WARM AIR 26 February 2022

Aviation Sports Club Gliding Newsletter

THIS WEEKEND: www.ascgliding.org Bank Acct 38-9014-0625483-000

Saturday Instructing: Ray Burns

Towing: Derry Belcher
Duty Pilot Joseph Dickson

Sunday Instructing: Ray Burns

Towing: Peter Thorpe
Duty Pilot Simon Hay

MEMBERS NEWS

- In Warm Air this Week;
- Club News
- Weekend Reports
- Articles
- Roster

Thank you for the contributions from members.

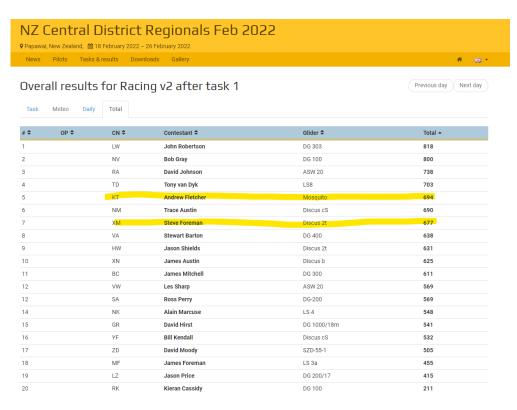
Club News

Right a bumper issue this week with many stories, pictures and articles. Thank you to our Lionel, Ivor, Fletcher, special guest Roger Brown, Steve Wallace, Jonathon, Gus, Izzy and Shivneet.

Where are our Members?

Well, the week before last there was the **Vintage Glider fly-in**. Andrew Fletcher, Tony, Ray, Derry were soaring down in Papawai and Masterton. We hope to have some pictures and stories from the team for next week....hint hint, hint.

And Andrew (Dash) and Steve Foreman (Hawkeye) are competing in the **NZ Central District Regionals** being held at Papawai. The weather has been wet, wet, wet down there, but some flying is taking place.



Phase 3

As Announced by the Government today

"We are moving into Phase 3 of our response to Omicron from 11:59pm tonight"

The rapid increase in cases means most of us **will self-manage COVID-19**, including more use of rapid antigen tests (RATs). Red traffic light settings remain in place.

How to self-manage COVID-19 | Unite against COVID-19 (covid19.govt.nz)

So simply do the right things to look after others. You know the drill.

Expect disruptions to club operations over the next few weeks.

Weekend Reports

Saturday – Lionel reports

Could sleep in for a few minutes as Peter had extracted the keys so that he could access RDW for his BFR. Jonathan let me in and we wondered whether we'd have enough customers to get the aircraft out. The weather forecast was for rain but the sky was in fact clearing up with blue patches appearing all over the place.

Eventually we had a few single seater pilots that we keen to take GMP for a flight, so we started getting things out and underway. Initially we were told that it was best to set up on 26 however a persistent tail wind convinced Rex that we should be moving to 08. A call to the tower and we moved down to 08.



First up with Jonathan with a few circuits which were well executed. After these flights GMP was taken aloft by Matt Moran. Then it was Shiv's turn for a circuit and then a low power on take off exercise. All well handled.

Called it quits and retired to the club rooms for a cool beverage. Nice day considering that the day was forecast to be a washout.

Thanks to all for another great day.

Sunday -Ivor Reports

The day looked reasonable for training, with light wind mainly from the west. After a slightly delayed start, we were ready to set up on 026. With just a small group of people, including Roy Whitby, Alex Michael, Jonathan Pote, Craig Best, Nick Vyle, tow pilot Fletcher McKenzie and Kazik Jasica, we set about preparing things for the days flying. While we were getting ready, Lionel Page and Peter Thorpe were down at the other end of the field preparing the ATC motor glider GNW for some flying activities. Before too long we were ready to go, with Lionel in GNW away first at around 11.30, followed a short while later by Roy in GMW. There were some strong lift patches encountered on the tow up, although after release it became clear that there was way more sink around, and staying airborne was not going to be so easy.

Next up was Alex in GMP, who gained height early and managed with some difficulty to stay up around the area for well over an hour. While he was up, Jonathan went up to practice a non standard circuit, joining onto base from an exercise north of the field and making a good landing. Then it was Nick's turn in GNF. Nick is a new glider pilot, and this flight was basic flying skills practice, which went well although with little lift found it was over too quickly. In the meantime, Alex had returned with GMP, and next up in that was Craig, who found less lift and more sink but still had a great flight.



The next couple of twin flights were

Shivneet Chand flying with Izzy Burr while I grabbed a quick lunch break. First flight was an unexpected [for Shiv] low power on takeoff exercise, which he handled very well. Then they went up for some further training exercises, including a simulated baulked approach, again all flown well. Then it was back into the air for Nick. This time there was some good lift about and we managed to extend to flight, giving Nick lots of practice with basic turns, getting balance sorted out and managing a couple of thermal climbs along the way. We ended the flight with a circuit and landing demo, with Nick asking good questions throughout. While we were up flying Izzy took off in GMP and managed to hook into some good strong lift north of the field, giving her a good 2 hour flight which took in a quick

trip to Orewa and a low level look at North Shore airfield.

The next flight for the twin was Jonathan, basically repeating his earlier exercises but this time with key instruments covered. Speed control and altitude judgement were excellent, and the flight was capped off with a good, well judged landing. The final flight of the day was with Kazik, who had not flown for some time and was looking for some general airtime. He made very good use of the fading lift available, most of which had now moved way north of the field and so was unavailable. Nonetheless, Kazik used every



scrap of what was available, eventually coming back down just a few minutes before the tower went off watch and all flying needed to end. Izzy landed at the same time, and we were soon packing everything away before heading off for a good wind-down session in the clubroom. Most people were there chatting late into the evening, although I eventually got home around 1900, having been part of another great day's flying.

Izzy chips in

Also a small story which may be of interest, I took Shiv up for a couple of flights today, on the first one, having fully briefed him for a 2000ft flight, I asked Fletch to do a low acceleration on take-off. No one let anything on, so when we got to the far end and RDW was still on the ground, Shiv released and landed ahead as taught. As soon as we'd come to a stop the comment came from the front cockpit "You little sh*t" as I sat in the back laughing.

That sounds like your progressing very well Shiv. Well done, there is a category in the logbook to sign off on "little X%@\$# moment I am sure



Lovely Photo from Shivneet

Fletcher McKenzie Reports from the front and gives us some lovely photos to boot....

The week started with rain forecast.

We get to Saturday night, and I was expecting the usual. Waking up to no rain was unexpected, and then it turned out it was not raining! I had told my daughters that I probably won't be flying. I excitedly checked the weather, it looked like there was potentially a window. I texted Ivor - I got the go from him and I grabbed my gear and ran out the door with a protein bar, an apple, water and no sunscreen (Murphy's Law works). Still unsure.

I arrived with the caravan already out - I said my good mornings and did my own checks, having a good look and reading my notes. Ivor said we may get a few tows in today...

I was ready for flight. Once we added the tow rope, we found some mud in the tow hook. We cleaned it out - unsure how it made into the hook....

First tow with Roy and Ivor - once airborne the feeling of being happy hit, the sense of freedom and a huge 'thank god it's not raining'!!! Roy was also happy to get airborne once again!



Second up was Alex - 2000 feet tow - easy tow in MP. Next was Jonathan with Ivor, as I was climbing, I noticed some thermal activity. Again, another happy pilot.

Next up in NF was Nic, with a 2000 feet tow, followed by Craig after Alex landed in MP.

Shiv and Izzy were up next. Part of the training for Shiv - Izzy and I together devised a plan to do a low power take off without Shiv knowing - letting the Tower know was a little harder. Thanks Ivor and Adam in the tower. All went well and Shiv did what was expected.

Shiv then was finally airborne with a 2000-foot tow. Followed by Ivor back in NF with Nic. Izzy took off in MP wanting to beat Alex's time and Jonathan and Ivor jumped back into NF.

The last tow was with Kazik and Ivor up to 2550 feet - I finished with a hangar landing and cleaned RDW. 11 Tows on a day that we thought we may get nothing.

A beautiful afternoon with no rain (or at least where I was).

Day 71 as a Tug Pilot was complete.







Articles of Interest

Gus came across this article. Well worth reading and can be found online here.

For those in training your instructors will brief and remind you about the securing of canopies, particularly **in the two-seater.** You may note there are two painted arrows externally on the canopy frame for the wing runners to visually check they are secured and aligned.

Why did we do this, well simply we had the same incident take place in MW, our previous Grob, with a solo pilot several years ago during the aerotow stage.

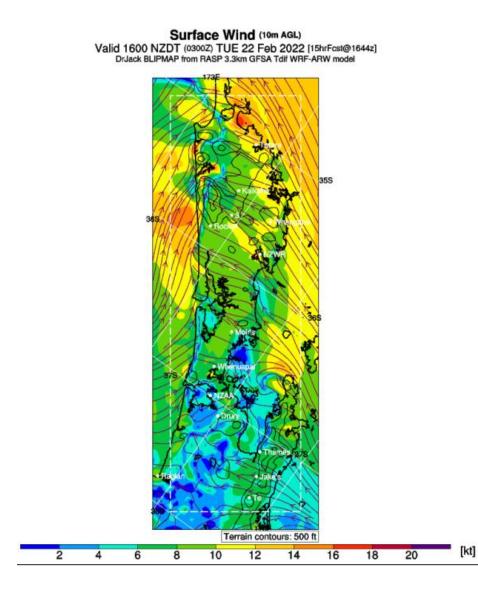
The student pilot recovered well and landed safely. A complete replacement canopy was needed and cost more than 10-12K.



Convergence – Jonathon converges – converses on Convergence

"On Monday evening a convergence was easily identifiable. The photo clearly shows two different cloud bases/LCLs (Lifting Condensation Level) along a line running north/south close to the west coast.





The RASP surface wind map for the same time shows the convergence as a blue line indicating zero wind speed. Note that a blue area or line might indicate a convergence with rising air (Lift) but equally a divergence, with descending air spreading out as it reaches ground level (Sink!) so check the adjacent wind arrows.

Meteorologists need to be as precise as possible, hence the relatively new term of 'Lifted Condensation Level'. For glider pilots, the simple formula of

"Spread x 400 = Cloud Base in feet"

where the spread is the difference between ambient temperature and dew point works well.

Cloud base - Wikipedia

<u>Lifted condensation level -</u> <u>Wikipedia</u>

Wave Conditions and Circuit to fly

Last week due to Cyclone Dovi, extreme high winds were experienced. And Steve Wallace put out a teaser Quiz on speed to fly in circuits and whether you would fly in such winds. Well, a few conversations between Derry and Roger Brown (highly experienced instructor with decades of soaring experience Roger kindly put this article together to be shared. A really good read.

Circuit speeds/ approach speeds for me at least are judged on how really gusty or smooth the air is with in that area of the wave influenced air mass. . The general formula for circuit and approach speed can get thrown out of the window - again for me at least in some wave conditions. This is based on what I have experienced in both the Westerly wave and the infamous Easterly wave where one is dealing with generally none copy book none consistent conditions. Especially if the wave is jumping frequency . - Not so good I have to say.

There are generally three issues. There can be huge wind gradients and depending where the rotor may lay, with some pretty good moderate to severe turbulence that will arrive out of nowhere, generally at the wrong time one has to say. The other issue, again depending where the rotor may be and or the actual wave length is, [frequency] are high levels of very big sink again at the wrong time / place . The last piece is height - we must have plenty of height and in some cases, heaps of if. One also has to be very careful to how far or close one needs to be to create a safe aiming point angle whilst all this is happening - critical. So how do we overcome these three issues. A very good understanding of what is really happening and therefore what is required to overcome these very inconsistent conditions safely.

Two examples, Taupo V.K camp which really started out to be a really - ho - hum ridgy thermal day. However, the Taupo ASK21 out landed just short of the runway due to a wave system that had developed but hard to read as such, eventually changing frequency. The rotor NOW jumping downwind overhead the airfield from where it had happily sat all day over the town looking like none moving broken cumulus. [first clue] I got caught up with that in GJ as it pounced on top of me whilst

overhead the airfield. I had had a good flight and was now contemplating landing. Suddenly and somewhat instantly I was now going to land very very quickly that's for sure. My downwind leg was virtually sitting on top of the runways fence line with a final approach turning on top of the boundary fence. The vario was off the stops as far as sink rate goes. 1000ft / minute or more would be my guess My circuit height that I started from was just over 1800ft AGL [saves readers calculations One can always get rid of surplus height, but under these conditions one was never going to regain any that's for sure. My approach speed was 90knots but should have been higher I have to say. End result, I still undershot my aiming point on the airfield.

Example two Club Ka6 days Matamata, 100knots approach speed and looking for more. This was the day Tony Tinnermans landed one paddock short of the western runway [022] in his DG400. An extreme day that's for sure. Huge sink around the circuit combined with an extremely bad wind gradient, I was returning after a really great westerly ridge / wave flight. On the ground the windsock was only about 15knots - gusting. Just above that say 100 ft or so, all hell was breaking loose. Very Very deceiving but not unexpected in such conditions.

However not all wave systems can be of an extreme nature, and I have had more good rides than the extreme ones when they are well behaved and somewhat mild mannered and very stable. This generally makes for an easier circuit of cause both in position / speed and height relationships. However you still do not know what the conditions are like closer to the ground when completing a wave flight or thinking that there may be some wave about because the thermals had a 'strange' feel to them perhaps., So all ways be aware. Understand what the air could be doing at those lower levels. Take samples on the way down, not just blindly descend and join circuit as one may do on a more normal day. You may just get a bit of a surprise.

The 1963 Nationals at Hood were a very good case study of what can happen when a wave shows no mercy however to those who dare try and tame it as it were. An amazing story once you dig into what happened. Gusting 60 k on the ground whilst retrieving - , amazing.

Steve Wallace Adds

To add to Roger's excellent story, I've attached a picture I took of the S100 flight computer in the glider I was flying at the Nationals out of Omarama a couple of years back.



You'll see I'm 36km out from the turn point with an expected turn point arrival height of just under 12,000' and a nice 70Kt tail wind helping me along. Ground speed from memory was around 300kph. This all changed of course once I rounded the turn point and had to head back into the wind!

Lower down the wind wasn't quite so extreme but I still would have had plenty of speed for the straight-in approach to Omarama from the final glide.

At Whenuapai we are somewhat sheltered from the more extreme conditions that some clubs find themselves flying in on occasion so as Roger points out, the necessity for such high circuit speeds are not out of the question.



Well finally, we do not usually do the **Fashion Critiques with Glider Pilots**, because there is not enough ink in the pen.

But our very fashion savvy "Hawkeye" has gone out there with leopard seal skin boots while flying down in Papawai.

I understand Dash is physically distancing himself from him as a result.

Hey, if you have a Turbo, who cares what others think.



Take extra care over the next few weeks.

Duty Roster For Jan, Feb, Mar

Month	Date	Duty Pilot	Instructor	Tow Pilot
Jan	15	R BAGCHI	I WOODFIELD	D BELCHER
	16	T-O'ROURKE	S-WALLACE	G-CABRE
	22	M MORAN	A FLETCHER	P THORPE
	23	I O'KEEFE	R BURNS	R CARSWELL
Anniversary Weekend	29	K PILLAI	L PAGE	R HEYNIKE
	30	K BHASHYAM	I WOODFIELD	F-MCKENZIE
	31	T PRENTICE	A FLETCHER	D-BELCHER
Waitangi Weekend	5	C BEST	I WOODFIELD	G CABRE
	6	E LEAL SCHWENKE	L PAGE	R CARSWELL
Waita	7	R MCMILLAN	S WALLACE	P THORPE
Feb	12	A-MICHAEL	P THORPE	P EICHLER
	13	R WHITBY	S WALLACE	R HEYNIKE
	19	C DICKSON	L PAGE	R CARSWELL
	20	K JASICA	I WOODFIELD	F MCKENZIE
	26	J DICKSON	R BURNS	D BELCHER
	27	S HAY	A FLETCHER	P THORPE
Mar	5	R BAGCHI	P THORPE	G CABRE
	6	T O'ROURKE	S WALLACE	P EICHLER
	12	M MORAN	I WOODFIELD	R HEYNIKE
	13	I O'KEEFE	R BURNS	R CARSWELL
	19	K PILLAI	L PAGE	F MCKENZIE
	20	K BHASHYAM	A FLETCHER	G CABRE
	26	T PRENTICE	P THORPE	D BELCHER
	27	C BEST	R BURNS	P EICHLER



