

LUKEWARM AIR 23 April 2022

Aviation Sports Club Gliding Newsletter

THIS WEEKEND:

www.ascgliding.org

Bank Acct 38-9014-0625483-000

Saturday	Instructing:	S WALLACE
	Towing:	G CABRE
	Duty Pilot	R BAGCHI
Sunday	Instructing:	R BURNS
	Towing:	P THORPE
	Duty Pilot	T O'ROURKE
Monday	Instructing:	L PAGE
	Towing:	R HEYNIKE
	Duty Pilot	M MORAN

Lukewarm Air's thoughts.

Having a 'Plan B' is a fundamental aspect of our sport. Hitherto, our newsletter has had no 'Plan B': 'Warm Air' had to produce and mail 'Warm Air' on time each week, no exceptions allowed. This 'Plan B' for the ASC Newsletter is similar to some 'Plan B' outlandings: You walked away, and used the glider again, but it could have been a lot better.

Plan B, *Lukewarm Air*, will ensure all the weekend reports are published every week, even if the formatting leaves a lot to be desired.

MEMBERS NEWS

In Lukewarm Air this Week;

- Club News
- Weekend Reports
- This week's thought
- Logan goes solo
- Historical note: A G6 4 re-appears
- And finally...
- Roster

Thank you for the pictures, stories and contributions from members.

Club News

Weekend Reports

Friday 15th: Lionel reports

After a little understandable confusion re flying on Friday, it became apparent that it was all on. I arrived early having by passed the coffee shops as they would be closed. I found Jonathan and Craig patiently waiting at the gate. We got MP's trailer ready and waited for a few more bodies before rigging. Peter, who was standing in for Derry arrived, take away coffee in hand - damn they were open..... Other members arrived and soon there were enough people to help rig GMP.

A while later, kind Adam in the tower granted permission to drag everything down to the 08 end and commence gliding. This was done and since I had not flown for a while, I went for a refresher with Jonathan as ballast. (He did not seem to mind being ballast.) Next up was Jonathan's actual flight when we managed to eek out some lift and got the longest flight of the day. Nick furthered his training with some nice aero-towing and introduction to circuits. Alex and Craig aired newly assembled GMP. As there really was no lift under the enormous high pressure, we finished up at 3pm and headed to club rooms for a cool drink.

Nice day and excellent start to the long weekend. Thanks everyone - another great, safe day's flying.

Friday 15 April Tow Pilot Report

Peter Thorpe recalls Friday: Duty Instructor Lionel Page and gate guardian Jonathan Pote were at the field well before me on what was a pleasant autumn day with scattered cloud and a 10 kt SSE breeze. This put us on 08 so we all headed to the other end of the field and were ready to launch by 1140. First flight was Jonathan and Lionel in NF but the air was pretty dead as it took us 9 minutes to reach 1500ft. The next flight with the same crew was to 2000ft and only took 8 minutes so in that half hour some thermal activity had started. Lionel made two flights with new member Nick Vyle, a third flight with Jonathan while Craig Best had two trips in MP and Alex Michael one. A very pleasant day's flying for the tow pilot in smooth conditions with very little cross wind and a total of eight launches. We had retired to the club rooms by 1600hrs and spent a very pleasant late afternoon sitting outside in the sun chatting.



Alex readies 'MP whilst Rescue 4 aims at the Seasprite

Saturday 16th – Steve Wallace reports

Forecast was for light easterlies on the ground and the same up top. This was confirmed by the ATIS which advised 5kts at ground level and 3kts variable at 2,000'. What was changing was the ATIS QNH which started at 1021 Bravo and by the end of the day was 1018 Echo. So was falling at a rate of about 1 HPa / hr which was really the only indication of some approaching bad weather. It was a busy day in the twin with two training flights for Rahul and two training flights for Logan (plus one that didn't get off the ground) before Logan was set free to complete his first solo flight. Congratulations Logan, well done! Logan even had to be called down from 2,700' after 30 minutes of soaring due to the imminent arrival of the Boeing 757 and list of tows that still needed to be complete before our 4pm curfew. One of these was a trial flight for potential new member Yuan, who indicated he was keen to come back after a nice 30 minute flight in the late afternoon convergence.

Other flights were Ray in BU and Tony in BD who were wanting to flight test their new ADS-B installations. Craig and Alex also took turns and blowing the cobwebs out of MP and taking advantage of the lovely Easter weather.



A crowded view with the team busy rigging 'IV

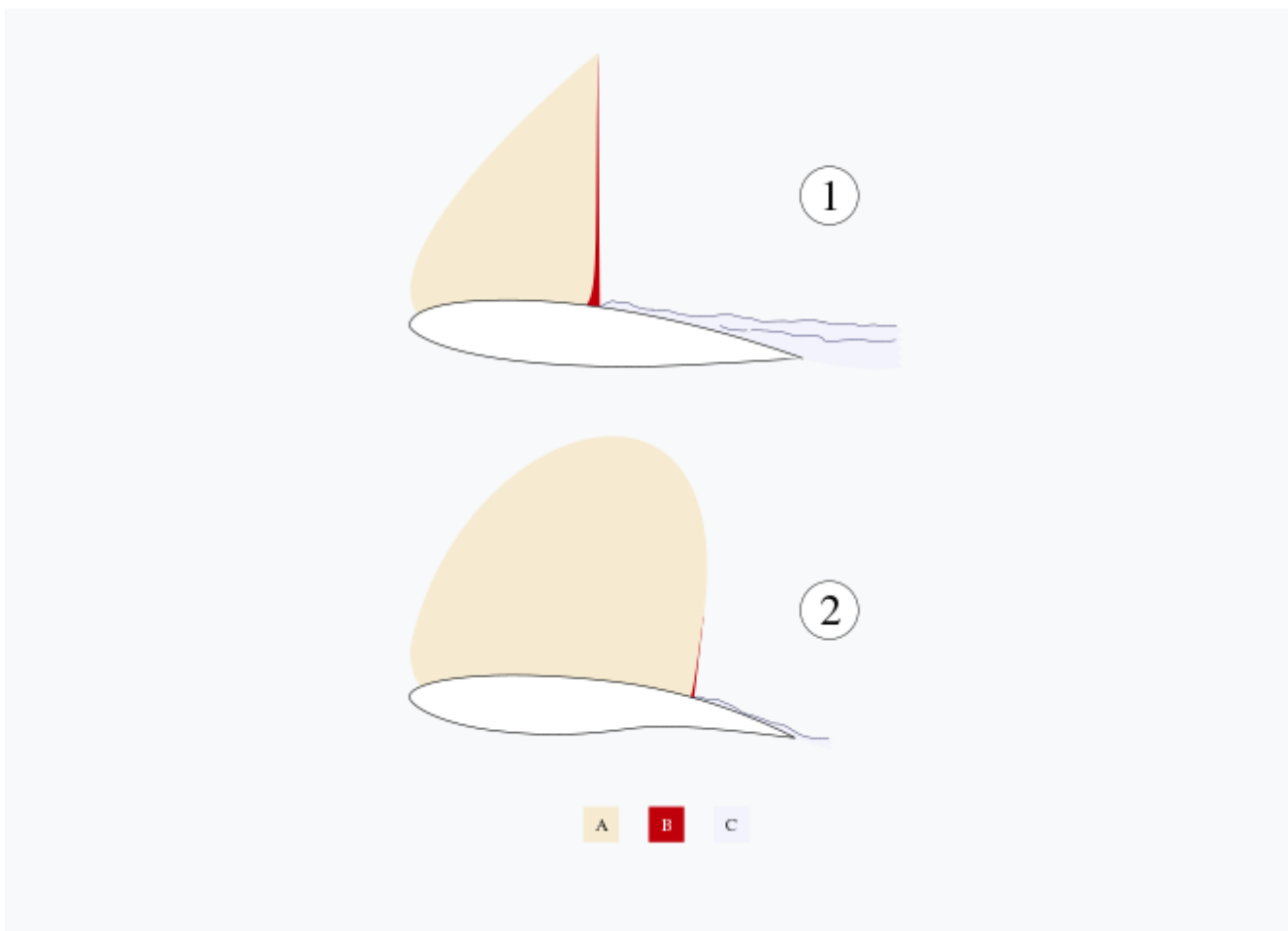


A homesick angel

With 380 kN thrust, and supercritical airfoil wings, this Boeing 757 could tow every glider in New Zealand at once. Note how the supercritical airfoil section mimics that of some gliders. As with winglets, gliding got there first!

It is worth remembering that the B757 is the only twin-engine airliner classed as a 'Heavy' for traffic separation on landing or take-off. All other 'Heavy' airliners are four engine. Avoid the vicious vortices!

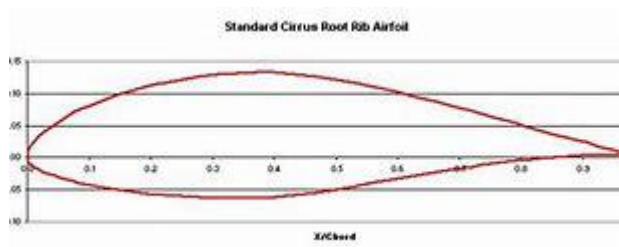
This week's thought: Super-critical airfoils:



Conventional (1) and supercritical (2) airfoils at identical free stream Mach number. Illustrated are: **A** – supersonic flow region, **B** – shock wave, **C** – area of separated flow. The supersonic flow over a supercritical airfoil terminates in a weaker shock, thereby postponing shock-induced boundary layer separation.

A **supercritical airfoil** (**supercritical aerofoil** in British English) is an **airfoil** designed primarily to delay the onset of **wave drag** in the **transonic** speed range. Supercritical airfoils are characterized by their flattened upper surface, highly **cambered** ("downward-curved") aft section, and larger **leading-edge** radius compared with **NACA 6-series** laminar airfoil shapes.^[1] Standard wing shapes are designed to create lower pressure over the top of the wing. Both the thickness distribution and the camber of the wing determine how much the air accelerates around the wing. As the speed of the aircraft approaches the **speed of sound**, the air accelerating around the wing reaches **Mach 1** and **shockwaves** begin to form. The formation of these shockwaves causes wave drag. Supercritical airfoils are designed to minimize this effect by flattening the upper surface of the wing.

Editor's note: OK, it is not quite the same as the Standard Cirrus Roof Rib Airfoil, which generates lift mainly on the prominently curved upper surface (higher speed airflow creating lower pressure) plus the downthrust from the reflex undersurface.



Logan's First solo:

I went solo for the first time this Saturday. I rocked up not expecting to be allowed to solo having been power flying in Dunedin since February but I went for a 20 minute morning soar with Steve, which included spins and stalls and once we landed he was satisfied enough to let me solo. After Steve was seen having an extended chat with Ray and after we practised low acceleration on takeoff I got the go-ahead.

As soon as the ground roll started I was heard yelling some choice words inside the cockpit. The tow went off without a hitch and I could definitely feel the clouds working. Rex very nicely dropped me off into some lift at 2000ft which I very quickly lost. I saw a pretty good looking street over the other side of Riverhead forest so started making my way over, thinking if there was nothing I would head right back. What do you know but after flying through sink all the way over I found myself thermalling in lift that was getting up to 7-8 knots. Needless to say, I quickly found myself just below 3000ft heading up and down the street. Which I was quite content doing for half an hour before I started remembering hearing Steve say something about a 757 movement. Right then tower hopped on and told me a 757 was coming in and that I could land now or land in 15 minutes but not in-between. Hopeful, I called glider base to see if I could stay up. Unfortunately, NF had prior commitments so it was brakes open and back down to the ground for me whereupon landing I was greeted by the welcoming party for photos and congratulations. Thanks so much to all the instructors for getting me to solo.



Logan's triumph



Good height gain and in balance



Home again



No ice bucket in the civilised ASC, Just a handshake

Sunday 17th Reports

Ivor: Sunday dawned dry but blustery, with a fair amount of blue sky, which was forecast to deteriorate throughout the day. Before too long we had a couple of people keen to fly, so set about preparing the aircraft, and with clearance from the tower we moved to the far end and made ready to fly.

First up was Logan Chalmers, keen to follow up on his first solo from the previous day. We climbed to 1500' in a turbulent and gusty sky, with Logan handling the conditions well. Having completed the tow we settled into a plan to arrive at the start of downwind at an appropriate height, having let the tower know we would soon be joining the circuit. The air was clearly unsettled, and the shear on approach quite noticeable, all of which Logan handled well. We had extra speed on, given the conditions, which proved a good decision as we were subjected to some sudden downdrafts half way down the final leg. Nonetheless, Logan flew well, and executed a good, well controlled landing. As we walked back to the caravan we discussed a possible second solo for Logan, and agreed that conditions would need to improve first.

Shortly after we landed Alex Michael launched in GMP, but not before some discussions about the conditions and what to look out for. He launched well and was soon establishing a little downwind, but close enough to get back to the field in the strengthening conditions. Jonathan Pote and I then launched in the twin, with Jonathan coping well with what were becoming steadily more turbulent and variable skies. We were soon aware of the increased wind speed above 2000', and the challenge of finding and staying in any thermals that we found. While looking around we heard Alex make the request to join into Base from where he was, and a little later the tower warned about some significant shear on the approach, which Alex confirmed shortly after landing. Descending through 1500', Jonathan set course for the start of downwind, and then as it became clear we would not get there in the strong Easterly we were now experiencing, also opted to join directly onto Base. He kept extra speed on in the circuit, and controlled his descent on finals well, but still experienced shear that at times caused significant airspeed loss, making the approach especially tricky. Nonetheless, he kept his cool and made a great landing right on the threshold.

Having got safely back on the ground, and following discussions with the tow pilot, it was clear that the conditions were very far from ideal, and I made the call to end flying for the day, something that everyone agreed with. We therefore packed up and headed back to the hanger, but not before having to jump-start the yellow tractor after it suffered a flat battery.

Once everything was packed away in the hangar, and after some technical discussions about trolley design for one of the gliders, we headed off to the clubroom for some much needed hydration and storytelling. It was some time before we were locking up finally and heading home, with the wild weather continuing around us.

Monday 18th: Less said the better, but at least our gardens benefited. Who needs a met service? The QNH fall was just as good at over the horizon prediction.

Historical note: A Göppingen Gő 4 Goevier has ‘surfaced’ in Holland and moved to the Dutch transport Museum. Designed just before the War, this side-by-side trainer had an L/D of 19, marginally better than the single seat Grunau Baby. PH-178 was built post-war (1948) and last flew thirty years ago.

In a flight covering 1–3 June 1939, Josef Fűringer and Hofmann flew a Goevier to a new world duration record of 49 h 45 min.^[2]

A Goevier was used to develop the now ubiquitous [Schempp-Hirth airbrake](#) with its [parallel ruler](#) action.^[3]

During [World War II](#) the Goevier was the standard advanced trainer with both the [National Socialist Flyers Corps](#) and the Werrmacht Luft gliding units.^[1]



And finally...



Some cockroaches have no taste

(And some editors cannot rotate an image...)

Duty Roster For Apr,May,Jun

Month	Date	Duty Pilot	Instructor	Tow Pilot
Apr	2	E-LEAL SCHWENKE	I-WOODFIELD	P-THORPE
	3	R-MCMILLAN	R-BURNS	R-HEYNIKE
	9	A-MICHAEL	A-FLETCHER	G-CABRE
	10	R-WHITBY	S-WALLACE	F-MCKENZIE
Easter	15	C-DICKSON	L-PAGE	D-BELCHER
	16	K-JASICA	S-WALLACE	R-CARSWELL

	17	J DICKSON	I WOODFIELD	P THORPE
	18	S HAY	A FLETCHER	R CARSWELL
Anzac Weekend	23	R BAGCHI	S WALLACE	G CABRE
	24	T O'ROURKE	R BURNS	P THORPE
		M MORAN	L PAGE	R HEYNIKE
	30	I O'KEEFE	P THORPE	R CARSWELL
May	1	K PILLAI	A FLETCHER	D BELCHER
	7	K BHASHYAM	I WOODFIELD	F MCKENZIE
	8	T PRENTICE	S WALLACE	P EICHLER
	14	C BEST	R BURNS	G CABRE
	15	E LEAL SCHWENKE	L PAGE	P THORPE
	21	R MCMILLAN	P THORPE	R HEYNIKE
	22	A MICHAEL	A FLETCHER	P EICHLER
	28	R WHITBY	I WOODFIELD	D BELCHER
	29	C DICKSON	S WALLACE	F MCKENZIE
Queens Birthday	4	K JASICA	R BURNS	R CARSWELL
	5	J DICKSON	L PAGE	G CABRE
	6	S HAY	P THORPE	D BELCHER
	11	R BAGCHI	A FLETCHER	P THORPE
	12	T O'ROURKE	I WOODFIELD	P EICHLER
	18	M MORAN	R BURNS	D BELCHER
	19	I O'KEEFE	S WALLACE	F MCKENZIE
Matariki	24	K PILLAI	L PAGE	R CARSWELL
	25	K BHASHYAM	P THORPE	R HEYNIKE
	26	T PRENTICE	A FLETCHER	P EICHLER