

WARM AIR 13 November 2021

Aviation Sports Club Gliding Newsletter

THIS WEEKEND:

www.ascgliding.org

Bank Acct 38-9014-0625483-000

Saturday

Instructing: CFI will arrange with available tow pilots and instructors

Towing:

Duty Pilot

Sunday

Instructing:

Towing:

Duty Pilot

MEMBERS NEWS

- *In Warm Air this Week;*
- *Club News*
- *Get Your Motor Running Dimona*
- *Roster*

Thank you for the contributions from members.

Club News

CFI – Ray Burns Reports

6 Nov 2021.

Holy Aviation, Batman! We flew!!!!

First thing: A huge thank you to Gus for moving heaven and earth to get us flying. We all owe him big time. If it weren't for his "tee-totalness" he would never have to buy another beer!! At least he should be kept in soft drink for some time.

Peter, Lionel and myself extracted the 109 and got some badly needed practice. Peter, Gus, Derry and Fletch all got current in the FK9 and Ivor, Issy, myself and Lionel all flew one or other of the singles. Tony joined us and got BD into the air once more.

What's the plan for this coming week?

We are hopeful that OUTSIDE groups will be extended to 25. If this is the case, Gus will put this to the authorities on base and we expect to increase our limit from next weekend. We very rarely get this many people on the airfield at once so (assuming the 25 number is approved) I am not planning on creating any kind of "roster" of those that can fly next weekend.

However: We are still bound by ALL other aspects of the SOP. Please ensure you read them carefully before coming out. I am reluctant to summarise those SOP's because all of the points are important. However, don't forget:

- You must be double vaccinated
- Stay physically distanced while on the field
- One person in the caravan at a time
- All surfaces to be cleaned between users (wipes and spray in the caravan)
- Sanitise your hands. (Sanitiser in the caravan).

The big disruption will be the continued inability to fly dual. We will have to wait and see when that will be removed. I understand that is very painful for



those of you that are not yet solo or require some solo time before being able to fly solo again. I can only commiserate with you. My own power flying is being similarly affected.

Finally, I would like to share with you some comments from Glenn Sycamore who in turn was sharing comments from Dave Brown. I know most of these are power related but I have underlined the ones that apply to us just as well as anyone else:

If you decide that you would like to fly then please read the following advice our resident A Cat and CAA flight examiner, Dave Brown, gave to the NZ Warbirds pilots this week:

- Lack of currency often leads to distractions and errors like checks getting missed. So make sure you give yourself plenty of time to get the aircraft out, fuelled and preflighted.
- Remember that it's spring and birds are nesting, so have a good look around the aircraft and under the cowls to check for nests.
- Take some time to review local procedures, frequencies etc before you get into the aircraft.



Some frequencies have changed recently, so after a long break, muscle memory may take you back to the old frequency.

- Use a checklist if necessary.
- If the engine hasn't been run for a while, let it warm up properly before you do the run-up, and do a high power check before you commence your takeoff.
- Once airborne, you may find that there are a number of other aircraft around with pilots who're also not very current – distractions tend to bring heads into cockpits to the detriment of lookout, so make a conscious effort to get your lookout going.
- Once back in the circuit, remember that a go-around is as normal a manoeuvre as landing. So if the approach isn't looking good, give it away, go around and try to achieve a better approach on the next one.
- Remember that it's not over until the aircraft is back in the hangar. Avoid the temptation to relax after landing.
- Also remember that we do it because we enjoy it, so we don't want an unnecessary incident ruining the experience!

Reports from members

From Roving Airfield Reporter Mr Pote

What a fantastic return to WP - great company with long flights in magnificent weather, every usually rigged glider (5) flown plus two rigged just for the weekend.

Eighteen Club members signed in over the weekend (with at least five more 'dead certs' on the old membership sheet), so despite covid, the Club is in great health.



Unrecognizable Members introducing themselves to each other behind masks and long hair. Izzy had competition with the longest locks apparently

From Roving thermalling Reporter Steve Wallace

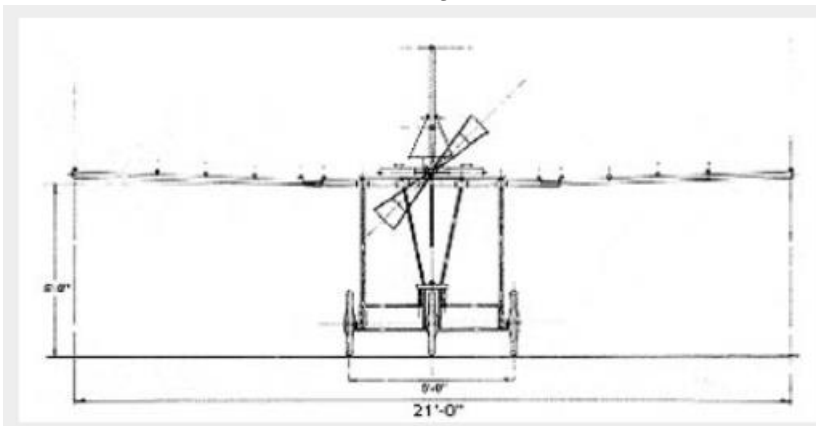
Please find attached some photos of the lovely convergence flying that was to be had for those lucky enough to be rostered onto the airfield on Sunday.



Photos are;

- Warkworth
- Kaipara Flats airfield
- Overdevelopment between Warkworth and Wellsford
- My house in Millwater

Kazik came across this interesting website and article



A bit of NZ aviation history <https://www.nzedge.com/legends/richard-pearse/>

The following article is kindly shared by permission from Ian Williams, Glider / Tow Pilot and Engineer from the Auckland Gliding Club. We see Ian fly into NZWP now and then to service the Grob 109 and pick some of us up from land outs at other airfield during competitions.

The Dimona GCB

I thought the background about this motor glider would be of interest to some readers. Actually, this story is in two parts. The first part relates to GCB (which I will try and keep short but probably won't) and the second part is the acquisition of the current rebuild from Australia, which is really quite entertaining.



GCB at Omarama

That will have to wait for the next edition, provided the editor doesn't bin it. So, to the Dimona GCB I first heard about this aircraft when doing a Class 2 NZG engineers' course at Hororata with Roger Harris, quite a few years ago. Roger talked about it as he had previously carried out some superficial fiberglass work on it. It

was in Greymouth, owned by a bloke called Dave, an Engineer there. At the time I was in the Grob 109 syndicate (GOC) and had recently completed quite a significant refurbish on it, so the whole motorglider concept really appealed to my personal kind of aviation passion.

Around that time, I had a client in Karamea to visit, so I figured that a slight detour to Greymouth was possible, really just to take a look. Having previously flown a Dimona in Australia (VH-GIX), my interest had already kicked off. Swinging by Greymouth airport, sure enough, in the back of a hangar was this forlorn looking Dimona - in bits. It had been parked there for around 20 years and looked like it. However, a close inspection did not reveal any significant structural issues. There were quite a few superficial dings and the engine smelt like a 100- year-old Model A Ford – that is, a mixture of old grease and oil, combined with a smell of mouse turds and dust.

To give you some background; this Dimona (S/N0 3537; Thai no 537) was one of 10 purchased by the Royal Thai Air Force in 1982, for initial cadet training. They had been in service for approximately 10 years. However, GCB had an apparent engine failure and landed in a paddy field, damaging the undercarriage. This was a year prior to the others being taken out of service. We didn't know it at the time but the Limbach L2000 engine had been sent back to the factory in Germany and had been overhauled. On disposal, nine of the 10 were purchased by an Aussie and relocated to a warehouse in Brisbane. The 10th remained in Thailand as a museum display. Of those nine, one went back to Germany, one to the USA, and of course GCB to New Zealand. The rest remained in Australia. Interestingly, the two Dimona's I brought back from Aussie were also ex Thai Air Force (VH GNW and VH-WWW).

So, to cut a long story short, I offered to restore it for the owner for a set sum, less materials, as I really wanted more fiberglass work experience, which he accepted. After a year or so the owner developed some significant health issues and asked me if I would like to buy it. So that is when Tony Noble, Conal Edwards, Jonathan Cross and I became ¼- shareholders.

Back to the story – a few weeks after my first visit, and sweet-talking the Club into borrowing the PW-6 trailer, I saddled up my trusty Toyota Hilux and proceeded to Greymouth. Loaded all the bits - engine and prop in the back of the truck, wings flat on the trailer, fuse on two brackets bolted to the trailer (yep, I was responsible for those four holes!) and the tailplane on the roof rack, we set off back to Auckland. Interestingly, driving through the night to Blenheim, taking the back route via Tophouse and St Arnaud, and just passing the gate of the Nelson Gliding Club in the middle of the night, the trusty Hilux clicked

over exactly 500,000 Km! The restoration took about four and a half years of essentially part time work, during which I really learnt a lot. There was a lot of support and help from various people. Two that stand out are Ron Simmons (with painting and finishing) and Allen Trump, who redesigned the engine cooling baffles. Allen's work resulted in the engine running much cooler than the original design. Their input was highly valued. Sailplane Services also carried out some fiberglass repair work as well as the replacement of all 10 sets of the linear aileron push rod bearings - not a five-minute job. To expand that somewhat, GCB was an early production Dimona where the "up" aileron control put the aileron push rod in tension. At cruise speed, both aileron's combined "up" load is surprisingly high, resulting in the aileron push rods being subjected to an increasing compressive load. To overcome this, five linear bearings are used in each wing to try and keep the rods straight under this compressive load. Later aircraft were changed so this load is in tension, so only three linear bearings are required per wing. As a further complication, each aileron bearing set in GCB consists of three ball bearings in a housing around the push rod. These bearings are contained in an entire outer bearing ring made from nylon. Maybe OK initially, but nylon absorbs moisture and over its time in the Thailand heat and humidity, all 10 of those bearing sets had expanded and seized. Fortunately, a complete replacement set was obtained from Diamond Aircraft and installed by Sailplane Services. Corrosion was also an issue I had to address, as the aircraft had spent many years operating close to the sea. This was mostly surface corrosion on metal fittings requiring them all to receive the full treatment.

The engine has an interesting story. When I picked it up, it really looked disgusting externally. However, after taking a few bits off, the inside looked new and unused. With the help of the Thai restaurant owners in Papakura, translation of the military documentation confirmed that indeed, the engine had been overhauled in Germany. This was later confirmed by Limbach. All this included a major introduction to the delights of Thai food as well! The Hoffmann three- position prop was well past its calendar six-year life, though still in its packing crate. This therefore had to be sent to the Australian service dealer for re-life - not a cheap event, but eventually all done and attached. One interesting engineering issue became obvious - any type-certified aircraft has to comply with its Type Certificate. However, if said aircraft is supplied to a military organisation, said military have no requirement to ensure type certificate compliance. So, putting said aircraft back into civilian life, it's a real mission to ensure compliance because generally there is no detailed documentation of various mods carried out while in military service. This means EVERYTHING has to be checked for compliance. Not only applicable AD's and Service Bulletins but the whole aircraft structure and fittings. GCB was no exception, however, there will be more about that in the next Aussie epistle, which will probably raise some eyebrows. Finally, the great day came where David Gill from the CAA inspected it, signed it off and a successful test flight ensued.

Since that time it has completed just over 500 hours and flown from North Cape to Omarama. There have been many trips to the South Island and a few to Napier, Bridge Pa and Hastings.

It is an interesting little rocket. A real plus is its low-speed stability, so in gliding mode it flies and feels just like any glider. A gentle stall at under 40Kts is really a non-event. No tendency to drop a wing violently, just an increased rate of descent, so thermalling at 45Kts works well. Best LD of 27:1 is at 51Ks. Visibility is excellent and the seating position is very comfortable. For cross country flying it will thunder along at 90Kts, burning around 13 L of 95 octane Mogas.

It holds 80L so theoretically giving a six-hour duration with engine running. I have flown from Drury to Ashburton non-stop, but the red light was starting to flash before touch down. With the adjustable glide angle control in the full forward position, it will move along at 100Kts, but use a bit more fuel.

It has been on and off the Douglas Road strip a few times, ridge soaring the west coast with engine off and prop feathered, quite a number of times. On one trip from Rangiora to Nelson, I inadvertently pinged the upper airspace at 10,500 feet around St Arnaud - Airways were very understanding though.

All four of us in the syndicate have had some really interesting cross-country flights, any one of which can be a story in itself. Still on my wish list is to fly it from Drury to Matamata using less than 10 minutes of engine time.

Duty Roster For Oct,Nov,Dec

Month	Date	Duty Pilot	Instructor	Tow Pilot	Comments
Oct	2	A MICHAEL	I WOODFIELD	P THORPE	-
	3	R WHITBY	R BURNS	R CARSWELL	-
	9	C DICKSON	A FLETCHER	D BELCHER	
	10	K JASICA	L PAGE	R HEYNIKE	
	16	J DICKSON	P THORPE	G CABRE	-
	17	S HAY	S WALLACE	F MCKENZIE	-
Labour W/E	23	K BHASHYAM	L PAGE	P THORPE	Matamata
	24	K PILLAI	R BURNS	R HEYNIKE	Matamata
	25	G LEYLAND	S WALLACE	D BELCHER	Matamata
	30	I O'KEEFE	I WOODFIELD	D BELCHER	-
	31	M MORAN	R BURNS	G CABRE	-
Nov	6	T O'ROURKE	A FLETCHER	F MCKENZIE	
	7	R BAGCHI	P THORPE	R HEYNIKE	
	13	T PRENTICE	L PAGE	P THORPE	
	14	C BEST	S WALLACE	R CARSWELL	
	20	E LEAL SCHWENKE	I WOODFIELD	P EICHLER	
	21	R MCMILLAN	R BURNS	G CABRE	
	27	A MICHAEL	A FLETCHER	D BELCHER	
	28	R WHITBY	L PAGE	F MCKENZIE	
Dec	4	C DICKSON	S WALLACE	R CARSWELL	
	5	K JASICA	R BURNS	R HEYNIKE	

	11	J DICKSON	A FLETCHER	P EICHLER	
	12	S HAY	S WALLACE	G CABRE	
	18	K BHASHYAM	I WOODFIELD	D BELCHER	
	19	K PILLAI	P THORPE	F MCKENZIE	