Aerobat

August/September 2013

Issue Number 3 Volume 4

Aerobat

August 2013 Number 3 Volume 4

Web site
www.hcrf.co.nz

Facebook
Hibiscus Coast Radio Fliers

Committee contacts

President
Wayne Drinkwater
president@hcrf.co.nz
(09) 426 8584

Secretary/Treasurer
Hayden Purdy
secretary@hcrf.co.nz
(09) 427 5906

Club Captain
Nigel Grace
clubcaptain@hcrf.co.nz
(09) 420 3182

Social Secretary
Ngaire Ladd
socialsecretary@hcrf.co.nz
(09) 4260840

Frequency Officer
Jim Hall
jimh,geo@clear.net.nz
(09) 426 1478

Editor
Ross McDonnell
editor@hcrf.co.nz
(09) 4260840

Cover Picture
3D Sidewalk art in Germany
by
Nikolaj Arndt

From the Editors Desk

Well I survived the first edition and am back for another go.

I see Auckland has now turned into its normal weather for winter. One thing about Auckland is that it can have nice weather in winter without all that windy stuff you always get in summer, but sometimes of course you can't.

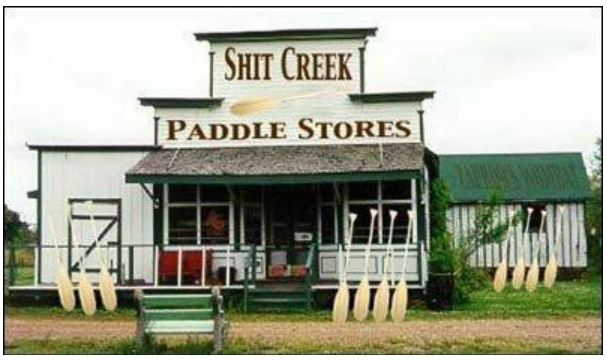
Good to see all those members and their other halves at the Mid Winter Christmas do. Nice to put names to faces and for some members to meet our land lords.

You will note the new Email addresses for the committee, and thanks to Hayden, it looks great.

Please feel free to send me articles and photos for the magazine at the editors Email as this has been rearranged to get to me. Photos and information of what's on your building board would be very much appreciated.

Ross McDonnell
Editor
editor@hcrf.co.nz

I FOUND IT !!!



De Havilland DHC-4A Caribou

Article by Russell Corney

DHC-4 Caribou at Goroka PNG 1966

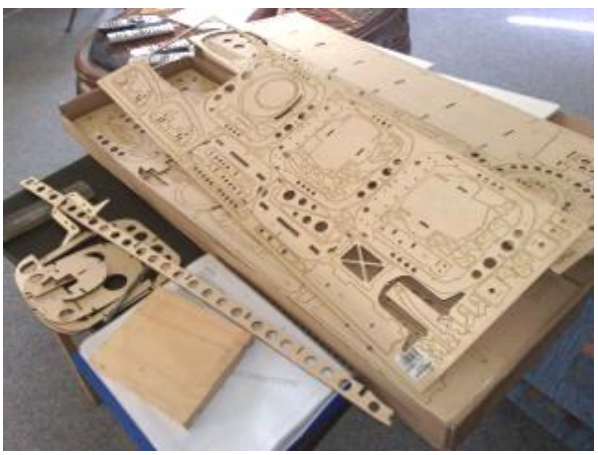
Attached are photos of the 1/12th scale DHC-4A Caribou that I am building.

I brought the laser cut kit from SPARC AERO in Australia, it came with a 54 page assembly manual (No full size plans - the parts just clip together so every piece lines up), hardware and sheeting are not supplied.

Dimensions:

	Actual Aircraft	**Model**
Length	72'7" (22.2M)	1.865 M
Wing Span	95'71/2" (29.13 M)	2.505 M
Height	31'9" (9.65 M)	0.820 M

Ready for sheeting



Laser cut parts

G60 Electric Motors fitted

Fuse sheeted & primed

The model attracted me as during the mid 1960's I flew the full sized aircraft in Papua New Guinea flying for Ansett MAL.
I flew it for 2 years as a Co-Pilot, then the aircraft was sold, as roads were being build in the Highlands of PNG. I continued flying the C47 (DC3) for a further 7 years up there.
The aircraft was built by de Havilland of Canada and was purchased new in 1965. It is an all-metal high-wing monoplane powered by two P&W R2000 twin wasp radial engines developing 1450 Hp.

Model being built by

Captain Russell J CORNEY (Retired)
1244 Whangaparaoa Road
Gulf Harbour
Whangaparaoa 0930
New Zealand
(09) 428 0224
(021) 0244 2564
russelljcorney@nettel.net.nz

My Living Will

Last night, the kids and I were sitting in the living room and I said to them,
"I never want to live in a vegetate state, dependent on some machine and fluids from a bottle. If that happens, just pull the plug."
They got up. unplugged the computer and threw out my wine!!

The little Bas#@ts!!*

"From the presidential suite"

Here we are with the worst of winter behind us and spring just around the corner!

Although it's not been a bad winter most of us have managed to get an acceptable amount of flying in, and the paddock has not suffered too much unlike other years when it became waterlogged.

We have had some amusing mornings too like the other week. I was driving down the hill to the paddock and the paddock was lost in a blanket of fog!!

That morning we had a total of 7 Bixlers assembled and ready to go but no one seemed to keen on my remark about a mass launch into the fog don't know why???

I have had the dates for the indoor flying confirmed by the Hibiscus Coast Youth centre, (dates will be in the calendar somewhere in this newsletter)
The hall is not an ideal choice but it is cheap and local I looked into the Orewa community centre hall but they demanded a block booking and a $300 bond, our current hall may not be a perfect venue, there is little chance of us damaging it.

Please take advantage of the evenings we will keep the costs the same $5 per flyer and all the profits will go towards buying the prizes for our summer gliding competitions.

Wayne Drinkwater
President

5 WAYS TO INCREASE MODEL PERFORMANCE - WITHOUT BUYING A NEW POWER SYSTEM!

Article by Andrew Gibbs

Most models will benefit from a little attention to improve their performance

There are a number of ways to tweak a model to make sure its performing as well as it possibly can. This short article discusses how to get the most performance from a model, without buying a new power system. The propeller is a great place to start:

Trying out a few different propellers can produce a surprising performance gain. Remember to balance the spinner as well

1. Choice of Propeller

Experimenting with propellers is often the easiest and most effective way to get a model to perform better. The greater the load a prop places on the battery, the more power your motor will draw. However, even small increases in prop diameter can cause big changes in the current drawn by the motor, so when changing props, always be sure to check the current consumption is still within the limitations of your motor, battery and ESC.

Another easy and simple way to get more performance is to check that the pitch of the prop is appropriate to the needs of the model. You may get more speed from a model by changing to a prop with a greater pitch. For example, instead of a 9 x 5, maybe try a 9 x 6. Again, always check the current consumption when changing props.

If rate of climb and not level flight speed is your preference, changing to a lower pitch prop may work wonders. For example, an electric glider might climb significantly better with a 12 x 7 instead of a 11 x 8.

2. Balance That Prop

An unbalanced propeller can develop a significant amount of vibration, especially at high rpm, and that vibration uses energy from the motor which is then not available to turn the propeller. For this reason, balancing the prop can yield a surprising benefit in performance.

For electric models in particular, I recommend investing in a good quality balancer. The investment will repay dividends for every one of your models in the future. Spinners can also be out of balance, so remember to balance them too.

3. Check control surface alignment

A model can appear to be flying straight when in fact it's crabbing sideways a little. This presents the side of the fuselage to the airflow, and can really slow the model down. Crabbing can be caused by incorrectly set up control surfaces – if your rudder is deflected right, and the ailerons left (left aileron up) when the sticks are centred, chances are that the model is crabbing. If you

get the controls properly centred, the model could pick up a surprising gain in speed.
Some models have two elevator halves, connected by a wire joiner. If the two halves are not aligned correctly, one elevator half may be up, while the other is down. This will produce drag, slowing the model down.

A balanced propeller will not waste motor power producing vibration - instead, all of the motor's output power will go into turning the prop.

4. Optimising the balance point

A model with an excessively forward centre of gravity (CG) will require an additional amount of up elevator to maintain level flight, compared to the same model where the CG is correctly positioned. While a forward centre of gravity is good for longitudinal stability, the necessary up elevator will cause some additional drag. Also, the up elevator means that the tail will be producing more of a downwards load than necessary, so the wing will have to produce more lift to compensate, with an associated increase in induced drag. Both of these factors will slow the model down somewhat.
It can therefore be worth moving the CG rearwards in small increments, carefully assessing how the model flies after each change. As the CG moves rearwards, the elevator will become more sensitive, and so it may well be sensible to reduce the elevator throw a little. Take great care not to move the CG too far rearwards, or the model will become excessively sensitive. If the GC is taken even further rearward, the model will become unstable and even un-flyable.

5. Flying style

Your flying style can significantly influence the performance of a model. Tight turns cause a lot of drag, robbing the model of airspeed. Instead of making tight turns, try easing them out so that turns are wider. These cause much less drag to be generated, and the model will fly for longer and/or faster.

DEMENTIA QUIZ TWO

Question 1

Johnny's mother had three children. The first child was named April. The second child was named May.
What was the third child 's name?

Question 2

There is a clerk at the butcher shop, he is five feet ten inches tall and he wears size 13 sneakers.
What does he weigh?

Question 3

Before Mt. Everest was discovered,
What was the highest mountain in the world?

Question 4

How much dirt is there in a hole that measures two feet by three feet by four feet?

Question 5

What word in the English Language is always spelled incorrectly?

See page 7 for answers

We have now passed the shortest day and you know what that means.

Summer is almost here !!!

DEMENTIA QUIZ TWO ANSWERS

Answer 1
Johnny. Read the question.

Answer 2
Meat.

Answer 3
Mt. Everest; it just wasn't discovered yet.

Answer 4
There is no dirt in a hole.

Answer 5
The word incorrectly.

THE INTERWEB THINGEE

Have you found any internet sites with information that has interesting information to us modellers, please let me know and I will publish it here. Here are the first offerings.

Gibb's" Beginner's Guide to Electric Flight"
http://www.gibbsguides.com/article03-BG-part01-intro.htm
It is always good to go back and look at the basics as if you haven't got them right you most properly haven't got much hope of building on them.

Is yours a big one?
http://www.nzmaa.org.nz/Docs/Interest/MANZ/Cert%20of%20LM.pdf
MFNZ Large Model SIG regulations on large models.

A good starting place to look
http://homepages.ihug.co.nz/~atong/
Alan Tong's site indexes links to just about anything you ever wanted to know about things modelling, and a few other things too.

Plans Plans and more Plans
http://www.hippocketaeronautics.com/hpa_plans/index.php
If you are looking for a plan or a 3 view, this is a good place to start. And it's free.

REWARD OFFERED!

Can anyone recognise these two children?
According to the August 2003 Aerobat they were found at the field.

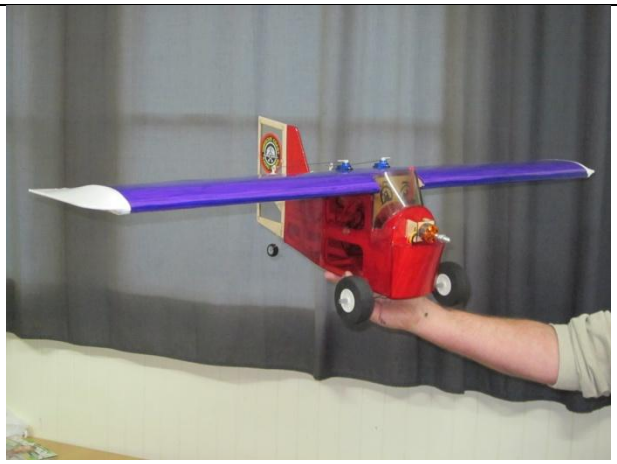
Remember:

Amateurs ...
Built the ark.

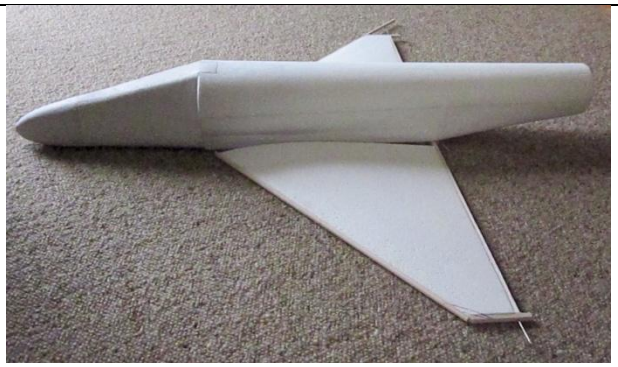
Professionals ....
Built the Titanic

AROUND THE CLUB

Ray Wood's very interesting Propellosaurus takes shape. A free plan from RCM&E



Wayne Drinkwater's little bug in all its radi-aint beauty.

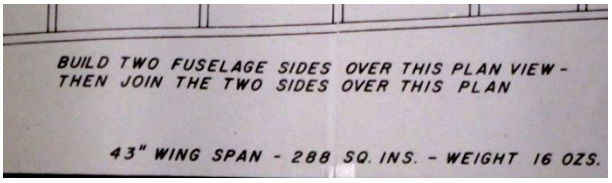


The start of my new A4. All cut by hand by Alan McDonnell. Ducted fan installed.

Didn't fly as well as expected. Was quite a handful

Just needs servos and more trim.

Now that's a tail. Russell Corney's Caribou CHC4. Seen at club night.


BUILD TWO FUSELAGE SIDES OVER THIS PLAN VIEW - THEN JOIN THE TWO SIDES OVER THIS PLAN

43" WING SPAN - 288 SQ. INS. - WEIGHT 16 OZS.

Part of the instructions for Ross McDonnell's Denison Pylon plan. What does that mean?

McKenzie Carter's latest. A pylon ship. It's easy Mckenzie, "just go fast and turn left."

Nigel Boyd's latest creation. A quad copter with attitude. Flys as well as it looks.

Totally Home designed and build from parts including old outdoor chair legs recycled from the dump. Total cost around $100.

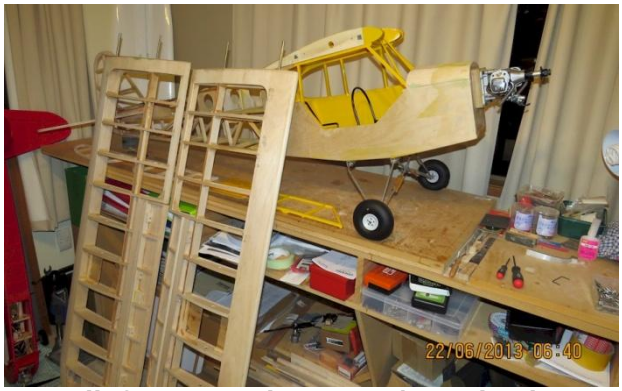
Norm Rogers' New Lazy Bee. Just look at that paint job

Ken William's new Hawker Fury looks god enough to fly.

Seen at the field one morning!
Oh dear, what are we turning in to?

Nigel Grace's big cub is progressing well with a little more work in the cabin and a final sand it will be ready to cover(cub yellow of course).

.



Built from a Bud Nosen 1/4 scale plan expanded by 10% to give a wingspan of 120" engine is a OS ft160 4 stroke

H.C.R.F. Calendar 2013 – 2014

Date	Day	Event	Where/When
5 August	Mon	Club Night	Whangaparaoa Guide Hall 7-30 Pm
25 August	Sun	Indoor	H.B.C. Youth Centre 7-30 to 9-30 Pm
2 September	Mon	Club Night	Whangaparaoa Guide Hall 7-30 Pm
29 September	Sun	Indoor	H.B.C. Youth Centre 7-30 to 9-30 Pm
2 October	Wed	Twilight 1	Wainui 5-00 Pm
7 October	Mon	Club Night	Whangaparaoa Guide Hall 7-30 Pm
9 October	Wed	Twilight 1 Rain Date	Wainui 5-00 Pm
27 October	Sun	Indoor	H.B.C. Youth Centre 7-30 to 9-30 Pm
4 November	Mon	Club Night	Whangaparaoa Guide Hall 7-30 Pm
17 November	Sun	Christmas Lunch	To be advised 12 Noon
24 November	Sun	Indoor	H.B.C. Youth Centre 7-30 to 9-30 Pm

WINTER INDOOR FLYING

As New Zealand is still in winter and the weather is traditionally wet, windy and cold, it was decided that it was time for us to revisit the great tradition of the "Indoor Flying.

The LAST SUNDAY IN THE MONTH was chosen or this as follows
25 August, 29 August, 27 October and 24 November

"H.B.C. Youth Centre in Orewa (Behind the arts centre.)
7-30 to 9-30 Pm

Times will be allocated for Helicopter, Fixed wing and Other,
so incidents should be kept to a minimum.