

WARM AIR 17 Nov 18

Aviation Sports Club Gliding Newsletter

THIS WEEKEND:

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Saturday

Instructing: Ray Burns

Bank Acct 38-9014-0625483-000

Towing: Peter Thorpe

Duty Pilot: Rahul Bagchi

Sunday

Instructing: Rex Carswell

Towing: Graham Lake

Duty Pilot Rudolf Struyck

MEMBERS NEWS

SATURDAY *Instructor Ivor Woodfield gets to start*

Rain had been forecast for early Saturday, although the sky was clear as the sun rose. As we were hosting ATC cadets for a day of flying I set off very early to open up. Nevertheless the key had been collected much



earlier and the tow plane was in the air when I arrived .. something about training? People quickly gathered, and by 0900 the twin GMW was being inspected, the caravan was set up and the cadets were starting to arrive. Peter Thorpe would be flying the self launching ATC Grob twin GNW all day, and while things were being set up, he was at the other end of the field getting GNW ready. With some evidence that lift was about, some singles were also dragged out and once GNW arrived at the 26 threshold we were ready to go.

First launch of a glider was at 1015 with the first of 8 cadet flights in GMW. Overall there was lift available throughout the day, although it did decline after about 1600, and most flights were 25-30 minutes.

While these flights were happening, there were a further 9 cadet flights in GNW, so overall a very successful day for cadet flying. The response from all involved was very positive, and it was a real pleasure working with this group of young people.

Also during the day there were 3 single flights, Rahul Bagchi and Isabelle Burr in GVF and Graham Lake in GIV, with Graham getting the longest flight at 63 mins. There was also one trial flight leading to a very happy convert to gliding, and a potential glider pilot in the making.

Simon Hay went up for a circuit late in the day as he had not been able to fly for a while, and demonstrated some good flying with a well planned and executed circuit and landing.

Last flight of the day was by Dave Todd who took a friend up for a flight in GMW. He was able to make good use of the last bits of lift, touching down just after 1700 out of a smooth blue sky.

We soon had everything packed away and most people were drifting away, although a small group did gather around to discuss the issues of the day :-) All locked up and done by 1745 at the end of a great days flying. Altogether a total of 24 flights over 7 hours.

Peter Thorpe adds.....On Saturday we had 40 SQN ATC cadets to fly and as the Pegasus Trust owned Grob 109 motor glider was finally back on line I was able treat five cadets and two adult helpers to the joys of self-launching glider flying. The weather was fine, the cadets were keen and polite and all went very well until an unusual noise from the engine compartment when taxiing back to the caravan caused us to look under the bonnet and discover a broken alternator attachment bolt. So back to the hangar and off with the engine cowls to let our



engineer, Ian Williams, work his magic. Fortunately he was able to extract the broken portion of bolt so he will be able to replace it and have the glider ready for static display at Warbirds open day next Sunday.

The supposed to be Towie Graham Lake..... Hmmm... supposed to be, but hardly at all, as newly minted towpilot instructor, Rex Carswell, stole my ride under the guise of training the new tow pilot, Andrew Williams. I did get a couple with some excuses about briefing and they wanted lunch. The last bit was announced as I had just taken the first bite of my lunch.

I did what any self respecting Libelle owner would do, hauled her out of the hangar and up to the MAD shack for a wash. This was prelude to a polish. I was soon surrounded by some lovely young ladies who insisted on helping. One could assume good looks as the cause of this but a ride in the towplane and being "voluntold" by boss lady Annette are far more believable explanations. We had barely started when I was called away to do a tow, the other two



seemed to be on a long lunch. No problem taking one of the cadets up with me and we soon vanished into the sky. On the return I found IV all alone...and all shiny. A few little touch ups here and there and it seemed only right I should go flying. Andrew and Rex dropped me straight into a thermal and I managed 63 minutes for the longest flight of the day. It seemed only the decent thing to help wash the towplane at the end. Many thanks to the cadets for the help polishing the mighty Libelle and for your company all day.

SUNDAY

And Peter Thorpe again...this time a Duty Instructor.....Tow pilot Derry Belcher was waiting at the gate (unusual for a tow pilot) when I arrived so we were soon into the routine of preparing the fleet for action. Geoff Leyland, Matt Moran, Roy Whitby, Neville Swan, Rahul Bagchi and Tony Prentice all appeared along with Ian O'Keefe and Steve 'Hawkeye' Foreman who were hoping to rig their high speed pursuit ships and vanish cross country. Alas, the actual weather was not as forecast by the mysterious (to me) RASP on-line forecasting thingy being 8/8 overcast with lower cloud at 1500ft while the AKL ATIS gave the surface wind as 120/06 and calm at 2000ft.

We set up on 08 and although there were signs of rain to the west we were ready by 1130 so Geoff Leyland and I launched to do some steep turns. We could not get above 1500ft and after some steep turns we were soon at 900ft in the downwind area so a non-standard rejoin had us back on the ground in eight minutes. Tony Prentice wanted to refresh his back seat rating so a quick circuit to 1000ft was soon done.



I then took Derry's daughter's partner for a trial flight. There was some light misty rain around but not enough to stop flying however on aerotow at 70kts indicated MW was wallowing like a drunken sailor. I looked at the wings and could see a thin film of moisture, not enough to form globules but it sure was enough to adversely affect handling and climb rate. The glider was difficult to control with some snatching of the ailerons (jerky feedback) so the lesson here is that MW does not like wet wings and/or slow airspeed when on tow and if at any time you have difficulty with control call the tow plane for more speed.

Matt Moran and Rahul both took MP for a fly but even though there were now blue holes in the cloud cover the best time was only 12 minutes from a 2000ft tow so everyone lost interest in flying and we packed up at 2pm. Hawkeye finished polishing the wings of his glider and moved out so that we could put the club aircraft to bed and after a wee chat around the table by the caravan we headed home. Just five very short flights for the day.

FAREWELL TO CRAIG ROOK

One of our long serving towies, Craig Rook has decided it's time to do something else. Craig started in 2004 and has been a towie for some 15 years. Thanks for your friendship and the towing over the years. We hope to see you back some day.

ANDREW WILLIAMS - OUR NEW TOW PILOT

Hi, I'm Andrew and am excited to be getting involved with the club here on base. Graham asked me to write a bit about myself for Warm Air which I have been reading for the last few years. My dad was in the Army, so as a family we moved around a lot, spending some time in Auckland, Waiouru, Australia and Europe. We'd always go back to Taupo for holidays though so that's where I like to think I'm from. I studied Biology and Geography at Uni in Auckland and then moved to Taupo where I worked on town planning and tourism development while exploring the forests and mountains on foot and by snowboard. I have always been interested in planes but it wasn't until I was 25 that I started to fly, getting my PPL in a Cessna 172. I finished it a week before I went overseas to travel for a few months and when I got



back I got a job in business development in Hamilton. There I joined the aero club and picked up a couple more type ratings including the local microlight club's Bantam, which was a lot of fun to fly around the farm strips of the Waikato.

Despite my dad being in the Army (or maybe because of that) I was always interested in joining the Air Force, so one day I decided to do it before I couldn't keep up with all the youngsters on basic training. I initially joined as a chart and map maker (my Geography background there), and nearly eight years later I now work in mission support at 5 SQN, briefing and debriefing crews.

I've found time to keep flying at the Power Section, entered a couple of air races (including one with ex-towie Jamie Wagner), did some skydiving for a while and completed a CPL. I'd like to become an instructor one day because I've heard that teaching something is a great way to really learn about it properly and like having something to work toward.

Saturday was my first day learning to tow and I had a blast! RDW is very zippy so I have to remember to keep the turns nice and gentle, at least until after the glider has released! It was refreshing and interesting to do non-standard joining procedures and circuit patterns. I haven't done much gliding myself yet, only a few flights in Taupo and I'm keen to try a bit more. I'm looking forward to meeting everyone in the club, hearing your stories and learning more about the art of flying without an engine.



THERE IS A KNOT IN HERE.....AT THE END OF THE SPLICE.....AND WE TOWED WITH THE ROPE LIKE THIS. Be careful, have a good look and feel. This was hard to see and impossible to get out. Neville cut the section out and respliced.

CFI CORNER

Airspace

Check your maps. G156 extends from the airfield to Albany Village. If you are over Lucas Creek, (the one to the east of the prison) or Herald Island, you are outside of G156, so your ceiling is 2500 feet. Paremoremo Rd (which runs along the ridge line to the west of Lucas Creek) is a better ground marker for the eastern boundary than Lucas Creek.

Lookout

I've been thinking about lookout (again). Lookout is a function of Perception (seeing something), Decision (deciding what to do) and Response (doing something).

Have you heard of the "Big Sky Theory"? Wikipedia has this to say:

In aviation, the Big Sky Theory is that two randomly flying bodies are very unlikely to collide, as the three-dimensional space is so large relative to the bodies. ... It does not apply when aircraft are flying along specific narrow routes, such as an airport traffic pattern or jet airway.

And I would "or in a thermal or on approach"

I've also been reading an article from the ATSB called "Limitations of the See-and-Avoid Principle" (The full article can be found at https://www.atsb.gov.au/publications/1991/limit_see_avoid.aspx).

A lot of the items found in this article you will have heard from Jonathan, but I want to give just a short precis:

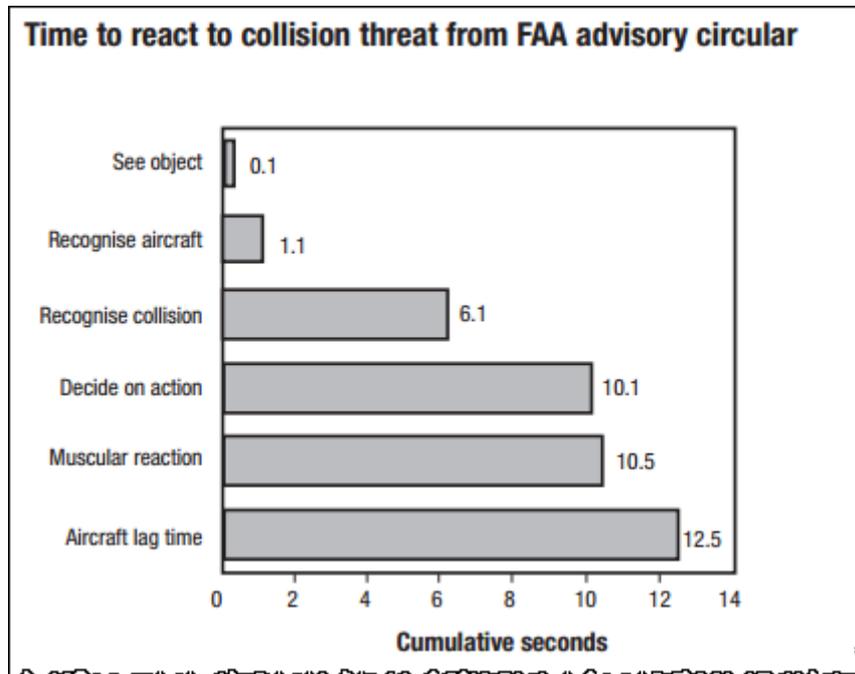
It might seem obvious, but the point is worth making: The first part of the see-and-avoid principle is you need to look outside the cockpit. It's worth re-iterating that we need to have our eyes outside the cockpit and away from the instruments - MOST (e.g. 90%) of the time.

Once we have looked out, there are a number of limitations to consider (text in italics are direct quotes):

Field of Vision	Most people have a field of vision around 190 degrees. It starts to contract at about age 35, and this contraction accelerates markedly after 55.
Obstructions	We are a lot better off in most gliders than our power friends; our cockpits don't have door pillars and the like to block our view. However, we are blind below and behind. If you are flying a two-seater from the rear, then there are a number of obstructions to consider: A head right in front of you being first and foremost. Visibility from the rear is definitely not as good as from the front. Dirt on the windscreen is really another obstruction and easily fixed by cleaning the canopy (!)
Glare	<i>When the glare source is 5 degrees from the line of sight, visual effectiveness is reduced by 84 per cent. In general, older pilots will be more sensitive to glare.</i>
Blind spot	We all know that each eye has a blind spot that the brain compensates using binocular vision. Did you know that the blind spot increases to 18m (the size of a glider) at 200m (a comfortable turning diameter)?
Accommodation	(The process of focussing on a subject): <i>A young person will typically require about one second to accommodate to a stimulus, however the speed and degree of accommodation decreases with age. The average pilot probably takes several seconds to accommodate to a distant object.</i>
Empty field myopia	This is the tendency of the eye to focus at about half a metre when there is nothing else to look at.
Mandelbaum Effect	The eye can be "trapped" at the at-rest focus ($\frac{1}{2}$ metre). <i>...dirty windscreens are particularly likely to produce the Mandelbaum effect.</i>
Background Contrast &	How many times have you tried to find a helicopter? They are nearly always below us and we are trying to see them against the ground and houses. This is most difficult.

Contour interaction.	Think of the helicopter pilot - trying to see a white glider against a cloud.
Lack of relative motion	The eye is much better at detecting objects that are moving than objects that <u>appear</u> to be stationary. When we are on a converging course with another aircraft the target may well appear to be stationary in our vision.
Small visual angle	When on a head on collision course with another aircraft, the angular size (i.e. how big the a/c looks in our vision) is tiny until just a few seconds before impact.

A particularly interesting graphic from the ATSB's report is this one:



Two gliders travelling at 60 kts will cover 2,500 feet in the time it takes to react. If you were up with the big boys and on a collision course with a 737 closing at 400kts, you cover well over a mile in that time.

Things that make all this worse:

- Fatigue
- Dehydration
- Hypoxia
- Workload (e.g. trying to centre in a thermal)
- Stress (maybe I left my circuit a little late and I'm now making an approach lower than I really should be)
- Overheating
- Age - just about all of our physical attributes are deteriorating! - Vision and reaction time included.

Therefore : Apply the IMSAFE, keep a good lookout, allow for your age, clean the canopy!

Month	Date	Duty Pilot	Instructor	Tow Pilot	Notes
NOV	10	S HAY	I WOODFIELD	G LAKE	40 Sqn ATC
	11	M MORAN	P THORPE	D BELCHER	-
	17	R BAGCHI	R BURNS	P THORPE	
	18	R STRUYCK	R CARSWELL	G LAKE	
	24	K JASICA	L PAGE	C ROOK	
	25	G LEYLAND	I WOODFIELD	R HEYNIKE	
Dec	1	J DICKSON	R CARSWELL	R HEYNIKE	
	2	K BHASHYAM	P THORPE	D BELCHER	
	8	I O'KEEFE	S WALLACE	R CARSWELL	
	9	T THOMPSON	L PAGE	G LAKE	
	15	T O'ROURKE	R BURNS	C ROOK	
	16	R BAGCHI	I WOODFIELD	F MCKENZIE	
	22	J POTE	R CARSWELL	F MCKENZIE	
	23	T PRENTICE	P THORPE	D BELCHER	