





SEPTEMBER 2018







is produced by a keen group of individuals within the **Canterbury Recreational Aircraft Club.**

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Contributions for the next edition are due by **October 10th**. We invite contributions from all, with editorial discretion being final.

Brian Greenwood editor@crac.co.nz

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Cover, Kevin Dore in his Alpi Pioneer 200 Hawk ZK-KPD and David Leefe in his Alpi 300 ZK-MWL.

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CONTENTS

New Club Aircraft Proposal	3
Club Member's Alpis	5
Thoughts On A Tragedy	16
AOPA Darfield Fly-In – An Open Letter	18
Mudeller's Corner – Esci 1/48 RNZAF A-4G	20
Committee Notes September 2018	22
Tecnam For Hire	22
Lockwires – Engine Loss Of Lubrication – Rotax 912 ULS/Foxbat	23
Upcoming Events	24
New Members	24
Congratulations	24

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There have been discussions around the need/desire for a third club Aircraft.

The Instructors say "yes" and there does seem to be a firm requirement for a third club aircraft. This has been discussed at length at the last two committee meetings and a favourable finance offer similar to the previous arrangement for RGB has been received, and the loan required will likely be half that needed last time.

BACKGROUND

RGA

When RGA was being considered the change from the Rans to Tecnam was a big step and although there is no requirement in the club rules for one, a "Special General Meeting" (SGM) was held and it was decided to proceed. In the end RGA was highly successful and despite the remaining Rans being \$90/hr and the Tecnam \$125/hr a large majority voted with their money and flew RGA.

RGB

It became clear that the Tecnam was a huge success. RGA was always booked on fine days and there was a strong desire to have a second aircraft that could be used for training, and for fly-aways. The committee recommended RGB and another SGM was held as the purchase would need a loan of \$70,000. We all expected that the 700hr utilisation would split to 2 X 350 hr but even at that rate RGB would be financially successful. In the end RGB and RGA are being flown over 1200 hr per year combined so the hours went up! This of course allowed us to pay off the loan in half the time expected and the club looks even more professional with two identical aircraft.

RGC?

Originally RGA was supposed to be the cross-country aircraft and RGB the local trainer, however often both aircraft are in the circuit or local training area. On busy weekends they are fully booked. The Instructors do field complaints from students about aircraft availability.

Financially the club can "almost" pay for a new Aircraft and by the time the final payment is due there may only be a requirement for a small loan, perhaps half of the \$70k loaned for RGB.

Different aircraft have been considered and discussed, however we would get the most value for the students and instructors with the same aircraft, people can book RGA/B/C and have no differences swapping between them. Once qualified people can then specialise on their preferred area (e.g. STOL, Cross country touring, gyro etc). There are already a number of people happy to allow training in different aircraft. This last weekend members were training in a STOL, a Tail dragger, a Pipistral, and a Yak, none of which are club owned aircraft.

SGM?

There is no requirement in the club rules for an SGM although this has been done when the committee thinks a decision may be "controversial". This has been discussed and considered at the committee level extensively and although the committee is nearly split on this, with differing opinions; the democratic majority vote is that an SGM will not be held in this case.

However, if even a small percentage of the club members want one (10%), we will do so. Please let us know if you want a meeting or are happy for the committee to proceed by emailing to PRESIDENT@CRAC.CO.NZ - Please do this by the October the 2nd and we will do what club members want.

NEW AIRCRAFT: PROS

- Aircraft bookings are 100% committed at times causing some training bottlenecks
- The new aircraft should pay for itself, in exactly the same way RGA/B have
- All previous debt has been cleared with ease, which suggests that this finance option is an excellent way to expand the fleet
- Having three identical aircraft is professional, helps with booking, and is safer for students swapping between them
- We can afford it on current income, plus we expect it to generate additional income, so the financial risk is low.
- The club has the infrastructure (Hangars, maintenance agreements, instructors etc) to support a new aircraft so another one will not cause any difficulties (except: see fuel)
- We can do more cross-country training
- We would have aircraft available for use by qualified pilots without affecting the training schedule (e.g. fly-aways)
- Three aircraft would give us better availability when one of the fleet is out for maintenance and as the aircraft age more down time can be expected. As an example, there is a big maintenance job coming up on RGB and we are struggling as to when that can be fitted in. We rely on Chris and Stew who often work nights and weekends to keep the aircraft online. A third would help with this.
- Should we have a significant breakage or, god forbid, an accident that means an aircraft is "down" for months, we will still have two online.
- We have the go-ahead from our Committee/Instructors and any necessary Finance
- This allows us to have a pipeline of aircraft at different ages and consider selling the oldest when the time comes. When the new aircraft arrives RGA and RGB will probably be at 2600 hours and 1600 hours respectively.

NEW AIRCRAFT: CONS AND COMMENTS

- Having two training aircraft is enough and sets a limit on how many students our hard-working Instructors have to put through.
- Business confidence is shaky, is now the right time to be taking on a loan?
- It's very difficult keeping enough fuel in stock for two aircraft, is a fleet of three sustainable under the current practice? (we're still working on that!)
- Being over-committed at weekends on two aircraft is a good thing, it forces bookings to weekdays and evenings (in Daylight Saving months).
- It will use up the majority of available funds for about a year.



CLUB MEMBER'S ALPIS BRIAN GREENWOOD

The Alpi family of aircraft are a very popular choice for CRAC members, with 7 that I know of having had an association with the CRAC.

Alpi Aviation is an Italian company which specialises in Microlights, but also produces a turbine-power helicopter (the Syton AH 130, which is based on the Rotorway Exec). They have also branched into unmanned aircraft, producing both fixed and rotary-wing UAVs.

In New Zealand we have examples of the 200 and 300 series of aircraft, however there is also an aerobatic model (330) and a four-seat version (the 400 series) available. The 200 and 300 series can be bought as kits for amateur construction or complete factory built. The construction materials are a combination of wood and composites.

The Alpi's have a reputation as a good ownership experience, very easy and fun to fly with no vices. The robust Rotax four-stroke engines provide the motive power.



The first Alpi that I was aware of was David Leefe's ZK-PYS, an Alpi 200 model. This aircraft was first registered to an owner in Hamilton in 2004, David bought it in 2008. For some reason I only ever seemed to get photos of PYS on short finals or touchdown.



PYS is a very nicely finished aircraft (all 200's except MGK in NZ are factory-built) but, amazingly, David sold this paragon of aviation! For good reason, he got the opportunity to own the next model up, an Alpi 300 – see MWL.

The next Alpi I heard of was Ross Marfell's Alpi 300 ZK-RFT (Reach For The sky?). The 300 is quite a



different aircraft to the 200. Apart from the obvious retractable undercarriage, the 300 has a thinner, tapered, wing, a swept-back tail, and a sliding canopy instead of a hinged at the front one.

For all the times I have seen this amazing aircraft (the epitome of the high-end Microlight) I don't seem to have many photos of it. Ross, if you want to do some air-to-airs some time, that would be great!

Above, ZK-RFT basks in the heat of the Rangiora Airfield open day, 2015 (it was freezing cold and horizontal rain at times!)

Right, the same aircraft at Ashburton this year. This angle clearly shows the sliding canopy, tapered wing, and swept-back vertical stabiliser.





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ZK-PKT is an Alpi 200 purchased in 2013 by then-club member Steve Amstad. He sold it on to **Volkmar** Wollenweber in late 2014. ZK-PKT is labelled as an 'XL Sparrow' model – I'm not sure if this is in humour or for real! Definitely in humour, Volkmar has added the 'Furious Feather' label. This is also the aircraft shown in the dramatic photo at the beginning of this article.

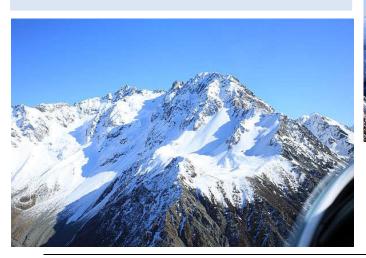


Left, ZK-PKT gracing the grass in front of the club house with **Glenn Martin's** Sting, ZK-MTN.

Below, Volkmar took me on a trip to Hokitika not too long after he bought the aircraft, here's the proud owner doing a pre-flight before the trip home.



Right and Below, the view out the window during the trip to Hokitika. Not a bad wee country, aye?







ZK-LPM is an Alpi 200 Pioneer owned by the dynamic duo of Margo Migirdichyan and Viktor Dragomiretskyy. These club stalwarts have been providing expert IT support for CRAC for quite a few years.

I was surprised to learn that LPM was owned from new by none other than club member Ross Marfell. Ross obviously got the Alpi bug, he owned it from 2003 through to late 2005, before he purchased the Alpi 300 model mentioned previously.



LPM is often seen around the airfield and on club events, thanks to Viktor and Margo's support of club activities.



Kevin Dore's Alpi 200 Hawk ZK-KPD is the latest model 200 Hawk. It was imported by the agent, Logan McLean, in December 2015 and registered to Kevin from new. The factory 'Hawk' specifications include leather seats and a moulded canopy.

Kevin asked to do some air-to-airs a few months ago, hence the cover and the centrespread. Thank you to Roy Waddingham for his skills as the camera-ship pilot, and the use of his and Dean Waller's Tecnam.





Left, Kevin brings KPD in over the fence at Forest Field, 2017.

As mentioned previously, **David Leefe** sold his Alpi 200 to own the 300 model **ZK-MWL**, below, in 2017.











The final Club Member's Alpi that I know of is the well-known ZK-MGK owned by Mike Sheffield, Graeme Main, and Ken Richards. It was purchased as a partially-built kit from the USA, unfortunately the fuselage was damaged in transit which required our tenacious trio to do a lot more work during the build.

It's powered by the ubiquitous Rotax 100 horse-power engine which makes it a sprightly performer (above!).





LATENEWS I've just heard of another possible Club member-owned Alpi. If so, and they don't mind a little publicity, there might be a follow on next month!



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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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THOUGHTS ON A TRAGEDY

GLENN MARTIN

By now most of us, thanks to the media, know that there was unfortunately a fatal accident involving a microlight in Southland on Saturday September 8th. Firstly of course this is tragic and whatever the circumstances our thoughts go out to all involved and all that this affects.

The aircraft and Pilot involved was not a local or a club member which, in a minor way, allows us at CRAC to have some perspective and perhaps it is timely for a few reminders and thoughts.

Process

The first reminder is that any accident needs to be soberly dealt with and the appropriate authorities and people contacted. The club "ERP" (Emergency Response Plan) covers this well. As a reminder we all operate under CAA rules and this precludes any of us either those involved or witnesses from talking to or contacting the media. This long-established rule is to allow the proper authorities to do their job, inform family and friends in the right way, and to stop rampant speculation as to "what happened and why". Therefore, the media asking about any accident needs to be politely told that we/I cannot discuss. The right people to discuss with are the Inspectors and CAA investigators.

Speculation

We live in an instant world and we all, especially as pilots, want to know what happened so we can learn from the accident and fly safer. However, experience has shown that often first impressions and first conclusions are wrong. The Investigation process does take a long time, often a couple of years but usually does come to some useful information. I have no idea what happened in this particular incident, but it would be highly unusual for the causes to be anything totally new, therefore this is a timely reminder that we need to listen to the lessons of the past and fly accordingly.

Green...orange...red...

Aviation has a lot of rules and numbers we are told to fly by, whether these are VFR minima or the stall speed of an aircraft etc. These are all designed to have a safety margin, this does mean that you can often stray a little beyond the green recommended number and get away with it. Sometimes this means we then feel safe in this "orange zone"... you may have done that many times before with no consequences"... therefore it is fine. The problem with this is that it normalises our behaviour in the orange zone and over time we drift more and more towards the red zone...then one day we get bitten! Should we be lucky we survive and shift our personal safety margins back a bit. Perhaps we should just all follow the rules and the limits specified for our aircraft...would that not be simpler and safer?

Confirmation Bias

Any time there is an accident there are many whom will use it to confirm their bias. Should you believe that GA aircraft are safe and Microlights are not this will confirm your bias, and you will ignore the GA helicopter which crashed the following day and talk about the Microlight to anyone whom will listen.

In actuality, the accident rate with Microlights is not known. This is because a quirk of the PART 103 is that we do not, like GA, report hours flown. Therefore, we do know the number of accidents, but not the accident rate. This is like claiming your uncle is an alcoholic because he drunk a bottle of whisky...well if he did that each day then he probably is, but if he took a year to drink it then probably not!

In the GA world the rate is pretty constant at 35 accidents per 100,000 hours (from CAA quarterly report). The absolute number of accidents in GA (heli+fixed wing 2016) was 25 and in ALL Sport Aircraft including Microlights was 18. So; which is bad, and which is good? Well, they are all bad.

The facts we have, show that the number of Microlight fatalities has been trending down, and that the number of microlights registered has been trending up. Therefore, it is likely that things are getting better, but there is no room for complacency.

Perspective

Perception is not reality, reality is reality. The media reports certain things as newsworthy they seem to like reporting Microlight, Robinson R-22 and motorbike accidents. In 2016 there were 8 fatal accidents in ALL Aviation....and 327 deaths on the road, almost one a day. The reality is that flying is very safe, but we cannot be complacent.

Take home message

- Stick to the process, do not talk to the media
- Do not speculate
- Do not push the limits stay in the green zone
- Microlights are safe too
- Have some perspective, be nervous driving to and from the field, not flying the aircraft.

Glenn







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AOPA DARFIELD FLY-IN - AN OPEN LETTER

WORDS: PETER COLLINS
PHOTOS: BRIAN GREENWOOD

This is about two topics, really. An enjoyable weekend of flying; and "Them and Us".

The occasion was the "AOPA Darfield Fly-in 21 - 23 September 2018", also known as the "Charlie Draper Weekend". For me, it was huge - 75 attendees. Of that number, 74 came in GA aircraft, and of the 17 aircraft that overnighted there were just three microlights - including Papa Lima Charlie.

Were the microlights outnumbered? Yes! Was there any discrimination? None that I could discern. I have been a member of AOPA (both the NZ chapter and the USA chapter) for some years. The USA educational resources are superb (don't get me started) and in NZ the gatherings, organisation and mutual support are at least those I experience in my "home" club, Canterbury Recreational Aircraft Club (CRAC). In addition, AOPA are a significant voice in both international and New Zealand aviation, and very active in negotiations between users and authorities.

I am always made welcome at AOPA gatherings, and never feel that I am the 'small minority', despite being 'outnumbered'.

Generally, I find that massed gatherings of aircraft are best avoided - at 80, I sometimes find that my situational awareness can get overwhelmed with even a few aircraft in the circuit. But AOPA gatherings are, from my point of view, brilliantly managed. Ground control is provided, friendly and informal, but very effective; having so many aircraft around, landing and taking off from up-country farm strips, virtually head to tail, could be daunting - but when amiable guidance is provided to all, then it becomes easy! And fun!



Heading photo: PLC drops in to the bucolic strip at Flock Hill Station.

Above, short finals to Charlie Draper's strip at Darfield, with a few of the attendees already there.

Did I have a good time? Yes, indeed; this was my second Darfield experience, and both have been among the high spots of my aviating. Putting down, within one full day, with others, at a dozen truly interesting mountain strips, all within a few miles, really stretches the ability and is great fun. To top it off, I was complimented on

my flying; I put that down to how easy it is to handle a forgiving low-inertia machine and throw it around, compared to some of the heavy iron, for I started flying too late to develop a real mastery of the activity.

Final thoughts? Certainly: for microlight pilots, by joining AOPA you would get access to a broad selection of excellent fly-ins, help hose-down any remaining 'them and us' fiction, and add weight to an already effective advocate of our activities.

Safe Flying!

Papa Lima Charlie.





MUDELLER'S CORNER - ESCI 1/48 RNZAF A-4G BRIAN GREENWOOD

With the withdrawal of the Air Combat Force from the RNZAF in 2001 (and subsequent abandonment of any form of co-operation from Australia) I seemed to lose interest in modelling the RNZAF, despite the brilliant history and current subjects available. Perhaps it's time to get my mojo back, by drawing on a happy time for the Air Force.

In 1984 the Government agreed to purchase the ten remaining airframes of the Royal Australian Navy's carrier fleet of A-4G Skyhawks to supplement our existing fleet of A-4K's. The 'G model was the same as the US Navy's 'F version but with air-to-air capability (i.e. AIM-9G Sidewinders). These aircraft were brought into service and converted to 'K standard by the addition of an IFF antennae (which squared off the top of the tail fin), a new radio behind the cockpit, and the addition of a drag chute in a housing under the tail.

Eventually all G's and K's were rolled through the 'Kahu' upgrade programme and equipped with F-16C-equivilent radar, avionics, and weaponry. Many of these aircraft are still in service with the Draaken organisation providing dissimilar training for the USAF's F-15's, F-16's, F-22's, and F-35's.



The Esci 1/48 Skyhawk was originally released way back in 1979. Standards have improved a lot since then but the basic kits still holds up well. It's considerably cheaper than the better Hasegawa kit (\$45 is compared to \$65ish) and has some advantages (e.g. extended slats) over the new Hobbyboss kit at around \$85ish. Mine was even cheaper - \$15 on sale. I suspect it was mis-priced as a 1/72nd version!

Other nice features of the Esci moulding (currently available

as an Italeri boxing) are the detailed ribbing on the rudder, two large underwing tanks, some free-fall bombs, and a complete set of pylons. Different versions come with bent or straight refuelling probes, brake chute housings, and some even have the square-tipped tail fin of the 'K version.

Negative points include a mixture of raised panel lines on the wing and engraved on the fuselage, zero detail in the intakes, shallow (but detailed) wheel wells, incorrect canopy and windscreen framing, fixed air brakes, and



slightly coarse vortex generators. Most important, however, is that it is reasonably accurate in outline.

I am lucky enough to have a set of RNZAF Skyhawk decals from an Australian company called Gekko Graphics – beautiful and well-worth seeking out if you're interested. One of the options was for NZ6217 in its straight-from-the-RAN Colour A-4G scheme of Aircraft Grey (BS 381C-693) and Light Admiralty Grey (BS 681C-697) – a beautiful scheme but notoriously difficult colours to match. My answer was to use Tamiya XF-83 Sea Grey and XF-23 Light Blue lightened with 15% XF-2 White. Possibly the Sea Grey should have been lightened a little too but it's not as dark as it looks in the photos.

The kit is relatively simple and it goes together easily - except that I filled the slots where the extended slats fit because there's no ridge to the wing surface on the real aircraft.

The other modification was to *carefully* sand off the windscreen detail (1500 grade wet!) and polish the result ready for masking and painting. I drew the windscreen outline onto the masking tape and cut it out with a scalpel (*below left*). It's not perfect but at least I'd had a

go at fixing the odd shape that was there.





I converted some spare AIM-9L model sidewinders to the appropriate 'G versions by removing the front fins and replacing them with fine card – from a margarine lid! All-in-all a quick, fun build of an old warrior from an old kit.

Despite being "clapped out" and having no military

value, NZ6217 is one of the aircraft currently providing training support to the USAF through Draaken. Funny, that.









TECNAM FOR HIRE BRIAN GREENWOOD



Club member **Erin Heese** has offered her 100hp Tecnam P92 Super Echo to CRAC members for hire at \$125 per hour.

This aircraft is ideal for cross-countries but has a fixed-pitch propeller so is very similar to our own P92's.

For further details or to register for the booking system e-mail thelightaircraftco@gmail.com or phone Erin on 027 292 3689.

COMMITTEE NOTES SEPTEMBER 2018

- RAANZ meeting with CAA re Rotax TIS and On condition issues
- Safe key replaced
- Christmas Function date discussed
- Replacement Fire Extinguishers installed in hangars
- Steve Noad orchestrating a Precision Landing
 Workshop on Sat 29th
- RGA August Hours 40.2 (on new engine feels like a new plane!) and 66.8 for RGB
- Safety Meeting at the airfield to discuss circuit procedures well attended.
- Viktor looking at incorporating a billing system into the web site
- New Aircraft Purchase: Committee voted to
 proceed with purchase of a new club aircraft
 – subject to improved fuel facilities for the club.
- Fuel discussions based around a trailer-based tank ongoing (and commercially sensitive)
- Finance offer similar to the one which enabled us to purchase RGB tabled and accepted for RGC.
- Correspondence received urging club to look at a Pipistrel instead of a Tecnam, however Instructors do not want to introduce a new aircraft type into the training mix at this stage.
- Weekend use of club aircraft away from the airfield – policy being drafted, currently instructor authorisation required
- Tecnam lease proposal by the club declined, however private leases by club individuals encouraged and supported
- Committee investigating supporting repairs to the Okarito strip as it is a popular destination for club members.

LOCKWIRES - ENGINE LOSS OF LUBRICATION - ROTAX 912 ULS/FOXBAT GORDON SWAN, SAC TECHNICAL OFFICER

It has come to my attention via a defect report, that there can be an occurrence where by the oil line connection can loosen off.

This can cause loss of oil and of course the result, in this case, was an engine malfunction and seizure. Good airmanship and flight handling enabled the aircraft to be landed safely.

I can't say that this is a manufacturer's fault! But I can say that this would not have happened if the pipe or tube retainer nuts had been wire-locked or retained in some way that inhibited them from loosening off.

A point of interest when tightening up these types of lines, it is essential that the main tube body is not allowed to turn as you rotate the union nut, as this places a resultant twist in the clockwise direction and a loading in the anti-clockwise direction. If it is not restrained in some way vibration can do the obvious.

You must, for your own safety and that of your passenger, lockwire or retain with locktite (or similar) all fittings that are like the oil lines, on the oil cooler.

Our thanks to the Inspector who advised us of this incident.

http://www.sportflying.co.nz/uploads/8/8/2/4/8824800/foxbat engine_loss_of_lubrication.pdf

RECWINGS would like to express our appreciation to the **Sport Aviation Corp** (SAC), Gordon Swan, and the West Auckland Airport Parakai newsletter



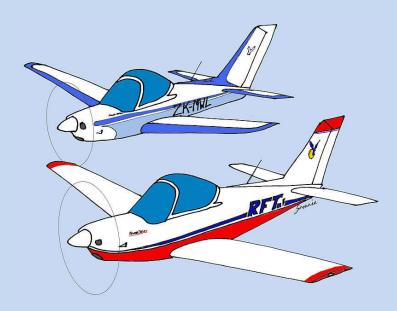
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Interested in joining us?

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

29th September – Precision Landing Seminar and BBQ run by Steve Noad at Forest Field. Register with captain@crac.co.nz

7th October - Forest Field 30th Anniversary Celebrations (see advert)

27th October – Club Fly-in to the Omaka Aviation Heritage Centre

2nd December – Club Christmas Function – catered in the Hangar.



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

Glenn Martin, Gordon Swan (SAC), Peter Collins.

Air-to-Air pilots: **Kevin Dore, David Leefe, Roy Waddingham**

RecWings logo by Eric Lim.

Printing kindly sponsored by:

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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:

Dillon Wobben
Brian Fitzgerald
Hamish Sullivan
Colin MacDonald
Mark Sullivan
William Aitken

Please make our new friends feel welcome.

CONGRATULATIONS

Paul Milnes. Adv National **Pietro Zugnoni**, Adv. Local

NEXT NEWSLETTER

Contributions for the next edition are requested, publishing deadline October 10th, 2018 ("ish").

Next publishing date approx. October 17st, 2018

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

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