

# WARM AIR 30 May 20

## Aviation Sports Club Gliding Newsletter

THIS WEEKEND:	Club Cellphone 022 357 6731	<a href="http://www.ascgliding.org">www.ascgliding.org</a>
Saturday	Instructing: Peter Thorpe Towing: Ruan Heynike Duty Pilot Tony Prentice	Bank Acct 38-9014-0625483-000
Sunday	Instructing: Steve Wallace Towing: Derry Belcher Duty Pilot Roy Whitby	
Monday	Instructing: Ray Burns Towing: Fletcher McKenzie Duty Pilot Izzy Burr	

## QUEENS BIRTHDAY WEEKEND

### MEMBERS NEWS

#### SATURDAY Instructor Andrew Fletcher gets first crack

Saturday morning started with fog on the North Shore, by the time I arrived at the field it had cleared and the hangar was unpacked and glider D.Is completed.

The first flight was airborne at around 1200 with new member Emillio, we released at 2000 feet into a flat calm sky. Primary and secondary Effects of Controls and 30 degree angle of bank turns followed by a demo circuit and landing, no lift at all just smooth air and 14 minutes airborne time.



Next up Toni Thomson solo in GNF for a smooth 14 minute ride back to earth, Ray Burns had by this time readied the G109 and blasted off into the blue for around 30 mins of fun and currency.

Next up for me Craig Best, we had a solid brief so as not to waste any time in the air. Boxing the tow, steep turns and a simulated paddock landing were decided for an action packed you guessed it 14 minutes. Craig

boxed the tow finding the slipstream below the tow plane (the only movement of air we felt during the entire flight) and moving out to the left and making his way around the box nicely. Steep turns followed which in the smooth air were great fun, 60 degrees angle of bank and 2G made for great fun and some height used up. Craig finished off with a nice simulated paddock landing, aircraft stopped in 170 paces which is very respectable nice one Craig.



on final at 100 feet. Turns, stalls and a circuit flown nice work Emillio.

*Towie Andrew Williams* I have been spending lockdown in Taupo (a great place to be working from home), so I drove up to Auckland for my tow day. It was great to give the car a run and to get out around the country again. I turned up at the field later in the morning and there were already plenty of people around and Jonathon Pote was recording attendance as usual! It was good to catch up with people since the last time I was at the club was in February. Andrew, Neville, Tony and a couple of others were in the hangar so we caught up a bit and moved BD out. Kazik Jasica, Roy Whitby and Craig Best were doing DIs on gliders. I ignored them, not wanting to interrupt them during the process, and went and got DSM ready to fly.

We had just setup at the 08 end when my sister in law arrived at the gate with my young niece and nephew. They weren't there to fly though - I was just the delivery man for presents to the toddlers!

It was only my second time towing in DSM so managing the engine after tow release is still relatively new to me. Peter was there and had a few good tips though, and having the airspace open above 2500 was helpful to take the pressure off a bit.

While all this was going on Kazik Jasica launched in GVF for a wonderfully smooth 14 minutes (are you spotting a theme yet). Tony Prentice launched and I am sure had a lovely 14 minutes cruising back to earth. Peter Thorpe launched in the G109 for some currency and to enjoy the smooth conditions.

Krishna Pillai was next, so I jumped into the front of GNF so that Kris could start a back seat rating. We had a nice flight and I sat back and enjoyed the view while Kris managed the flight (not something you do a lot of when instructing) and became familiar with the view from the back seat.

To finish the day Emillio, we briefed well and got airborne I handed over to Emillio at 1000 feet on tow and I didn't get the controls back until e were

Conditions were very smooth throughout the day. There were a few farm fires to the north but not a speck of lift. It was ideal for practising getting the trim just right, and a few people took advantage of it for doing first hands on aerotows, and boxing the tow. And there were plenty of people out for the day wanting to get back in the sky even just for 15 minutes or so after the last couple of months.

From the number of aircraft flying around the zone I would have thought we were back at level 0. There were a lot more aircraft than I expected, people using the transit lane, and a lot of helicopters doing their usual thing. A Herc went up for a flight test at the end of the day and there were a few power section flights and circuits too. With the tower on I even got sequenced behind them a couple of times - it's a shock having to deal with any kind of traffic after so long without any!



Overall it was great to be back up in Auckland for the day and to see the club members out there keeping things going strong!

Got some nice pictures too. You can see gliders in a couple if you zoom in enough.

**SUNDAY "Duty" Instructor Lionel Page explains why he stayed in bed....sort of....**

No much going on Sunday. Did not even go out to the field. A call from Ray Burns confirmed a low cloud base and the MetService forecast was for light rain for the rest of the day.

Only poor Rahul Bagchi went out and waited for a while until he texted me to say he too was heading home - dedication!

#### **THE GENERAL AIRCRAFT LIMITED HAMILCAR TANK CARRIER Jonathan Pote concludes his series on wartime gliders**

The story of the heavy-lift GAL49 Hamilcar was not an easy one, and construction would only have continued under the compelling conditions of a World War. However, once the Hamilcar finally became operational, albeit in very small numbers compared to the Horsa and CG-4A, it proved essential to the major airborne landings at the end of the war, and would have seen service in the Pacific but for the nuclear weapons. The other assault gliders vanished rapidly after 1945 as the helicopter showed such promise of landing lightly armed troops in an organised way. However, even the most optimistic supporters of the helicopter did not see it carrying tanks and heavy artillery behind enemy lines any time soon and so some Hamilcars were produced after VE Day, a diminishing number of them and their pilots stayed in service until about 1950.

Churchill was so struck by German glider successes in May 1940 that the Airborne Forces were formed immediately, with an initial strength of five thousand. Specifications that led to the Hotspur, Horsa and Hamilcar (plus the Slingsby Hengist) were issued simultaneously despite the fact that in fact there were actually no aircraft able to tow the larger ones envisaged. The Halifax and Stirling that became the faithful tugs of the larger gliders had yet to enter service in their designed role of heavy bombers and A

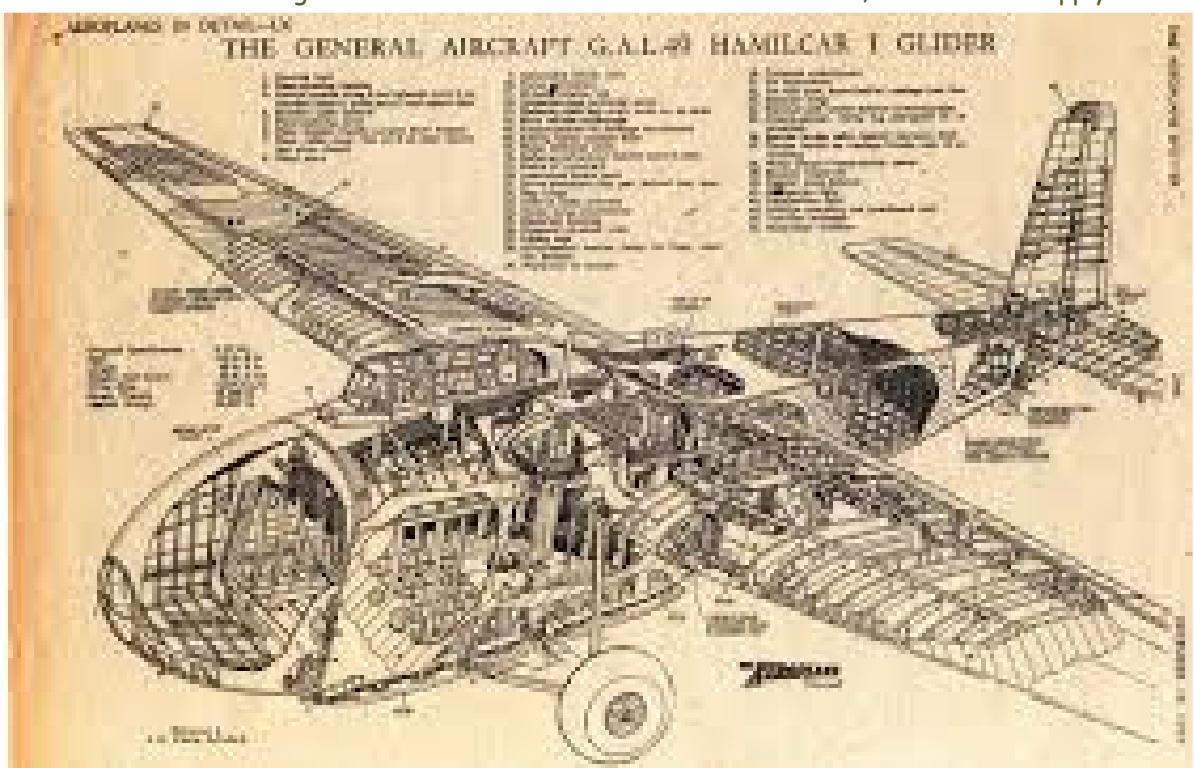


Halifax staggers over an army camp towing a Hamilcar

certainly would not be available to tow gliders in the foreseeable future. Lend-lease, which would supply the C-47

Skytrain/Dakotas to tow the medium sized gliders, was still nearly a year away and far from certain, so all the assault gliders were a great leap of faith.

Due to its size, a half-size prototype, the GAL 50, was constructed. .



Sadly out of focus, a 'Flying Forest'

This crashed at the end of its only flight, but was considered to have proven the possibilities and production of the full-size glider went ahead.

Even so, it was three years before a prototype flew but at least this was in time for the invasion of Europe, when about thirty landed in Normandy (Only fifty had been built by 1944)

A great problem with airborne troops is supply. Even an elite soldier can only carry enough rifle ammunition for a couple of encounters with enemy troops and nothing to repulse tanks. Whilst the Horsa and CG-4A could carry jeeps and their trailers, the Hamilcar raised the bar to light tanks and heavy artillery. The Tetrarch tank was designed before WWII when no ideas about assault gliders existed. Nevertheless, initial plans were made to build a glider structure around a Tetrarch, the tank driver to double as the pilot and its two-pound (40 mm) quick fire anti-tank gun to be used in the air if needed. Sanity returned with the Hamilcar designed to carry a Tetrarch plus two Bren gun carriers, a total of eight thousand kilograms; and flown by two trained pilots. The vehicle engines were started in the air, and the tank driver had a lanyard to open the swinging nose door as soon as practical. Some Hamilcars carried the Seventeen-pounder anti-tank gun, a 75 mm beast, complete with its towing vehicle.

The Locust tank was an American design with glider carriage in mind (although the USA never operated a glider large enough to carry it), being somewhat squatter although its weight and weaponry were much as the Tetrarch. It supplanted the Tetrarch for the Rhine crossing.

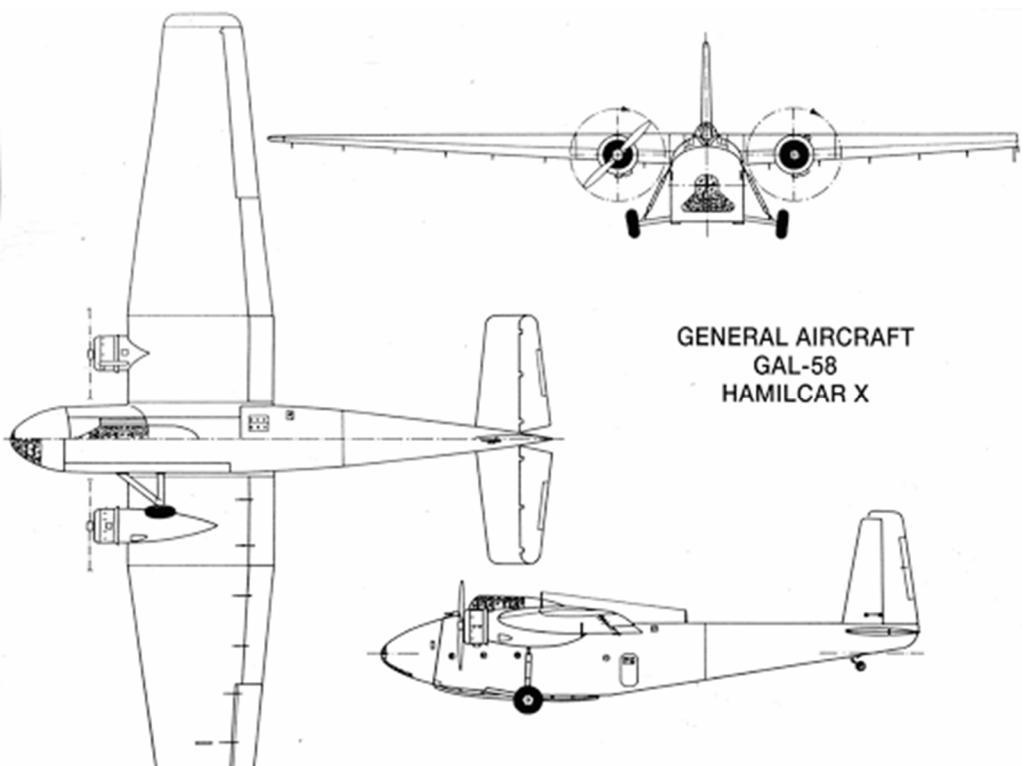


A Locust light tank emerges. The Hamilcar undercarriage has been lowered.

Some thirty Hamilcars carried heavy loads into Arnhem, but it really came of age with the Rhine crossing where fifty carried heavy loads across the river, giving the troops landing in Horsa Mk IIs the heavy firepower they needed until relieved by waterborn troops. (The troops at Arnhem were only tasked to hold out for three days

until relieved by others advancing overland, but in fact held out for eight days before withdrawing, leaving many to be taken as prisoners).

Some Hamilcars were retrieved from Germany dismantled, but the 'flying forest' was almost too large to handle without large vehicles and on major airfields. Another disadvantage of the design was that it could not be flown empty: A considerable amount of ballast had to be carried in lieu of a load.



## The GAL 59 Hamilcar 10

The reason the effort was made to recover some of the 'used' Hamilcar from Germany was the looming transfer of British forces to the Pacific, where it was expected fierce combat would last until 1947 or later, as Japan fought for the final bit of the home islands and to the last man. It was thought a powered version might be launched whilst also being towed but by just a twin-engine tug, and after landing at its destination, fly back empty (but with much ballast) on its own. With two Bristol Mercury radial engines, in effect an airframe the size and weight of a Lancaster was to be flown a thousand miles over water with the powerplants of a Bristol Blenheim, less than a third of the total horsepower of the Lancaster. The Hamilcar 10 did indeed fly under its own power, but it must have been a great relief to all concerned that the wooden airframe with its weak engines was not put to the tropical test.



The Morning after the night before: Horsas where they came to rest (in the dark) at Landing Zone 'N' on June 7<sup>th</sup> the day after 'D' Day..

## The legacy

The enormous effort that went into the wartime assault glider program left little legacy. Glider owners today are acutely aware of the problem of storing a wooden glider in the open, both sun and rain being very damaging. Glue deterioration also was a problem, and thus the vast majority soon became firewood or some form of hut beside the airfields they languished on. Even in the 1960s I remember seeing about a dozen Horsa and Hamilcar fuselages on properties around RAF Lyneham, but by the time historical interest had risen, all were gone. Parts of the fuselage of just two Hamilcars remain, now in safe museum custody.

General Aircraft Ltd had gained a taste for the enormous and ugly, and designed the GAL 60 Universal Freighter post-war. The front end of this bore more than a passing resemblance to the Hamilcar, and as with the glider, the Company struggled to build this metal behemoth. However, Blackburn Aircraft came to the rescue and built it as the Beverley which gave a decade of valuable service to the RAF, able to carry - and drop - loads no other aircraft could manage until the Lockheed Hercules came along.



The GAL/Blackburn Beverley

Slingsby had made sport gliders before the war, and although their wartime Hengist lost out to the Waco CG-4A, a far more practical medium sized fifteen seat glider, they were back into sport glider production for many years post-war until their final aircraft design, the T 67 Firefly, a powered trainer aircraft. It then diversified into other composite machinery, ironically including the SAH 2200 hovercraft now carrying a dozen armed troops to patrol such varied borders as the ice of Finland and the desert of Saudi Arabia. Had it been around in WWII, the SAH2200 would have admirably suited the Rhine crossing exactly as its forbear the Hengist was intended to.



The Slingsby Hengist 15-seater. Only a dozen were built

Elliots of Newbury had made luxury furniture pre-war, and produced a large proportion of the Horsas during the war. Post-war, with luxury furniture not in great demand, they modified the pre-war DFS Olympia Meise, a design produced for the (abandoned) 1940 Olympics by Deutsche Forschungsanstalt für Segelflug. The wheel had turned full circle - the DFS 230 had set the assault glider ball rolling, and now its last design was being produced by the former enemy. EoN also produced a version of the Grunau Baby (A serviceable EoN Baby survives in New Zealand) as well as SG 38 Primary gliders for the Air Training Corps. Sadly, many EoN Olympias built 'on spec' were never sold, and the family firm sold its glider business to Slingsby and ceased trading. Vintage Kiwi has an Olympia, ZK-GAA.

One reason why British sport glider production took time to get going post-war was the number of gliders impressed by the RAF in Germany post war. Mainly Grunau Babys, some fifty ex-Luftwaffe gliders were acquired by the RAF and ATC, but overall there was little disposable income available and greater priorities.

## ROSTER May/June 2020

Month	Date	Duty Pilot	Instructor	Towpilot	Notes
May	16	I O'KEEFE	R CARSWELL	D BELCHER	
	17	M MORAN	I WOODFIELD	F MCKENZIE	
	23	T O'ROURKE	A FLETCHER	A WILLIAMS	
	24	R BAGCHI	L PAGE	R CARSWELL	
Queens Birthday Weekend	30	T PRENTICE	P THORPE	R HEYNIKE	
	31	R WHITBY	S WALLACE	D BELCHER	
	1	I BURR	R BURNS	F MCKENZIE	
Jun	6	C DICKSON	I WOODFIELD	P THORPE	
	7	K JASICA	A FLETCHER	D BELCHER	
	13	J DICKSON	R CARSWELL	A WILLIAMS	
	14	B MOORE	L PAGE	R HEYNIKE	
	20	S HAY	P THORPE	R CARSWELL	
	21	K BHASHYAM	S WALLACE	F MCKENZIE	
	27	G LEYLAND	R BURNS	P THORPE	
	28	I O'KEEFE	I WOODFIELD	R HEYNIKE	