

RecWings

The Magazine of the Canterbury Recreational Aircraft Club



- An afternoon with Sofia
- SIO Completion Party
- On Jabirus and SeaRays

July 2017

Where's my Electric Aeroplane?

I seem to have an unshakeable optimism for the future, especially in technological and social improvements. Part of this was probably influenced by the movie "2001: A Space Odyssey" in my formative years. It left me with the belief that we would have a well-established moon base or two by 2001, and that classical music is eminently suitable for space movies!

Sadly we never pursued the exploration of space with the vigour that characterised the lunar landing years, but the piece of technology that was well-predicted, I didn't believe! In the follow-on movie, "2010: The Year We Make Contact", the hero sits on a beach using a portable note-book style computer. At the time I remember thinking "That's a bit optimistic for 2010", and yet the laptop format was established by the early 90's (2010:TYWMC came out in 1984).

We don't have proper hoverboards yet, but I was hoping for a higher uptake of electric cars and aeroplanes by now. I know we have some reasonably decent electric cars now, but the series 2 Nissan Leaf is still at the thick end of \$20,000. The series 1 has a range of less than 120km which reduces rapidly with an increased electrical load (lights, wipers, heater, and sound). Driving one of these from Rangiora to Christchurch and around was like the Apollo 13 movie – you have to reduce the electrical load to ensure you got home safely!

None of this bodes well for a usable, practical microlight-class aircraft. But, like electric cars and hybrids, the top end of the market is leading the charge (excuse the deliberate pun). Have a look at the ElectraFlyer-C prototype or the e-Go prototypes. Electric aircraft are coming... I look forward to the day when we're putting a charging station (or 6) on the field instead of mogas.

However, for the next decade or so most of us will be flying aeroplanes running on squashed dinosaur juice. This is another prediction that I'm happy to be wrong about.

**Front Cover, Mike Sheffield's
Pober Pathfinder at Forest Field
© 2017 Brian Greenwood1**

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S10 Completion Party

Words **Brian Greenwood**

Photos Courtesy of **Julia Reeves**

Many of you will be aware of our friend and esteemed club-member **Brent Thompson's** ongoing battle with Motor Neurone disease. What you may not be aware of is that he hasn't let this get in the way of completing his Rans S10 rebuild project, with a huge amount of help from his Mother **Ann**, wife **Jess**, and friends.

The fully aerobatic S10 (ZK-S10) flew a few weeks ago, and Brent was keen to have a



celebratory party to mark this huge achievement.

I hugely regret that I couldn't attend, but luckily **Julia Reeves** was there to record the event and kindly allowed me to publish these photographs. Thanks Julia! And a huge "Well Done" to **Brent Thompson**, his mother **Ann**, and supporters.





Full details of this wonderful celebration are in issue 53 of the wonderful KiwiFlyer magazine.





On Jabirus and SeaRays

Words and pictures by **Colin Ashby**

My name is Colin Ashby, I am an engineer who came to Christchurch from Warkworth north of Auckland to assist with earthquake recovery work, and I have stayed on and am a reasonably recent member of the club.

I have had a Jabiru DAM for many years, but have found I have often been at the back of a rented hanger with about 3 or 4 heavier aircraft to move out or “pirouette” around without contracting hanger rash before I can go for a fly. I also have a love of vintage cars and we had an older campervan parked on the street and starting to clutter up the neighbourhood, so my wife and I

decided to have a hanger built at Rangiora which Paul Hunter made an excellent job of and the Jabiru was in by Christmas 2016.

I once used a hanger with “The Hanger Doors from Hell” (but that is another story), so hanger doors are something close and dear to my heart, and being aware of this, Paul did a particularly good job and the 14m



wide, counter balanced, vertical bi-fold door which can be relatively easily lifted by hand. Now having a large hanger and a small Jabiru, it was a space begging to be filled.

I have been interested in amphibians for quite some time so about two months ago I phoned Barry Eaton in Motueka and he kindly agreed to take me up in his SeaRay amphibian, so Sandra and I set off in our old campervan for the 5 ½ hr journey around windy roads to get there. We had stored the camper in the new hanger, but with the cooler weather the mice had decided that the hanger looked like a warmer place to hang out, and the campervan even better!

I noticed a few mouse droppings before we set off, vacuumed and set a few traps and off we went. Barry Eaton gave us a good pointer on a very good freedom camping spot by the Motueka River, and all was bliss until 4am when we heard mice scurrying about. Then one decided to jump on Sandra's back and she let out a scream loud enough to wake the dead, for me to turn the light on! I think the mice probably got the biggest fright and decided to clear out. Needless to say at Sandra's insistence, we slept the next night in a motel!

Any way we had fun. Barry took me up in the amphibian and we cruised around Abel Tasman park admiring the view. They actually have an airstrip in the middle of the park which looks like fun if you don't have an amphibian but landing fees are \$25 per time. We did a touch down on the water and "S" curved around like a jet-ski on steroids then into the air again to cruise along the coast admiring the view. (See You tube "Going for a coffee SeaRay style").

Later I took Sandra on the back of our scooter that we keep on a rack on the back of the camper out for lunch at a café on a wharf that I had spotted from the air – very nice on a sunny day. Glad to be alive.

Barry showed us the local aero-clubhouse and if you phone in advance they have a bunkroom that you can use for \$25 per head per night. With kitchen, hot shower and toilet. Ha ha! We have just found our Motueka bach! Next time we will leave the camper behind and fly over, which if Barry can do it in 2 hours at 70 Knots should take us less rather than winding around the roads for 5 ½ hours.

I liked the amphibian but decided that "Speed is King" as I want to get places quickly, (we have family in the north island) I considered it time to upgrade our Jabiru DAM to something faster. I'm a bit like "Toad of Toad Hall" at times and need a little controlling. Sandra is pretty good. I'm spoiled really. Sometimes "she who must be obeyed" takes a bit of talking around, but if she agrees you can guarantee it is a wise decision.

We were up in Auckland recently on business which we finished at 3pm. As the airline did not leave until 7 pm we had a few hours to kill and Sandra asked what should we do? Silly question!

I just happened to have on my cell phone "trade me" with, low-and-behold a Jabiru J230D at Ardmore on it. I suggested we could kill a few hours, going over to have a look and she surprisingly agreed! So we went over, met the owner Mr Bruce Sinton and had a look. It was absolutely beautiful, it had only done 390 hours and apart from a slight scuff on the front wheel pod, it was as new.



It was factory assembled and Bruce Sinton had bought it near new from Australia and flown it across the Tasman via Lord Howell Island and Norfolk. He reckoned the North Island looked pretty good when he saw it and even better when he was over it! Unfortunately health reasons had prevented him using it a great deal and it had been hangered, regularly started, but not flown for nearly 3 years. We were both impressed and so we have made the decision to upgrading our Jabiru SK80 DAM to the six cylinder Jabiru J230D which is capable of 120 Knott cruise and 130 knots in straight level

flight flat out and capable of carrying a respectable payload.

However I had to learn patience. It had to undergo an annual before Bruce's friend Mike who is an A cat instructor and I could fly it down to Christchurch, where we would pay his air fare back to Auckland.

I know Jabiru have their challenges, but "better the devil you know than the devil you don't", and I now know Jabiru pretty well having had that DAM plane for a number of years. (Time sure flies when you are having fun!)

DAM, now has updated superior nose landing gear for safer landings, water cooled heads for cool running, an electronic ignition system for easy starting and an alternator for good power supply – heck I don't even have to rev the motor to use the radio anymore! I've just got DAM right and now I'm in the process of upsizing. I would like to do 120 knots and the J 230 D is big enough for Sandra and me to take an e-bike in the back so that when we get to an airfield we have transport. So look out Motueka, here we come!

I took delivery of my new Jabiru on Saturday 17th June 2017 and it was Great! My brother in law drove me out to Ardmore in the morning and it was foggy all the way but although it remained foggy everywhere else, as we arrived it rolled back and evaporated over the airfield. Bruce Sinton the chap I was buying the plane off reckoned I must have friends in high places and I reckon I do. I feel truly blessed.

I went for a test flight with Bruce's friend Mike Foster who is an A cat instructor. All went well, we landed, Fuelled up, I handed over the cheque, and then as Mike Foster put it; "**What are we waiting for? there was nothing stopping us except pure fear and common sense!**" We climbed aboard, did our checks and we were off! Climbing a little more steeply than usual to clear the fog bank at the end of the runway, and then setting a course south.

It was absolutely beautiful flying weather once above the fog, pressure even at 1029 all the way flying at 6,000 to 6,500ft through controlled airspace, which I normally try and avoid and hug the ground, but Mike had it well sorted. The plane averaged 20ltrs/hr travelling at about 105 knots at about 2850rpm.



The plane went well and we made it down from Ardmore to Rangiora in 3 hrs 55min. I was pleasantly surprised as I thought it would have taken longer, and we had 55 litres in the tank at Rangiora.

I hadn't sleep too well the night before due to excitement of taking delivery of the plane, so halfway down I handed the controls to Mike and had a power

nap for 15 minutes. We made an "emergency pit stop" at Kaikoura for Mike who had had a large coffee before we left and continued on, otherwise we would have made it with no intermediate stops although I found the seat was starting to get a bit uncomfortable after 3 hrs of flying.

The wing tanks are interconnected via a balance tank in the body of the aircraft and are not turned on and off as with other plane. The left fuel tank had a tendency to empty first and even though we tilted the plane to rebalance the fuel load, it tended to get out of balance again. In the end with plenty of height we ignored it and allowed the left tank to run dry. Even though the tanks were not balanced it did not run out of fuel. Any suggestions in keeping Jabiru wing tanks balanced would be gratefully received.

The plane did have a tendency to require pressure on the left rudder peddle continually as well as some left pressure on the joy stick and some adjustment will need to be made to make it well balanced so it can be flown "Hands off" like DAM, but apart from that all was good. The Garman GPS is particularly good showing high ground

warnings, tracking etc, and I am yet to become fully familiar with it.

Our new microlight, is a Jabiru J230-D. It is rated at 700 kg as a light plane and 600 as a microlight and has plenty of baggage space and a 6 cylinder motor capable of pushing her along at 120 knots in the cruise, 130 knots in straight level flight in smooth air, with a VNE of 140 Knots but fuel consumption wise 105 knots is pretty good and capable of flying from Auckland to Christchurch in one hop with fuel to spare! Am I wrapped? – Yes!

I can foresee that my wife Sandra and I are going to share many happy hours touring around NZ in this wonderful machine.

Our existing Jabiru is an SK80 model 4 cylinder rated at from memory 460 kg, cruise speed 95 to 100 knots. We have had a lot of fun in it and have been from Cape Reinga to Invercargill in at various times. I've got it sorted with water cooled heads, electronic ignition and an aftermarket alternator and it is currently for sale for



CRAC Hosts NASA: A Day at Rangiora Airfield

Words and Picture Hamish Pulley

Some of the NASA crew based in Christchurch for the SOFIA missions came out to Rangiora Airfield for a visit. A few CRAC members took them for flights, I took a couple up in my plane and some of them went up in trikes and out around Lyttelton. A number of our guests even got a flight in Trevor's Autogyro, and Stewart flew some of them in for a beach landing. I believe at least one went up in one of the club planes. A good time was had by all, despite the weather!



NASA Hosts CRAC: An Afternoon with SOFIA

Words and pictures **Brian Greenwood** (unless noted)



I'm not sure how the connection came about exactly, but a group of our members hosted some of the visiting NASA crews at Rangiora Airfield (refer to Hamish's report on the previous page), which resulted in a reciprocal invitation for club members to visit their airborne telescope SOFIA. It was one of those invitations that didn't have to be asked twice!

The NASA flight crews are rotated through Christchurch to fly the missions, currently there are two crews based here. Many of them were on site on the day we visited, our host was Flight Engineer **Tim Sanson**. It was very refreshing to be told "take photos of anything".

SOFIA (Stratospheric Observatory For Infrared Astronomy) is a Boeing 747 SP modified to take a 2.5 metre Infrared Telescope through a large hatch in the side of the aircraft. It's here on a 6-week mission and will fly 18 missions during its stay. It's operating from the Operation Deep Freeze base at Christchurch Airport during the Antarctic off season, which is obviously a very cost-effective use of this resource. One of the targets on these missions will be the minor-planet Pluto.

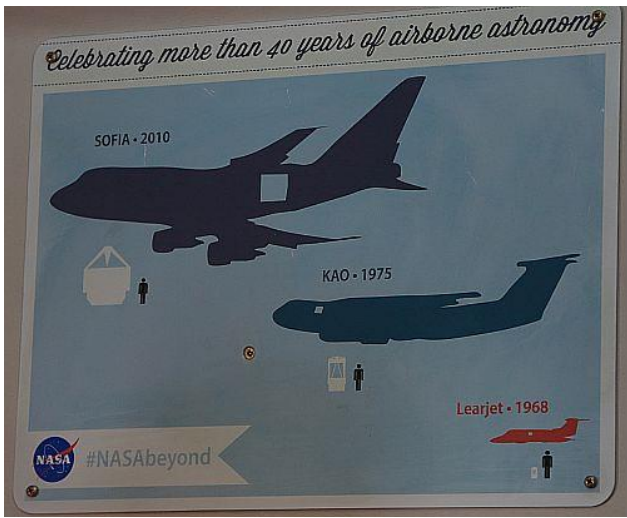


One of the reasons for operating at our latitude is that, at the 747's operating altitude (37,000 – 45,000 '), the air is almost as dry as space. This is vital for Infrared observations.

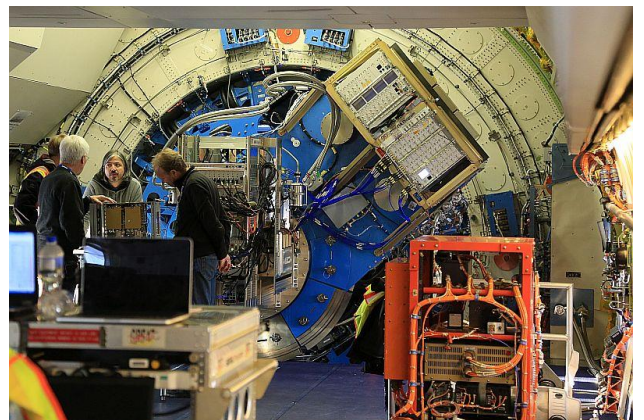
The Aircraft itself was one of less than 50 short fuselage SP models produced (The "short wheel-base version" as one of my car-nut friends put it). It was designed to give airlines a very long-range version of the popular 747, which suits the current role very well. It served Pan Am for ten years before being sold to United, with whom it served for another decade. It was then retired for a period before being acquired by NASA in the 1990's, the modifications taking another decade. It still wears the original Pan Am name, **Clipper Lindbergh**, and was re-christened by Charles Lindbergh's grandson Erik Lindbergh in 2007.



SOFIA, still retaining its 'Clipper Lindbergh' name from its Pan Am days, gracing the Operation Deep Freeze ramp at Christchurch International Airport. The aircraft is a joint project between NASA (80%) and the German Aerospace Centre – DLR (20%).



Above, two of the information placards on board the aircraft





SOFIA in flight with the hatch open for the Infrared Telescope.
NASA Photo/Jim Ross

Obituary Notice – Peter Dyer

Mike Sheffield, Club Captain

Long-time club member **Peter Dyer** passed away last week. Peter had his own hangar down near Steve Noad's. He shared it with his son Chris for many years, and they produced several aircraft together. Peter was a great supporter of the club and up until a few years ago attended club AGM's and voiced his opinion on many subjects. He was well respected by many members including myself. I always made an effort to visit Peter when in his hangar. He was always the gentleman with wise comments on what I was doing.

Peter will be remembered at the airfield at 12 noon on the 5th August with a Wake for him. All those who knew Peter will want to attend.

A Personal Message from Wayne Wilson

Wayne Wilson and his family wish to sincerely thank members for their support and condolences on the recent passing of Wayne's wife, Lillian and the passing of his son, Morgan, on 28 June. Your expressions of sympathy were gratefully received.

NTSA Report into Harrison Ford's crash released

Brian Greenwood

I reported on this crash when it happened in March 2015 but missed the follow up NTSA report. The likely cause of the engine failure was the Holley carburettor's main metering jet becoming dislodged and rotated by 90 degrees, which resulted in the fuel-air mixture being too rich for the engine to continue operating.

Harrison Ford calmly turned away from houses and glided towards the Gold Course, potentially saving lives. To quote the report: "... *Ford handled the emergency with the coolness and concentration you see reflected in any number of his on-screen characters*". He was 72 years old at the time of the accident and has over 5,000 hours single engine land and sea, multi engine land, helicopter, and instrument flying.

Although seriously injured (the seat belt arrangement contributing to this) he has made a complete recovery and has returned to flying. It's nice to see something complimentary about a celebrity.



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Phone: 027 869 7205

*Registration not required for attendance at fly-in

Celebrating our successes!

Congratulations to all our members who attained a milestone this month. The ones I have noted are (clockwise from top-left) **Conor McCauley's** first solo, **Nick Ward's** Advanced National, **Gert van Kruiningen's** first tailwheel solo, and **Maria Pietras-Jensen's** first solo. Thanks to everyone who supplied the photos.



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Modeller's Corner – Aftermarket Accessories

Brian Greenwood

I've had a few compliments about the models I have shown in these pages, which is very flattering, but if you have a look around the various modelling sites on the net you will understand why I am humble about my own results – I would be lucky to be considered an average modeller in world terms.

This month's theme came around for two reasons – I have nothing new to show (RecWings does take a lot of precious modelling time) and a comment from one of our members who is doing one of the same kits as me. It's the awesome Airfix 1/24 Hawker Typhoon. Mike's got through more than I have (I usually have a few on the go at once) and mentioned that the instrument panel wasn't as flash as he thought it would be.

Fore-warned is fore-skinned, as they say, so I had a look at Hannants for an aftermarket replacement. A company called Yahu does an awesome pre-painted etched-brass replacement which arrived in about ten days from ordering.



It's truly gorgeous, the instruments are very clear and recognisable (**photos left and right**), and painted to far finer detail than I could ever achieve. I have no idea if it is accurate for the version of Typhoon I'm doing (late model Bubble-canopy Mark Ib) but it's definitely being used.

I've seen people spend far more on aftermarket resin, etched brass, and transfers than the original kit, by a large factor. Modelling's all about relaxing and doing your own thing, so the only rule is: Enjoy yourself.



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NZLX AIRPORT MOTELS
ALEXANDRA AIRPORT : CENTRAL OTAGO

Committee Notes July 2017

- Booster pump still to be installed
- \$20K on RGB loan paid, remaining \$35K
- \$1K per month to be put aside for further engine replacements (\$20 already in fund)
- Carb heaters to be fitted to both Tecnams
- Hangar remediation completed under budget (thanks to Stewart and helpers)
- Time clock to be fitted to new fuel bowser to increase security. Security camera being investigated.
- Michelle to produce the weekly CRAC RAP
- WDC now monitoring aircraft landing at Rangiora and checking on Landing Fees paid
- WDC getting strict about vehicles on grass and may lock off the airfield unless improvements seen
- Dave McPherson proposing an Easter Fly-in to Oxford to celebrate 10 years of operation
- New BBQ purchased for \$290, may look at building it in to the outdoor area.

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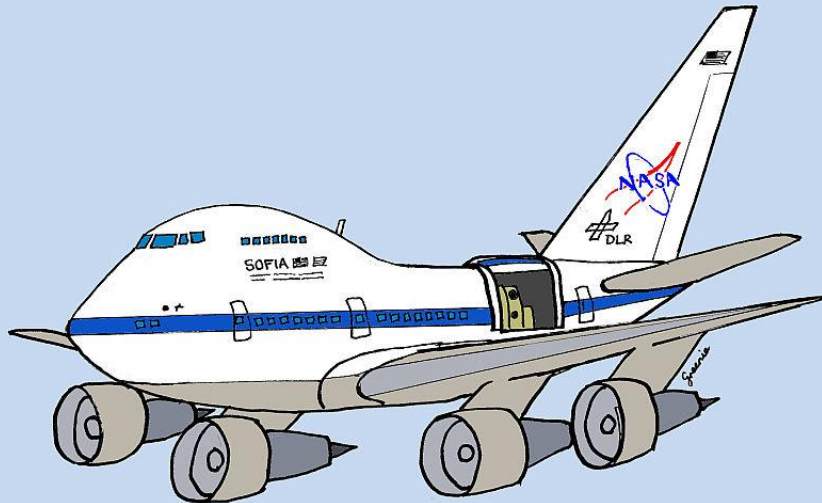
- 7/8th scale replica. (Graham Lee kitset)
- Built approx. 2003 by Mike Kindon, Canterbury Recreational Aircraft Club, Rangiora.
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Interested in joining us?

E-mail secretary@crac.co.nz or use
the online application form.

We can send you an information pack
which includes membership details,
costs, and joining forms. Membership
enrols you for the magazine, too.

Upcoming Events

19th July – NZRT Aerodrome Safety Meeting, CAC

Clubrooms 7:30pm (note CAC not CRAC)

28th July - Mid Winter dinner at 808 Restaurant
in Belfast (Note: not 21st)

29th July – CRAC participation at the Rangiora
Winter Festival – volunteers required (see
Michelle)

10th August – Flying Enthusiasts Meetup, Vespa
Bar, Christchurch – come along and socialize

18th August - club run and picnic to Culverden
Strip

7th September - Movie night - pizza and beers

20th October - Poker Run and BBQ lunch. Prizes.

23rd November - Tech night. GPS and Building
with metal. Ray Corbett.

15th December - Club BBQ and kids fun day.

Keep your eye out for weekly club e-mails,
join the **CRAC Drop Of The Hat** WhatsApp
group for informal group fly-aways. Join
CRAC Revolutionary for general chat and
good humour.

Contributions and Attributions

**Julia Reeves, Colin Ashby, Hamish Pulley,
Mike Sheffield, Wayne Wilson**

*Disclaimer: This Magazine is prepared by
dedicated enthusiasts; the opinions expressed
herein are not to be taken as official club policy
unless approved by the committee.*

New Members

Welcome aboard to:

Erin Heese

Max Edmonds

Jason Erasmus

James Hart

Ivan Campbell

Andrew Leith

Amadeus McKissock

Please make our new friends feel
welcome.

Congratulations

Robert Johnston, Adv. Local

Next Newsletter

Contributions requested, publishing
deadline 9th August 2017 ("ish").

Next publishing date approx. 23rd August
2017

Brian Greenwood, Editor
(editor@crac.co.nz)

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