

ROTORUA MODEL AIRCRAFT CLUB (INC)

August-September 2026 NEWSLETTER

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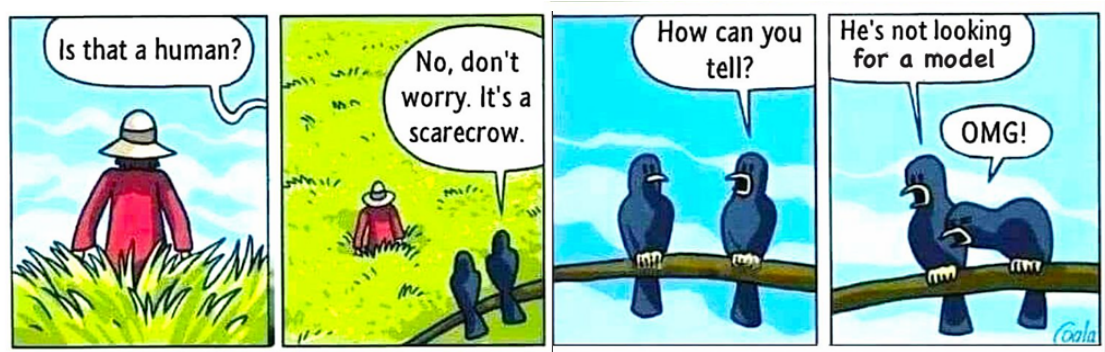


Welcome to the August-September 2026 newsletter

This month has been quiet, but as to be expected with the winter weather. Now with it coming into spring let's hope that better weather is coming our way.

Interesting finds

This month I've got some comics... And some photos of when the Club house was being built in 1990!





Building the clubhouse in 1990

Upcoming events



VINTAGE SIG RALLY

17th Oct 2026
HMAC field
Collins Road

This rally is for flyers who enjoy flying model designs of earlier eras. The aim is for everyone to have fun through sharing enthusiasm for these designs, and socialising with people who share similar interests in building and flying. Models must be from plans or kits dated up to the end of 1975, built recently or in the past. The plans may be scaled up or down. Power may be IC or electric. The range of designs up to the end of 1975 includes:

- ☐ 'Traditional Vintage' – original FF designs fitted with RC
- ☐ Pioneer RC designs
- ☐ Designs for RC gliders, converted to have power

Copilot

UPCOMING RALLY

Hamilton Model Aero Club
RC field 231 Collins Rd, Melville, Hamilton
17th October 2026

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- ☐ 'Traditional Vintage' – original FF designs fitted with RC
- ☐ Pioneer RC designs
- ☐ Designs for RC gliders, converted power
- ☐ RC sport, scale, and pattern/aerobatics designs

Faster models will be flown in separate time slots.
No competitions – just flying for the joy of it.

Organisers' choice awards will be made for:

- ☐ Best 'Traditional Vintage' flights
- ☐ Best RC glider flights
- ☐ Most authentic pattern/aerobatics
- ☐ Concours: best construction and finish - model must be flown to qualify

Registration fee: \$10
BBQ lunch available

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Vintage SIG Waikato Rally

17th October 2026
HMAC RC Field



A RALLY FOR FLYERS WHO ENJOY FLYING MODEL DESIGNS FROM EARLIER ERAS. THE AIM IS FOR EVERYONE TO HAVE FUN THROUGH SHARED ENTHUSIASM FOR THESE DESIGNS, AND SOCIALISING WITH PEOPLE WHO HAVE SIMILAR INTERESTS IN BUILDING AND FLYING.

Side thrust article

Why do RC planes have down and right engine thrust?

Right thrust: If you're wondering why you're told to point your engine to the right, sooner or later somebody will mention P-factor which is short for propeller factor. You can get a pretty good description of this phenomenon from Wikipedia, so here's the short version. Your plane is traveling forward. You pull up on the elevator, and now your plane is traveling forward with an increased angle of attack. As a result, the downward traveling blade (right) is able to produce more thrust than the upward (left), thus causing the plane to yaw to the left. Therefore, we point the engine to the right to counteract P factor. This sounds good at first, but it's not correct. If right thrust counteracts the left yaw caused by P factor when you yank on the elevator, then the plane would turn right when you level off, because the P factor goes away but the engine is still pointing to the right. You're supposed to counteract P factor by using your rudder. The second most commonly misattributed reason for right thrust is engine torque causing the plane to roll to the left. Torque does indeed cause left roll, but it is corrected by aileron trim and you therefore don't have to think about it. It's not much of a factor because there's more torque at high throttle, which is also when there is more airspeed, which causes a simultaneous increase in the correcting effect of the wings and tail. So, why is right thrust needed? The propeller creates a spiral slipstream that surrounds the fuselage. Most planes have the vertical stabilizer on top of the fuselage. The slipstream hits the fin on the left side, pushing it to the right, which causes the plane to yaw left. The engine is angled to the right to counteract this effect. Both the problem and the solution are proportional to the throttle setting, so they balance each other nicely.

But why do different planes have differing amounts of right thrust? The two main factors are the location of the tail fin and the ratio of airspeed to slipstream strength. High airspeed causes a straightening of the slipstream and thus less yaw, whereas low airspeed combined with lots of engine effort will have more side forces in the slipstream and create more yaw. For examples of the two extremes, imagine a pylon racer vs a big, draggy biplane with a long, low pitch propeller. This explains why biplane designs sometimes call for as much as 5 or 6 degrees of right thrust, whereas very fast planes typically have little right thrust or even none.

Down thrust:

It's tempting to think that RC planes have down thrust simply because when the throttle is advanced the nose comes up and the plane climbs too much, just because this is one of the effects of applying power. A properly adjusted plane will maintain a level attitude at all throttle settings, or at least come close to this ideal, and proper adjustment is achieved by pointing the engine up, down, or level as required by the rest of the airframe. Airfoil selection and wing location relative to the engine are the key factors determining the proper vertical orientation of

the thrust line. For example, a typical balsa trainer needs a lot of down thrust. This plane has a high lift airfoil, which translates to high drag, and it's on top of the fuselage, so the center of drag is very high in relation to the center of thrust. This causes a rotational tendency with the center of drag as the axis. The result is that the airplane pitches upward when the throttle is advanced, like when you push a kid on a swing. The high angle of attack slows the plane down, and the plane will stall or at least wallow around, or if the engine is very powerful the plane will go slw and climb like crazy. Pitching up and climbing can be mitigated by trimming the elevator down, but then you have a twitchy plane with a bunch of lift in the rear, and the nose drops when you cut the throttle and try to land. To maintain pitch stability at all throttle settings, the ideal thrust line theoretically should pass through the center of drag (although this ideal is not achievable in most designs). The engine should be pointed down, so the imaginary line along the propeller shaft will project aft wards pretty close to the center of drag.

New Models

John's new mossie will be taking to the skies soon !



John's chipmunk is complete and has flown



Neal's new helicopter on the way:



14th Annual PANDAS "Single Channel & Retro R/C" Event 2026

This event was held in Yorkshire UK on the 23 of august. The people at the event said that the weather was superb, clear skies and some thermals for gliders. There were lots of models there including control line, retro single channel models, gliders and a girocopter. With the money raised from the event they donated it to the yorkshire air ambulance!

Overall a good event. Hopefully we can get something like this closer to home in the coming years!

Photos and more on their Website:

<https://mode-zero.uk/viewtopic.php?p=16665&sid=70873c2eb889220757e702c60aefd1af#p16665>

Send anything you'd like to advertise for sale to other club members at
alex.br.marsh@gmail.com

That's all for this newsletter!