

Aerobat -

**Official Magazine
of the
Hibiscus Coast Radio Fliers Club**



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CLUB **INFO**

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COVER PHOTO

*The pilot of Colin Austin's
23% scale Grumman F9F
Panther.*

*It has 2.760 Metre
wingspan and weighs in
at 23Kg.*

*Model is powered by a
behoec 180g turbine
putting out 18kg thrust.*

*This plane has done 166
flights so far.*

Photo by H Remks

H.C.R.F. Calendar 2018

As usual our fixed flying times are every
Wednesday, Saturday and Sunday morning.

Date	Day	Event	Where/When
04-Aug	Sat	Winch Gliding	Wainui 8.30 am - 12.00 noon
06-Aug	Mon	Club Night	Pinewoods Hall, 23 Marie Ave. Red Beach – 7.30 pm
01-Sep	Sat	Winch Gliding	Wainui 8.30 am - 12.00 noon
03-Sep	Mon	Club Night	Pinewoods Hall, 23 Marie Ave. Red Beach – 7.30 pm
01-Oct	Mon	Club Night	Pinewoods Hall, 23 Marie Ave. Red Beach – 7.30 pm
06-Oct	Sat	Winch Gliding	Wainui 8.30 am - 12.00 noon



From the Editor's Desk



Shortest day has come and gone so summer is on its way.

This of course means one of the greatest competitions of the year has already been held and if you didn't go you have missed it.

I refer of course to the "Thermal Thaw."

It was held at Ambury Park Farm in Mangere on Sunday 24 June which turned out to be a fabulous day for flying with light winds and quite a bit of sun. We managed to get two of the three heats held before lunch.

Lunch, cooked by our favourite chef, Aneil Patel, consisted of steak with a garlic dressing, herbed spatchcocked chicken and a selection of very tasty sausages. This of course with fresh rolls and salads.

After lunch round three was flown. The wind picked up a bit before the last event was flown. This was a mass launch and was scored on an all up, last down basis. Unfortunately the judges lost count of who was last down so it had to be reflown.

How did I do? Well remember I was flying a Bixler knockoff with half the wingspan of the Radian gliders. Added to this the first two flights had radio problems that put the plane into a vertical dive after motor cutoff. This lost me half the height I had gained on these flights. Did I mention I got a 100 point landing? OK I got 18th out of 20.

I sure am looking forward to next years Thermal Thaw. Those of you who missed it sure missed a great day

I hope all fliers have perfected their landing skills as in summer Auckland is known to be windy.

Ross McDonnell
Editor

My mouth is like a magician's hat, you never know what's going to come out of it.

From the President's Desk

Greetings,

Well the Shortest Day has passed thank goodness. The sheep are back on the Flying Field so the grass is quite short again along with plenty of wind, rain and glorious mud. It sure makes me appreciate my four wheel drive.

But the company is grand as usual, and of course we can now, if we want to, sit-in our club house out of the wind and rain. Thinking ahead to our Twilights, being able to sit inside makes the weather less of a gamble when we are organising them.

Our Treasurer and Secretary team "Henny and Carmel Remkes" have been hard at work organised our, as usual, successful midwinter lunch at Valentines. Thirty four people turned up for a nice lunch and enjoyed each other's company.

Henny and Carmel also discovered our new Club meeting hall which we tried out for our July meeting' Nice and airy main room with big TV monitor on the wall for our videos, kitchen, toilets and even outside a garden with tables etc. for summer and plenty of off street parking. Everyone seemed happy with the venue, no complaints, so we have booked the hall for the next 12 months. Though the icing on the cake folks, is the financial side of the deal. It saves us \$380.00 per year that's the equivalent of 9 new members' subs!!!!

So I am sure you will join me on behalf of our club in thanking Henny and Carmel for all their efforts - just brilliant :-)

We were also involved with the Annual Model Exhibition at the Whangaparaoa Hall for the third year. It was over two days 7 and 8 July. The main Hall was taken up with the railway enthusiast, boats were in an open room to one side and we were up on the stage as usual looking down onto the railway set up. Probably the best spot as we can hang a few models from overhead steelwork above the stage but the down side this year was it was quite dark. If we decide to go back next year we must look at more lighting. My two morning shifts were similar to the other years starting slow but building towards midday. The afternoons, according to the lads were better than last year, with more interest from retired guys and once again most of our info sheets disappeared. Personally I found it worthwhile being there. It will be interesting to see what the feedback is from the lads who were on our stand. A big thank you to the twelve of you who gave up your time to help over the weekend - it was really appreciated.

Flying wise well it's not been as bad as one would have expected. Ok a few days we didn't fly but we have had a few lovely winter calm days, though the low winter sun just over the hill on the downwind part of the circuit can be a problem am sure the flipping things magnetised.

Me, well I'm flat out repairing again (for the third time) my poor old O.S 45. Powered Piper Cherokee. First, stalled it resulting in a heavy landing repaired it. Second time motor cut out for the third time and it landed hard in the long grass (repaired it and changed the motor) This time I lost battery power so no control and crashed quite hard, though luckily into mud, so I am in the middle of repairing it again .

One never stops learning does one? I had checked the NIMH battery back home before I left. It was 90% full then after the crash checking it again with Jim's tester. Nothing just flat, then checked it with my tester it still showed 90% even though it was flat.

Must admit I have problems with electronics, I have problems even setting a digital watch. But as one of our experienced lads told me don't trust the battery tester. Always re charge the battery before you leave home just to make sure. So will stick that one into my overloaded brain. Still it's a brilliant hobby isn't it so interesting always something to work out and interesting.

OK Denison better get back into my workshop and repairing mode.

Happy Landings
Pete D.



I don't think women should be allowed to have kids after 40. 40 kids is way too many.

Images from the Annual Model Exhibition Whangaparaoa

Photos by H Remks



Most common Google request: How to disable autocorrect in wife?

A 4 E/F Skyhawk

A-4 E/F Skyhawk made by Freewing RC.

Length is 56 inches, with a wingspan of 37 inches.

Powered by a 80mm 12 blade EDF with 1850kv out-runner via a 100amp ESC.

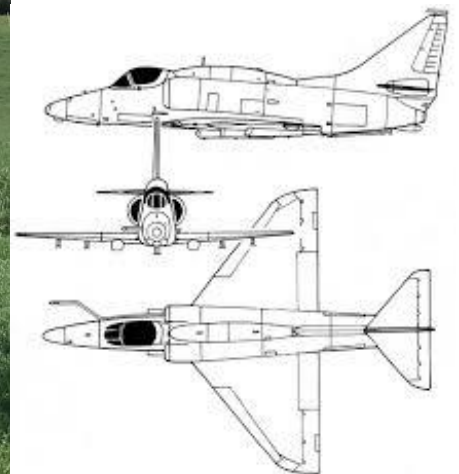
Rotating main gear. (very nice.)

Electric retracts and metal gear servos all round.

I run 5200mah 6S packs which give about 4 minutes flight time with a top speed of around 150kph.



The model is very nicely made with some of the best detail in an EDF (much more scale than FMS). It features detailed split flaps, removable nose cone, and magnetic ordnance which are removable.



It flies really well given the short wing. I thought it might have some trouble with the winter field down at Wainui, but it ran down nicely.

Reasonable fast, though the ordnance tends to weight it down. The roll rate without expo is pretty incredible and made it quite fun the first flight with full rates ☺

Linton Evans

Pictures Peter Dennison

I often wonder who Pete is and why we do things for his sake.

Norm Latest Model



Norm Rodgers with his latest model, designed solely to fit the criteria to enable him to get his "Wings Badge." It did work as he is now the latest wings badge holder in the club. **Well done Norm.**

(Don't you just love the wing shape? Reminds me of something but I just can't think what. Ed)

Pictures by our president

These pictures are painted by our President. I think they would grace any home.



Diet advice "Your pants won't be too tight if you don't wear any."

SlowPoke™

A Bee by any other name (Ed.)

I have to admit that I've never flown a wheeled aircraft before. I've hand launched, I've flown off snow, I've flown off water, but never off the ground. As such, I was a bit apprehensive before the first flight, all the more so since this is a tail-dragger.

I applied power gradually and the plane basically took care of matters itself. The tail came off the ground in a few feet, and very little rudder correction was needed. The landing gear is very far forward with a wide stance, so there was no tendency to nose over

or ground loop. After about 100 feet (30m), I was running out of short grass, so I pulled back gradually on the stick, and the SlowPoke was airborne. The tail comes off the ground almost immediately. With its forward-set wide-stance main gear, the SlowPoke had no tendency to nose over or ground loop.



I made a slow climbing turn and got used to the controls. I initially found the elevator to be quite sensitive, even on low rates, but I quickly got used to it, but I had to hold some up-elevator, even after dialling in full up-trim. After about a minute, I was feeling comfortable with the plane, and was thoroughly enjoying

myself. I flew circuits for a few more minutes, and decided to land before the BEC cut off the motor power. The approach was pretty uneventful, and I made a nice two-wheeled landing. Again, there was no tendency to nose over, and the SlowPoke came to a stop in about 50 feet (15m) or so. Phew!

That evening, I decided that I had been over-zealous in getting the centre of gravity to the suggested location, and that the plane was a bit nose heavy. I replaced the APC prop with the Master Airscrew I had planned on originally, and flew again the next day, this time from a paved runway. The SlowPoke required less up elevator this time. I flew around for a few minutes, and even did a few loops. The plane will loop quite nicely from a slight dive. After a few more minutes, I turned off the motor and set up for a dead-stick approach. The SlowPoke glides quite well with the prop stopped. I made what started out as a nice runway landing, but the plane bounced back into the air, and came down rather hard, bending the landing gear once again.

I'd highly recommend it to anyone who wants a different looking, decent flying, fun sport airplane. Although the SlowPoke has a very low wing loading for its size, it is not really suitable as a trainer (nor is it marketed as such), but it would make a great second plane.



By Stefan Vorkoetter for Sailplane & Electric Modeler Magazine

A man drops his phone on a concrete floor, but its ok because he had it on airplane mode.

2.4 Transmitter Antenna Orientation

by Craig Gottschang.

There still seems to be confusion on how to best orient the transmitter antenna on 2.4Ghz radios. Even pictures of “correct” and “not correct” antenna positions shown on the Team Horizon website differ from verbal recommendations from various experts. The stubby 2.4 antennas rotate at the base from horizontal to vertical as well as 360 degrees on their axis, resulting in an almost infinite number of ways to point. Our local JR rep made a presentation at a recent club meeting that seems to clear up the issue. In this short article I will attempt to put in layman’s language what the rep explained in fairly technical terms. For starters, both 72Mhz and 2.4Ghz antennas operate in a similar manner. Both are “common”, one quarter wavelength, dipole antennas with omnidirectional radiation in the plane perpendicular to their axis. In lay terms, that means they consist of a straight rod and radiate in all directions outward from the axis of the “rod”. The area directly off each end (axis) of the antenna is a “null” where the radiation pattern is weakest. Think of the radiation pattern as a very fat donut with the antenna pointing through the hole of the donut. **Figure 1** shows a technical drawing of a dipole antenna radiation pattern. 2.4 null Radiation pattern for both 72 and 2.4 transmitters. The “z” axis represents the antenna with nulls on both ends.

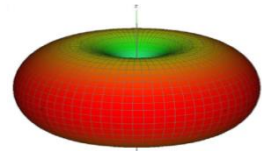


Figure 1



Figure 2

The objective is to orient your antenna to keep your jet in the “fat” part of the radiation pattern and away from the “hole” or null off the end. To achieve this, always have your antenna perpendicular to the anticipated flight path. For a 2.4 transmitter this can best be accomplished with the antenna positioned to near perpendicular (bent) and pointing at your head. One null is directly behind you and the other points into the ground immediately in front of you, two areas where hopefully you won’t be flying! If you naturally hold your transmitter pointing downward, the same effect can be achieved by positioning the antenna straight out and pointing at the ground. **Figure 2** shows proper 2.4 transmitter antenna position

A logical question at this point is “if my 72Mhz antenna radiates the same as a 2.4Ghz, why aren’t we concerned about it’s orientation”? The answer lies in the wavelength difference between 72 and 2.4. With a wave length more than 10 times longer, the 72Mhz signal has more area to be “seen” by the equally long receiver antenna and in effect, “bends” around objects such as turbines and other solid items in your jet. Because of this characteristic, 72Mhz radios are less susceptible to signal loss in the null portion of the antenna radiation pattern.

Another byproduct of the short 2.4Ghz wavelength is the necessity for multiple receiver antennas. Both JR and Futaba systems use multiple, short antennas and both recommend they be oriented 90 degrees to each other. With Futaba’s two antennas coming out of the receiver, this means they should “point” more or less perpendicular to each other. JR uses up to four remote antennas and they should be placed in different areas in the fuselage and in different orientations as well. The objective with both systems is to have a least one antenna with a clear path to the transmitter signal radiation pattern. My personal opinion is that for most of our installations and the relatively close distance we fly our jets, the orientation of the transmitter antenna is probably not that critical. I see lots of pilots flying with their 2.4 antennas pointed in all sorts of directions and for the most part, nobody is having problems. Nevertheless, why not operate your radio in the most efficient and effective manner possible? We never know when that perfect combination of negative factors will coincide and we end up with a loss of signal. Now that I have at least a rudimentary understanding of how my antenna works, I make sure to keep the strongest signal pointed at my jet.

It is so cold outside I saw a politician with his hands in his own pockets.

WARNING WARNING WARNING



Hi guys

Here is a little story just to let you know you can't be too careful with your Lipo's.

I just put my last Lipo for the day on my charger and went upstairs to watch TV with Carmel.

I put the battery in a "Lipo safe" bag on top of some tiles and to be sure put another bag underneath and one over the opening where the lead goes in.

I made absolutely sure as always the charger was on the correct MAH and voltage.

Carmel suddenly said "I smell something electronic burning"!

I jumped up, raced downstairs and walked straight into a wall of acrid smoke!

I couldn't see further than the tip of my big nose.

I raced into my hangar, grabbed the hot smoking mess of battery/bags and charger and threw them out the door.

Carmel had followed me down and we opened all the doors/windows then we put on a pedestal fan to help blow out the dense cloud of smoke.

I've charged Lipo batteries all these



years without a problem, but as they say there's always a first time! It's taken days to get the terrible smell out of our downstairs area.

Guess what! I'll be charging them outside from now on.

Now I'm just left with cleaning the soot off my planes and scorch marks on the carpet.

I'm halfway there....

Let this be a warning to all not to get complacent with our Lipo batteries.

Cheers
Henny

PS photos of scorched carpet and burn marks on tile.

Losing a wife can be very tough. Some may even say impossible.

FAIREY SWORDFISH Part 2 By Peter Denison



Still working on the Fuselage - fitted the servos, made up and fitted the idler arms for the closed loop system. I then thought it would be sensible to make the bottom wing centre section as this is where the undercarriage mounting plate, fuel tank etc. fit up against.

Plus I had to work out what hinges to use on the centre section, as I want the wings to swing back against the Fuselage for easy storage and assembly.

It worked out ok but it took about four weeks and when it's all screwed in place one tends to think where on earth did the time go.

Fitted the hinges temporarily to see how it looked and yes quite happy with them so I will duplicate it for the Top wing centre section as well. They are adjustable so, onwards and upwards I hope :-)



If I got 50 cents for every failed math exam, I'd have \$ 6.30 now.