

JULY 2022

RAANZ RECIPILOT



OVERVIEW

WELCOME TO THE JULY RECIPILOT ISSUE

Do you truly know how proficient and competent you are in your flying skills?

This month we have a great article that challenges you to ask yourself that very question and honestly assess your ability. We also have another story about an aborted takeoff that reminds us that good decision-making is a key part of aviation culture, and should always remain top of mind.

We hope you enjoy reading these and take the lessons onboard in your everyday flying.

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From The Vice President

Scott James | audit@raanz.co.nz

A couple of recent incidents and some input from one of our members (thanks Trevor) meant that it seemed like a good time to talk about ADS-B

I was recently cut off in the circuit and after landing I went to have chat with the pilot. He claimed he didn't see me on the screen (which isn't surprising as the aircraft I was in doesn't have ADS-B!). I also had a student comment to me a couple of weeks ago that they found the ADS-B in very useful in the circuit (although ADS-B is not required at our airfield)

- Not all aircraft are going to have it so do not rely on it exclusively for aircraft positional awareness. The big screen in front of you (windscreen) is where you should be looking'
- On monitoring and using ADS-B, be careful of looking into the cockpit instruments to long, new toys, to see where other aircraft are.
- Mark 1 eyeball is still essential as are accurate positional radio calls.
- Whilst taking the latter, i.e. radio calls, on board and allowing for them and the ADS-B screen outputs, remember that not everyone makes accurate calls (let alone those not making calls at all) so in truth they could be out in altitude and location. Make allowances.

ADS-B is a great tool, and of course, if you are flying in controlled airspace, you will have to have it (time is running out – especially if you want the rebate). I have it in my aircraft and it certainly is very helpful when out and about. But there are many aircraft out there without it, and have no intention of getting it. So keep your eyes out that window

From The Operations Manager

Rodger Ward | 0274932943



<https://www.aopa.org/news-and-media/all-news/2020/december/pilot/pursuit-of-proficiency>

With the advance of technology, it is very easy to become complacent in our flying.

The following article from Jonathon Mauchline, CFI Whanganui Aero Club, is an excellent reminder of the need to remain current in those scenarios that are becoming fewer and further between but when they do happen can wreak havoc so very quickly.

Competence, or Confidence?

Jonathon Mauchline | CFI Whanganui Aero Club

The foundation for this thought stems from my experience flying with pilots, doing BFRs, Type ratings and the like. I have the privilege in this job of getting to fly regularly. I get to fly with many different people of a very vast range of experience; I get to maintain my skills as part of my job, and I also see how hard it is for some pilots to maintain theirs. As a result, I understand how easy it is for me to write this article, and in turn, how hard it may be for some pilots to read this.

One of my jobs as CFI of Wanganui Aero Club is to look out for the overall airmanship specifically within our club and to promote safe, and fun flying throughout our GA community. Unfortunately, sometimes this involves having to have the odd stern word to others. The purpose of this article is to try being a reality check, a prompt to re-think your priorities while participating in this sport we all enjoy.

You, as Pilot in Command of your aircraft are legally, ethically and morally responsible for the safety of yourself, your aircraft and your passengers, in the operation of the aircraft. Your passengers usually do not fully comprehend the technicalities of flying or understand some of the risks involved. They rely on you, often in blind faith, as the Pilot in Command, to know what to do in an emergency.

I conduct Biennial Flight Reviews for PPL and Microlight pilots on a very regular basis. One of the questions I ask, as standard, is; "How long has it been since you last practised a Forced Landing? Or stall, or glide approach?". "Not since my last BFR" - Is an answer far too

commonly heard.

Unfortunately, a lot of these basic skills which are taught and practised so intensely during pilot training are left go unchecked and unpractised later on.

You would expect that most current PPL/Micro pilots would be capable of flying the basic training manoeuvres to a high standard. Concerningly, in my general observation, the standard of flying when these exercises are checked during a BFR often leaves a lot to be desired. Particularly in these situations, the "not since my last BFR", is absolutely not good enough! The attitude often seen from instructors when signing off a BFR is "Good for another two years". When discussing anything beyond legal currency this is the furthest thing from the truth.

Forced landing practice and Wing-drop Stalling are two exercises during a BFR which I place particular emphasis on and am often disappointed by.

I get the feeling that often pilots 'stick their head in the sand' with these exercises, reassuring themselves with;

- "The last practice I did was okay",
- or "My engine is reliable, I won't ever need this in real life",
- or "My instructor signed off my BFR, he thinks I'm good enough until next time".

These and a variety of other similar excuses are used to convince the pilot that there's no need for them to practice, thus protecting damage to ego by not realising actually how inaccurate and uncurrent they've become.

For others, it may be simply that they're not comfortable practising these on their own.

This also indicates a problem, if a pilot isn't comfortable practising these in a controlled 'training' scenario, in a real-life scenario with the high pressure and possible 'panic' factor you are less likely to react correctly.

The Forced Landing Pattern is an activity which when practised and current, gives a pilot assurance that they can walk away following an engine failure. Pretty important, huh?

How good is 'Good enough? Some pilots seem comfortable when they do a FLWOP on a BFR and don't seem to understand how close it is when they 'scrape' in... Or they breathe a sigh of relief when they manage to achieve a good one like they didn't have any confidence in their ability, to begin with. In a real-life forced landing situation, would you not want to be 100% comfortable with your capabilities in carrying out a FLWOP? Is it not worth a flight or two's worth of practice to be comfortable with your ability? Remember, you are responsible for all occupants on your aircraft, occupants who are helpless and are relying on YOU to keep them safe.

Would your next passenger be comfortable if they knew you hadn't practised a FLWOP for over a year? Would they be comfortable if they knew how good your last practice was?

These are the questions to ask yourself when deciding whether you're good enough...

Often, pilots do not want to practice a FLWOP because they are afraid to muck it up. I do not think this is a good enough reason not to practice...

How many of your last 10 FLWOP practices were you 100% confident in a successful outcome? Is anything less than 10 out of 10 good enough? Ask your passenger...

Stalls: Stalls are important. A study I recently read (not sure where), said that 80% of unintentional stalls occur below 1000ft. We can infer by this that pilots are distracted when these stalls occur, whether that be by making a turn, wind shear, approach to land, take-off... these aren't the straight and level stalls we practice at 3000ft. When you go and practice a stall at a high altitude, you expect it, you know that it's going to occur and you know how to recover so you have that in the forefront of your mind when it happens. With low-level stalls, you often do not, and cannot expect it. Reactions are delayed, in the case that it develops into a wing drop – if recovery isn't 100% intuitive, you'll start rolling wings level with ailerons, only worsening the situation. Before you know it, your aircraft will have turned onto its back and be pointed at the ground and you'll have the controls fully aft, as the aircraft hits the ground. That is the harsh reality of it.

Within the last couple of months within the wider GA community overseas, there have been at least 3 or 4 fatal low-level stall/spin accidents in light single-engine aircraft. I personally know of a couple within (relatively) recent times in NZ, one fatal and a couple of very close calls. These normally happen at a height close to which a normal stall recovery would be successful if executed very quickly at the onset. But in most fatal scenarios, the killer was in not recognise the stall quick enough – the pilots were not expecting it. So, when the nose starts dropping and the ground comes racing up it is a very hard thing to push forward unless stall recovery is 100% instinctive. This only happens with practice.

By practising slow flight, stalls, and wing drop stalls at higher altitudes we start learning the feel of the aircraft close to the stall, and handling of the aircraft (specifically regarding rudder use) becomes more intuitive. With it so much more familiar, recognition of the stall symptoms and edge of the flight envelope becomes more instinctive.

When the only time you go practising these are on a BFR, you aren't preparing yourself for the 'worst case scenario'. When the "shock" factor kicks in, currency in the practice of these exercises is the only thing that may prevent a disastrous outcome.

When an Instructor does a BFR with a pilot, there is a set of standards they have to work by. If manoeuvres and exercises aren't performed to the required standard, more flying must be completed before BFR sign-off. One, two, or three flights with a pilot only give an instructor a small snapshot of the overall capabilities of a pilot. Using this snapshot, an instructor has to make the decision to either sign off the BFR or request another flight – unfortunately, BFRs are often shorter than they should be; external pressures, such as an itinerant pilot leaving a BFR to the last minute can leave an instructor with a difficult situation. If they ask for another flight, please understand they are looking out for you. Additionally, if you begin your BFR within the 60 days 'grace' period then an incomplete BFR still won't stop you from flying – as long as it's complete by the expiry. On behalf of all GA and Microlight instructors, 'Please don't leave your BFR til the last minute.

I am hugely passionate about aviation and love promoting this fantastic sport with pilots and students, so writing this has been hard and almost 'out of character but it is a topic which I think has needed to be raised. I strongly encourage you to go out and practice, get comfortable with your capabilities and constantly strive to become the best pilot you can be, because at the end of the day that is what will keep you safe. Us instructors are always willing to give a bit of advice, go up with you on a weekend to practice – please make use of us, we're here to help.

Have fun, happy flying.

Cheers,
Jonathan Mauchline
Chief Flying Instructor Wanganui Aero Club



OUT AND ABOUT

Dannivirke Dawn Raid Flight

By Len Carney | Feilding Flying Club

I am an advanced local pilot that has recently achieved a passenger rating. It has taken me about three and a half years of weekend flying, with the help of the club instructors, to achieve this rating.

When I achieved the passenger rating, it wasn't lost on me that I was now in charge of the well-being of another individual. Of course, any decision-making on any flight is critical to the safety of me, the passenger, and other aircraft, whether it be a local solo flight or a cross-country.

So, it was with this in mind, that I set upon planning to take my first passenger to the Dannevirke fly-in.

On the morning of the flight, the weather at Feilding was dry, with a variable moderate easterly, and 40+ kilometres of visibility. The decision was made to go, and the flight to Dannevirke was uneventful. A little turbulence was encountered between Ashhurst and Hiwinui, but nothing untoward to deal with.

I am yet to do any good in the landing competitions, so the emphasis was on making a safe landing. Once we shut the aircraft down, my passenger and I enjoyed the spoils of getting up at 500am in the morning and tucked away a good breaky.

Once prizes were handed out (to other pilots dammit), pretty much everyone started upon their home legs.

The Home Leg

The weather in Dannevirke had developed into a somewhat damp affair. It had been drizzling, the ground was damp and soft, and the aircraft was also wet. The temperature was about 10 degrees, and the dew point was not far off that at about 9 degrees.

As Dannevirke is a grass strip and having only taken off in dry conditions on a grass strip, I elected to wait and watch others depart, just to observe how manageable the conditions were. Each aircraft seemed to depart okay, and I didn't notice anything untoward with others departing.

We started up the aircraft and performed the standard checks and briefings. I noticed that the engine temps did not rise as quickly as they have done in the past, but waited until I had a temp above the red, a standard parameter to reach, enabling an engine run-up. The engine did not seem to run rough at 4000rpm and the idle was stable. The temps did not appear to rise following the engine run-up. But the temps were in the yellow and having proceeded with take-offs with temps at this level on many occasions before, elected to line up on runway 20.

I checked with my passenger if they were good to go and started my roll down the runway.

All seemed normal at first, airspeed was building, and the engine sounded as if it was running smoothly. At about 50% down the runway, I had just 50 knots of airspeed. I was looking for 55 to 60 knots to try to lift the aircraft into ground effect. Things were happening quite quickly by this stage, and I had been easing back on the stick to try and take the weight off the nose wheel.



OUT AND ABOUT

The aircraft, popped into the air briefly, but settled back down to the runway. At this stage, runway was getting used faster than is comfortable, and the end of the runway was 60% closer than when I started, and I still hadn't obtained enough airspeed to enable the aircraft to fly. It was time to abort.

This was my first ever abort, and maybe due to not having executed an aborted take-off before, let alone on wet grass, I applied the brakes, with a little too much adrenalin in the system. You guessed it, the brakes locked up, and the aircraft skewed to the right. So I quickly released the brakes and straightened the aircraft. The resistance from the grass, and the soft damp ground, even without applying any further brakes, scrubbed of remaining speed rapidly, and the aircraft came to a halt without mishap.

I taxied back to the holding point, checked the aircraft configuration, engine temps, and re-briefed my passenger. My passenger is also a pilot (close to intermediate stage), and he suggested utilizing the short field technique. We lined up again, and I held the brakes and applied full power. It was at this moment, with a full power run-up, that I noticed I was only just getting above cruise power. A lot of factors were now in play, and my decision was to taxi off the runway, park the aircraft, and reassess the situation.

I made a conscious decision that I would not proceed with any take-off until I understood what was going on.

I called FFC's maintenance department and advised Stan of the lack of power. Stan suggested that it was either icing (conditions were perfect for this).

Another factor Stan suggested could have been an issue was that the engine just wasn't warm enough. The taxi from where the aircraft was parked, to the hold point for runway 20 was very short. He recommended we spend a good time warming the engine to bring the temps to an optimum level. If there was any carb icing, this would likely clear it.

I called the FFC Flying School, and Steve emphasized the need to take the weight off the nose wheel, to alleviate it ploughing into the soft runway., make sure engine temps were nominal, and if in doubt, call Stan.

I elected to talk to a local pilot from Dannevirke airfield. I am not sure whom it was I talked to, but I asked what the best landmark was to define the halfway point down the runway. He was able to tell me that the windsock was 50 to 60% down the runway and allow safely for an abort at that point. He also emphasized that the last 200 to 300 meters of the runway, was very soft, and if we proceeded into that, we would likely become bogged.

So, with this knowledge in hand, a mental reset, and a bit of well-advised aircraft engine management, we started the third attempt to head home to Feilding. On this occasion and following the advice I had received, the engine was warm, I had a better understanding of the conditions, and had a solid plan in place including take-off technique and abort parameters.

We carried out our standard briefings, and run-ups, and made sure the T's & P's were well within range. We lined up on runway 20 and carried out a full power run-up.



OUT AND ABOUT

Straight away, I noticed that we had optimal power (which we did not seem to have on the earlier attempts). We started our roll using a short field technique, and I held the weight off the nose wheel. It still took a lot longer than I am used to, to gain airspeed, (wet long grass and small wheels factors as well). However, once we had about 55 knots, the aircraft jumped into the air, I lowered the nose, and the airspeed quickly rose to between 65 and 70 knots. I was able to take the aircraft out of ground effect, and thankfully our uneventful journey home had finally begun.

One of the most helpful aspects of this experience was my passenger. The transport industry talks about Crew Resource Management. Well, for us recreational/flyers, that will mean a fellow pilot in the right-hand seat, or a non-pilot passenger sitting next to you. I was lucky enough to have another pilot next to me, and this was very helpful in assisting in making sound decisions. Specifically, on the third take-off attempt, I had briefed my passenger to call the abort position and keep eyes on T's & P's and our rpm. He did call the windsock, but we were already airborne and on our way.

Things I Learnt

- In cold and damp conditions, make certain T's and P's are optimal, especially if you suspect carb icing.
- Be aware of how weather conditions could affect potential carb icing.
- Make a plan and mean it. If you identify an abort position, and things are not going to plan, then do as you planned...abort.
- Consider a full power run-up to establish that you do have full power.

- Don't pull the brakes too aggressively when aborting on a damp runway. If you have made a decent plan, and you have stuck to it, you will have enough time to abort the roll.
- Don't be afraid to ask for assistance from local flyers. They will likely know the airfield, local environmental conditions, and landmarks.
- If need be, utilise your passenger. They can really help to take some of the mental load away from you.

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Being a low-hour pilot brings many challenges. We learn to fly with our instructors. But it's probably fair to say, we don't become great flight managers overnight, and that this takes time. I think it's all about how we manage the challenges when we're confronted with them, how we use the resources around us, and how alert we are to when something is not going to plan.

I know that there will be experienced flyers out there that would have better understood what was happening and would have reacted more decisively at the time. I guess it's fair to say we're not all at that point in our flying experiences. So I hope this synopsis is of some benefit to someone out there.

Enjoy your flying everybody.

Thanks.

Len Carney.

Feilding Flying Club.



Incidents

Microlight type/model

Tecnam P2002

Description of the incident

(Please note: this is an incident that occurred in 2015). Some hours after first solo, I set out on a training flight with my instructor. All went as usual until shortly after initial takeoff when, with the aircraft accelerating into climb and pitching up, I was unable to get the stick forward. I reported this to the instructor and he took control, but also was unable to get the stick forward. At this point we were several hundred feet in the air and hanging on the prop, but mercifully stable. He asked me to look for anything jammed in the controls, my stick was clear but I was able to see his camera jammed between the gooseneck of his stick and the floor. He could not reach it. I removed my harness, and got on the floor, but was unable to pull the camera loose, told him to relieve the pressure on the stick. When he did that, I was able to remove the camera. Normal flight then resumed, but after 15mins I called it a day, being unable to focus well on what I was doing.

Describe the affect on safety

Potentially fatal for both of us.

Corrective/preventive recommendations

1. My own aircraft has a boot around the base of the control column preventing loose objects from jamming the controls.
2. I am now keenly aware of objects brought into the cockpit by myself or others, and where they are placed. In this case, the camera had been placed on the floor and was either kicked or vibrated back during takeoff.

3. I believe a caution needs to be put out regarding the Tecnam P2002: the control stick is a gooseneck shape that curves back and disappears under the seat. This provides a perfect pinch point for objects to become jammed, as in this case.

Microlight type/model

Vans RV12

Place of incident

Hastings

Other aircraft involved

Nil

Description of the incident

Student pilot on solo consolidation circuits.

3rd or 4th solo circuit climbing on upwind leg approx 500ft AGL struck 2 pigeons on the middle section of port wing causing moderate wing damage. Student radioed to the instructor, instructor advises the student to carry on the circuit and land. The student landed the aircraft with no further incident.

Describe the affect on safety

The low-time student could have been startled but handled it well. Wing damage could cause controllability issues if it was worse than on this occasion.

Remedial action taken

Aircraft grounded, internal, CAA and RAANZ incident reports filed

Corrective/preventive recommendations

Raise more awareness regarding bird hazards to microlights and the effect the strike can actually have on a light-skin airframe.

Membership Changes

Griffith Hansen	SAC client	not issued	IA
Xavier Gregory	Parakai Aviation Club	Novice	Joined
James Smylie	Bay of Plenty Microlight Assn	Advanced National	Joined
Leon Jordaan	Associate	Novice	Joined
Anton Aalders	Associate	Advanced National	Upgrade
Douglas Heaton	Canterbury Recreational Aircraft Club	Novice	Joined
Anthony Turner	Mercury Bay Aero Club	Flight Instructor	Upgrade
Richard Taylor	Associate	Novice	Joined
Simon Morice	Canterbury Recreational Aircraft Club	Novice	Joined
Leonard Carney	Feilding Flying Club	Advanced Local	Upgrade
Egmont Johannes Stegen	Matamata Aero Club	Advanced National	Upgrade
Jay Preece	NZ Autogyro Association	Novice	Joined
Bryn Atkin	Canterbury Recreational Aircraft Club	Senior Flight Instructor	Upgrade
Chris Hogg	Associate	Novice	Joined
Craig Fullerton	NZ Autogyro Association	Novice	Joined
Daniel Wright	Canterbury Recreational Aircraft Club	Advanced Local	Joined
Jeff Bonnici	Auckland Recreational Microlight Aircraft Club	Intermediate	Upgrade
Thomas Hallam	Associate	Advanced National	Upgrade
Paul Graveling	Gyrates Flying Club	Advanced National	Joined
Kevin Moir	Parakai Aviation Club	Advanced National	Joined
Peter Finnegan	Associate	Advanced Local	Upgrade
Nicolo Parolini	Parakai Aviation Club	Novice	Joined
Bob Shearing	Canterbury Recreational Aircraft Club	Advanced National	Upgrade
Harris Atkinson	West Coast Microlight Club	Novice	Joined
Grant Aitken	SAC client	Novice	Joined
David Ames	SAC client	Advanced Local	Upgrade
Ollie Brooks	SAC client	Advanced Local	Upgrade
Roelof Burger	SAC client	Intermediate	Upgrade
Nicholas Buxeda	SAC client	Advanced National	Upgrade
Joshua Grant	SAC client	Advanced Local	Upgrade
Lionel Green	SAC client	Flight Instructor	Upgrade
Imran Khan	Otago Aero Club	Intermediate	---

Membership Changes

Phillip Rees	Associate	Advanced National	Joined
Maarten Visschers	SAC client	Advanced National	Upgrade
Zoe Colliver	Feilding Flying Club	Novice	Joined
Craig Powell	Whangarei Flying Club	Intermediate	Upgrade
Gregory Francis Allen	Whangarei Flying Club	Novice	Joined
Mark Thorns	Associate	Advanced National	Upgrade
John Turner	NZ Autogyro Association	Intermediate	---
Louis Wakeman	Associate	Novice	Joined
Brett Belworthy	Associate	not issued	Joined
Frank Babbott	Fiordland Aero Club	Advanced Local	Upgrade
Arienwen Miles	Associate	Novice	Joined
Yanan Wang	Associate	not issued	Joined
Steffan Van Uffelen	Associate	Advanced National	Upgrade
Stephen James	Canterbury Recreational Aircraft Club	Novice	Joined
Nicholas Gambirazzi	Associate	Novice	Joined
Robert Swanney	Hauraki Aero Club	Advanced National	---
Donald Payne	Canterbury Recreational Aircraft Club	Novice	---
Toby Vantveen	Canterbury Recreational Aircraft Club	Novice	Joined
Graeme Clark	Bay of Plenty Microlight Assn	Novice	Joined
Peter Frew	Associate	Novice	Joined
Henry Savill	Associate	Novice	Joined
John Pauwels	Associate	Advanced National	Joined
Peter Chadwick	Canterbury Recreational Aircraft Club	Advanced National	Joined
Hamish Craig	Associate	Novice	Joined
Warrick Honey	Associate	Advanced National	Joined
John Norman Gilbert	Matamata Aero Club	Advanced National	Joined
Stephen McGregor	Matamata Aero Club	Novice	Joined
Jonathan Vitz	Associate	Novice	Joined
Yu Ren	Associate	Novice	Joined
Lachlan Gunn	Canterbury Recreational Aircraft Club	Novice	Joined
Christopher Crosse	Associate	Advanced National	Joined
Gareth Reid	Waikato Microlight Club	Novice	Joined
Jimmy Taylor	Canterbury Recreational Aircraft Club	Novice	Joined

Membership Changes

Christopher Fraser	Canterbury Recreational Aircraft Club	Advanced National	Joined
Deborah Paull	Associate	Novice	Joined
Taylor Green	Canterbury Recreational Aircraft Club	Novice	Joined
Anthony Knowles	Canterbury Recreational Aircraft Club	Novice	Joined
Liam Sutherland	Hawkes Bay and East Coast Aero Club	Advanced National	Upgrade
Matthew Lay	Parakai Aviation Club	Novice	Joined
Jack Tulloch	Associate	Novice	Joined
Paul Richardson	Associate	Novice	Joined
Megan Alexinas	Canterbury Recreational Aircraft Club	Novice	Joined
Paul Jury	Associate	Novice	Joined
Nicholas Rayner	Associate	Novice	Joined
Charles Robin Wooldridge	Whangarei Flying Club	Novice	Joined
Nicola Rowlands	Associate	Novice	Joined
Yuan Fu	Associate	Novice	Joined
Josh Dale	Associate	not issued	FRTD
William Doig	Associate	not issued	FRTD
Marcus Fletcher	Associate	not issued	FRTD
Dave Robertson	Associate	not issued	FRTD
Tim Schollum	Associate	not issued	FRTD
Dale Shane	Associate	not issued	FRTD
Aiden Skelton	Associate	not issued	FRTD
Albert Van Rooyen	Associate	not issued	FRTD
Josue Hernandez	Whangarei Flying Club	Novice	Joined
James Ford-Hathaway	Wairarapa Aero Club	Novice	Joined
Jonathan Hill	Associate	Novice	Joined
Christopher Johnson	Associate	Senior Flight Instructor	Joined

