

What the Ops Team is Talking About . . .

A summary of key items discussed at the Operations Team on-line meeting on 20 April 2021. David Moody (North), David Hirst (Central), Gavin Wills (South) and Martyn Cook (NOO).

1. Incident Reports for Mar 2021 - Apr 2021

- takeoff with brakes unlocked, disguised by local turbulence, ATC flight, checks done by P1
- ATC cadet unconscious for 30 seconds 20 mins into flight, undisclosed medical condition
- near miss on final approach to airfield between club glider and microlight training aircraft
- wheel-up landing on training flight, check list recited but corresponding action not taken
- wheel-up landing on outlanding exercise, lowered wheel early then retracted to work some lift
- "firm" landing after speed washed off too early, pilot distracted by busy airfield activity
- tow plane commenced launch with flaps in landing position, launch aborted after radio call

Commentary on Selected Incidents:

Air Training Corps Event: The context for the first two incidents was an ATC flying day with about 10 cadets on site. A large number of contributing factors was reported to the Ops Team. Imagine an excited bunch of Air Cadets . . . It appears that the club was not well prepared - the Launch Point Controller was inexperienced in that role and unable to effectively control the launch point. The flying order was not established, wing runners were not well organised, and the sterile environment around the cockpit during preparation for flight was not enforced. There was a briefing given before flying, but a number of cadets were observed playing on their phones during this time instead of paying attention.

The Cadet Leader and the Launch Point Controller both showed a lack of effectiveness at the launch point, evidenced by:

- Cadets were not weighed, and weights recorded in advance
- Cadet names were not advised (with correct spelling) to the Launch Point Controller

The Cadet Leader, on several occasions, needed to be recalled when about to set off across the runway in the retrieve vehicle, due to approaching aircraft, despite being warned about the need for a lookout being included in briefing. An intermittent fault with the caravan radio contributed to communication difficulties. The P1 instructor in the glider was kept busy trying to regulate the airfield environment as well as flying the cadets. The pre-flight checks were not performed thoroughly on this flight, and the takeoff commenced with airbrakes unlocked. The tow pilot did not give the normal signal for brakes open - the pilot was alerted by a radio call. It is already known that in moments of stress a pilot will filter out radio calls and not hear them, so a rudder waggle might have been more effective. The airbrakes were closed and the launch continued.

The second incident - a cadet losing consciousness during flight - occurred on the same day. Fortunately the cadet's body became limp so there was no difficulty with the instructor moving the controls. The instructor was able to make a safe and hasty return to the airfield.

The Operations Team will be following up these incidents with the ATC organisation to ensure that groups of cadets are more thoroughly prepared, briefed and supervised on future occasions. At the same time, gliding clubs who provide flights for groups of ATC cadets are strongly advised to pay attention to the lessons in the above incidents, and ensure that airfield procedures and disciplines are strictly followed. The [Gliding NZ Advisory Circular 2-12](#) describes the formal arrangement between GNZ and ATC, but may now need expanding to cover the responsibilities of the cadets themselves. The health and well-being of the cadets is clearly in the hands of the ATC Course Director (Page 4), but whatever the failings of the ATC may have been on that day the responsibility for operations lay with the gliding club officials: the P1 Instructor and his CFI.

Near Miss on Final Approach: This involved two gliders and a microlight training aircraft, all on final approach at the same time. The incident is still under investigation.

The general principle is that when multiple aircraft are approaching the same aiming point then "short final" can be a very dangerous place. Lookout becomes very important - but all aircraft have extensive blind areas beneath and behind, especially when flying along the same line over the ground, and it's very easy for two aircraft to be in each other's blind spots, so neither sees the other. In this incident the pilot in a third aircraft (also on final) observed the loss of separation between the two aircraft ahead and gave a warning on the radio, at which point the power plane turned away and made an orbit. Perhaps the power plane should have held back rather than trying to land in front.

Wheel-Up Landings: These still occur rather frequently. It's hard to suggest an effective cure. The contributing factors in these cases were:

- distracted while performing the checks (checks were recited but the action was not taken)
- lowered wheel early, found lift on downwind, raised wheel, tried to circle, landed anyway

One action that some experienced pilots take is to visually compare the position of the landing gear lever with the cockpit placard immediately after turning onto final approach.

2. Glider Circuits

At some airfields gliders and power planes share the same circuit track over the ground, and the same landing point. This was mandated by CAA after a fatal mid-air crash between two power planes on final approach to an uncontrolled aerodrome. Some members of the Ops Team believe that this is not a safe or realistic requirement to be placed on gliders, and it would be better to have glider circuits flown inside faster propeller-driven aircraft, which would in turn be inside even-faster jet aircraft. If this was promulgated it could make it easier for all aircraft to establish the landing sequence, maintain the sequence right down to the ground, and ensure that the gliders can retain their necessary and legal right of way.

Three important reasons for a glider-specific circuit are:

- to keep options open until turning onto final approach in a satisfactory position and height
- to establish an orderly sequence for landing when multiple gliders are landing at once
- to reasonably ignore all power traffic as they are required to give way to gliders

An "orderly sequence" would mean that you (as pilot) would know where you were in the glider landing sequence (eg. third in line) and that you would have visual contact with all the gliders landing ahead of you (eg. two ahead). This requires clear radio communication and good lookout.

It was noted that when the aiming point is the same for all landing aircraft then the risk of collision on final approach is still not reduced. This suggests that on some airfields with long or multiple runways pilots might be wise to choose different landing areas to reduce collision risk on final. Putting all aircraft on the same final approach path does not seem very smart at an uncontrolled airfield when there are other options available.

3. A-Category Instructor Training Program

There was discussion about how to train A-Cat Instructors, and what skills and abilities would need to be developed. It was clear that candidates would need to train Instructor Trainers, perform the role of flight examiner, issue endorsements and ratings of all types, and accurately assess "quality" in every aspect of a gliding operation. It was also proposed that candidates would need to be recognised and nominated by their peers, rather like a "life member" in a gliding club, as opposed to than working through a list of requirements.

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