12-13 June 2021

AGC Weekly News

Weekend Roster

Saturday
Tug Pilot: Andy Campbell
Instructors: Paul O'Neill-Gregory, Sam Tullett
Duty Pilot: TBA

Sunday
Tug Pilot: Ron Burr
Winch Driver: Bradley Greer
Instructors: Norm Duke, John Robertson
Duty Pilot: Hugh Warren

Another Special Winch Day

Graham Player, Winchmaster

Another "Winch Day" is scheduled for Sunday 20 June, weather and ground conditions permitting. The aim is to continue training for new winch drivers, which will benefit the Club in the long term. This is also an opportunity for members to brush up their winching skill and to obtain winch ratings to benefit their soaring in the upcoming season. Special rates will apply

Winter Gliding

Russell Thorne, CFI

As we approach the Winter months, there are a number of considerations concerning safe Gliding operations.

Firstly, consult the weekend weather forecast with special interest in rain and wind conditions. If unsure, contact the Duty Instructor before coming out to the airfield for advice. Make a booking to alert ground support for instruction or launches.

If the wind direction is in the NW to SW quarter, then sustained flights can be conducted along the Drury Hills using ridge lift.

If the wind conditions are in excess of 15 knots crosswind from either the Easterly or Westerly direction, then flying may not be possible. The same applies to sustained rain. Showers only may or may not directly affect the airfield. Expect rough conditions during departure and approach phases. If weak Easterly wave is evident, then sustained flight can be expected within the railway line to airfield area.

Useful combinations of SW wind and unstable atmospheric conditions offer the best opportunities during these months.

If the airfield has experienced heavy rain leading into the weekend and has had no opportunity to disperse, ground conditions will be adversely affected and an airfield inspection will be conducted to determine if flying can take place safely.

If you are airborne and a shower is obviously going to cross the airfield, some thought should be given to immediately return to the airfield and landing, or hold off within safe gliding distance, until the conditions improve. A passing shower may cause wind strength to increase temporarily, but can also offer soaring opportunities in front of the squall line, if managed safely. Speed control on approach and touchdown at minimum speed are important.

When ground conditions become soft, special consideration should be given to your touchdown area. Generally, the centreline or crown is best, as the thresholds of and both sides of each runways suffer first in this event.

In these conditions where mud becomes trapped in undercarriage areas, the gliders must be cleaned out BEFORE placement back in the hangars.

When the airfield is eventually deemed unusable until the Spring period improves ground conditions, flying will cease.

Under the Overcast

Roy Bourgeois

A few weeks ago I got back to my home airport after a long XC flight that got pretty difficult at the end with clouds knitting together into a solid (and lowering) overcast and little remaining sunlight on the ground. And, on getting back I was “rewarded” by the need to jump into a tow plane to aero retrieve two guys who landed out at different airports on their way back. Before I left, I remarked to a club member that my flight was difficult at the end and that I had ‘” used every trick I knew” to get back. Sometime afterward, that member suggested that it might be helpful to the newer and less experienced XC pilots to explain some of those “tricks” and I agreed to write something up. So, the point of the suggestions below is: how to get back to your home field when the day deteriorates to large horizontal overdevelopment, cloud spread, and huge ground shadow? Or as my British friends might say, “What to do when the day goes to poo?” Here are a few ideas that have worked for me.

Be Patient

Thermals depend on ground heat and the ground stays warm for a very long time after cloud shadow develops. Note that a 2 kt thermal at 4500' AGL left the ground over 20 minutes earlier. Expect that the thermal strength values will diminish as cloud shadow increases but stay optimistic. You will still have time and thermals to get you home! Especially true if you can divert to areas not covered by shadow.

Be Efficient

"Optimistic" doesn't mean pretending that the day hasn't changed. When the day starts to deteriorate you must use all of your altitude efficiently and waste nothing. Forget normal speed to fly settings and use whatever speed covers the most ground most effectively. Downwind this will usually be the best L/D speed. Flying into or crosswind, it will usually be best L/D plus about ½ the wind at your attitude (and note that the wind will change as you get lower). Use all the lift available but do not turn into a thermal

unless you feel a genuine surge under the wings and are confident that it is real. It's OK at normal cruise conditions to make a mistake on the thermal turn direction but when the day is going bad you can't afford that mistake. You certainly can't afford a 360 degree turn into nothing or sink. Keep your eyes outside the aircraft because dust, birds, and other gliders can help a lot. Watch for haze domes and developing cumulus under the overcast. Fly as smoothly as you can.

Finding Lift when High

When high, go for the dark spots. As the overcast and spread develop you will usually see dark spots in the overcast (removing sunglasses may help with this). The dark spots are there because the cloud is thickest at that point - usually the result of a residual thermal billowing up in the overcast. You can climb under those dark spots - probably not like you may have been climbing earlier in the day, but we are now in survival mode and will use any climb.

Finding Lift when Low

When low, go for the remaining sunlight. As the cloud shadow develops there will frequently remain a few isolated areas of sunlight on the ground, often quite small. If you are low, go to these (or slightly downwind of them). Just remember to keep a safe landing field in range. The remaining sun-lit patch focuses the thermals at that point and the departing thermal entrains all of the ground heated air from a much larger area than what is sunlit (see the first item above). This trick has saved me many times and once got me a free steak dinner when I radioed this advice to a guy getting ready to land out, "Fly over the sunlight first!" He made a save and bought me supper that night. True story. This really works.

Infrastructure matters

On the day discussed at the beginning of this article it did not surprise me that the two guys who landed out did so in fairly high altitude airports located in somewhat isolated areas directly on their course home. While my flight path home often favours those two airports, when the day gets tough I divert east instead to a lower elevation airport I can reach that is slightly off course but surrounded by a large built-up area of urban tenements, industrial buildings, and silos, rail yards and a big steel bridge all to the west (and usually upwind) of the airfield. These features hold heat long after the sunlight stops and I have effectively used that area for a final climb to get home many times. If low, I arrange my flight path so that I can fly over the built-up area before heading to the airport and I usually find a climb over the infrastructure sufficient to get me home the last few miles, even when nothing else is working. With a rural or isolated airport as your safety field, you don't have this tool available.

Lastly, but most importantly, while all of these tricks usually work, you must never depend exclusively on them nor commit to a final glide to your home airport unless you are sure that you can make it and with reasonable margins. Always have an alternate plan and a safety field in your inventory if it doesn't work. There are few things that take the fun out of soaring (or worse) more than a sketchy final glide over unlandable terrain while watching all of your margins evaporate. Any good land out is better than a failed final glide with no safe options.

I hope this article has value for you. Stay safe. Have fun.

Roy Bourgeois is a well known US and South African glider pilot who serves as the Chief Pilot for the Greater Boston Soaring Club. He has held several US national records, competed in many US and Canadian Nationals, and has flown over a quarter million XC kilometers in his 4200 hours of gliding. He can be reached at royb@bw.legal

Article courtesy Wings & Wheels, USA.

An Invitation

Ross Gaddes

**I want to invite all members, partners, and friends to
a Mid-Winter Mushroom Risotto evening
at our clubhouse
on Saturday July 24th at 6pm.**

Under Simon Gault's direction, the quality food will be perfect for a cool winters evening at the AGC clubrooms.

**$27 per person:
This includes our annual prizegiving and will also include lots of fun.**

Make a booking in your diary now!

AGC Membership Update

Greg Balle, Membership Secretary

I've just completed a round-up for a committee request to present stats at GNZ AGM. This is the outcome:

We currently have a total 102 members registered with GNZ at season ending June 2021.

1 Visiting Pilot
7 Communications only
13 Youth
81 Flying

Additionally, AGC has nine Associate Members – these are volunteer/social/honorary, and do not require registration with GNZ.

QGP Theory Lectures and Examination Schedule

Russell Thorne, AGC CFI

The following is the 2021 Theory Lectures and Examination Schedule to be held at the Auckland Gliding Club beginning after Queens Birthday weekend at 09h00 on Saturdays during the Winter Season. Expressions of interest to cfi@glidingauckland.co.nz

All Glider Pilots under training should consider attending this series. The one-hour exams are multi-choice and require a 70% pass rate.

Please bring your training syllabus for exam signoff.

Apart from the GNZ online content, there is the Qualified Glider Pilot Study Notes publication available from Gliding International Bookroom at $32.00. Most exam content is sourced from this publication. See https://www.glidinginternational.com/books-dvds

Schedule

12 June Navigation and Airmanship- Russell Thorne
19 June Air Law- Gerard Robertson
26 Jun Exams Law and Navigation/Airmanship- Russell Thorne
3rd July Meteorology-Anton Lawrence
10th July Human Factors -Jonathan Cross
17th July Exams Meteorology and Human Factors-Russell Thorne
24th July Glider Technical - Gerard Robertson
31st July VHF Radio Theory- Russell Thorne
7th August Exams Glider Technical and Radio Theory-Russell Thorne
14th August VHF Radio Practical -Russell Thorne

When making payments to the Club Bank Account Number 03 0104 0012743 00, PLEASE ALWAYS include the Invoice Number and Your Surname.

Thanks to all those who have contributed to this edition. 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