

AGC Weekly News

Weekend Roster

Saturday 27

Tug Pilots: Dion Manktelow
Instructors: Paul O'Neill-Gregory, Russell Thorne
Duty Pilot: Matthew Williams

Sunday 28

Tug Pilots: Andy Campbell, Wayne Thomas
Instructors: Ross Taylor, John Bongrain
Duty Pilot: Gerard Robertson

Odds & Ends

Andy Campbell reports that visiting UK glider pilot Matt Sheahan has put out a clip on his YouTube channel "Planetsail" titled Turning and Sea Breezes, shot whilst flying BI above Drury, in which he draws similarities between turning aircraft vs America's Cup AC 75's. You can see it at

https://www.youtube.com/watch?v=OW_qPDPQeSc&feature=youtu.be

He also shows the local sea breeze effects. A good promo for the club.

Russell Thorne has sent me this link to the Waipukurau CD Contest, where a lot of our Auckland Club pilots are.

https://www.soaringspot.com/en_gb/2021-central-districts-regionals-waipukurau-waipukurau-2021/results

It's also interesting to note that the DG300 recently advertised on the GNZ website for \$46 000.00 was sold within two hours of the advert's release.

Gerard Robertson has sent in this link to this video on thermalling:

<https://www.youtube.com/watch?v=skOq959kp-0&t=300s>

Safety - Blue on blue

Professor Sidney Dekker, National Safety Advisor



When you've been involved in an activity like gliding for a long time, certain incidents seem to form a pattern – they happen over and over. Wheels-up landings are frequent, stall-and-spin accident less so. Each individual incident by itself is, however devastating and uniquely terrible for those involved, not hugely informative over the previous one. But then, occasionally, an event happens that somehow challenges assumptions that previously held true. Let's take midair

collisions, for example. We know that they happen in gaggles and in competitions, and that risk exists in certain places that they might happen between you and something really big (like a cargo Boeing 777 bound for Hong Kong climbing out of CTAF at Wellcamp Airport west of Toowoomba in Queensland). But to be in a glider and fly into your own tug, or be flown into by your own tug, about half a minute after releasing – that one might be new to some of us. It's like a blue on blue incident, where the two parties involved in an operation end up shooting each other.

Instructional Flight

It happened in Alberta, Canada last year, during the northern summer. Such events have much to say about us, too – about the kind of tug you use and what you see and don't see from it, about FLARM and about what you do when on tow. Such an incident reveals whether or not you

release in a particular situation – say, when a strong thermal gives both the glider and the tug a kick up, and the tuggie may not feel you release at all, and whether and when you say anything on the radio after releasing, like ‘rope clear’ or ‘thanks’ and where you write up aircraft defects.

The Transportation Safety Bureau of Canada, whose chairperson was once a Masters student of mine, investigated this accident. My story here borrows a lot from what they have to say about it.

On a day in July 2019, the tuggie had completed two aerotow operations with the club’s Cessna 182 tug. The first tow had departed at 1510 (3.10 pm). The occurrence glider flight, on an ASK-21, was the second flight of the day for the student and flight instructor. The first instructional flight had been completed at approximately 1030. At 1549, the tow plane departed Runway 07 with the glider in tow and turned to the south while climbing to the intended release altitude of 5,700ft above sea level (ASL) or 2,000ft above ground. As in Australia, gliders turn right after releasing. Canada operates with high-tow procedures, like almost all countries except Australia.

Towing Exercise

Around the time the aircraft crossed the extended centreline of Runway 07, the glider flight crew radioed the tuggie and requested that he carry out some medium bank turns as part of the glider towing exercise. This had not been briefed prior to departure. At this point, the tow plane was at approximately 5,900ft ASL. The tow plane completed a medium (approximately 30° bank) left turn of about 145°, which brought both aircraft over approximately midfield, followed by a medium (approximately 30° bank) right turn of about 90°, which brought the aircraft to a track of 305° near the western edge of the field, at approximately 6,100ft ASL. The glider released halfway through this turn. Typically, a glider pilot will release from the towline when the two aircraft are in straight and level flight. When the tow plane reached the anticipated release point, the glider had already released. But the tuggie was not aware of that. Shortly after, the glider flight crew called the tuggie on the radio to thank him for the tow. The tuggie could not see the glider but executed a left clearing turn of approximately 80°, as is standard procedure upon glider release. He did not initiate a descent at this point, but did begin preparing the aircraft for the approach and landing at CEH2. Because the pilot of the tug could not see the glider, he entered a slight right turn in an effort to find the glider. This brought the tow plane to a track of 270°T. Still unable to see

the glider, the tuggie then proceeded to complete a 90° left turn, heading almost directly south. There was no attempt to communicate with the glider to determine its position. When the glider released from the tow plane halfway through the second medium turn at an altitude of approximately 6,100ft ASL, the glider flight crew proceeded to fly more or less on a track of 270. By releasing in a right turn, the glider was not in a position where the tuggie would normally expect to see it, in other words, behind and to the right of the tow plane.

Impact

At 1555, when the aircraft were 0.5 nautical miles (NM) southwest of the threshold of Runway 07 and at an altitude of approximately 6,075ft the tow plane’s propeller struck the glider’s empennage. The time between the glider release and the collision was 34 seconds. When the tow plane struck the glider, the vertical and horizontal stabilizers separated from the glider. The glider entered a dive from which it was unable to recover and struck terrain in a near-vertical attitude. The student pilot and instructor were fatally injured. Both were wearing parachutes. The tug was equipped with a PowerFLARM Core airborne collision avoidance system ACAS. On the day of the occurrence, the PowerFLARM Core installed on the aircraft was not working. In addition, throughout the 2019 flying season, the following issues with the PowerFLARM had been recorded in the club’s unofficial daily log for the aircraft:

- ***Power Flarm intermittent 22 March 2019***
- ***POWER FLARM DISPLAY NOT WORKING 31 March 2019***
- ***Flarm intermittent - keeps resetting 19 July 2019***

These defects were not recorded in the aircraft’s log.

To avoid judgmental language and oversimplification, as well as the usual bromides of ‘try a little harder out there, people’ or ‘just follow the rules’ or ‘let’s write another rule,’ the Canadian TSB is usually careful when declaring ‘probable causes’ or issuing recommendations. Instead, the story itself carries a lot of that load, and raises some really interesting questions for us.

Important Questions

In Canada, at this club, there was no procedure to follow if visual contact was lost after the tow was released. While there is a procedure for what to do after release, what do you do when you do lose sight of each other? Or, for that matter, what more can we do to prevent that from happening? We are taught to each turn in opposite directions. In Australia, the glider turns right, the tug turns left, although in many countries, this is actually reversed. But what do you do after that? As a glider pilot, you might persuade yourself to look at the tug for a bit longer, but then again, you may be in a thermal at that point, perhaps even with other gliders. You'd rather be watching those. As a tuggie, you might make the turn after glider release, stop after 90 degrees and then try to get the heck out of the area where the glider might still be. But perhaps this doesn't work all the time – there may be other traffic, for example. The tug itself should be considered. Does your club tow with a Cessna? For some pilots, looking out the windshield of Cessnas is like looking through the slit of a letterbox. Other pilots don't see it as so limiting or troublesome. Of course, each aircraft has blind spots and blind angles. It has to have wings, after all, and whether you put them on top or on the bottom, there's going to be stuff you don't see.

The Issue of FLARM

Then there's the issue of FLARM. Lots has been written about the 'cry wolf' syndrome of some warning systems, and thus our growing distrust (and disregard) of them. Lots, on the other hand, has also been written about our overreliance on computer- and warning systems, to the point that some are concerned that we don't look out or up enough anymore. This discussion is amplified when the device that is supposed to warn you only works intermittently. Intermittent electronic gadgets are perhaps even worse than electronic gadgets that have failed altogether. Because if they are intermittent, when can you trust them, when not? How and where do you write up this problem? The tug itself is airworthy without FLARM working, so your club may discourage you from writing it in a place that may cause the tug to be grounded before it is fixed. Note that in this case, it was recorded – in the club's own daily log for the tug, which is not a regulator maintenance release, which may well have been the type of document that guides people in the club to necessary repair and maintenance tasks. Where would you find this if it were your club?

Such questions in themselves, rather than oversimplified causal statements or recommendations, can actually push us into thinking differently about how we run our operations.

Who is Keith Essex?

Courtesy Omarama Gliding Club

You would have had to be living under a rock not to have heard of Keith Essex, who arrived in Omarama from Alaska and almost instantly was doing 1,000k flights regularly and winning our championship trophies. We got him to share his aviation journey for this newsletter.

At a very young age Keith moved to Alaska and lived in an area where everyone flew. Flying was a natural progression, as using the road system was too difficult to get around. Keith learned to fly in a Super Cub and brought his first aircraft, a "1940's J5 115hp, no flaps Cub (hot for a J5)". "A fun piece of junk". All he could afford at the time but in which he did 900 hours.

Keith got his first flying job at age 19 at 900 hours, with Delta Air Service flying passengers, mail and groceries and fuel into native villages using a Cessna 207, Cherokee 6, Beech Bonanza and Navaho Chieftain – 'hot' aircraft in the 1980s! Then Keith became a ski plane pilot flying Cessna 185's on the glaciers in Talkeetna.

In 1991 Keith set up his own business in Girdwood with a C185 on snow skis, primarily glacier flying, supporting mountaineering expeditions, flying skiers and doing tourist flights. Then 20 years ago, he switched to helicopters in order to overcome the problems due to unreliable weather. At this stage he became really busy as he could operate so much more.

Keith got his helicopter commercial licence straight away (in Alaska, as a student pilot, you could borrow money from the State of Alaska, which Keith did to gain his instrument and commercial ratings. If you then went into aviation, a portion of the loan would be forgiven - maybe 50%). For a young person it was a ton of money to get the necessary ratings and it all helped. Keith introduced innovations to his business-like sledge dog rides up on the glacier. The many remote communications sites were powered by solar and generation and during a switch from diesel to propane he saw a need to be able to

provide propane. He then established a propane refueling site, putting in place the required infrastructure.

When Keith sold his business three years ago he had 13 helicopters. He has remained as president of the company, his obligation ceasing in May, though he will remain for as long as they need him. He feels "he established the business at the right time and sold it at the right time".

Keith had a couple of friends in Alaska who were into gliding, who encouraging him to have a go. "You will love it". To Keith, it looked very boring. At an airshow, the Wilit brothers were there, well known glider pilots in the USA, talking and offering instruction. "What the hell" thought Keith - I will give it a try, being advised it would take three days to get a rating. Keith showed up and started flying, thinking "yeah this is fairly boring", until there was some wind on the ridge. Then a light bulb went on – "you could actually travel doing this!" Keith got the rating after a week or so and went and brought a Duo, but really didn't know what to do with it.

Then he received an invitation to go to Namibia, with the use of a Nimbus 4D, so he figured he needed to learn pretty quickly how to fly XC. While in California he flew every day for about six weeks xc, then went to Namibia. An 'eye opening' experience, where he learned a lot, became solidly "hooked" and his gliding. Interest has continued from there.

In 2014 Keith came to Omarama. He was used to flying in the mountains but found it both challenging and scenic. Because he loved it so much, he has set himself up to spend a lot of his time here.

Keith was aware the OGC were thinking of buying another DUO, so when he saw a good buy advertised (550 hours, ex Barron Hilton Ranch), he purchased it on the spot, giving the OGC first option to buy it.

Keith is our Omarama "treasure" who has ensured gliding continues in the wake of Glide Omarama ceasing business. He has purchased a new Dynamic and a Carbon Cub as tow planes. For this we are very grateful for indeed.

Keith is one of those "good NZ blokes" who give back to our sport assisting where he can and most recently helped at the Regionals, providing task setting expertise.



For sale/wanted

ASH31Mi: Accident free, built in 2015, 30 engine hours, 600 hours airtime accumulated 2018-2020, flawless engine performance, five-year check/overhaul in 2020, complete documentation, aluminum Cobra trailer, LX 9070 etc. \$356 000.00. Serious inquiries only to Ross Gaddes +64274789123

Ventus 2a - s/n 10 Equipped with LX9050 with Flarm and control column unit. Maughmer winglets - Refinished in 2008. Imported ex USA - no major damage history. Dittel FSG71M com and Trig TT21 Mode S (ADS-B out capable). Aluminium top Cobra trailer, wing wheel, tail dolly and tow-out bar. Re wired with LiFePo4 batteries. My partner Malcolm wishes to sell his share as he is no longer based in Auckland. I will either keep my 50% share or sell outright (#2 choice). This aircraft is one of the best performing gliders in 15mtr class yet is a delight to fly, even when tanked, and exceptionally easy to handle. They land short and rig in minutes. MY PARTNER IS VERY KEEN TO SELL HIS SHARE. Contact me - Ross Gaddes - for more details.

Thanks to all those who have contributed to creating this edition. Thanks also to all those who have made known their appreciation of the club newsletter. If there is anything you would like to share with the members via this newsletter, text or photographs, please e-mail me. I will be grateful for any contributions, whatever they may be.

Editor: Peter Wooley, Ph 021 170 2009; e-mail wooleypeter@gmail.com