

New Zealand Autogyro Association



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New Zealand Autogyro
Association



nzautogyroassociation@gmail.com

President:

Garry Belton

beltoncontractingltd@gmail.com

Vice President:

Elton Haakma

iamelton@hotmail.com

Secretary:

Muriel Smith

otaua_hf@hotmail.com

CFI:

Elton Haakma

iamelton@hotmail.com

Safety Officer North Is:

Paul Scherrer

swisie@xtra.co.nz

Safety Officer South Is:

Lloyd Heslop

lloydheslop54@gmail.com

Newsletter:

Daniel Belton

dbelts@hotmail.com

Find us on Face book

NZ
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From the Office

Hello members.

Welcome to the second newsletter for the year.

Man the months seem to be flying by. I hope you have been able to get in some flying on the calm smooth autumn days.

Up coming events- Wanganui flyin coming up on Kings birthday long weekend (weather pending) more information below. Please contact John to register your interest.

The club subscription runs from the 1st of Jan to the 31st of Dec.

The cost is \$40/year for a flyer or \$20/year for a non-flyer..

NZ Autogyro Association bank: Westpac 03-1552-0218467-000

For online banking please reference your 'name' & 'sub' on payment.

The club needs your help-

We ask that all our members could please send in a recent picture of your Gyro so we can compile a photo bank to add to the website, please email them through to the Club email.

For upcoming newsletters if any one has any stories or photos to share, please send them through to keep the newsletters full and interesting. We also seek Members profiles, if you have not yet done one, please do and send it through.

Until then take care and Fly safe,

Kind Regards Daniel Belton

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Cover photo: ZK RCI and ZK YGG at Fielding open day

Murchison 2024

Greetings Fellow Gyronaughts

It's been only a few weeks since Graeme Clarke and I flew to Dannevirke for the annual fly in. Unfortunately, the weather played its hand with us having to depart Dannevirke early and flying to Paraparaumu in the rain, landing and seeking local knowledge before progressing across the Cook Strait.

Windy and Google are great tools but with loads of advice from Paraparaumu Aero Club instructions "go South, turn right and about 3 miles offshore you should see the South Island". Hmmm not sure I like this... but it turned out to be true! After tracking along the Coast, we arrived at Crail Bay enjoying a beverage to cement our success before continuing onto Nelson.

March 8/9/10 – Forecast for fantastic weather in Murchison and it came true for the first time in many years. It was great to have the 2 Paul's (Shearer & Kuchenbecker) from the North join us for the weekend along with their partners having driven down in their campers. Also great to have a surprise visit from Bruce & Liz Naish (ex gyro pilot) who had also enjoyed many years at Murchison in the past. In all, we had 5 gyros – myself with the RAF flown in from Nelson, Mark Humbke from Koromiko in his MTO SPORT, Graeme Clarke (REJ), Paul Shearer (RKK), and Paul Kuchenbecker (RCT). The 2 Pauls and Graeme spent Thursday/Friday flying around the block – Tutaki & Mataki Valleys and an adventure towards Inangahua over major tiger country observing nature's power during the 1968 Inangahua earthquake. On Saturday morning, we all headed up the Matiri to what's called the 1000 acres, a large plateau at around 4000 feet set between Murchison and Little Wanganui on the West Coast. It's a fantastic place to explore but with wind and questionable performance, an area not to be taken lightly. Coming off the plateau back into the Martiri Valley is exciting as you pass over large bluffs and find the lawn chair decidedly high above the valley floor. Most enjoyable however, especially with the weather presented. During the day, Jim Benbow arrived in his Piper Cub and set up camp for the night along with Dave North in a Grumman Fix Wing. Dave is also a Gyro owner (not currently airborne). We also had a visit from Murray Bensemman from Takaka. After Saturday lunch we decided to visit Byron Kelly's strip near Springs Junction, 4 Gyros and a Piper Cab arriving to find Byron waiting. Since our last visit, he has built a small house made of poly panel, a kitset from the North Island complete with appliances etc. almost ready to go.





The jug was on with a switch to start genset and a brew was had by all with an offer for us to use the facility at any time for a fly in or stop over if you are passing. It's an awesome spot right on the runway edge with views of the mountains up and down the valley.

We left one by one with little wind and headed back to Murchison via the Maruia Gorge finding Jan had arrived from Nelson. She had arranged a BBQ dinner with brazier etc. under the marquee on field for all to enjoy. A great evening along with Lochie's red... of Murphys bricks – a tradition for all to enjoy.



Photo credit Paul Scherrer

Sunday, the fog arrived completely set in till 11:00. Around midday, 4 micro lights from Hokitika arrived and people were ferried to town for lunch and a catch up.

Mark packed up and headed back to Picton early as the weather looked to be gaining wind strengths. We packed up the tent while several Gyros had last rights in the sky, then parked up onto their trailers. Jan headed home towing the trailer with tent etc, and I flew RAE back arriving around 3pm.

Paul Shearer called, and we stored his Gyro whilst he took in the joys of Golden Bay.

Thank you to both Paul's for supporting our South Island weekend, I hope you enjoyed the company and flying we have to offer. Hope to see you all again next year!

Regards,

Jan & Lloyd

Murchison flyin

What a stunner, Paul s and myself with our partners arrived thursday mid morning at the airfield and were setting up our gyros when the farm manager arrived to tell us no flying that weekend. Well a bit of a shock. Paul rang Lloyd and told him and discussed we could find another airstrip, then the manager came back to say lack of communication between him



and his boss, and that it was all good. I understand the new owner owns the strip personally to keep the air strip going good for Murchison. Graeme Clark arrived soon after and we did some circuits, also Mark Humbke in his mto then later Lloyd, so five gyros turned up and a few fix wing flew in. Overall we all did some great flying over the next three days. I think I clocked up 6 hours on Sunday afternoon, Paul S went to Golden bay to end the rest of week there too make the \$900 ferry crossing worthwhile. I decided to go to west coast and up to Karamea to check out the airstrip. A great place, then decided to go down to Haast and into Jackson bay where there is a strip I wanted to fly some of the rivers there because in an earlier life I jet boated most of them but cloud base was to low so no go so shot over Haast past to Wanaka and from lush green west coast to drought and burnt Otago then up to Twizel, mount cook, Tekapo, then met up with Paul for the friday sailing back home. The gyro caused a lot of interest whenever we stopped and the most spoken phase was you would never get me up in one of those things

cheers Paul Kuchenbecker`

Bryce Mcghie is using the Herbertville Beach as his airstrip. Made a low trailer to make it easier for transport about 10 mins from his house.





Beware of ducks lining up on the runway

After many years of being fascinated by autogyros I came across the two Pauls and their gyros at Wings Over Wairarapa, November 2023. My enthusiasm prompted them to invite me to the NZAA 2024 AGM at Dannevirke, where as promised I had a demo flight, thanks to John O'Leary and his Calidus.

I spent the weekend catching up with the two Pauls and a bunch of other enthusiasts, chewing the fat and taking on board salient advice and information. Crucially, Elton offered to train me if I could find a two seater and get to Matamata or Tauranga. I found myself at a crossroads, having decided relatively quickly which style of gyro I preferred. I faced months of procrastination and going off the boil, or jumping in and getting on with it. Suddenly the ducks that had been quietly lining up in a row on the runway since November, all at once quacked, flapped and took off. As Gary said in his opening paragraph in the last Newsletter, I was "bitten real bad". Within forty-eight hours I had purchased a very well looked after MTO sport (ZK-RJW) and it was hangared at Tauranga Airport. Elton territory!

I then spent a week thinking, "Heck, what have I done!"

Since mid-February, with my very supportive partner Ruth, I have been tripping back and forth between Upper Hutt and Tauranga. This has been possible because as an OAP I can find the time and we have a motorhome which provides the accommodation.



We do round trips of about two weeks with a similar or lesser break in between. We have done four now and I have just started the fifth. The year is disappearing fast!

Elton starts work early and finishes at 3pm so we are usually in the air by 3.30pm. We fly for about an hour with theory and de-briefing adding to that. To date I have done about thirty hours actual flight time. The weather has been good so we have been flying nine to eleven days on each trip.

I have always considered myself a slow learner with new major challenges and I have a conservative approach. Elton informs me I am in the average band for achievement versus time on the stick. We



get on well and in dealing with me I am sure I have tested and proven his adaptability as an experienced flight instructor. I feel very fortunate to have found him through the NZAA.

It was Elton's wise decision to start at Tauranga instead of Matamata so I could gain experience in a controlled zone along with the radio aspect. It has been a hurdle at times getting used to the rapid-fire lingo style used by certain air traffic controllers. I am informed others have struggled with this too so I don't feel too bad. But I am glad of the experience and I just let Elton take over the radio when it gets too busy and I concentrate on what needs to be done.

We have been doing circuits recently and things are falling into place. I am in no rush and would prefer to go solo at Matamata where it is quieter so we have a loose plan to get the gyro hangared over there by the end of June.

I am really enjoying flying my gyro and I still have to pinch myself now and then that this is really happening. I am grateful to all of you who gave me advice and steered me in the right direction.

Elton loves flying my particular gyro. Recently he got the chance to get in the front seat again when he took Ruth up for a forty-five minute flight on a beautiful Saturday morning. She thoroughly enjoyed it, so hopefully this bodes well for some time in the distant future.

Phil Bolton

Kings Birthday Wanganui Fly in

Hi Folks hope you are all well and have been taking advantage of this settled autumn and doing a bit of flying.

Yes its that time of the year again and the Wanganui flyin is on the event calendar again.

Hopefully, weather dependent it will be on Kings Birthday weekend 1st 2nd 3rd of June, those wishing to fly down Friday you are more than welcome, but if you could please let me know beforehand that would be great so I can meet you and give you a ride to your accommodation.

Please make sure you are familiar with joining procedures as Wanganui can be very busy with flight school traffic.

Any questions feel free to ask me.

As discussed at the AGM if the weather is looking a bit dodgy we will postpone till the next best weather weekend so it gives those that have a bit of a cross-country a better weather window.

I will be sending out an update closer to the weekend but if you are wanting to attend could you please text me on 0274 937895 or email me on olearyjohnd@gmail.com just so I have a bit of a heads up on numbers.

Fingers crossed 🍀 the weather gods will be in our favor.

Looking forward to catching up with you all

Cheers John O



The McCulloch J-2 Gyroplane

Article from KiwiFlyer magazine, Written by John Brough

issue 31 2013

Given the present status of autogyros as 'microlight' aircraft for recreation, many readers may not realise that there were in fact some certified gyro designs produced in volume for the commercial aviation market in relatively recent times. Both from the USA, there were 68 'Air and Space 18A' Gyroplanes produced (first flight in 1965) and there were at least 83 McCulloch J-2 Gyroplanes produced (first flight in 1962). Ultimately though, neither was commercially successful. We have a McCulloch J-2 here on the New Zealand register. Arguably (at least by a gyro enthusiast such as your KiwiFlyer Editor), the history and rarity of this aircraft, alongside the fast growing popularity of autogyros, make the McCulloch J2 a desirable and affordable classic aircraft. For that matter, if you wanted to fly a gyro and were for some reason uncomfortable with un-certified two-bladed teetering rotor systems, then the McCulloch resolves that issue by having the same three-bladed system and rotor hub as the Hughes 300A helicopter. Performance won't be as crisp as a modern machine, but it won't cost as much either. Interested? KiwiFlyer asked McCulloch J-2 owner John Brough from New Plymouth, to put some information together for readers and John kindly contributed the following:

THE McCulloch J-2 was designed by Drago Jovanovich of El Segundo, California in the 1960s and went into production at Lake Havasu, Nevada in 1971 after having received FAA certification.

Drago Jovanovich was also the designer of the Hughes 300 series helicopter's rotor hub and blades as well as a small JOV-3 tandem rotor helicopter.

The rotor hub same as the helicopter and the 2 was purpose by McCulloch and specialist parts cables, gearbox, propeller.

Two models of produced, the J-2 The J-2 had an all lbs and a fixed Wooden two blade

The J-2 Super

weight of 1600 lbs and a constant speed Hartzell three blade metal propeller and an exhaust muffler installation.

There were twenty one time-lifed items installed, with times ranging from 300 hours for the main rotor thrust bearing to 75,800 hours for horizontal stabiliser trunion.

There were 2 known prototypes and at least 86 production J-2s built, the majority being sold in the USA, with others going to Canada, and 6 to Australia. There are about 15 that are listed as being current and able to fly.

The McCulloch Aircraft Corporation requirement for the Gyroplane was to produce the ultra- safe, simple and easy to fly J-2 that combined the best of two aviation worlds. The simple control and economy of powered fixed wing aircraft along with the manoeuvrability of powered helicopter flight. In the end the J-2 did not have the performance of a fixed wing aircraft with a similar engine, nor perform like a helicopter. The initial purchase price was US\$22,000. Compared to a Hughes 300A



and blades are the Hughes 300A remainder of the J-2 designed and built other vendors for such as controlex engine and

the J-2 were and the J-2 Super. up weight of 1500 pitch Sensenich propeller.

had an all up



helicopter at US\$36,000 and a Piper Cub at US\$14,000, it was perceived as being too expensive for the performance that it offered. Initial sales were reasonable but it was described as being underpowered in its current configuration.

To overcome the shortcomings a J-2 Super was produced and its constant speed metal propeller did improve performance to a level that was acceptable but it was too late and too expensive to continue production.

Production was passed to Aero Resources, Gardena, California in 1974 and they assembled another two J-2 Super Gyroplanes and provided support for a number of years before going out of business.

Flying the J-2 is different to other gyroplanes in New Zealand as it has an articulated rotor system versus the two blade semi-rigid system employed by other NZ registered gyros.

Before take-off the rotors are spun up to minimum 400 rpm and maximum 520 rpm by an engine driven pre rotator at 0 degrees pitch and at the start of the take-off roll the collective is raised to its top limit which is 4 degrees of blade pitch. As 47 mph is reached, the gyroplane flies off the ground. Correct take-off technique is to then remain in level flight until 65 mph is reached, with climb out at 70 mph. All this happens quickly thanks to the 180hp and constant speed propeller.

In flight control is just like a fixed wing aircraft. When setting up for a final approach and landing, ease the power off to set a rate a descent as necessary to provide a glide path that is constant at 60 mph and start to flare the gyroplane at about 10 feet and reduce the power to idle and touchdown will follow with a soft landing and very short landing roll.



Maintenance is straight forward, using standard aircraft engineering practices for the Lycoming O-360-A2D, Bendix Magnetos, Hartzell Propeller, Bendix-King Radios etc. along with biennial and 4 year component checks.

Serial Number 073 was produced in 1972 and test flown after completion in August 1973.

It was operated in the USA until July 1999 before being sold to Rob Sanders here in New Zealand with a total time of 590.3 hours. First flown here in December 1999, ownership was transferred to John Brough in 2006.

The J-2 was issued with a NZ Certificate of Airworthiness when it arrived in NZ, but as there was no provision for a certified (with CoA) gyroplane under the NZ Rules, it operated as an aircraft with a NZ

CoA but not covered under current rules. This was changed in 2007 when our NZ Civil Aviation Authority reclassified the J-2 to a Class 2 microlight and issued a non-terminating microlight Aircraft Flight Permit. This made it legal to operate in New Zealand from that time on.

An overhaul of the J-2 was carried out in 2007 and it has been airworthy since that date, with a total time of 665 hours.

This gyroplane came complete with all logbooks from new, maintenance, parts, and flight manuals and compliance reports.

Latest Development in Gyroplane Rotor Blades

Years of intensive research and development have resulted in a radical diversion from traditional straight rotor blades normally fitted to gyroplanes. Multiple prototypes were tested in a wide variety of conditions before the R&D team settled on the final eye-catching configuration, which is due to be released for limited trials shortly.

Inventor and team leader Jim McEwen explains that the new design offers the following advantages:

- Better sun protection for pilot.
- The close-fitting rotating umbrella canopy throws raindrops clear and keeps the gyroplane cleaner.
- Rotor blades clear the rudder whilst reducing useless rear ground clearance.
- The design allows the pilot to more easily reach front blade when the rotorhead is tilted fully rearwards.
- Reduced clearance between blades and other components enhances the "whop whop whop" sound coveted by so many rotary wing enthusiasts.



McEwen expects development to continue with the intention of adapting the radical new configuration for use on helicopters. In the meantime the extensive list of significant advantages is sure to encourage many buyers

from within the gyroplane community.

Those interested in learning more about this radical new approach should go to wonderfitleverfly@mateyouredreamin.com



For Sale

BENSON GYRO.

This was one of the original Gyro built in the late 1970 's

90 HP McCulloch Engine (Dismantled).
48 inch Wooden Propeller
22ft Rota Blades
Plastic Fuel Seat Tank

Have lot of used McCulloch Engine parts that go with it.

Damaged 2 seat DOMINATOR

Built 2008
SUBARU EJ 20 Engine (Late Model)
230 Hours on clock
Auto Flight Gear Box
V.D.O Engine Gages
MGL Rotor Rev Counter
70 Litre Fuel Seat Tank
Miro Air Radio

Can help with Aluminium Tubing supply's
All enquires contact Lloyd Fitzsimons

Phone 0274947526

For sale



AMAX reduction drive for EA 81 Subaru with starter motor.

Open to offers

Andrew 027 4821515

ZK RIT \$45 000

Auto Flight Dominator for sale

39 hrs, 28" Rotor flight, 72" Warp drive

Contact Donald, 0272240533

donaldfranklin101@hotmail.com





With the passing of one of our South Island club members Derek Zandbergen, the family are needing to clear out Dereks shed of all the Gyro parts he has accumulated over the years. For a full list and photos please email nzautogyroassociation@gmail.com or any questions please call Rod Zandbergen 0274814039. Many thanks.

Photo: Radiator E-949 V.W Golf 1500 Diesel (New)

Radiator (Used)

Gyro seat/fuel tank

Photo: Seatbelt

Photo: Instrument panel

Photo: Instrument panel shell

Photo: Gyro tail and tail planes.

Gyro wheels plus spare inner tube.

N.B broken fuel cap on the gyro seat

Rotor head gear (RAF)

Smaller radiator

2x black Exhaust pipes

Grey exhaust pipe

Photo: Miscellaneous lengths of aluminium rods and other things.

2x white Wheel guards



Subaru Engine No.1:EJ22

Engine No.2: EJ18

Engine No.3: HIRTH G40.264 1993 (270 horsepower?)

Engine No.4: EA81

Engine No.5: EA81

This is not everything but it's a start.



For Sale

Complete Link Engine Management kit

Brand new never been used

Freight included \$750

Contact Darrell Jones Darrell-Jones@bigpond.com

