RecVings The Magazine of the Canterbury Recreational Aircraft Club



February 2017





You can't always trust what you see

Originally this thought came to me while I was doctoring a photo with Photoshop. It's something I rarely do – usually the photo is either a throw-away or good enough to use. In this case I wanted to re-arrange the JOR/JOL formation to pose JOL above and behind JOR, instead of trailing it. It worked out quite well although I will have another attempt some time.

But the same thought applies to flying and driving – we tend to see what we expect to see. Have you ever experienced a time in your car when you thought the way was clear to proceed, only to find an oncoming vehicle when you checked again? Often it happens in low light or difficult lighting circumstances. Sometimes the car blends into the background.

I recall a time when I was in the front passenger seat of a Cherokee on the way back from Nelson. I was trying to figure out where we were on the map (a consistent problem for me!) but I know the pilot, a good friend, knew exactly where we were. My brother piped up from the back seat, asking what the dot in the distance was. Looking up I could see what looked to be a large helicopter in the distance. The pilot was already altering course when I realised that it was a small helicopter reasonably close. I was amazed at how small an R22 is from immediately behind.

There was no real issue, we were far enough away that it wasn't a problem, but in brief moment my brain adjusted both the size and the distance to the object. My perception was quickly altered to match reality.

I guess if there's a take-home message from this, it's probably something we all know anyway – don't rely on a single check to look for other aircraft, and if you do spot something, check again. I think that this is something that pilots are good at anyway – all of the ones I have flown with, anyway.



Cover, Brendon Marshall brings his Airborne Streak Trike into Rangiora, one fine summer morning.

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Wayne Wilson

(Article supplied)

After years of serving the club in various capacities, Wayne Wilson has decided to step aside as the club Patron at the next AGM. He wishes to hand over the reins to a younger person, preferably one of the long standing members still active in club affairs. New members may not be aware that there are still some of the original members around and they are the ones that have 'been there, done that'. Hopefully, the Committee will put one of these forward for election as Patron.

Before gliding, Wayne flew biggies around most of the world from Greece to Norway to Europe to Japan to Thailand to Vietnam to the Antarctic and all points in between including little ones like Wake Island, Midway Island, Kwajalein, Guam etc.

Some of the many aircraft he was qualified in ranged from the Neptune in the Pacific and the Antarctic to Super Constellations to P3

Orions to C130 Hercules to Dakotas and various single engine aircraft at a testing facility in a desert.



Wayne Wilson Florida 1954. Flight training



After returning to New Zealand, he started off in gliders and progressed to microlights and along the way, built five microlights, two of which he still has and flies.



Wayne came to the club after a long stint in gliding with the Wigram Aviation Sports Club, now the Omarama Gliding Club and while there, served as Treasurer and colluding with Roger Read, came up with a prepay scheme for their gliders that solved a potential cash crisis. The club has gone from strength to strength since then. These two also initiated a glider engineer syllabus that was the basis for the current IA system for the NZ Gliding Association.



Wayne became involved with computers at the Sinclair stage and wrote spreadsheets that made scoring the gliding contests held at Omarama a much easier and accepted system for the contestants. He started scoring contests in the late 70's when gliding was around the corner from the Omarama town at Tara Hills on a strip called Killermont. Wayne remembers sitting on the floor of the Pyewells' home in Omarama in front of a

fireplace with a black and white TV while operating a Commodore 64 for scoring. In 1992, World Glide 95 needed volunteers for the world gliding competition to be held in Omarama in January 1995. The contest used GPS and a scoring program that let Wayne get on with his new job, one of a gang of seven that organised World Glide 95. Wayne was appointed as the Administration Director and wound up organising and caring for over 500 pilots and volunteers for the contest.

During his love affair with Omarama and gliding, Wayne and his wife, Lillian built a chalet on the airfield and joined forces with fellow Wiggies and other supportive gliding club members in digging irrigation trenches, planting trees, fencing and other various jobs in preparing the new airfield for World Glide 95. He also found



time to build his first microlight, a Challenger II ZK-LIW which is still flying in the South Island. This aircraft was routinely flown to Omarama for the summers and parked in front of his chalet and acted as an airborne weather data collection platform routinely flying to 10,000 feet to send back temperatures and pressures to the Canterbury University group collecting the data for contests. Wayne became disillusioned with gliding in the late '80's when the gliding fraternity's interest in gliding gave way to baches, skiing, VCR's and other pursuits that left only the hard core to get the gliders washed, inspected, find a tow pilot and an instructor and put the

aircraft away at the end of the day.

After joining the Canterbury Microlight Club, it didn't take long for Wayne to jump in and volunteer as club Treasurer at an early stage. The club only had about 20 members but when the President at the time, Russell Warnock instigated a move to the Rangiora airfield and drummed up support for a hangar and club house, the club began to really expand.

Doug Anderson sweet talked Wayne into helping him expand the fledgling pokie game idea (we had one of original registration numbers) and that really made the club boom. We wound up with a hangar, a club house, a new Rans aircraft to replace the original Thruster that suffered a write off and lots



of money in the bank.

Wayne's involvement with the club and committee has been steady for almost 30 years and he is still at it, albeit on a casual basis.



CRAC Photo Contest

Brian Greenwood

Our capable Marketing Manager, **Michelle Polglase**, has provided these images from our recent photo contest. Thanks for organising this fun event, Michelle. I reckon it's a corker idea that we should hold periodically. Thanks to everyone who participated too, there's some great images.

And the Winners are...



Left, 1st place by popular vote goes **to Roy Waddingham** with his spectacular view.

Right, 2nd place to **Hamish Pulley**

Below, 3rd place to Dave Mitchell with this well-synchronised formation (even the propellers!) of his ZK-DYM and Mike Small's ZK-KTO. Dave commented that it took a while to get the props in sync!







Left, Aoraki Mount Cook by **Glenn Martin**.

Below, two very unusual and great views of a Singapore Airlines Boeing 777 touching down at Wellington – **Ross Petherick**



Right "Growler Runway" by **Glenn Martin Below**, contributed by **Roy Waddingham**



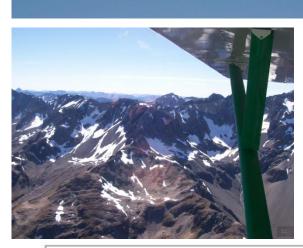






Above, contributed by Iceman, a nice view of the Mark 26VB Spitfire owned by Ivan Campbell, and our own ZK-RGA.

Left, "Does my bum look big in this" contributed by **Glenn Martin**



Left, Browning Pass in Summer; **above**, Mt Aspiring in Spring - both by **Alastair Miller** and taken from ZK-CVK



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Unfortunately, a difficult-to-trace fuel leak in JOL meant that I drove down — which is probably just as well, it got quite windy in the afternoon. I didn't hang around for any events; I just wandered around the parked aircraft and looked at the flying scale models and the (always worthwhile) Aviation Museum.



This page, the MiG 17 (actually a Polish-built Lim 6 variant) of the Ashburton Aviation Museum

















Below, a familiar registration –
Dave Mitchell's "Kermit"
gracing the aircraft park. Other
attendees from CRAC were Ross
Marfell, David Leefe, and
Graeme Main – all in Alpis.
Some of the STOL squadron
arrived just after I left.











Above 3 photos, some of the impressive RC models displaying at the SAA Fly-in.





Left, Simmons Spartan belonging to Pat Scotter and on display at the AAM.

Below, details from the Mark 26 Spitfire in attendance.







Ivan Campbell's Spitfire Mark 26b sneaking in over the fence, one fine Summer's day at Rangiora Airfield.

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Warbirds over Wanaka News

Brian Greenwood

There have been a few announcements from our friends at Warbirds Over Wanaka.

Firstly I missed publishing the announcement of the winners of the Warbirds over Wanaka Charitable Trust Scholarships. This is a monetary prize to allow some of our more promising younger pilots to get into Warbirds.

It was won by Michael Williams, a Flight Instructor of the RNZAF, and ex-CRAC Member Andrew Love of Christchurch. The level of applicants was apparently very high, so it is a fantastic achievement. Congratulations to both! Andrew intends to use the scholarship to gain a Harvard rating.

Secondly the Early bird bookings for WoW 2018 have gone on sale. Next year is the 30th Anniversary of the Air Show so it's bound to be special.

Healthy Bastards 2017

Brian Greenwood

By now most of you will have probably heard that club members **Dean Philip** and **Chris Anderson** got first and second places respectively in the Microlight category at this year's HBBPC. I believe that **Frank Barker** also got fourth.

Dean has fitted a 130hp Viking engine to his Zenair CH-701, and hasn't had time to make cowlings so flew it without them. Chris's Rotax is putting out around 120hp. Chris also won the "Most impressive effort by a low time pilot" and the Shortest Take Off at a mere 7.3 metres.

The videos of both are available on Facebook and possibly Youtube, definitely worth checking out. The short take off runs seem to defy gravity!

Hearty Congratulations to you all.

How to make a perfect touch down

Brian Greenwood

Perhaps this isn't the best advice for junior pilots, after all, I am well-known for a keen (some would say overly-enthusiastic) sense of humour. However, one of the tricky things in one's learning phase is timing the touch-down, so it's a good topic for discussion.

I've heard other trainee pilots say the same thing – touch-downs are the hardest bit! It takes a while to learn to judge your height using your peripheral vision, and balancing that with feeling the aircraft slow down and get a bit mushy towards the low end of the speed range. If you're not slow enough you can miss the earth entirely – but that can be better than the other extreme.

One of the best things that I learned is the use of trim to control the speed in the descent. Get the speed right, get the trim right, and at least you're set up for a good landing. I remember re-learning this lesson when I got back into microlights — I didn't bother with the trim for a while, as the control forces aren't huge in the S6. However, things only really started coming right when I remembered that a good landing starts with setting up the approach correctly.

The second piece of good advice was not to touch the nose wheel first! Even three pointers in a nose wheel aircraft should be discouraged because of the stress they transmit to the firewall. I remember the wise words of Stewart Bufton – "don't think of it as a nose wheel, think of it as \$20,000 worth of repairs".

The final piece of advice I was given was both the wisest and the most useless – "if you flare when the instructor braces for impact, you've probably left it too late"!



Instructor, Secretary, and Treasurer **Scott James** checks to make sure we're down after a rare good landing in JOL. This proves the point – even a stopped watch is right twice a day.

February 2017 Committee Meeting Notes

- Committee Meetings moved to the 2nd
 Wednesday in each month (no meeting in January of course)
- Bank Acct \$32K plus \$24K in engine fund
- \$20K payment to be made off A/c loan
- Flying hours RGA 15.8 RBG 26.1
- Oil Gauge replacement still pending
- Request please pay your IOUs for food!
- RAANZ Meeting: Should there be a registration fee? Further meetings to organise event.
- Low cost membership fee proposed for ATC
 Cadets passed subject to AGM ratification
- 2 x ATC Cadets keen to trade work for flying time, set at 8 hours work per flying hour. Work to be logged and signed off by Instructor or Committee member. Passed.
- Old Ranch Slider to be sold
- Procedures to ensure that all people flying club a/c are members and that payments are made immediately for all flying (no credit available)
- AGM to be organised proposed date April 19th.
- Anyone interested in standing for the committee or other positions are invited to contact Scott James to discuss it. We're always keen to get fresh ideas and encourage new faces. The election of officers is a democratic process and this is simply to encourage people to consider pitching in.

Vale Steve Askin

Brian Greenwood

It is with a heavy heart that I write these words, it has just been announced that the Helicopter Pilot killed while fighting the Port Hills fires was Steve Askin (a.k.a. David Steven Askin) from Way2Go Heliservices in Rangiora.



I'm sure some of our members are friends of Steve, and many of us have had contact with Way2Go over the years.

The Port Hills fires are, obviously, a huge risk to people and property. We're incredibly lucky that we have pilots like Steve working to protect our society.

I'll leave the proper reporting to the professional end of the media, but I am sure that I speak for our entire club in offering our deepest condolences to his Family, friends, and Rob Kitto and the team at Way2Go. I know his loss is felt throughout the aviation fraternity as well as the wider community.







Photo credits: Top, Way2Go Heliservices

Middle: **Alastair King** Lower and left: Editor

Introducing Karl and Justin Meyers

Buzz Harvey

Many club members will remember Troy Glover, a very personable young man who worked around our club for a number of years exchanging his time for flying in club aircraft. Troy was a real success story, who took his start in aviation with us and made something of it and is now flying commercially.



We now have two new young men who are keen to follow in Troy's footsteps. These two very keen lads are Karl and Justin Meyers, brothers aged 15 and 14 respectively. They attend Kaiapoi High School and are also cadets at our local No.88 (ATC) Squadron.

Our committee has approved for these two guys to undertake work around our club in exchange for flying instruction. CFI Doug and some of his instructors have also indicated their willing to give their instructional time for free for Karl and Justin, for which they are very grateful.

They are willing and hard workers and have started already; mowing lawns, washing RGA and RGB, sweeping hangars and alike. I will be primarily responsible for their work around the place, but any jobs can also be allocated and signed off by committee members and club instructors. If there is something you think they could do, please let me know. They might even be keen to wash your aeroplane or sweep your hangar for a donation to their flying account.

They are both very amiable guys and are looking forward to meeting club members and integrating as new youth members of CRAC. Some of you may be willing to offer them a seat in your aeroplane on occasion. Please note that whilst they are very keen to experience as much flying as possible, they will need to obtain their parents approval for any flights that are not with a club instructor. Just being cautious!

When you see them around, please say gidday and I'm sure you will find them polite and engaging young lads.

Cheers Buzz 027 499 7265



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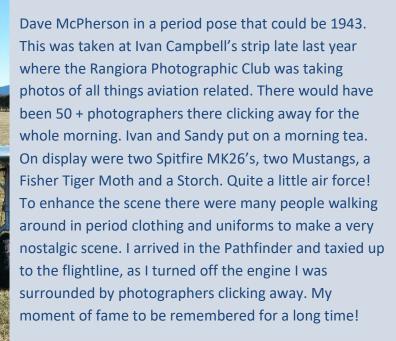




From the President

Mike Sheffield

No, it's not me!



The morning's highlight was Ivan flying the Spitfire over his strip at low level for the photographers gathered on the edge of the runway.

It was a very special event and not something that happens very much anywhere in the world. Dave and I were very privileged to have been part of Ivan's world for the morning.

You too can be part of the 'warbird' scene in North Canterbury by attending Ivan and Sandy's open day on 22nd March. See email sent to you recently.

Our club is hosting the RAANZ Flyin this year between Friday 31st March to 2nd April. This could be a great event for our club if the weather is fine.

Planes start to arrive on Friday and leave on Sunday. We are planning to put on an evening meal at the clubhouse on Friday with breakfasts on Saturday and Sunday. There will be a number of flying

events and competitions on Saturday followed by a dinner at the Rangiora RSA on Saturday night. The committee along with other helpers are well into the organizing of the event. Keep these days free and come and participate when you can. You can pre-register soon.

We are making the clubhouse available for flyers to stay in and we have a camping area designated near the car park. We have discussed billeting some flyers so if you are able to put up anyone for a couple of nights please email me at president@crac.co.nz, we have no idea who will come at the moment but we are prepared.

Book these dates and get involved, the more people and planes the better the event will be.

On the club scene, things are going very well, the planes are being well utilized with RGB clocking up 200hrs by the end of this week. We have set aside money for a new 912 engine for RGA when it is ready and we are actively paying off the loan for RGB.

You will have heard that the club will soon have a permanent fuel supply pump. This will be located near the toilets at the West end of the field. Details on how it will be used will come soon once it is installed and we know how the software will operate. This will be a great asset to the recreational aircraft operators in our area and is just another example of how far our club has come in the last 10 years. We continue to grow and improve our assets for members and keep recreational flying affordable.

This is the prime goal of the committee along with safety. Our instructors continue to provide very high quality instruction in the best training aircraft, at the best airfield, for the best club in the country.

Our AGM is coming up in April and if you want to be part of the team that forms the club future, put your name forward and get involved.

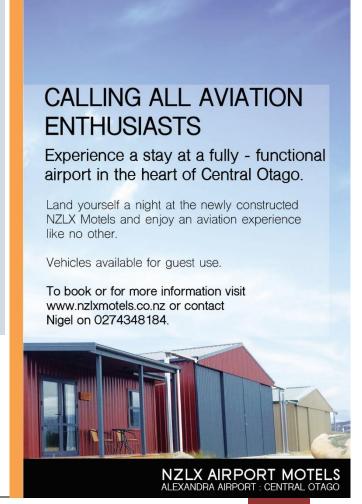
Safe Flying and remember the RAANZ Flyin.

Mike Sheffield President

Classic Fighters Omaka 2017

Just a reminder that this year's airshow is nearly on us. The Air Show runs from April 14th through to the 16th this year.

There might be accommodation left, and definitely air show tickets available. Just sayin'!





This aircraft seemed to be an attempt to recreate the stunningly successful World War One-era Bristol Fighter. The specifications called for a fighter capable of carrying a power-operated turret mounting four machine guns. Boulton Paul had considerable expertise in aircraft turrets from their Overstrand aircraft.

Although the thought of a fighter aircraft armed only with a rotating turret might seem odd to modern thinking, it should be remembered that the understanding of the time (mid 1930's) was the that new generation of bombers coming into service (such as the Heinkel 111, Wellington, Dornier 17's etc) were well armed and fast enough to roam the skies with relative impunity. The idea of a turret-armed aircraft capable of catching these bombers and firing into them from less-protected angles seemed to make sense. The Royal Navy's Fleet Air Arm used the same concept for their Blackburn Roc (which had the detail design finished, and was built by, Boulton Paul).



Boulton Paul's aircraft flew nearly a year ahead of the Hawker Hotspur. Hawker was heavily committed to the Hurricane program at the time.

The prototype, by now named Defiant, first flew on August 11,

The specification called for a two-seat day and night "turret fighter" with a top speed of 290mph at 15,000 feet. Boulton Paul responded with a very clean looking design, along with proposals from Hawker, Fairey, and Armstrong Whitworth. The first two companies were ordered to proceed with prototypes.



1937. However, production orders had already been placed for the Defiant the previous April, because of the superior turret design and Hawker's pre-occupation with the Hurricane.

The first Defiant Squadron, No. 264 (Madras Presidency) was formed in October 1939, a month after the outbreak of World War Two. It was followed by 141 Squadron in March 1940. Early combat experience proved the concept against bombers, however it was a different story in fighter vs fighter combat. Initially the Luftwaffe losses were high when they mistook the Defiants for Hurricanes and attacked from the upper rear - right into the range of the Defiant's guns. It didn't take long before the Luftwaffe cottoned on to the lack of forward-facing guns and comparative lack of manoeuvrability. Attacks from the front or beneath were fatal for the Defiant.

There was some success forming a defensive circle (much like the Me110) and descending to near sea level in this formation. This reduced or removed the ability of the attacking fighters approaching from underneath. However, this was a difficult manoeuvre in the heat of combat, and didn't seem to be used much.

Eventually the Defiant was withdrawn from day operations, half of the aircraft manufactured had been lost in combat. Night fighting was always been part of its brief, and it had some success against





the Luftwaffe night offensive of late 1940 to 1941. Half of the enemy aircraft downed at night during this time were to the Defiant's guns. Even so, the statistics also show that none of the night fighters available at the time were particularly effective.

Around this time the Mark 2 version was released, which had a higher-powered Merlin in a slightly longer nose. It also had a correspondingly larger fin and rudder.

Perhaps the biggest contribution the Defiant made was as an Electronics Counter-Measure platform. In one configuration it used equipment that re-broadcast German Radar signals and emulated a formation of approaching aircraft. Eight Defiants had to fly in close formation (which limited it to daytime operations) to give

the same radar return as 100 medium bombers. This technique was used to draw Luftwaffe fighters away from a real raid.

Another ECM fit was code-named "Mandrel" which jammed German radar. Nine Defiants flying 50 miles off the enemy coast could open up a 200-mile gap in the Luftwaffe's *Freya* radar.

Other roles included Air-Sea rescue (dropping inflatable dinghies to downed pilots) and Target Tug duties.

The Defiant may not have been a successful day fighter but it was a very nice aircraft to fly and contributed to the war in other ways. The lack of forward-firing guns (even though the turret could fire forward and

Photo CH 2526 Imperial War Museum

upwards over the propeller arc) was an error in the specification which contributed to its lack of success.

Follow on proposals included a version with canons in the wings and a naval version, neither of which were accepted. One Defiant Mark 1 has survived and is owned by the RAF Museum.



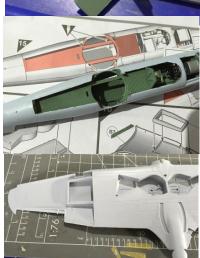
Airfix seems to know about my interest in the Battle of Britain period. Having produced the definitive models of the Spitfire I and Hurricane I in 1/48 scale they have turned their attention to the Boulton Paul Defiant. There had been previous limited run 1/48 scale models of this aircraft (in both Mark I and II versions) from

Classic Airframes, but it was a kit for experts. I have a CA Mark II night fighter in the stash but have never got around to building it, probably because of its complexity.

The new Airfix kit is well up to their current standards. It is an accurate, easy to build and well-fitting kit. The only minor flaw is some reasonably thick trailing edges, which (somehow) I missed correcting. I had ordered some aftermarket decals which turned out to be the ones originally produced for the Classic Airframe kit.



The kit assembles in an entirely conventional manner, staring with the cockpit. The instrument panel is represented with raised dials which are complemented by a perfectly acceptable decal. The top decking sections in the cockpit are held together by two spacers which are cut out after assembly — a very clever way of ensuring that there's space for the turret (see the second photo on the left)



The wings are made up of eight pieces including the undercarriage bay. Airfix have designed a neat box spar section, enabling the upper wing and lower outer wing components to connect securely to the lower inner section (bottom photo, left). At this point I should have shaved the trailing edge on the lower surface to sharpen it up a little.

After assembly I gave it a quick coat of Tamiya primer and corrected a couple of minor blemishes in the joins by filling with Squadron Green Putty (*right*).

For the top coats I used Tamiya XF-81 RAF Dark Green, Xtracrylic RAF Dark Earth, and Tamiya



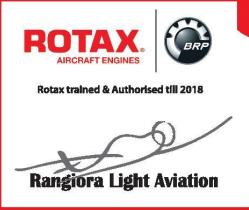
XF-21 Sky. Instead of my usual blu-tack sausage method of delineating the camouflage I scanned and enlarged the kit paint instructions to 1/48 and cut them out as paint masks (*far right*). It worked well and is a technique I will use more often.

Finally, a coat of gloss varnish (Johnsons 'Klear'), decals, and some Vallejo Acrylic Semi-Gloss varnish to matt it down.

As built it needs some more mud and dirt around the undercarriage, and some more oil leaks from the Rolls Royce Merlin. Apart from that, I'm calling it done! A very pleasant build of an unusual aircraft.







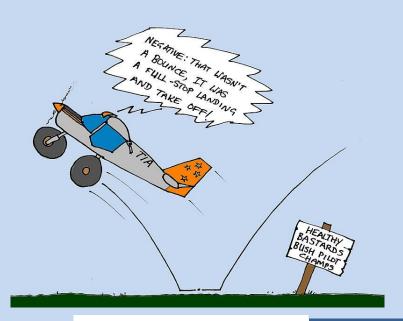
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Wayne has just returned from his bi-annual, update course for Rotax Aircraft Engines at Bert Flood's facility in Australia. This keeps him factory current all the way to the beginning of 2018.



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www.crac.co.nz

WhatsApp

CRAC Drop Of The Hat CRAC Revolution (for chat)

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Interested in joining us?

E-mail <u>secretary@crac.co.nz</u> 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

March 22nd – Loburn Abbey Fly-in, see "From the President", this issue. February 25-26th – Ohakea Air Tattoo March 31st – April 2nd - RAANZ Fly-in, Rangiora Airfield

April 14th – **April 16**th - Classic Fighters Omaka 2017

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

A heart-felt 'Thank you!' to the following contributors: Wayne Wilson, Michelle Polglase AND the photo contest entrants, Buzz Harvey, Mike Sheffield. Thanks to Wayne Wilson for painting the Clubhouse, too!

Cool Links

NZ Civil Aircraft
nzciviair.blogspot.co.nz
NZ Aviation forums
rnzaf.proboards.com
Hawkes Bay Microlight Club
www.microlight.org.nz
Gert van Kruiningen's Bleriot project
www.bleriotxi.com

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:

Vanessa Martin
Paul Milnes
D'Anvesh Achanta
Jamie Bertie
Alexander Scott
Alexander Shadbolt

Please make our new friends feel welcome.

Congratulations

Cris Lawry, Adv. Local
Florin Predan, Intermediate
Alexander Shadbolt, Adv. National

Next Newsletter

Contributions requested, publishing deadline 8th March 2017 ("ish").

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

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