

# WARM AIR 15 Aug 20

## Aviation Sports Club Gliding Newsletter

**THIS WEEKEND:**

Club Cellphone 022 357 6731

[www.ascgliding.org](http://www.ascgliding.org)

Bank Acct 38-9014-0625483-000

**Saturday**

Instructing: Ray Burns

Towing: Peter Thorpe

Duty Pilot Geoff Leyland

**Sunday**

Instructing: Ivor Woodfield

Towing: Fletcher McKenzie

Duty Pilot Ian O'Keefe

**IF WE ARE STILL AT COVID LEVEL 3 THIS WEEKEND - NO FLYING. OTHERWISE, MAYBE... WE WILL LET YOU KNOW**

### MEMBERS NEWS

**SATURDAY** *Instructor Steve Wallace did not bother going out*

Saturday was forecast to be quite unstable with a lot of large showers passing through and a 20Kt westerly changing to a southerly and then fine after about 3pm. A quick look at the rain radar, surface pressure map, tephigram and of course out the window convinced me it wasn't worth the drive to Whenuapai. So, I spent some of the morning looking at YouTube videos on How to Read tephigrams so Warm Air could provide those with nothing better to do, something to do next times it's raining. Links below:

<https://www.youtube.com/watch?v=7p7c85hhgOo> Nice explanation, especially of CAPE. (12 mins long)

<https://www.youtube.com/watch?v=STrCGN5TLoA> A bit American but a nice break down (18 mins long)

[https://www.youtube.com/watch?v=175qE\\_j5MZ0](https://www.youtube.com/watch?v=175qE_j5MZ0) Nice visual, 3 mins long, just the basic temp and dew point profile.

**SUNDAY** *Towie Derry Belcher grabs the crayons*

We started the day by rigging our trainer GNF. This was the usual straight-forward Grob ritual of dancing on the spot until the Grobbly object finally relents and allows the wings to slot into place, to which, comes the same old question "what did we do differently for it to go together?" The answer my friends, is absolutely nothing! It is all just an exercise in patience.

With that simple exercise over, we set up glider base beside the grass 26 runway with a SW crosswind, and the first three flights were Ray Burns and Andrew Fletcher - Ray doing a practice demo then Andrew doing his BFR. The air was quite bouyant with thermals and Andrew mentioned they easily climbed to 3000 feet on one flight.

Isabell Burr had the last flight with duty instructor Ivor Woodfield in the front seat but unfortunately did not have a very long flight as a rain shower sneaked by to the south...

There was talk that the towplane might have chopped up the thermals that we flew through on the way up but I was a little sceptical. Maybe the towee should mark thermals with a smoke bomb, or you could use the markers on your cellphone soaring app such as XC Soar)... Next time maybe?



So, after putting the planes away we headed to our new clubroom, previously the parachute club packing room, which has been cleaned, polished, and tidied lately by our members, and then furnished. I am sure all agreed, it is SO much better than sitting on grotty chairs in a cold hangar, around a tiny card table! A big thank-you to the kind folk who provided the new couches, heaters, tables, and even a Lazyboy style couch and an armchair for the towpilot! 😊 Having a club-room could help make a big difference for our club on the social level, and with it being outside the 'main fence' solves the problem of getting family etc along for get-togethers.

*Instructor Ivor Woodfield had the colouring pencils.....I arrived at 0930. The sky was blue but cloudy, and it was certainly not warm.*

*Ray Burns, Derry Belcher, Jonathan Pote, Andrew Fletcher, Neville Swan were all there, and we were soon joined by others, including Izzy Burr, Simon Hay, Kishan Bhashyam, Roy Whitby, Tony Prentice, Rex Carswell and Lionel Page [who had just been for an early morning run, which was preceded by a 12Km "warm up" -- most impressive ..]*

First task was to rig the twin GNF, which had been sitting in its trailer ever since returning from Drury, this was the first flyable day since it returned.

The fuselage was quickly transferred from the trailer to the rigging cradle, and the wings extracted from the hangar. When everything was ready, the first wing went in easily enough. The second wing however proved more of a challenge. Despite several attempts, the wing just would not fully engage. Several suggestions were made, and various people came and studied the

problem, but still the wing stopped just a couple of centimeters short of its destination. Then suddenly, and with nothing obvious having changed, it just slid home. It was immediately locked into place and we were done. The rest of the rigging happened smoothly, and before long we were ready to fly.

While all this was happening, Steve Forman arrived with a van load of furniture for the packing shed, and was soon busy unloading it. With the help of Roy and Kishan it was all unloaded and assembled successfully, ready for club use.

We set up for operations at the threshold, hooked GNF up to the tow plane, and were ready to go. First up was Andrew Fletcher, for 3 flights with CFI Ray Burns, the first of which launched around 12.30.

Once they had finished all they had to do, Izzy Burr took a flight from the back seat, launching around 1400. There was not any usable lift to be found, despite feeling some reasonable bumps during the launch. After scratching around for a while ahead of some dark looking weather, we ended up landing in some quite heavy rain. Good flying from Izzy throughout.

With the rain, together with the grey sky and the deepening cold, no one else was wanting to fly, so the planes were packed away. It was then suggested that we test out the new club space and furniture before going home, so everyone traipsed to the other end of the field, where we were met by a warm and comfortable space. Almost too comfortable for some as the conversations drifted on for quite a while before we were locking up and leaving.

Not a great deal of flying, but a good winter's day at the field nonetheless.



## HOW TO THERMAL BETTER - CROSS COUNTRY BASICS

So - you've found your cloud - but what's the best way to use it?

Centering thermals efficiently, and climbing quickly, are probably the most fundamental skills you need to soar successfully. Even a small improvement in your technique could easily mean a few hundred feet in every thermal - or thousands of feet in a typical cross-country flight. Come to the end of the day, this might even make the difference between getting home and landing



out. In competition, what you gain in an improved climb rate could well equate to the points separating the winner and being in the mid-field.

### **Build a Mental Picture**

Before you even reach a thermal, you can start building a mental picture that will help you center and climb quickly when you get there. Typically, you will be approaching a cumulus hoping to climb. You can improve your chances of finding a thermal by assimilating all the experience gained on that day to guess where the thermal might be in relation to the cloud. Whilst on some days, thermals appear to form randomly, there are others when you can find them quite reliably. As you approach the area where you expect the thermal to be, hold the stick very lightly. Other than maintaining a good lookout, you should be totally focused on feeling which side the thermal is. If the thermal feels strong enough, turn towards the wing that's lifted.

After you have rolled and turned into the thermal, one of two things might happen: If the lift steadily improves, great. But what should you do if the lift drops into sink?

The answer depends on how good the surge felt and how desperate you are to climb. If you weren't confident of the lift when you started to turn and the clouds ahead look good, then simply roll out and get going - if you've got the height that is! However, if the surge felt smooth and solid, but you turn into sink, then you've probably turned the wrong way. At this point FORGET any distractions about what techniques to use, and resort to a mental picture. Logically, the quickest way back into the center is to do a tight 270° turn, and then re-enter. This maneuver brings you back to where you would have been if you'd turned the right way in the first place! You're now in a position to maximize your climb.

There are two widely-taught techniques, but they appear to be completely contradictory. The 'tighten on the surge' theory says that when the vario indicates the greatest climb rate, you should increase the angle of bank. In apparent contrast, the second theory says you should widen out when encountering the strongest lift. So how do we resolve this contradiction? The answer is that both theories are right, but they are appropriate in different situations.

### **Tighten on the Surge**

So, having positioned your glider in the thermal, how do you establish yourself in the center and optimize your climb rate? The answer is to use the tighten on the surge technique: when you feel the thermal pushing solidly, or the vario indicates the strongest lift, you should tighten the turn and dig the wing into the thermal. Most pilots don't turn tight enough, but of course, if you only tighten up in lift you'll end up in a spiral dive! To prevent this, when the vario indicates weaker lift or sink, you should widen the turn out to anticipate banking and pulling into the next surge.

### **Widen Out in the Strongest Lift**

Tightening on the surge is the technique for staying centered in one core of a thermal. So what is the role of the opposing technique of widening out in the lift? Quite simply, this should be used when you think there is a developing core nearby. But how can you recognize this emerging fresh bubble?

Having centered on one core, there are a few tell-tale signs: firstly, the average rate of climb drops off and, secondly, the thermal seems much stronger on one side than the other. Another core has formed, which is bumping up the side of the one you are in, and the outflow from that bubble is interfering with yours. Sometimes this is marked by birds/gliders circling or tendrils being sucked into cloud base nearby. In any case, the solution is simple: widen right out in the

strongest lift, wait a few moments, and tighten up in the emerging bubble. Then continue to stay centered in the new pulse of lift using the tighten on the surge technique.

There is a strong correlation between the width of a cumulus and the number of bubbles feeding that cloud. For example, when arriving under a vast cloud street you should expect loads of bubbles and will probably need to widen out into wind frequently when you feel a fresh surge. On the other hand, climbing under the last isolated cloud of the day, you are likely to have to rely on simply tightening on the surge to get you home.

Whichever style you adopt, if you want to climb fast, you have to keep working it all the way to the top!



Adam Woolley was born into the gliding world, being the 3rd generation in his family. Going solo at 15, his thirst for efficiency in soaring flight & quest for a world championship title to his name has never wavered. One big passion is sharing his experiences & joy with other glider pilots all around the world. Adam is an airline pilot in Japan on the B767 & spends his off time chasing summer around the globe. He has now won 7 national Championships & represented Australia at 5 WGC's & 1 EGC.

## AUCKLAND GLIDING CLUB QGP LECTURE SCHEDULE

### QGP Exams Human Factors and Radio Procedures Theory

-Sat 15th August 2020 @ 9am @ Drury

## GLIDING EVENTS CALENDAR 2020/21

### Matamata Cross Country Course

-Sat 24th Oct 2020 - Wed 28th Oct 2020

### Taupo Central Plateau (practice 31 Oct + 7 comp days 1 to 7 Nov)

-Sat 31st Oct 2020 - Sat 7th Nov 2020

### Omarama South Island Regionals (TBC)

-Sat 14th Nov 2020 - Sat 21st Nov 2020

### Matamata Northern Regionals

practice 28 Nov + 7 comp days 29 Nov to 5 Dec)

### Springfield Soaring Championships

-Sat 28th Nov 2020 - Sat 5th Dec 2020

For further info see

<https://gliding.net.nz/events/?qnz=true&other=true&type=all&timerange=future&pageView=summary>

### Matamata Air Cadet Camp

- 7<sup>th</sup> - 11<sup>th</sup> December 2020

Omarama YouthGlideNZ camp

-Thu 10<sup>th</sup> Dec 2020 - Sat 19<sup>th</sup> Dec 2020

Matamata Sailplane Grand Prix (4 comp days 27 to 30 Dec)

-Sun 27<sup>th</sup> Dec 2020 - Wed 30<sup>th</sup> Dec 2020

Omarama Nationals (practice day 01 Jan + 9 comp days 02 to 10 Jan inclusive)

-Fri 1<sup>st</sup> Jan 2021 - Sun 10<sup>th</sup> Jan 2021

Auckland Enterprise (practice day 16 Jan + 7 comp days 17 to 23 Jan inclusive)

-Sat 16<sup>th</sup> Jan 2021 - Sat 23<sup>rd</sup> Jan 2021 @ Drury

Matamata Club Class and MSC (practice day Fri 29 Jan + 9 comp days 30 Jan to 7 Feb)

-Fri 29<sup>th</sup> Jan 2021 - Sun 7<sup>th</sup> Feb 2021

*Printing Conventions: Any contribution will have the author's byline; Anything in Italics is either a byline or an editor comment; Tailpiece is the editorial.*

## Duty Roster Jul, Aug, Sep 20

Month	Date	Duty Pilot	Instructor	Tow Pilot	Notes
Aug	15	G LEYLAND	R BURNS	P THORPE	
	16	I O'KEEFE	I WOODFIELD	F MCKENZIE	
Aug	22	M MORAN	A FLETCHER	A WILLIAMS	
	23	T O'ROURKE	R CARSWELL	R HEYNIKE	
Aug	29	R BAGCHI	L PAGE	R CARSWELL	
	30	T PRENTICE	S WALLACE	P THORPE	
Sep	5	R WHITBY	P THORPE	D BELCHER	
	6	I BURR	R BURNS	F MCKENZIE	
Sep	12	C DICKSON	I WOODFIELD	A WILLIAMS	
	13	K JASICA	A FLETCHER	R HEYNIKE	
Sep	19	J DICKSON	R CARSWELL	P THORPE	
	20	B MOORE	L PAGE	D BELCHER	
Sep	26	S HAY	S WALLACE	R CARSWELL	
	27	K BHASHYAM	R BURNS	F MCKENZIE	