ROTORUA MODEL AIRCRAFT CLUB (INC)

July 2025 NEWSLETTER

Secretary Andy Watson

Email: top.place@xtra.co.nz Ph 0274 856553

http://www.rotoruamac.org.nz/wordpress_Z









Welcome to the July 2025 newsletter

Another mixed bag of conditions this month. The midweek gang have had some excellent conditions although the air temperature has been on the low side. We are continuing to get an increasing turn out of members with an ever increasing variety if models. This includes drones and helicopters. Graham has the aerobatic side of helicopters mastered and is also doing some tidy pattern aircraft flying.

Andrew has been flying his Tyro Major, Carbon Cub and Electric glider with considerable skill. Years of flying A2 F/F thermal soarers gives Andrew a distinct advantage in the gliding department. Ian , Dylan and Graham are all into the aerobatic scene. Meanwhile Trevor has now completed a few landings and takeoffs and is progressing well with his training. Ashley has a new Bigfoot he flew today (wed 9th) and it wet very well.

Dave, Andrew and Andy have contributed items so read on.

VINTAGE NEWS

The Vintage SIG has been considering ways to increase the participation in their events. Over the last few years some of the regulars have passed. The younger generation hasn't grown up with pre 1950 models so the SIG is looking at incorporating Classic (up to 1975) models in their events. This opens up all sorts of designs by Dave Boddington and Ken Willard and many others. The Keil Kraft Super 60, Tyro Major, Gasser, Dixieland, Sig Kadet ,Modelair Hummingbird are a few that come to mind. Some of the ARF trainers would also qualify.

NEW MODELS

Dylan recently acquired this Extra 260. With some help from Ray new Savox servos were installed ,C of G sorted and radio set up.



The next fine day field pre flight checks were carried out.
Unfortunately the engine suffered from an intermittent miss particularly at full revs so it was very wisely taken home to be sorted.



Ashley looking very happy after the first flight of his new BIGFOOT Full flap on landing approaches allowed for some very slow short landings.

MOSSIE PROGRESS



The wing mounts are now fitted and the wing can be bolted in.
I need a bigger shed!



The Helicopter Department

Andy has provided a Bio of his aeromodelling activities

Hi all,

My name is Andy Watson, and I am the current secretary of the Club. I joined the Club in 1989 along with my then 12-year-old son Paul.

As a teenager I, like many boys of that era messed about with model aircraft from free flight to control line. The interest started after my father built a free flight model powered with a Davis Charlton 0.75cc Merlin diesel engine, which I still have.

After transferring from Hamilton to Rotorua for my job, Paul and I attended a couple of RMAC open days where the likes of Colin Mudford would dress up as clowns and generally play the fool. Paul was hooked and badgered us to join up. As it happened my wife and I were due to fly out to Europe for a 9-week holiday. My parents came up from Wellington to look after our three children. Before leaving we bought an Airsail control line aeroplane kit for Paul and said if you can build this and learn to fly it before we return, we will join the club. Well, with the help of my father and John Ryan he managed to achieve this using an old AM 1.5cc diesel I had. So, as they say the rest is history.

It wasn't long before we progressed to Radio Control with the purchase of a Futaba 5 Channel set and a Duraplane trainer powered with an OS FP40. We managed to strap a Kodak Instamatic camera to it, actuated with a servo off the 5th channel. The only problem was it had to be landed after every photo taken to wind on the film. Just shows you how much technology has leapt ahead since then. For several years I was quite happy to stand by and watch and pay but when Paul started his apprenticeship in Hamilton it was time for me to get serious about obtaining my Wings Badge. Under Colin Mudford's tutelage I achieved this. In the meantime, I was learning to fly full size in a Victor Airtourer but after gaining a PPL it just got too expensive and anyway my wife only came up with me once and that was enough for her. No cabin service and it was a bit too bumpy for her! Flying models with likeminded people is so much more fun anyway.

I'd hate to think how many models have been built or acquired by myself and Paul, also destroyed or lost! But the things that makes it compelling for me to keep coming back is the great comradeship, the willingness of members to help others, the lack of snobbery and the lighthearted banter between members. May it continue as we have a pretty good facility.

Cheers Andy

Well who knew Andy had achieved all that and also attained his PPL. Its amazing the talent and experience our members have.

Have we got a volunteer for next month?

A WORD FROM DAVE

Despite winter weather woes we have had some good flying days, even to the extent that the committee is considering purchasing some more "pre-flight" tables. The photo below was taken on 18 June, when we had a great turnout.

This reminds me of the range check procedure where there is often a lot of arm waving going on , up down left right , showing that the control surfaces are moving. All good, but is it? A closer inspection could reveal the ailerons (or whatever) are moving in the reverse direction in relation to the transmitter input. The classic take off crash is often

due to controls being reversed. Easy to occur after transmitter settings have been altered to suit another model. Any how it comes down to checking every time before takeoff, as full scale pilots do.



ANDREWS ENGINE REPAIRS

Andrew recently had a problem with the electric motor in his Tyro Major making self destructing noises and tells us how he went about fixing it.

A Case of "Driven Shaft Syndrome" in a Model Aeroplane Electric Motor Abstract:

We report a novel case of a model airplane electric motor suffering from "driven shaft syndrome", underscoring the importance of proper diagnostic and management strategies in aeromodelling settings.

Case Presentation:

A 65-year-old model aeroplane enthusiast presented with a motor that generated unusual sounds when spinning, after a recent unexpected contact with a fence midflight. As usual, this was blamed on "wind". The model's primary care physician had determined that the motor made a "funny noise". This was corroborated by an innocent bystander. He sought expert advice, and the problem was solved with a hammer.

History:

Prior to the flight in which the noise was noticed, the model had been in contact with a fence that unexpectedly jumped into the flightpath as the model was carefully approaching the southern threshold of runway 34 at the club site. Initially the arrival was suspected as the cause of the problem, until further analysis indicated that the trauma sites on the model were on the wings only, and the motor had been spared. Thus, the mystery deepened.

Physical Examination:

The motor was surgically removed by the primary physician. The motor's external housing showed no signs of impact trauma and appeared intact and could spin freely. However, on pulling the drive shaft forward, as would occur under power, the outer case on the motor moved forward 3-4 mm. Attempting to manually turn the shaft in tension revealed significant resistance and a gritty sensation, reminiscent of "gravel in a mechanical joint." Unsure if this was normal, the primary physician used telehealth to discuss the case with a local Senior Surgical Expert in the field of tiny electrons going fast along tiny wires.

Diagnostic Workup:

Further visual inspection revealed that the collet at the rear of the shaft was further posteriorly than usual (fig 1). In addition, despite removing the grub screw and the collet, the shaft would not travel sufficiently posteriorly for collet to be satisfactorily placed on the flat of the shaft. This suggested that at some previous time the shaft had been forcibly displaced backwards, causing internal components to misalign. No electrical damage was evident, but the mechanical misalignment appeared severe.

Management:

The recommended course involved carefully disassembling the motor to realign the shaft without further damage, however this was not possible. It appeared more major surgery was needed. The owner was counselled on possible repair techniques, including the option of just giving up and buying a new one. Surgery was agreed upon. Full informed consent was obtained per the Model Flying New Zealand ethical guidelines. Despite this, the motor attempted to run away, and restraint with tape was required. This had the advantage of also keeping all the inside bits, inside. Precise tools and surgical instruments were required and after gentle adjustments with a large, heavy hammer, repeatedly, the shaft was able to be shocked into submission, the collet relocated (Figure 2), and the motor was awoken from the procedure in the Recovery Room.

Outcome:

The model was successfully flown on the next flying day, and on landing was crashed into the protective orange fence surrounding the pilot box. This was considered a successful outcome.

Conclusion:

We believe this is the first case report of this problem to be published in the New Zealand aeromodelling literature, and humbly propose the term, "Driven Shaft Syndrome", or "McMenamin-Philpot Syndrome" be applied to future cases. In the world of aeromodelling, proper repair techniques are vital to treat "driven shaft syndrome". This case serves as a reminder that in this hobby, brute force sometimes "trumps" – if I may carefully use that word – patience, gentle correction and finesse.

Acknowledgements

The authors thank Ashley Perera, who provided the initial second opinion and confirmed there was indeed a funny noise from the engine.

No electrons were harmed while the shaft was being hit with the hammer.

Figure 1 Preoperative: Showing the gap at rest between the collet and the rear of the motor. Note how dirty it is coming directly from the primary physician.



Figure 2 Postoperative: Showing the collet in the correct place. Note how clean it is now.



FOR SALE

The Club has a number of small items for sale like hinges and other small items. Also a couple of gliders and an aerobatic model. Contact any Committee member for details.

Beginners model for sale

Arising Star

- Complete with servos and ASP 46
- Test flown and ready to fly just requires a receiver and battery pack.
- Another good beginners model.
- Has had a bit of use but has plenty of life left



If you are interested in this model we can arrange a buddy box trial flight.

Contact John on 020 4118 5597

COMING EVENTS

August NDC Vintage Precision and Duration

September NDC 1/2A Texaco

November NDC Vintage Precision