a new event at Loganholme in south Brisbane - now on 16 October - good practice day for those who can make Canberra.

The LARCS club at **Loganholme in south Brisbane** has a great field with 1,000 foot clearance. Come along and make this a good day on 16 October!

## 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!

**Electric & Glider FLIGHT Australia magazine** - produced under the auspices of the Australian Electric Flight Association - contacts:

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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)

**Web site - [www.aefanet.com](http://www.aefanet.com)**