

Recreational Pilot e-zine

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Congratulations Doug Yarrall!

Last month Doug received the FAI AirSports Medal in recognition of his achievements and contributions to aviation in New Zealand.

50 years ago on March 9 1968 he set the NZ gliding absolute altitude record, reaching **37,288** feet in wave over the Wairarapa in an SHK1 wooden glider, using a war surplus oxygen mask. That record still stands today.





Doug has represented NZ in international gliding competitions, and more recently as a RAANZ ATO and Senior Instructor has spent many hours instructing and guiding pilots at the Wairarapa Aero Club based at Hood Airfield.

When the opportunity came up on the 50th anniversary of his record, RAANZ and Gliding NZ nominated Doug for the FAI award, which was presented at an awards dinner as part of the FlyingNZ annual conference.

912 carb icing incident report

Background

Whilst flying my aircraft on Saturday 23rd June with a group of aircraft I encountered carb icing problems in-spite of the Carb Heat being fully engaged. (NOTE all the aircraft including my own have Rotax engines, all with different carb heat systems, only my aircraft encountered problems.)

I was at 6500 ft over Esk valley (South Island) and was unable to descend to prepare for landing at an Ag Strip due to the carb-airbox temperature rapidly decreasing when I reduced the power. I noted the engine had started to shudder and immediately increased power.

I opened the throttle to 5000 rpm to restore heat to the engine/carbs and tracked back to Rangiora. On route I was at 6500 feet heading over the Puketeraki Ranges soon to descend into the Lees Valley to LL5500ft. I needed to reduce power to descend when I did this the engine shuddered again and this time inspite of careful reduction in RPM the engine stopped.

I continued to fly the plane and set the aircraft up for an optimal glide approach into Lees valley at the same time checking all the instruments in the cockpit were in the green including checking that I was not losing fuel. I was confident that the engine stopping was due to CARB Heat issues.

I then executed an engine re-start which restored full power and increased my rpm to 5000 to increase heat to carbs and successfully returned to Rangiora Airfield with only one more incident of a very minor engine shudder on a very slow and high power descent into the Loburn area LL2500. As I tracked the Loburn area to the field I noted the carb heat temperature restored to 22 degrees and engine was running satisfactorily.

Issue

Savannah S standard manufacturer's carb heat airbox system with full carb neat engaged was unsatisfactory and unable to maintain optimal carn temperature in winter conditions on a fine sunny winters day with outside temperature at minus-2 degrees with potential for icing conditions.

NOTE The group of aircraft included two other Savannahs, both of which have modified carb heat systems which maintained their air box temperatures over 20deg as opposed to my Savannah standard manufacturer's carn heat system which did not maintain a stable airbox temperature particularly at altitude.

Action taken

FMIP Fuel Mixture Ignition checks and Partial Power restoration plan and action. Including setting up the aircraft for an optimal glide path into the Lees Valley at 500ft per minute.

I did not make a MayDay or Pan call as I had restored the aircraft back to full power and I kept the RPM at 5000 on the return trip to Rangiora very slowly descending (at high power) whilst monitoring the airbox temperature.

I was prepared to make a precautionary landing if required and maintained the best altitudes I could to keep my options open on return.

Manufacturer to be advised that carb heat system when fully engaged is insufficient to maintain carb heat integrity in NZ winter conditions at minus temperatures with potential icing conditions

and needs to be upgraded for the safety of all Savannah aircraft.

Obviously there is a limit to how well this carb heat system works (I flew this aircraft all last winter with no issues) but I certainly would not trust it in similar conditions again. I will be upgrading the carb heat system to match the other Savannahs and will forward photos at a later stage

ATC Squadron Scholarship winner goes Solo Buzz Harvey/CRAC

Canterbury Recreational Aircraft Club (CRAC) has been supporting the new Air Training Corps (ATC) cadet unit based on Rangiora Airfield. No.88 (Rangiora) ATC Squadron has only been running for about three years and in addition to providing flying days and air experience for the cadets, CRAC has pledged an annual Flying Scholarship for a deserving cadet, consisting of ground instruction, 10 hours flying instruction, logbook, training manual and a year's free CRAC membership.

Leading Air Cadet Tia Warwick was awarded the 2017 scholarship in December last year, presented by CRAC CFI, Doug Anderson.

Tia has been flying throughout the year but was only 15 years old. She decided early on to make is a goal to go solo on her 16th birthday. Her flying skills were well up to speed and she would have soloed much earlier in the year if she had been old enough.

Anyway, the big day of Saturday 7th July rolled around, and Tia had a number of flights in preparation of achieving solo on her birthday. However, come Saturday, the weather did not look good. Nor-westers! Undaunted, Tia and Doug met up at CRAC early on Saturday morning. It wasn't too bad, so Doug decided to give it a go. Doug and Tia took off for Doug's usual prelim of three circuits, to make sure the student is still good to solo. However, unfortunately for Tia, the wind which had been playing ball during the first two circuits misbehaved and put a kybosh on going solo that day. If she could have, she would have, said Doug. The weather didn't improve sufficiently enough to try again that day, so the big event had to wait.



Three days later, the weather was playing ball and so after Doug's three circuits, Tia Warwick went solo. A very proud day for her and her family watching on and also for Doug and the other instructors who show their support for our local ATC cadets.

Tia is looking to pursue a career in aviation and involved in her school Gateway programme that is providing real experience for a career in aviation. Tia wants to be a pilot and is considering options like CTC Aviation in Hamilton. Well done Tia and all the very best for your career. We know you will always remember where it started and your first solo in CRAC's Tecnam RGA.



Flying in the Alps at this time of the year can be a bit boring !!Browning Pass from ZK CVKAl Millar/CRACBrowning Pass from ZK CVK

Potential Disasters Bill Penman/RAANZ OPS.

There is nothing like the enjoyment and excitement of obtaining a pilots certificate/ licence or even being lucky enough to own your first aircraft. There is a sense of exhilaration to have the freedom (almost) of the skies, to be like a bird and demonstrate to all your friends and family your new found skills, or not!

Unfortunately statistics show that throughout all facets of aviation that there are those that will push the boundaries with disastrous results.

There is an old adage that obtaining a licence is a licence to learn. There have been many articles and books written about experiences and 'how I learned from that', and the culmination of reaching a certain number of hours where the pilot thinks they are more experienced than they really are.

Social media is an avenue that unfortunately allows flying activities to be filmed that are pretty unsavoury and have the potential to go horribly wrong. These do have an effect of inciting some to 'have a go' as well.

Some of the ensuing factors that contribute to an eventual disaster are:

- Lack of flying experience or being new to the aircraft type
- Lack of recent flying- skills were rusty
- Conducting hazardous manoeuvres, often at low level
- Flying too low to recover from an emergency such as a stall
- Running out of fuel (exhaustion) or not managing the fuel supply (starvation)
- Flying in weather conditions not suitable for the flight
- Being a "Loner Ranger and the master of your own destiny" (to quote Ross St George a past CAA safety adviser)

RAANZ is a club based organisation where most of its members have continual support from other experienced pilots and instructors, where there is a strong safety culture and peer pressure to comply with aviation rules and fly safely. For those that are more isolated it may help to be given some sound cautionary advice at BFR time by their instructor.

Have a good think about what you are about to do and consider the possible outcomes so that you do not regret outcomes that may not make your day.

Unfortunately some do not become experienced until they have experienced a situation themselves and often that is too late. Take care out there

Membership changes

Noel Smith	Gyrate Flying Club	Advanced Local	Upgrade
Jason Tassell	Parakai Aviation Club	Advanced National	Upgrade
Scott James	Canterbury Recreational Aircraft Club	Senior Flight Instructor	Upgrade
Conor McCauley	Canterbury Recreational Aircraft Club	Novice	Joined
Luke Martlew	Canterbury Recreational Aircraft Club	Novice	Joined
David Tillman	Canterbury Recreational Aircraft Club	Advanced National	Upgrade
Tia Warwick	Canterbury Recreational Aircraft Club	Novice	Joined
Justin Lott	Canterbury Recreational Aircraft Club	Novice	Joined
William Cameron	Wairarapa Ruahine Aero Club	Novice	Joined
Michael Bryant	Feilding Flying Club	Advanced National	Joined
Peter Bourne	Feilding Flying Club	Novice	Joined
Gary Purkiss	Bay of Islands Aero Club	Novice	Joined
Robert Evans	West Coast Microlight Club	Novice	Joined

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