From the President Rodger Ward/RAANZ Pres

Recently I had the privilege of meeting a very keen group of recreational aviators in Gore. We spent an afternoon discussing some of the human factors involved with our sport. We were all there with the common goal of reducing bad press and preserving the operational freedoms that we are so lucky to have. Rest assured that the RAANZ exec has the same goal.

Belonging to a group of like-minded people certainly has many advantages. There is strength in numbers. Any group will have within a wide range of experiences and skill sets. Be prepared to share your knowledge and skills so that the overall standard of what we do can be increased.

Elsewhere in this publication you will find an ad for our forthcoming AGM. This is an important date on our calender. Every member has a vote and I would encourage every member to use theirs. This can be done either in person at the meeting, giving your club delegate the authority to act on your behalf or by proxy given the RAANZ Administrator. I look forward to seeing as many of you as I can at Whitianga.

The days are certainly starting to stretch out with some fine flying to be had. If you have hibernated a bit over the winter make sure your aeroplane is OK and you have brushed up on some of those sometimes neglected skills. With technology advancing and reliability advancing as it is there is a tendency for complacency to creep in. There are still a few alligators left in the swamp ready to bite hard if we give them the chance!!

Safe flying, Regards, Rodger

Editor's note:

Attending NZ Aviation Federation meetings and hearing of the issues many others have with CAA reminded me again of the freedoms we enjoy under Part 103. Provided we don't embarrass the Director with newsworthy accidents and incidents, we are pretty much able to govern ourselves without direct intervention.

Yes, we need to do better re incidents -particularly airspace infringements. Yes, those two recent fatal accidents put the spotlight on microlighting yet again. It is up to us all to ensure we keep our skills, knowledge, airmanship and judgement honed, so we don't attract CAA's intervention.

FAI Swoop freestyle world championships

Here's a couple of hours of thrilling flight.



RAANZ AGM 2017

Advance Notice

AGM 2017 Whitianga Airfield November 25th

Full details here

Rotten Rotax Regulators Martin Little/MBAC

A while back I noticed that a friend's Pelican didn't have the capacitor fitted as per the Rotax manual. This is a $22000\mu F$, low ESR capacitor located close to the regulator output which helps in smoothing the output voltage of the regulator. Admittedly there had never been a problem during the time he had owned it but I decided it should be fitted.

The following day he suggested a flight to Dargaville and as soon as we were airborne I was horrified to see the voltmeter registering about 12V (not the expected 14.5V) meaning **there was no charging** and we were running on the battery only. I racked my brains trying to think what I had done wrong and after landing I whipped off the cowl and checked the wiring and the capacitor. Fortunately, there were other flyers there who produced a voltmeter and who gave various bits of advice. Despite their help, no obvious fault was found.

Great relief when the engine fired up as the battery obviously had enough charge left for that. Worry about the radio and lights later. After take off I glanced at the voltmeter and...... 14.5V. WTF!!! Oh well, I wasn't going to complain.

Back in Whitianga, talking to club members I discovered that several had had troubles with the regulator and replaced them. Fortunately I was able to get my hands on a couple of the "duds". Using the circuit diagram and a bench power supply I tested the main components. First the two diodes – check. Then the two thyristors – check. Finally the voltage sense circuit (14.2V).- check. WTF!!! (again) This regulator is OK

Same tests with the second "dud" gave the same results. I now had two working regulators.

In my experience, electronic components do **not** stop working and then **self repair**, so what is going on? We are now in hypothesis territory. What phenomenon could explain all the above circumstances?

Earthing_

The regulator does not have a dedicated earth connection but relies on the mounting bolt. The casing is aluminium but has a rough surface which does not guarantee a good earth (oxide layer). My modification is shown in the following pictures. The mounting tab has been polished, drilled and tapped. An earth tab, made from scrap ali, is attached and has an 8 mm earthing stud.



This regulator is a crude type which is either on or off (albeit at high frequency) so the battery is the primary smoothing component. Therefore, make sure the wiring is as thick and short as possible. The capacitor helps in this and should also utilise thick and short wire connections.

Conclusion: If your regulator stops working you can either replace it for a mere \$360 or tweak the earth and check again. (PS I know the regulator is made by Ducati but that spoils the alliteration in the title.)

2017 Field Audit-Pilots

Results-

- 629 current members
- sample was of members with RAANZ no ending in 7 and known email address = 57 (9% of total)
- no replies from 14 (25% of sample)

- all OK replies from 29 (51% of sample)
- member contact details incorrect for 8 (14% of sample)
- medical expiry incorrect for 5 (9% of sample)
- BFR incorrect for 1 (2% of sample)

Analysis/findings-

- Poor response rate- changed email address? too lazy to click the reply button?
- But sample size still adequate and representative
- Contact errors- 3 email address, 4 phone #, 1 change of address
- Database gets updated on receipt of CMV form- members need to note any changes or update themselves ia the myRAANZ web page
- Medical expiry only started getting captured this year- still to catch up over a BFR cycle
- BFR error because pilot has let Instructor (1 year) lapse to advanced (2 years)

Actions-

- Rark up members to check/correct contact info on database, and note changes on CMV (next RecPilot)
- Send follow-up emails to non-responders (next audit)

2017 Field Audit- Aircraft

Results-

- 314 current aircraft
- sample was of a/c with registration containing 'E' and known email address = 23 (7% of total)
- no replies from 9 (37% of sample)
- all OK replies for 9 (64% of replied)
- owner/contact details incorrect for 3 (21% of replied)
- aircraft details incorrect for 2 (14% of replied)

Analysis/findings-

- Very poor response rate- changed email address? too lazy to click the reply button?
- Makes the sample size very small and data inconclusive.
- Owner errors- 2 changed ownership, 1 removed
- Database gets updated on receipt of annual inspection form- these are often consolidated and sent by IA well after the time of inspection

• Aircraft errors- 1 wrong type, 1 engine change

Actions-

- Rark up owners to check/correct email addresses on database (next RecPilot)
- Send follow-up email to non-responders (next audit)
- Rark up IAs to send in inspection forms promptly (next RecPilot and email)

Membership changes

David Mitchell	Canterbury Recreational Aircraft Club	ATO	Appointment
Kevin Healey	Parakai Aviation Club	Senior Flight Instructor	Upgrade
Elton Haakma	Gyrate Flying Club	Senior Flight Instructor	Upgrade
George Pirie	Matamata Aero Club	Intermediate	Upgrade
John Paton	Southern Recreational Aircraft Club	Intermediate	Upgrade
Oliver So	Gyrate Flying Club	Senior Flight Instructor	Upgrade
Chris Anderson	Canterbury Recreational Aircraft Club	Advanced National	Upgrade
Phil Welcome	Mercury Bay Aero Club	ATO	Appointment
Keith Stanley	Geraldine Flying Group	Advanced National	Upgrade
Phillip Spellman	Canterbury Recreational Aircraft Club	Advanced Local	Upgrade
Bruce Anderson	Gyrate Flying Club	Advanced National	Upgrade
Petr Polak	Parakai Aviation Club	Advanced Local	Upgrade
Trevor Alexander	Fiordland Aero Club	Intermediate	Upgrade
Nicholas Ward	Canterbury Recreational Aircraft Club	Advanced National	Upgrade
Steven DeGrey	Feilding Flying Club	Advanced Local	Joined
Graeme Duske	Matamata Aero Club	Novice	Joined
Anna Wruck	Canterbury Recreational Aircraft Club	Advanced National	Upgrade
lain Anderson	Parakai Aviation Club	Intermediate	Upgrade
John Hollings	Canterbury Recreational Aircraft Club	Novice	Joined
Carl Wall	Canterbury Recreational Aircraft Club	Novice	Joined
Anna Taylor	Kaitaia Aero Club	Novice	Joined
Robin Hoult	Canterbury Recreational Aircraft Club	Advanced National	Joined
Max Edmonds	Canterbury Recreational Aircraft Club	Novice	FRTO
Erin Heese	Canterbury Recreational Aircraft Club	Novice	Joined
Shannen Rietveld	West Coast Microlight Club	Advanced National	Joined
Kevin Haugh	Canterbury Recreational Aircraft Club	Novice	Joined
Neville Whalley	Whangarei Flying Club	Novice	Joined
Psylvia Hernandez	Matamata Aero Club	Novice	Joined
Rodney Dodd	Canterbury Recreational Aircraft Club	Novice	Joined
Kanoj Boouodira	Waikato Microlight Club	Novice	Joined
Jason Erasmus	Canterbury Recreational Aircraft Club	Novice	Joined
April Boys	Kaitaia Aero Club	Novice	Joined
Ryan McPherson	Waikato Microlight Club	Novice	Joined
Andrew Leith	Canterbury Recreational Aircraft Club	Novice	Joined
Jonathon Wood	Manawatu Aviation Club	Novice	Joined
Lars Janson	Gyrate Flying Club	Novice	Joined
Gregorio Umali	Canterbury Recreational Aircraft Club	Novice	Joined









Come and be part of our centenary celebrations.

- Saturday & Sunday Fly-In & BBQ Lunch
- Friday Aviation Movie Night at Geraldine Cinema
- Saturday Night Dinner & Entertainment

Registration for Friday & Saturday night activities essential*
For more information contact Ross:

Email: rangitata.airfield1@gmail.com Phone: 027 869 7205

*Registration not required for attendance at fly-in