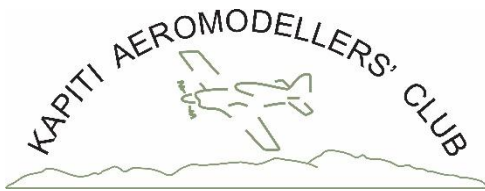
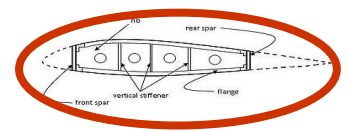


The Spare Rib News



**The monthly newsletter of the
Kapiti Aeromodellers Club**

March 2025

www.kapitiaeromodellersclub.org.nz



Kapiti Aeromodellers Club group

Notes from the Scribler



It's been great to have some more settled weather of late and numbers of flying days have improved. Some of those flying days have been busy, and others not so much.

This last month saw the first club night of the year and the first Silver Fox BBQ. We had a good turnout for club night given a number of regulars were away. The BBQ not so much. Given it wasn't raining, although a little windy for flying we only had 7 hardy souls come and enjoy a sausage.

A number of regulars were otherwise occupied, but even so

it was quite disappointing.

John Pfahlert has stained the new deck at the clubhouse and its great to have this improved deck in place. The painter has also been busy this week, painting windows and doors etc. All in all, the clubhouse is looking quite the piece.

There have been a few things happen this past month, Warbirds at Awatoto, the 'Rumble' Imac comp also at Awatoto, but nobody has bothered to write them, so I'll put something together for next month's newsletter.

I hope those that have been able to get down for a fly have enjoyed doing so. My own experiences have not been kind.

Some weeks back I badly damaged the undercarriage mounting on the Extra. I was a bit far over, thought I had cleared the weeds only to have a clump grab the tail wheel, rip it off, puncture the bottom of the rudder and, as I found out later, strip a gear on the rudder servo with the force. The front of the model hit the ground with some force, tearing out the undercarriage mounting and destroying the mounting structure. Repaired a couple of weeks later, I enjoyed a couple of flying days, only to land at far too slow a speed and tear out the undercarriage mounting plate. This time no other damage. Repaired and back in the air I enjoyed several good days flying until.... last Saturday, when flying I lost the throttle. It came back briefly but failed again on approach and I didn't make the runway. This time no broken prop, but undercarriage torn out again.

When examined in the pits, the throttle servo would not work unless manually freed, It was tight in one direction of travel and would basically lock. I've since stripped the throttle servo. No damaged gears but the motor isn't well, and I think its smoke has escaped.

Unfortunately, the repair this time is not that simple, as I have to undo a lot of the original repair and that's always a pain.

Oh well, onwards and upwards.

See you all at the strip sometime.

Have a good month.

Steve

Presidential thoughts

A better month for flying. I've been down 6 times since 1 January. Could have gone more but had other things to do. I've worked with Steve Hutchison to start the new motor in my Edge. It's an OS GT 33cc petrol. Fired up eventually so hope we will get it flying in March.

Missed the Vintage rally in Levin because I was helping my wife in the garden and cut one of my fingers rather badly. There's a moral there somewhere.

Club night in February saw a few turn up to hear Rod Ford talk about composite construction.

There is of course the upcoming rally on 15/16 March, and we need some helpers Sat/Sun to assist with the BBQ. if you haven't already been in touch let me know if you can assist.

The March meeting is Peter Randerson speaking about his laser cutter.

The AGM is in April. We need people to offer their services for the Committee and someone to act as secretary. Also, we need a good turnout to vote on the new constitution.

Reminder that the glider rally is on in Levin 29 March, any glider is acceptable. There was a great turnout of 25 or so last time one was held.

Till next time.

John Pfahlert
0211509763

News at the Park

As mentioned at club night, John and I recently met with the Rangers at the Park. There have been some changes in this area.

Firstly, Brendan Bulliff, the senior ranger on the park, resigned late last year and moved over to DOC. Somewhere in the mid North Island.

Jordan Clear, the mobile ranger for the park, and our contact point, is still with us and fulfilling that role.

A new ranger has now been appointed to the park to replace Brendan. His name is John Tesoriero.

John has written to all the active groups in the park to introduce himself. I've reprinted below for your information.

At this meeting, John Pfahlert and I discussed our wish to carry out some levelling works. This was in conjunction with a previous request to move the strip a little to the South. We had been informed that moving southwards was acceptable. We have also now been informed that our wish to level the area is acceptable and does not require a consent. GWRC are having some work carried out in the park in the next 6-8 weeks and we will have a chat with those contractors to find out what we can do. GWRC will also remove the drinking trough at the south end for us.

New contact numbers for the Rangers, John and Jordan, will be put on the noticeboard in the clubhouse. If you think we need to contact them at any time, then that is where their contact details will be found.

They will also speak to us at our May club night and take us through what is being planned in the park. We haven't had such an update for some years, so it will be good to have that catchup.

From John Tesoriero

I just wanted to take this opportunity and introduce myself to all our stakeholders and partners in QEP/Whareroa as the new ranger working alongside Jordan.

I grew up in Paekakariki during the 70s and 80s and I spent most of my youth exploring the park. Over the last few years I have been an active park user, running the tracks most days. I feel very blessed to now be working in this space that is close to my heart. When I was young the park was predominantly grazed with little vegetation, I have witnessed significant changes over the years. I have many happy memories of the park growing up, I remember going for rides on the trams and when Mark Todd rode in an equestrian event.

Most of what has occurred over the years has been down to a lot of individuals and groups of people who have invested their time and energy to protect the park and make it what it is today. Both Jordan and myself are really looking forward to working with you.

Over the next 4 weeks it would be great to catch up with the different groups. I'd like to set up some meetings to pick up on previous conversations, understand your aspirations and see how we can support you as a ranger team.

We will be introducing a quarterly newsletter on what's happening within the park. In this report we will also include our roster. Our aim is to provide a 7-day ranger coverage over summer and be on call during weekends in the winter months.

Just a bit of boring info about myself.

In a previous life I attended Kapiti College, managed supermarkets for 10yrs, Dairy farmed for 10 yrs in Te Horo, worked for KCDC in the restoration space supporting 25+ community groups and this invigorated my passion for restoration and Biodiversity. For the past 3 years a GW mobile ranger for Battle Hill and Belmont Park. I have 4 adult Children and live in Otaki.

Both Jordan and myself welcome any feedback or questions so please feel free to contact us.

Really looking forward to meeting you all.

Asymmetric propeller thrust and Gyroscopic precession

At our February club night, Peter Randerson took the time to update us on a number of things that were happening as well as talk about the model Lancaster that had an episode at warbirds. It had, apparently been reported that the model crashed due to torque roll when an engine was lost. Pete took the time to explain to us exactly what happens with propellers on a multi engine aircraft and what happened when the engine was lost.

It wasn't torque roll.

I found it really interesting and asked Pete for some info so I could write about it.

Pete has submitted the following 2 articles.

They are extremely informative.

I hope you all get something from them.

ASYMETRIC PROPELLOR THRUST

Asymmetric propeller thrust, commonly known as P-factor, is an aerodynamic phenomenon where a propeller-driven aircraft experiences uneven thrust distribution across its propeller disc, leading to yawing tendencies. This effect is particularly pronounced during high angles of attack, such as during take-off or slow flight.

Understanding Asymmetric Thrust

In level flight, a propeller's blades cut through the air symmetrically, producing equal thrust on both the ascending and descending sides. However, when an aircraft's nose is elevated, the angle at which the propeller meets the oncoming airflow changes. The descending blade (typically on the right side when viewed from the cockpit in aircraft with clockwise-rotating

propellers) encounters the airflow at a higher angle of attack compared to the ascending blade. This increased angle of attack results in the descending blade generating more lift and, consequently, more thrust. The imbalance shifts the propeller's centre of thrust to the right, causing the aircraft to yaw to the left.

Visual Representation

The accompanying diagram illustrates this concept:

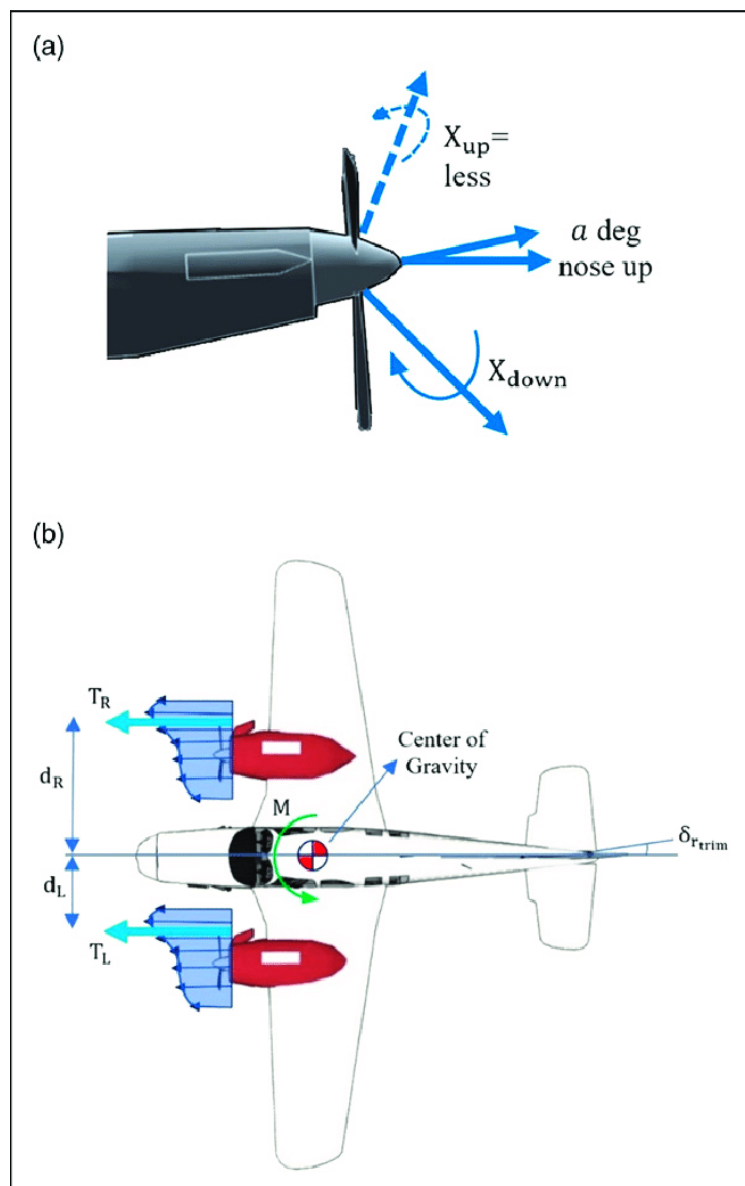
Figure 1: Asymmetric blade thrust effect in the presence of an angle of attack.

In Figure 1(a), the aircraft is depicted with a positive angle of attack. The descending blade on the right side produces more thrust due to its higher angle of attack, while the ascending blade on the left generates less thrust. This asymmetry causes a leftward yawing moment.

Factors Influencing P-Factor

Several factors can influence the magnitude of asymmetric thrust:

- **Propeller Rotation Direction:** In aircraft with clockwise-rotating propellers (as viewed from the cockpit), the leftward yaw is more pronounced. Conversely, aircraft with counterclockwise-rotating propellers will experience a rightward yaw under similar conditions.
- **Angle of Attack:** Higher angles of attack exacerbate the P-factor effect, as the difference in angles of attack between the descending and ascending blades becomes more significant.
- **Power Settings:** Increased engine power amplifies the thrust differential between the propeller blades, intensifying the yawing moment.



Pilot Compensation

Pilots must actively manage asymmetric thrust to maintain controlled flight. During phases like take-off, where high power settings and elevated angles of attack are common, right rudder input is typically required to counteract the leftward yaw. The exact amount of rudder needed varies based on aircraft design, power settings, and flight conditions. Regular training and awareness are essential for pilots to recognize and correct for P-factor effects promptly.

For RC pilots yaw correction can be made by manual rudder input or physically offsetting the thrust line of the engine/propeller by a couple of degrees. Less ham fisted is to create a throttle/rudder mix that can be fine-tuned for optimum results.

Conclusion

Asymmetric propeller thrust is a fundamental aerodynamic principle affecting propeller-driven aircraft, especially during high power and high angle of attack scenarios. Understanding and compensating for P-factor is crucial for maintaining directional control.

GYROSCOPIC PRECESSION

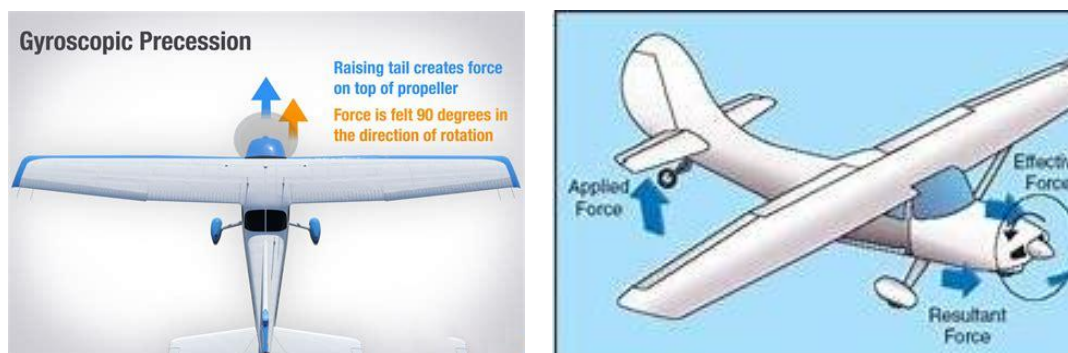
Gyroscopic precession is a phenomenon observed in rotating bodies, such as aircraft propellers, where an applied force results in a reaction 90 degrees ahead in the direction of rotation. In aviation, this effect can influence an aircraft's yaw and pitch movements, particularly during manoeuvres that alter the orientation of the propeller disc.

Understanding Gyroscopic Precession

A spinning propeller functions similarly to a gyroscope, possessing properties like rigidity in space and precession. When a force is applied to the propeller—such as during a pitch change—the resulting reaction occurs 90 degrees ahead in the plane of rotation. For instance, in a tailwheel aircraft during take off, raising the tail shifts the aircraft's nose downward. This action applies a force to the top of the propeller disc, and due to gyroscopic precession, the aircraft experiences a leftward yaw.

Visual Representation

The following diagrams illustrate this concept:



As the tail rises, the force applied to the top of the propeller disc results in a leftward yaw due to gyroscopic precession.

Implications for Pilots

Pilots must anticipate and counteract the effects of gyroscopic precession to maintain desired flight paths. In scenarios like take-off, especially in tailwheel aircraft, applying appropriate rudder input is essential to offset unintended yawing motions. Understanding the relationship between control inputs and gyroscopic reactions enables pilots to execute smoother and more controlled manoeuvres.

In summary, gyroscopic precession is a critical aerodynamic factor that affects aircraft handling during specific manoeuvres. Awareness and proper compensation for this effect will make your flying smoother and safer.

Now I know why a number of electric powered multi engine models use clockwise and anticlockwise rotating motors.

Rally 2025

The date for the 2025 rally has now been set.

The rally for 2025 will be held on the 3rd weekend of March 2025

Sat 15th and Sunday 16th March.



Vintage

Dates for the calendar.

Dates for the diary/calendar:

Levin Vintage Event Dates 2025

Gareth Newton Memorial - Saturday 22 February (Wind date Sunday 23 February)

Bob Burling Memorial – Saturday 17 May (Wind date Sunday 18 May)

John Selby Memorial – Saturday 23 August (Wind date Sunday 24 August)

Event Details:

Levin MAC flying site, Tararua Road (coming from SH1 turn over railway line opposite Allied fuel pump. Turn right when over railway line and turn left at the corner into Tararua Road past Mainfreight. The gate to the flying site is about 50 metres past 80km sign. The light green clubhouse and hay barn are visible from the road).

Any RC Vintage or Classical Classes may be flown. Precision is normally the most popular event. We can help you if unsure of the basic rules – just sing out as this is all about having fun. Sport flying of Vintage models and small field Vintage Free Flight is also welcome.

No entry fees or prizes. This is a low-key fun get together of like-minded Vintage fliers.

BBQ – The Levin MAC normally runs a sausage sizzle at lunchtime at purely nominal cost so bring a few coins.

Postponements – Any postponement decisions will be advised on the Levin Club website [Levin Model Aeroplane Club - Home \(sporty.co.nz\)](http://Levin Model Aeroplane Club - Home (sporty.co.nz)) and via the Vintage Email List which Stew Cox uses to provide reminders and updates concerning these events. If you want to be added to this list, send Stew your email address Flierstew@gmail.com

Weather – If unsure on the day, consult the new Levin MAC weather station on the Levin club website at Levin Model Aeroplane Club - Home under 'Weather Station and Camera' rather than making a call based on your local weather.

Levin has a much better microclimate for model flying than anywhere else in the lower North Island west of the main divide. Feel free to ring Stew if unsure.

For any further details please contact joint organiser Stew Cox– 027 548

1894, Flierstew@gmail.com or Bryan Treloar 0204 147 6917, bryan_treloar@hotmail.com

Hope to see you there.

Stew and Bryan

February Club Night

Rodney Ford talked to us about composite construction.

Rod brought along a selection of molds and finished pieces, including CF propellers, molds for propellers, spinners etc. The most complete piece was the fuse for an Extra NG. Rod talked about, as a trained draughtsman, he starts with the design before making a plug and then a mold.

He documents some of his work on various forums and will send us a link to those.



This is an idea that Ian Crosland has been playing with for some time. There's been tests and practices and failures, but now we have the real deal. Ian plans to fly the banner at the rally.

'Success with the banner. Can be towed with any slow stable above 40 size aileron aircraft. I used the Croz Duster'

Levin Glider Fun Fly

An open Invitation to attend the Levin Glider Fun Fly
Saturday 29 March 2025 - 9.30am start (Wind date
Sunday 30 March)

Format: Fun fly for soarers. Dig out those gliders or electric soarers that may have been tucked away for months or years! Bring along your electric, winch, bungee or hand launched glider and go soaring. All welcome. The day is about having fun flying soarers together no matter what your ability or sophistication of model. We anticipate Radians/Gentle Ladies right through to F3B soarers. Help available on the day, don't hesitate to ask the organisers.

Location: Levin flying strip, Tararua Road. Coming from the south, having turned right over the railway line opposite the Allied fuel pump and then immediate right at the T intersection, continue along Tararua Road past JB's on the right and Trayla on the left. The field turnoff is on the right about 50 metres past the 80km speed sign – you can see the clubhouse and the hay barn from the road. N.B. Due to roadworks at the SH57 intersection, Tararua Road is currently only accessible from the SH1 end.

BBQ: The Levin MAC will be running a sausage sizzle at lunchtime at purely nominal cost so bring a few coins.

Cancellation notification: The lower NI Glider Email List will be notified of any postponement on the Friday afternoon (if you want to be added to this Glider Email List please advise Stew at Flierstew@gmail.com). This will also be advised on the Levin Club website [Levin Model Aeroplane Club - Home \(sporty.co.nz\)](http://Levin Model Aeroplane Club - Home (sporty.co.nz))

If uncertain on the day, check the Levin Club's weather station on their website or feel free to ring Stew Cox on 027 548 1894

Hope to see you there!

Thermals
Stew Cox



Levin Vintage Gareth Newton Memorial - 22 February 2025

Report by Stew Cox
Photos by Clarke Keene and Stew Cox

An incoming High resulted in the Gareth Newton Memorial vintage event being able to be held on Saturday 22 February as planned, and the good weather resulted in a well-supported event.

The Levin club's new weather station showed that we were welcomed with a lightish wind of around 6-7 km/hr gusting around 10 km/hr but as forecast, it was coming from the east and directly across the strip. Some found this easier than others to contend with, largely due to the relative power to weight ratios of their models and the amount of runway needed. About 11.15am, the wind began to swing to the west and soon set into the afternoon forecast southwest vector and if anything, dropped in velocity. We were treated to wind more or less down the strip oscillating in mean wind speed between 4-8 km/hr until very late in the day. The wind change also triggered off significant thermal activity and there were some wonderful large thermals on offer from late morning for the rest of the day.



John Miller with his Buzzard Bombshell



Busy in the pits

One or two regulars couldn't make it due to ill health and in John Pfahler's case, due to cutting a finger badly in the garden just before leaving for the field. Clearly helping your wife in the garden before flying can be hazardous to your flying John! Notwithstanding, the event was well supported with 13 people flying and several spectators from the Levin club.

New Levin member Clarke Keene was one of those who very kindly brought along his camera as he knew regular cameraman Ross Gray would be away. Some of Clarke's excellent photos are included with this article.

Of the 13 fliers, nine recorded times across five different Vintage classes and four either sport flew or in the case of Ashurst's Bryan Treloar, didn't manage to get a model into the air. Unfortunately for Bryan, each of the three models he brought to fly went on strike with issues ranging from a switch that died at the field through to a con-rod breaking.....

Kapiti was well represented by John Ellison, Terry Beaumont, John Miller, Ian Crosland, Wayne Elley and Stew Cox.

Dave Crook came down from Waverley and got a lot of fun flying in as well as recording scores. Dave excelled in Vintage Precision not only making a perfect score but then making a perfect fly-off flight of exactly three minutes (no age bonus counts for fly-offs) with a spot landing and then nearly did the same again on the second fly-off flight hitting the spot just one second over the three minutes! Joe Bradbury (Levin) was a deserved second being the only other person to make the spot on all three flights and dropping only five seconds over two of his flights. John Miller again showed his continued improvement in Precision flying having two perfect flights after missing the spot and running a bit over time on his first flight. John pipped Stew Cox by one second although Stew got his own back on John in IC Duration. Ian Crosland was not far behind Stew in Precision. Unfortunately, Wayne Elley had a radio issue on his second Precision flight resulting in his lovely Miss America sustaining significant damage.



John Ellison's Tomboy and Ian Crosland's Mercury



Stew Cox New Ruler 1940 drops onto the spot.

Trevor Glogau (Wellington) flew his stunning Comet Sailplane in E Duration. Trevor had only had a half a dozen flights with this model previously but flew it with great aplomb finding thermals to make the 5 minute max in E Duration on all three flights.

Ian Munro (Wellington) had some excellent flights in the two Texaco classes he flew. He finished the day with a 15 minute max with his venerable TD Coupe which he achieved largely due to thermal assistance after an engine run just a little over four minutes. Ian has recently

repowered this model with a vintage ETA 5 diesel engine which has a very interesting pedigree. The side port 5cc ETA diesel was designed and produced by Charles Bedford and his oldest son Eric in Watford in the late 1940's. The Bedford family were actually from the Thames/Hauraki Plains area and moved to Watford in England in 1926. Charles's younger son Ken left the family engineering business in the early 1950's and was responsible for designing and producing the famous ETA 29 glo engines and equally well-known ETA 15 diesels.

It was interesting how the conditions changed late in the day when the very strong and large thermals experienced earlier in the afternoon were suddenly replaced by equally strong sink that pummelled the last flights of the day put up by Dave Crook and the writer in E and IC Duration respectively.

A great day's flying and we plan to do it all again on at the Bob Burling Memorial event on Saturday 17 May. Hope to see you there!

Results:

Vintage Precision

1. Dave Crook	New Plymouth	1938	Lanzo Bomber	600 + 200 + 199
2. Joe Bradbury	Levin	1946	Junior 60	595
3. John Miller	Kapiti	1940	Buzzard Bombshell	578
4. Stew Cox	Wellington	1940	New Ruler	577
5. Ian Crosland	Kapiti	1939	Mercury	560
6. Stu Hubbard	Ashhurst	1946	Junior 60	557
7. Wayne Elley	Kapiti	1936	Miss America	160

IC Vintage Duration

1. Stew Cox	Wellington	1940	New Ruler	626
2. John Miller	Kapiti	1941	Kerswap	584

Electric Vintage Duration

1. Trevor Glogau	Wellington	1940	Comet Sailplane	920
2. Dave Crook	New Plymouth	1938	Lanzo Bomber	761

A Texaco

1. Ian Munro	Wellington	1940	Simplex	1481
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Open Texaco

1. Ian Munro	Wellington	1936	TD Coupe	1592
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Wayne Elley's beautiful Miss
Before and after



America.

What's on in the months ahead.

March 15/16 Rally

Tuesday 18th March – Club Night – Peter Randerson will talk Laser cutting

Tuesday 15th April – Club Night – This is our AGM

Tuesday 20th May – Club Night – Park rangers will bring us up to date on Park developments

Don's Hurricane

Those that saw the maiden flight on scale day, will recall that one undercarriage leg failed to retract, and then Don lost throttle.

The undercarriage retract system is very old school using micro switches and one of these didn't activate as designed. Some mechanical adjustments should have now fixed this. The loss of the throttle servo is a bit of a mystery as no reason has been found and on the deck the servo operated as it should. It has been replaced.

Don's MSX-R

When I was selling Mike Hall's stuff on behalf of his widow, there was a brand new ARF of an MSX-R in Matt Hall colours. This model was a Hobby King model, a nice model and quite well built. Mike had made a start and I originally purchased it for myself. Don later purchased it from me.

Don finished the model around Christmas time. Its running a DLE 30 with pipe and some modifications needed to be made for the pipe to go down the fuse.

Don maiden it recently and after a few adjustments had it flying really well.



And that's it from me.

As Don would say, 'Fly hard, land soft'.

Steve