

REC WINGS

THE MAGAZINE OF THE CANTERBURY RECREATIONAL AIRCRAFT CLUB



- CLUB RANS S-6'S
- HELICOPTER OPERATIONS AT NZRT
- OXFORD 10TH ANNIVERSARY FLY-IN
- ROTAX CARB SOCKETS
- F-16'S TO WARBIRDS OVER WANAKA

FEBRUARY 2018



RECWINGS

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

The views expressed herein are the authors' and do not necessarily reflect those of the Canterbury Recreational Aircraft Club.

To subscribe to the e-mailed edition please contact
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editor@crac.co.nz.

For back issues, head to
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Contributions for the next edition are due by **March 14th**. We invite contributions from all, with editorial discretion being final.

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Cover, Club Members' Rans S-6s: Bruce Norrie in ZK-WMR, Dave Mitchell in ZK-DYM, Chris Dyer in ZK-MLD, and Don Bulmer in JOR.
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CANTERBURY FLY-IN

at Oxford

Easter Weekend 2018 March 30th - April 2nd

ELEV 850
FREQ 119.2

OXFORD
AIRFIELD



1. Standard overhead join requested
2. Circuit: RWY 27 Left hand RWY 09 Right hand
3. Turn to the north after landing
4. Caution: Trees at the end of 27
5. Clay target shooting maybe in progress (generally 3rd Sun of mth)
6. Occasional grazing occurs
7. There are no taxiways, be careful taxiing as it is a farm paddock
8. Operator Dave McPherson Phone 027 2231870

For more information
Phone Dave 0272231870

10 YEAR ANNIVERSARY OXFORD FLY-IN

DAVE MCPHERSON

It is 10 years since the Oxford strip was opened with an Easter Fly In, in 2008. The weather has been organised so that we can have a celebratory fly in Easter weekend March 30th – April 2nd 2018.

Recreational aircraft from all over NZ are invited. It will be a no stress fly in with lots of time to explore the local area or go further afield if you desire and plenty of time to socialise and talk aviation. This is the old-style fly in, where you can camp on field, sit around the bon fire, or relax in the CRAC shack around the potbelly fire.

A small committee is planning for this year's fly in. We will be catering on field.

Breakfast \$5

Lunch \$5

Evening Meal \$10

The Oxford strip is 1nm West of the Oxford township alongside the Coopers Creek, at the confluence of the Eyre River and the Coopers Creek. There is plenty of room for camping and tying down aircraft on the field.

The Oxford township has lots to do for the partners that are getting "cabin fever" on the air field. On Saturday the Oxford A&P show will be on with all the fun of a country show. Emma's Bookshop is a must visit and with the American diner next door there is plenty to fill in a day. We also have the famous "Sheffield Pie Shop" in Oxford. Check out the website www.oxfordnewzealand.co.nz for more information on accommodation, dining what's on etc.

There will be a shower and toilets on site.

Everyone is welcome from far and wide. We would love to see some 1st generation micro's there to show our newer members where microlighting has come from, to have got to where we are today with microlighting.

BP and Shell Avgas swipe card pumps are available on Rangiora Airfield, 17nm's to the east. Transport will be available for local Mogas if needed.

The Oxford strip runs East/West with all circuits to the south over the Coopers Creek. It is easy to find if you locate the Eyre river to the south of Oxford and fly west up the river until you get to the confluence of the Eyre River and the Coopers Creek. The strip will be to the north and parallel to the Coopers Creek. GPS coordinates 431753S 172091E. All traffic needs to do an overhead join before descending to circuit height. The airfield is 850ft AMSL. The strip is 500 metres long running east/west, 09/27

It can be a tricky strip on 09. 09 is a right-hand circuit and is best flown by following the river in a curved approach rather than over the trees. 27 is a left-hand circuit and more conventional. It is slightly up hill from East to West. The Oxford strip is in the Canterbury CFZ 119.2 but the Rangiora CFZ 120.2 is very close by, the corner being the Oxford township.

EVERYONE is WELCOME

For more info if needed, contact **Dave McPherson on 027 223 1870**



CLUB MEMBERS' RANS S-6 COYOTE II'S

BRIAN GREENWOOD

The Rans S-6 Coyote II is one of the most successful of the second-generation Microlights, with well over 2,000 aircraft flying around the world. Most of them are powered by the Rotax family of two or four-stroke engines. One S-6ES version has flown across the Atlantic Ocean – twice! (I'd like to find out more details of this.)

Rans S-6's also hold the world records for the most landings in an hour (112, set on 27/7/02), and the most airfields visited in one day (114, set 20/09/08 - beating the previous record of 70). Both were set by Steve Slade in the UK.

This design was a development of the earlier single-seat S4 and S5 aircraft, and first flew in 1988. The S-6 was perfect as a training aircraft with side-by-side seating and dual controls. S-6's began to appear in New Zealand fairly early on, with images of a couple of aircraft attending the famed Waitohi fly-ins.

Our club, then known as the Canterbury Microlight Club, raised the funds and purchased the kit to build ZK-CMC in the early 2000's. Although the club only got the chance to operate the aircraft for 6 months, the S-6 had proven its effectiveness as a trainer and its ability to pound the circuits.



Above, it must have been a proud day for the Canterbury Microlight Club (CRAC's earlier name) when the new Rans S-6ES was rolled out in December 2002.

Sadly, this Rotax 503- powered aircraft was lost in an accident after only 107 hours of flying due to no fault of the aircraft.

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[Handwritten signature]
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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.



Call Wayne: 03 313 6987 or 021 214 5091
Email: rangiora.light.aviation@hotmail.co.nz
www.lightaviation.co.nz



The Club replaced CMC with **ZK-JOL**, mostly built by **Paul Woodley**. JOL first flew in July 2004 at the hands of test pilot **Brent Thompson**.

This aircraft served the club reliably for the next 9 years, but was involved in a couple of dings in its lifetime. The most famous one was at the hands of **Rodger Ward**, who had the unfortunate luck to have an undercarriage break. The undercarriage can be a weak point in S-6's and this was NOT a result of Rodger's flying – just the accumulated stress of many student bounce and goes! Somehow the undercarriage broke after take-off and Rodger performed an exemplary wheeler landing on the nose and port main.



JOL was repaired quickly and put back into service (there was minimal damage – thanks, Rodger!). As a result of accidents like this, the S-6's undercarriage was re-designed, and the later legs were re-fitted to the club's third S-6, JOR.

By 2013 JOL had done over 2000 hours, and the engine

had over 900 hours on it – but the engine log books had been lost. The club took the decision to sell JOL to help fund the first Tecnam, and keep the newer Rans S-6, JOR (see next page).

I was lucky enough to buy her, and fitted a much younger engine thanks to **Grant Porter** at The Landing Spot. JOL continues to fly reliably and is enjoying a semi-retired life style – I must fly more often! She's been upgraded with a glass cockpit (well, a Samsung Tablet running GPS), and I've had the front cowling modified so it can be split but is otherwise pretty much as she left the club. The cowling modification is to allow the whole cowling to be removed without removing the propeller, similar to JOR.



ZK-JOR - Within a year of JOL's first flight, the club (by then known as the Canterbury Recreational Aircraft Club) decided to build a second S-6 to share the training burden and to train pilots in tail-wheel operation.

Mostly built by Paul Woodley and Mike Small, it was first flown in October 2006 in the tail wheel configuration ("Conventional Undercarriage", if you like the 1930's terminology!).



Both JOL and JOR had a clever modification to the cowling which turns the removable top panel into a proper hinged access panel on both sides. I've seen it referred to as the "Canterbury Modification" and assume that Paul W or Mike S were behind this? It makes these aircraft a lot easier to pre-flight.



JOR had a few issues with pilots who put her in a very undignified position (legs pointing upwards instead of down) and I hear she was a bit of a twitchy beast.

In late 2007 work re-commenced to re-build JOR as a tricycle-undercarriage aircraft. It's not a trivial undertaking, the whole fuselage cage has to be replaced. The original fuselage frame is still around somewhere, or was up to a few years ago.

JOR continued to serve the club well as a trainer, even after the purchase of our first Tecnam Bravo, ZK-RGA. The lighter S-6 offered pilots a cheaper alternative to the Tecnam. It is also a harder aircraft to fly because the S-6's are far more rudder intensive, which can create a better pilot – if you tough it through!

However, in 2015 the hard decision was made to sell the aircraft to help fund the purchase of a second Tecnam. We actually tried quite hard to keep this aircraft, however the economics of the situation won out. Two strokes should no longer be run "on condition" past their 300-hour overhaul requirement in a commercial or club training environment, which puts the cost of operating these aircraft on a par with the four strokes.

JOR was listed on Trademe but did not sell quickly. Luckily club member **Don Bulmer** made a good offer and the aircraft was sold to him.



It's been great to see JOR getting the attention of a new owner, and I have definitely benefitted from his experience too. I'm about to try the "303 Aerospace Protectant" on JOL, it certainly perked up the skins on JOR for a while.

Unfortunately, JOR's skins seem quite a bit older than her older sister JOL's, and Don has some big changes planned. Keep an eye out for a new lease of life for this aircraft!

Thanks to **Keith Morris** and **Dave Paull** for permission to use their photos from the NZ Civil Aviation Blog, nzcivair.blogspot.co.nz.



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ZK-MLD was built by the late Peter Dyer and first registered in November 2000. It's now operated by Stephen and Chris Dyer. Chris flew it for our camera on February 4th.

This aircraft has the original "116" wing (the same as WMR). Chris has recently treated the Dacron coating with the **303 Aerospace Protectant** that Don used on JOR. Chris reckons he's getting an extra five mph out of MLD.

A Rotax 912 80hp engine provides the motivation, Chris reckons his father picked the combination of the ultra-reliable 80 Rotax four stroke and the tail wheel arrangement for best performance and handling. It was the eighth (out of nine) aircraft that Peter Dyer had built. Apparently, Peter didn't count the two aircraft that he just "assembled"!





Bruce Norrie's **ZK-WMR** was originally built by Wilhelmus Laan in Auckland, and first registered in July 2005. Bruce bought it in November 2008 and has kept it in pristine condition. Like ZK-DYM, it has the gloss-finished Dacron© coating. This makes the fabric very fade-resistant (Unlike JOL/JOR which has an exposure life of around 800 hours in the sun) but is very labour-intensive to apply and makes repairs more difficult. It looks stunning!





Dave Mitchell's **ZK-DYM "Kermit"** was built by Dave and first flown in October 2008. At that stage it had the "ES" wing, the same as JOL/JOR/MLD. However, Dave built up the newer "Sport Wing" which he fitted around 2015. The newer design is slightly heavier, but gives a better short field performance and cruise speed – a much more efficient wing than the earlier ES versions.





*Dave Mitchell banks his S-6 "Kermit" away from the camera-ship, ZK-JOL.
Thanks to Scott James for flying JOL
© 2018 Brian Greenwood*

As you can see from the 5 aircraft owned by club members, there are a few variations on the Rans S-6.

Engines can be the 50hp Rotax 503 (ZK-CMC), 64hp Rotax 582 (JOL/JOR), or the 80hp Rotax 912 (WMR/DYM/MLD). It can be finished in plain Dacron (JOL/JOR/MLD) or treated Dacron (WMR/DYM), or even standard aircraft fabric. There are three wings available, the tapered "116" wing (MLD, WMR), the Extended Wing known as the ES (JOL/JOR), and the "Sports" Wing (DYM). I believe that there are also larger, tapered ailerons and flaps which can be fitted to the ES wing. Add to this a choice of Tail-wheel or Tricycle undercarriage, and you have plenty of variety.

The choices don't just stop at the airframe, however. There are two types of instrument panel, the flat type used by these five aircraft, and a later "domed" type which gives a little more space for instruments. Seats with headrests are available, and there is an interior kit which hides the control runs and rear cockpit stitching. This latter type is better suited to the 80hp versions and is fitted to WMR and DYM.

Much is made of the safety of these aircraft, especially regarding the strength of the fuselage cage. Personally, I have read too many accident reports and my prime defence against personal injury is still trying to reduce the risk!

The S-6 is still available as a factory kit in the ES form, now powered by the ubiquitous Rotax 80hp. As such it would still be a viable trainer (being very easy and forgiving to fly – but hard to fly well!). The Sport Wing version is also available to special order.

Versions:

- S-6 - original version with the 50hp Rotax 503 – tapered "116" wing
- S-6ES - Extended Span version
- S-6S - Sport Wing or short span tapered "116" wing (such as ZK-WMR)
- S-6LS - Factory-built to Light Sports requirements
- S-6S Super Six - Factory-built with standard aviation-grade doped fabric finish

CELEBRATING OUR SUCCESSES

Right, Andrew Leith soloed in RGB on January 21st.



Left, Jason Erasmus did his first tail wheel solo in KNZ on January 28th.



Yesterday (7 January), flying my IBIS GS700 Magic, ZK-PLC, I headed out from Rangiora to Okarito in southern Westland (it is tiny but does come up on google maps) to have a cup of coffee (in their tiny cafe) with the packed lunch that Bonita makes me. I flew via Lake Coleridge and on up to the head of the Rakaia River, making about 10,500' (on oxygen) and was abeam Mt Whitcombe, right on the spine of the island, when, suddenly, at 5500 rpm, a significant vibration started.

I throttled down and found there were rev ranges where it got worse, but at 4400rpm it was hardly noticeable. At that power setting, in the rarer air I could just about maintain altitude, however I was almost down to the official stalling speed (but since I put on the vortex generators I now have a generous margin of safety). At that height my radio call to regional Control should have got through but there was no reply. I put out an open call for anyone receiving this? I get one reply and announced my position, the problem and that I was heading for Mesopotamia station strip, in the Rangitata valley, down in the foothills.

When I got there I was still at, and holding, 7000' (in the denser air, probably) so I put out a call that the problem hadn't worsened and I was now diverting to Rangitata Island (NZRI) where there was likely to be help and advice. I called 'coming straight in' (bugger the circuit) and with Russell Brodie's help found that the fibreglass nose cone of the spinner had a split in the gel coat (but the fibres were still intact). When we took it off the inside was coated with black (aluminium powder) as it had been rubbing on the prop hub. I postulate the back plate of the spinner has been flexing. Anyhow, though there was some vibration without the nose cone, it was constant throughout the rev range, so likely to be a residual imbalance rather than something else having come loose.

The field got a call from S&R, who had been passed my calls, and I rang them and advised them of my safe arrival - obviously they were as relieved as I; they had been phoning the high-country stations along my route asking for them to keep an eye out in case I had to put down precipitously. Nice. I had NOT called PAN PAN, nor MAYDAY, remembering the trouble it had caused last time, for this time I was fairly convinced that with care I could carry on. If the worst had happened and the nose cone shattered but not completely detached, I could have faced really severe vibration, (and put out a MAYDAY) but having found a 'safe' speed I hadn't thought that likely (given that at the time I had no idea what, if anything, had come loose).

So, having identified the likely cause of the problem, without the nose cone I took off from NZRI and flew safely home.

Rule No. 1: **Don't panic.**

HELICOPTER OPERATIONS AT RANGIORA

GLENN MARTIN



Lately there seems to have been an increase in Helicopters “doing their thing” at Rangiora. Sometimes a few of us have been startled by a sudden arrival onto the runway, or concerned when on final as to whether the helicopter on the runway was going to take off before we landed on top of them. As an instructor this is always a good opportunity to teach “go arounds” and tolerance for other users, the truth is that it

is not a perfect world and RT is a training field and every operator makes mistakes, but we do need to communicate.

However, there was an incident where a helicopter doing a “straight in auto” could not see the fixed wing aircraft waiting to line up and the fixed wing could not see the helicopter and so lined up and rolled. When the helicopter re-sighted the runway, they were surprised to see an aircraft where they had intended to land. This time they did the go around.

This resulted in some discussion among many and the realisation that many of us are confused as to “what are they doing and why”. Confusion and lack of understanding is only a short journey from an accident. The Canterbury Recreational Aircraft Club (CRAC) Safety Committee sought a way to fix this problem. The upshot was a meeting held at the Canterbury Aero Club (CAC) clubrooms Chaired by Nathan Clarke (the Rangiora Airfield Safety Coordinator) and attended by Carlton Campbell who is the Civil Aviation Authority’s South Island Aviation Safety Adviser. All the major users were there and the helicopter operators as well. We had a good talk and came up with some info and suggestions that we will now pass along to you.

WAY 2 GO

Some time ago the Airfield users agreed that helicopters should make their final approach to the field from the North or South at low level either to the jet A1 pumps from the North or the centre triangle from the South. The AIP was updated to reflect this procedure. Their radio calls are clear and we all know where they are and what their intentions are. They are very good about keeping out of the general circuit.

HELICOPTERS DOING A “NORMAL CIRCUIT”

Several mainly personal helicopter owners do what we would call “normal circuits” i.e. like we do at RT and again as they are doing what we do, there is no extra knowledge or procedures that we need to understand.

Some of the instructors often need to discuss “what we will do next” with the student, occasionally this has resulted in a helicopter idling in the middle of the runway, seemingly unaware that a fixed wing is on final and wondering if it is safe to continue the landing. Naturally if that is also a student the tension can climb. We agreed that the helicopter instructors will move off to the “triangle” for discussions.

For fixed wing pilots a polite “helicopter on 07 what are your intentions XYZ on final” will suffice, and if you need to go around say “going around” and move to the right (07) keeping the helicopter in sight at all times. Then take it as another good learning opportunity...smile and wave guys.

HOVER TRAINING AREA

The area over to the South between 07/10 defines an area and the AIP allocates that area for helicopter hover practice (Black number 5) Helicopters operating there need to “hold short” of the active runways when they are “hover taxiing” to other areas, make radio calls AND visually check the traffic before moving across, just as fixed wing aircraft do.

AUTOROTATION TRAINING AREA

The AIP has a designated triangle between 07/10/22 (Black number 11) on the AIP reserved for Autorotation. Autorotation is the helicopter version of our “glide approach”. That is: when downwind they power off and simulate an engine failure. The helicopter guys tell us that the descent rate is extreme and once the power is pulled they will be on the ground “within 30 seconds”. When I started training at RT a few years ago almost all “auto-rotations” were onto the triangle. Lately almost all have been onto the runway. The helicopter people have agreed to go back to using the triangle as their practice area.

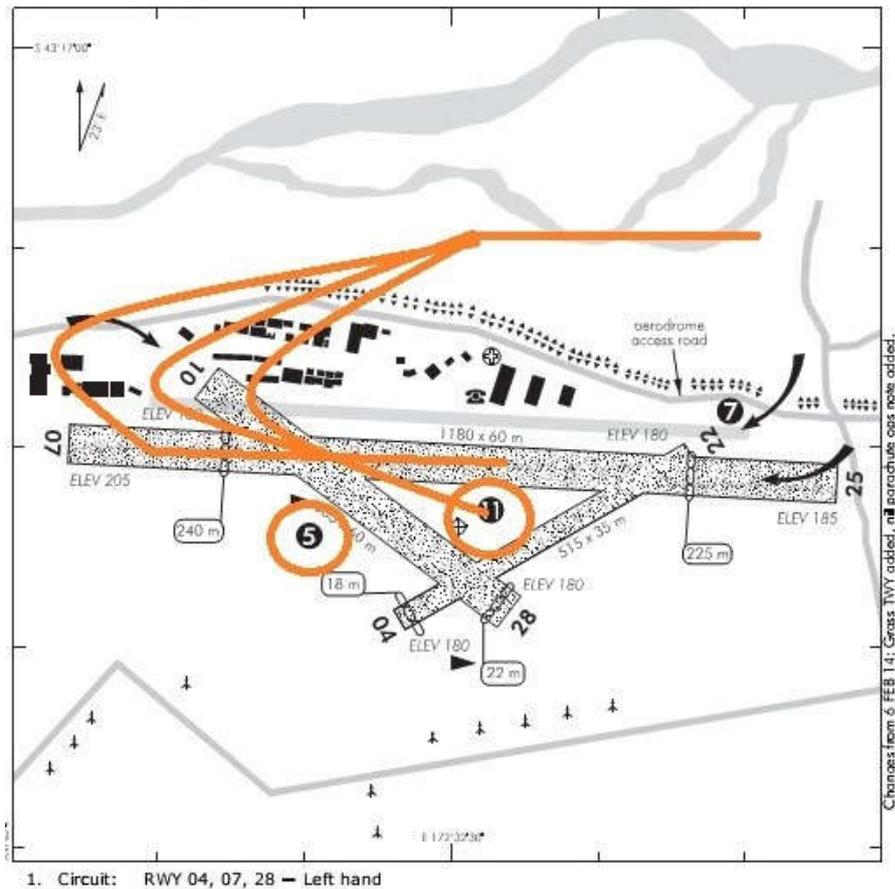
However for a flight test they must do one onto an active runway.

The other thing to note that often they will say “straight in auto” this means straight in from down the final extended runway. If they call “**180 Auto**” it will be from the downwind position, and they could be barreling in over the hangars and club rooms. If you do not see them, be aware they could be “behind you”; see the orange lines above.

Secondly a few of us have been confused by a helicopter on the runway about to roll and saying “rolling 07 for a straight in auto” They have now agreed to reserve the “auto” word for later. That is, they will call “extending upwind for a close in downwind” or “rolling 07 remaining in the circuit”

In effect this means that the student or Instructor will not decide to do an “auto” until they are mid downwind and can visually confirm that the runway, triangle, or circuit traffic are clear. Then they can call an “Auto” and say so on the radio.

For us it means that if you hear the word “Auto” you can expect to see a helicopter plonk down on the runway, or triangle, in the next 30 seconds....so DO not enter the runway. Also be aware that as the helicopter comes in so steep and flares they may lose sight of the landing area so if you move out to line up you may be just where they will arrive.



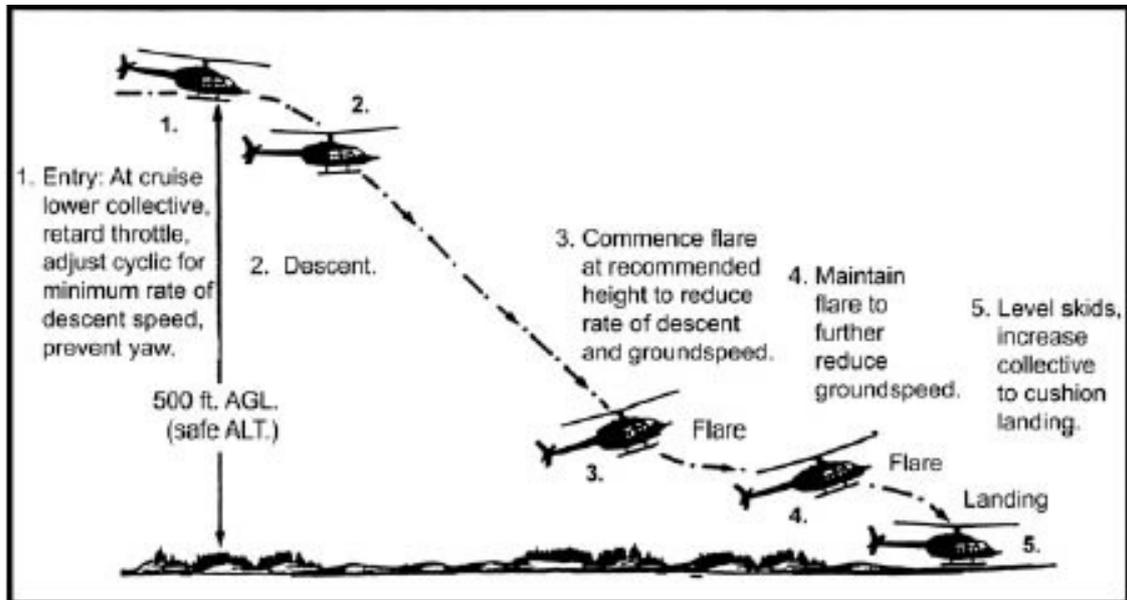


Figure 13-1: The straight-ahead autorotation

COMMUNICATION

Visual is the primary communication. The helicopter/fixed wing crash at Paraparamu a few years ago both pilots made the right radio calls but they did not sight each other. Be sure you see them and that they see you... there may be two helicopters so talk and see! Secondly radios are not perfect if there is a hanger between you and their flight path you may not hear their call. Therefore, continue to do the 360 visual check we all teach.

HOVER TAXI VS CIRCUITS

Heli's need to "hover taxi" ...to us that is flying....to reposition and can legally do so, but they cannot use hover taxi as a way of breaking the rules, so no Right-hand circuits on 07 under the idea that they are repositioning. Hover taxi should use the same taxi ways and holding short of runways and making calls as we do.

500 FT CIRCUITS

"low level" 700 ft AMSL, 500 ft AGL circuits are legal at RT. However just because it is legal does not mean you should do it. As you can see from above Way2Go can come in low over the river, a helicopter on an "Auto" can cut the circuit short and come over the hangers at low level (well below 500 ft) with little ability to see you.

We understand that a few pilots have "always done low level circuits" but RT is getting busier Carlton, CAC, and CRAC safety committee would rather these are "put out to pasture". Training for a 'low level' (not below 500') circuit is acceptable practise because one day the weather may force it upon you, but just doing low level circuits because you can or want to is discouraged given the negative impact on the 'fly neighbourly' principle, the impact on other traffic having to maintain necessary separation, and the reduced safety margins in the event of an emergency.

COURTESY

Rangiora is busy and only getting busier. There are often many students of various aircraft in the circuit at any time. Please be courteous if you are out there and no one is around then fine, try other vectors, crosswind, low level, "autos" etc. However, if it is Saturday morning, just because you want to practice some non-standard stuff DO NOT do it. You may be "comfortable" about it but what will that do to others, do not forget what it was like as a low hour pilot in a busy circuit

The minutes of the meeting are in the CRAC safety folder. if you have any questions please ask. Any safety

PERCEPTION IS NOT REALITY

BRIAN GREENWOOD

You may have heard the rumoured comments regarding the slow and steep take offs from some of our STOL aircraft. I know there's no cause for worry, but I can assure you that it does look very impressive when your experience is limited to a Piper Cherokee or Cessna!

I was lucky enough to be taken for a flight by Stewart Bufton during the early days of my Microlight training (Thanks, Stew). It was a great experience and showed me that these aircraft can be flown very safely at some quite amazing angles and speeds. Recent conversations with some of the STOL pilots confirm that a minimum of V_s times 1.3 (Stall speed x 1.3) is used, usually 1.5 to 2x V_s . After all, these pilots want to maintain their pink fleshy bits in good order more than anyone else. Microlight pilots know they need that safety margin.

For any doubters reading this, here's an interesting figure: 24.3 knots. That's the listed stalling speed of a Zenith CH 701. That means the **minimum** climb out speed is around 34 knots... that's the flaps-up stall speed on my Rans S6! (of course, use the speeds in your aircraft handbook, not the web site ones)



Zenith CH-701 Climb out – photo courtesy the factory web site, www.zenithair.com

Our local STOL group includes some very experienced pilots including at least two or three instructors, and they're excellent at supporting each other and mentoring.

So, there's no problem, right? Except for it all adds to the noise of "Microlight's are unsafe" and "All Microlight pilots are cowboys" that gets murmured around. **Unfair, ill-informed, and untruthful**, but it happens none-the-less.

The CRAC safety committee took the suggestions seriously, undertook an investigation and entered into discussions with Carlton Campbell, the CAA's South Island Safety Advisor. They concluded that the suggestions were unfounded. It was noted that, in low weight, low inertia aircraft, we are all taught to lower the nose immediately in the event of an engine failure, and to fly the aircraft to the Pilot's Operating Handbook. An observer outside the cockpit cannot accurately judge airspeed.

The solution is to not stop what we're doing but to be open and informative about it. Communication and training are the answers. Let's **inform, befriend, educate, mentor, and lead by example**. I'm thankful that we were lucky enough to hear the comments and be given a chance to correct these false impressions.

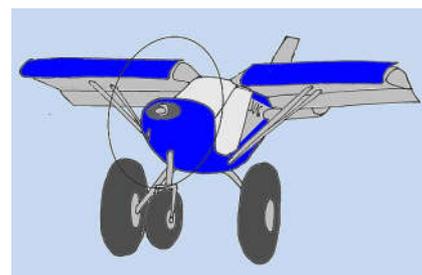
I'm sure that the specific comments are made with all due care and concern for our safety. We're all just looking out for each other – and isn't that a GOOD thing about the aviation community?

HEALTHY BASTARDS BUSH PILOTS STOL CHAMPIONSHIPS

BRIAN GREENWOOD

A hearty Congratulations to CRAC members **Deane Philip** for first place and **Chris Anderson** for second place in the Microlight category. Somehow, I never allocate the space to do this report justice for such a fantastic achievement.

Our friends/colleagues/fellow pilots have demonstrated in a national competition that they can consistently achieve top results.



WELL DONE!

ROTAX CARB SOCKETS

GRAEME MAIN

Earlier this year MGK's engine came due for the Rotax 500 hour or 5 yearly rubber replacement requirement – an expensive proposition considering it involves all hoses, the carb diaphragms, the fuel pump, and the carb sockets. It appears that in the past the practise has been for these items to be removed, inspected and replaced if necessary, on the basis that if it ain't broke don't fix it. However, the Rotax service manual does state that the requirement is mandatory and Steve Noad offers a kit which covers all of the affected parts – cost, some \$1600!



Some IA's, based on the issue of liability if they allowed this practise to continue and an incident resulted, have taken the view that replacement of the necessary items is mandatory. Others are happy with the "remove, inspect and replace if necessary" regime. In our case, we elected to inspect all items, but replace the carb sockets which are known to fail, and there have been several instances of members having this issue. My old Jodel D18 had both fail at about the same time (the problem becomes quite obvious as the engine runs roughly, wont idle, and then refuses to start.)

Having taken advice from others, we elected to obtain new carb sockets from JBM Industries in the USA. Their sockets are reputed to be superior to the factory Rotax product, and are a bit cheaper. I believe several other members have used them. The sockets duly arrived, were fitted, and had been utilised for some 35 hours, when a problem with rough running was noted, and the engine also refused to start. An inspection revealed that one socket had split with the rubber coming away from the flange.

Contact has been made with JBM Industries by email and the sockets have been returned to them. We await their response with interest although they agree that there is clearly a problem. If anyone else has used these sockets, I advise immediate inspection.

Meantime the old Rotax sockets (which were in perfect condition after 200 hours) have been refitted.

Opinion is divided on the necessity of replacing the various items however **it is clearly stated in the Rotax maintenance schedule that they must all be replaced.**

Unless the aircraft is being used for training, or is registered as an LSA, I believe that the common-sense approach should apply, i.e. carry out a microscopic inspection, and replace anything which might be suspect, otherwise there is no reason why these items should not last for many more years.

Secondly, if you are going to use after-market parts, (and you probably shouldn't in critical areas) be particularly careful that they are proven products.

Finally, talk to your IA as part of your decision-making process.

Above (and Content Page), standard OEM Sockets, with issues, for illustrative purposes only, from the JBM Industries web page, www.jbmindustries.com

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Email: undergroundairways@xtra.co.nz
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For Sale - Aircraft Seats

For sale on behalf. Double aircraft seat as per the photo.

No damage but could use a good clean. \$100 ono.
If interested, please contact Buzz Harvey
on 027 499 7265 or kiwisfly@clear.net.nz



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USAF F-16'S TO WARBIRDS OVER WANAKA

You've probably heard the news, there's a USAF display team of F-16's heading for Wanaka this year. Along with... the RAAF Hawks, a USAF C-17 display team, a Hispano Buchon (Spanish Me 109), and the RNZAF Black Falcons and 757. Sadly, the Polikarpov has withdrawn due to engine problems.

They're expecting huge crowds for the 30th Anniversary, my advice is to book now, while there's still accommodation somewhere in the South Island!



CALLING ALL AVIATION ENTHUSIASTS

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Vehicles available for guest use.

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ALEXANDRA AIRPORT : CENTRAL OTAGO

FOR SALE - CANON SL1 (100D)

- Camera Body, \$420 (a mere 3000 Shutter Activations, like new with box, charger, NZ Adaptor, 3 Batteries)
- Canon 18-55 IS f/3.5-5.6 Mark 2 lens (the good one), Like new \$120
- Canon 70-300 IS f/4-5.6 lens, with box, good condition, \$400

Or \$900 the lot. The Canon 100D was the world's smallest optical viewfinder dSLR. Contact Brian Greenwood, brian@brians-place.com or 027 201 8452

COMMITTEE NOTES FEBRUARY 2018

- Hangar rentals increased to \$170 per month from April 1st
- Replacement 80hp Rotax for RGA arrived early
- BBQ or Fly-in to be organised for March
- Easter Fly-in at Oxford – details provided by **Dave McPherson** (see separate article) - to be circulated to other clubs
- RGB's propeller to be balanced
- Tecnam Seatbelt modifications discussed
- Website Membership list to be updated
- Proposed budget for new Financial Year in progress
- CAA letter supporting running our aircraft on MoGas forwarded to Southfuels
- Weather Station to be replaced
- Honours Board still needs CFI details for some years
- Compliance Certificate issued for Hangar 1
- Proposed to complete electrical work in Hangar 1 before winter
- Prices to be obtained for covering the Septic Tank area with shingle and weed mats instead of the current collection of indigenous and exotic weeds
- Current airfield water restrictions preventing the use of the new water tractor sprinkler and hose
- CRAC sign at the 25 threshold to be erected
- ATC scholarships commenced – recipients are **Zac Lane** and **Tia Warwick**
- Club-supported ATC air experience started with 18 cadets having a chance to fly

It's the oil for your Rotax 912

Elf Moto4 10w-40 – a very high quality, semi-synthetic oil specifically designed to work with engine and gearbox combinations. Anti-clutch slippage is integral to the composition. **Moto4 Semi-synthetic** is low lead rated and allows you to maintain recommended service intervals even when mostly on AVGAS. *Rotax recommend reducing to 25 hour intervals if above 75% AVGAS usage.



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Contact **Dick Moore**
(03) 351 6068 evenings
or 0274 397 817
or email linanddickm@gmail.com

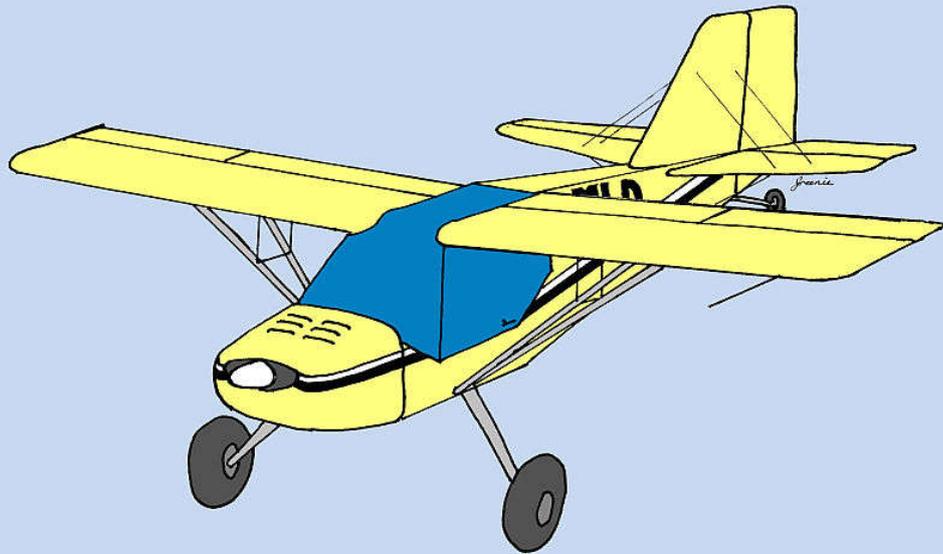
- 7/8th scale replica. (Graham Lee kitset)
- Built approx. 2003 by Mike Kinson, Canterbury Recreational Aircraft Club, Rangiora.
- Less than 50 hours flying time.
- Volkswagen powered, 55hp engine. (Dual ignition)
- Brent Thompson 60" propeller.
- Lewis replica machine gun (optional).
- Wired for ground power.
- Brakes fitted.
- Always hangared at Rangiora airfield.
- (Rep) Plans #1145. MAUW 730 lbs. Empty weight 460 lbs.
- Reg: ZK-RFC (Royal Flying Corps).
- Regular engine runs.
- Annual certificate.
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- View by appointment (Rangiora).
- All offers considered.

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WHATSAPP

CRAC Drop Of The Hat
CRAC Revolution (for chat)

FACEBOOK

www.facebook.com/flyCRAC



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

- TBA February/March – Club BBQ evening
- 16th – 18th February – RAAZ National Fly in at Stratford
- 28th Feb – 03rd March – Flying NZ National Championships, Timaru
- 24th – 25th March – Annual Murchison Fly-in
- 30th March – 2nd April – CRAC-hosted National Fly-in at Oxford Strip
- 30th March – 1st April – Warbirds Over Wanaka 30th Anniversary show

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**

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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:

- Romah Chorley
- Luke Martlew
- Brent Martlew
- Robert Dalrymple-Wilson
- Murray Marshall
- Daniel Buekenholdt
- Iain McPhail
- Leyton Wright
- Donald Laming
- Jacob Freeman
- Craig Ruane
- Susan Gaiger
- Grahan Gaiger
- Robert Bargent
- Augustus Dodd
- Kaylee McCracken

CONGRATULATIONS

- Allan Dillon, Adv. Local
- Luke Golman, Adv. Local
- John Hollings, Intermediate

NEXT NEWSLETTER

Contributions for the next edition are requested, publishing deadline March 14th, 2018 ("ish").
Next publishing date approx. March 21st, 2018