



To the Chathams in a modern microlight

4.6 hours and 65 litres of fuel after leaving Rangiora, Glenn Martin and his TL-2000 Sting LSA arrived at the Chatham Islands.

“ We are all very lucky to have these modern, efficient and reliable aircraft available. Do not be afraid to use them. “

You have a Light Sport Aircraft that you enjoy flying and you like setting new challenges for yourself. What better therefore, than a trip to the Chatham Islands? So thought Glenn Martin who planned, prepared for, and recently undertook just such an adventure. Glenn shares his story in the following:

The why

I am and always will be a recreational pilot. I started too late in life to be anything else. As a forever low hour pilot (currently 1450 hr) I decided to continue my aviation education once achieving my licence by doing additional things. These

have included a Mountain Flying course, seminars, extra ratings and deciding to try and fly to every airfield in the AIP. Thus far I have flown to 122 AIP fields, and many ag strips etc.

The Chathams lie 876 km east of my home base of Rangiora... so just take off on Zero Seven and extend upwind a bit. People have been flying there for over 100 years and there was a group of second generation microlights that went there many years ago, so my flight was not unique, just unusual.

The plane

ZK-MTN is a TL-2000 Sting S4, a modern third generation 'ultralight' from

the Czech Republic. There are several in New Zealand, though MTN is the only one registered as an LSA. This enables it to be used for Part 91 training but makes little other practical difference. It is an aircraft designed on CAD and tested before being built with CFD (Computational Fluid Dynamics) in the 2000s, having all the vices designed out before committing to carbon fibre. MTN is very easy to fly and very forgiving. The Rotax 912 iS engine is of course very good too. As my LAME says, "The difference is that Rotaxes actually get to TBO." In the USA, where they have been running Rotax engines 'on condition' for many years, 5000 hours between overhauls is

not uncommon.

Like all aircraft there are options when you buy it. A 'six pack' or Glass? MTN has a Garmin glass cockpit, three-axis auto-pilot, constant speed prop, ELT, parachute, and coffee maker. Well not the coffee maker.

Additions for long flight include a ferry tank for another 68 litres making 175 litres usable (12+ hr and 2300 km at 14 lph), life raft and dry suit, Spidertracks so people can stalk me, Garmin inReach and Satphone for backup Comms. Navigation is primarily on the Garmin G3X with AvPlan on an iPad for backup.

MTN is a modern microlight / LSA. Indeed this is not compass, watch and

Avgas and Jet A1
Call George Hoskins
Phone 021 369 600
or VHF 133.1 MHz



Ardmore Sky Station
Ph/Fax: (09) 297 7188
Email: skystation@xtra.co.nz

Tanker to Aircraft
Refuelling at Ardmore



PPL and CPL TRAINING

CAANZ CERTIFICATED

R22, R44, S300

SAFETY AWARENESS COURSES

TYPE RATINGS

INSTRUCTOR RATINGS

NIGHT RATINGS (unlim)

SCENIC FLIGHTS

HELI CHARTER

HELI FISHING

PROPOSAL FLIGHTS

HOTEL TRANSFERS

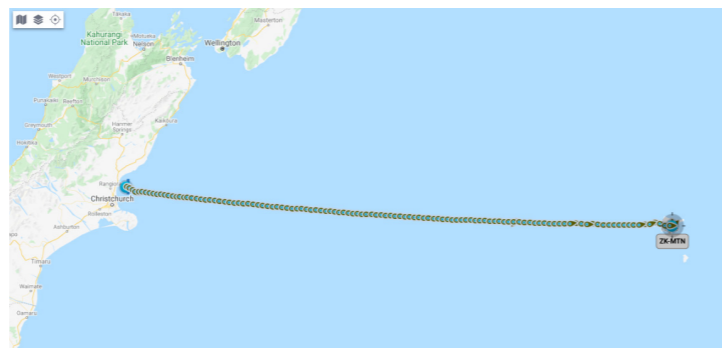
COMMERCIAL OPS

PHOTOGRAPHY

09 299 9442 sylvia@heliflite.nz www.heliflite.co.nz



Pitt Island Strip.



NZRT-NZCI Straight!



Cruising at 10,000 ft mid-flight.



East coast of Pitt Island.



Circumnavigation of Chatham and Pitt Island

sextant type flying - although anyone who has done that has my enduring respect!

We live on a Continent

I have flown from Cape Reinga to Stewart Island and many places in between and I never knew this was a Continent! This is legally all in the NZCC (Continental NZ) Flight Information Region. Once you go across a line about 50nm offshore you are in the NZZO (Oceanic). The rules for flying 'Oceanic' are a little different and you communicate with Auckland Oceanic. Tim Halpin and his team were very helpful in not only explaining the rules, but also taking a duty of care with my preparation and flights.

Practice

To fly as fast as possible efficiently, of course you need to go high. The rules in New Zealand limit you to 10,000 ft without extra oxygen (12,500 in the USA). There I found the 'nicest' speed was 90 kts IAS and therefore 109 TAS at 14 lph. Practice was two five plus hour flights over the South Island at that height where I tried out all the systems, including measuring my oxygen saturation and doing long division exercises to see if the brain was still working. Thanks to Travel Johns, the other obvious problem was also tested.

Air Chathams

Local knowledge is always the best and Matt Emeny and the team at Air Chathams kindly supplied advice, onsite weather reports, in-air updates and coffee on arrival.

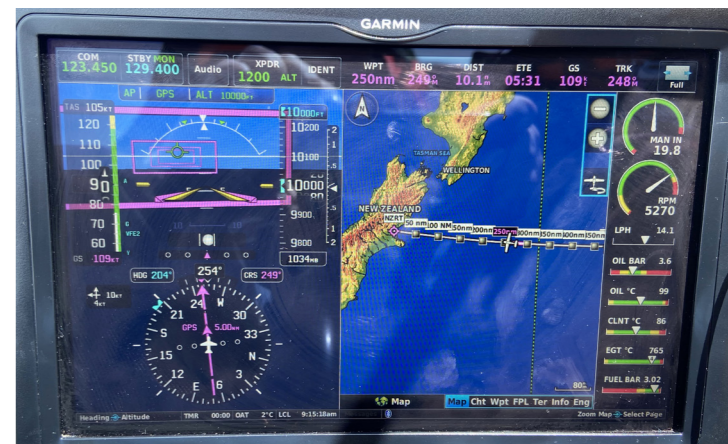
On the day there were low clouds at Rangiora (1000 ft BKN). A friend flew out to the coast and reported some holes further out, ATC reported cloud tops at 2,000 feet. Air Chats gave a good report for arrival. I had some issues with filing a VFR flight plan via an IFR process but we do these things to learn! Three friends escorted me out to the coast and a few miles further out there were gaps large enough to easily climb through. As reported, the cloud tops were 2,000 feet. I took a slow climb to cruising altitude, and some VHF reports then handed off to Oceanic contacted via the Satphone. I like flying and almost never use the auto-pilot, but this seemed like the right time. Air Chats updated me on the weather at NZCI on 123.45, the universal over-ocean VHF frequency.

Like Lindbergh I have a paper backup with waypoints and next magnetic heading each 50 nm. This gives an ultimate backup if the fancy stuff fails. In addition, I recorded 29 other parameters like oil pressure, fuel, fuel burn etc. It was something to do. With the position reporting, the paper log, and looking at the view, the flight went very well. Going east I had a 20 knot tail wind so groundspeed (seaspeed?) was over 120 knots. One funny thing; the latitude increases from 174 deg up to 180 then as you pass the anti-meridian it decreases again. On the Antemeridian you are directly opposite Greenwich London.

NZCI is a great runway, 1.3 km long and sealed, so I only needed a little of that. I landed after burning 65 litres of fuel over 4.6 hours.

The tourist

Of course, I went for a drive to see the Sunderland in the north east of the Island. The full story of how it ended up here can be found on the Air Force Museum blog - 'Sunderland-NZ 4111 and the Chatham Islands incident'.



Garmin G3X showing us at 10,000 ft and 109 kts on the return trip.



Backup navigation by AvPlan on an iPad with an Iridium Satphone.

HELISPECS
Professional Helicopter Maintenance at Tauranga Airport

Helispecs have been maintaining and repairing all kinds of small to medium size helicopters for over 40 years. The company is an approved Robinson Service Centre and employs engineers who have trained in the Robinson and Guimbal factories. All maintenance enquiries are welcome, including for:

- Annual review of airworthiness
- Avionics inspections
- Import /export services
- C of A issue
- 2200 hr / 12 year overhaul of Robinson helicopters
- Modifications and Upgrades
- Field Maintenance
- Supply of new & part-life Robinson parts
- Helicopter Leasing
- Helicopter Sales
- Logistics Services
- Robinson Helicopter Acquisitions

Roger: 027 498 2812
heli@helispecs.co.nz

13 Kittyhawk Way
Tauranga Airport
Mount Maunganui 3116
helispecs.co.nz

MAINTENANCE & INSPECTION

MODIFICATIONS & CONVERSIONS

AIRCRAFT REFURBISHMENT

PARTS SUPPLY

CUSTOM EQUIPMENT

LOGISTICS

Aviation Power Supply Pty Ltd

AVIATION POWER SUPPLY
For all your engine needs

LYCOMING
THE WORLD'S ENGINE

Contact our NZ Partner Superior Air Parts
(09) 298 8992
bob@aviationpowersupply.com.au
rob@superiorairparts.com.au

avplan efb
plan smarter, fly sooner

- Complete flight planning & moving-map navigation
- NZ Area Forecasts, plain-English TAFs & METARs
- IFIS flight plan filing, MetFlight & MetJet connected
- For all NZ pilots, at all levels
- Thirty day free trial

www.avplan-efb.com • 09 950 8801



At Kaingaroa near the northeast tip of Chatham Island.



Akeake trees on Chatham Island.



No shortage of crayfish to enjoy here.



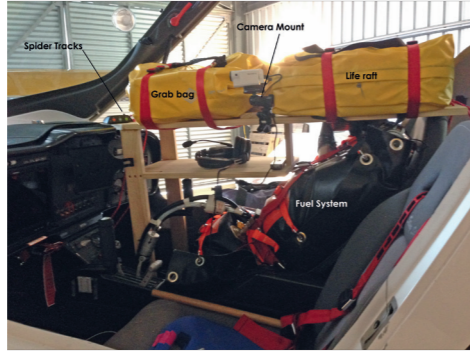
Sunderland NZ4111 hit an obstacle on take-off in 1959.



The only unfriendly local.



The right hand seat was full of gear.



Grab bag, liferaft, camera and additional fuel system.



Garmin inReach with in-flight snack bar below.



Grab bag contents.



Supplementary fuel system setup.

I went to see the nearby seal colony, had a wetlands walk and also a beach walk. It was all great fun. The Chathams really is a very different Island experience. After a great buffet (where I went back for thirds on the fish dishes) it was an early night.

Since I had a plane on an island I went for a Tiki Tour, circumnavigating the rest of the bit I had not seen. I flew over to Pitt Island and landed on a runway more like what I am used to. Then back around the rest. I enjoyed another great meal at Admiral Garden and then an early night to be ready for the home trip.

Home again

Air Chathams is very busy, and I tried to plan my flights to keep out of their hair, timing my departure accordingly. This time there was no tailwind, and I fluffed my Chathams time to NZT to UTC conversion with Oceanic, but they were forgiving. Communications followed the same profile - Oceanic to LRG VHF to CHCH Approach, to Rangiora frequency. Again there were some friends to meet me back at the coast. The total return time was 5.1 hours and 75 litres consumed.

In the end what you need, I believe, with Oceanic flight is a lot of prep and no dramas on the actual flight. I learnt a lot and made some minor mistakes, but will do better next time.

We are all very lucky to have these modern, efficient and reliable aircraft available. Do not be afraid to use them.

Glenn Martin 



Mission accomplished. Back at NZRT.

Preparations for Oceanic Flight

as undertaken by Glenn for his trip to the Chatham Islands

Legal

For flights over water you need to comply with Part 91.515 and 91.525(b). For comms procedure see AIP Vol 4 ENR sections 2, 4 and 7. That means for VFR oceanic you need: lifejackets, life raft, pyrotechnics, ELT or PLB, survival kit and a means of communicating with Oceanic. These are the legal minimums. To be clear you can, and people regularly do fly VFR around the world. Just keep out of clouds and check the weather.

Safety gear

CAA rules do not always keep up with the latest technology but there are good resources on the Earthrouters forum and plenty of good advice for fellow aviators and sailors. I took much more than the minimum. These started with a grab bag with survival gear and a four person life raft. The Sting has a parachute and this is the recommended device for ditching.

The supplies on the life raft could last a week. I figured after that I would conclude that the family does not want me to return so planned to paddle to Pitcairn instead.

I wore a modern breathable water-sports dry suit from GUL and would have 20 minutes to get ready, gliding from 10,000 feet. The other essential item you need from Pilotshop is some Travel Johns!

Communications

Comms was extensive: VHF for close work - it turns out the flat Earthers were wrong and after 170 nm this fades. Primary comms with Oceanic ATC was by Iridium Satphone. The Iridium network devices, in my experience, work the best and have very reliable contact and coverage. MTN has always had a Spidertracks and this is very solid. Everyone can follow me on the internet with a point every three minutes. The Garmin inReach is portable so can be taken into a life raft and will run for a few days without power. It also enabled texting people from anywhere. In the grab bag was a waterproof VHF marine radio. There are plenty of fishing boats around so this could have been handy.

Beacons

Should the worst happen the Sting has an ELT, plus I could phone Oceanic or the RCC (all programmed into the phone). The Garmin inReach and the satphone also have SOS buttons, then the marine VHF uses channel 16 as the international distress channel, as well as VHF 121.5.

Fuel/Oil

Rotaxes use very little oil, probably less than a litre per 100 hours. I never seem to top up between services. The Sting has 77 litres of fuel in the main tank and two 22 litre wing tanks. In addition I have an approved Big Buddy from TurtlePac.com which adds 68 more litres. That gives me 175 in total - enough for Chathams and return with a couple of hours to spare!

SWITLIK

Protecting Aviators, Mariners
and Soldiers Since 1920.



The complete range of Switlik products is available from Aviation Safety Supplies Limited, including:

10 year service Lifejackets
UZIP Suits as used by NZ Defence
5 year service TSO Liferrafts

AVIATION SAFETY

www.aviationsafety.co.nz

Phone 07 543 0075

Email: sales@aviationsafety.co.nz