

# Tale Feathers October 2014

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#### **Hi Club Members**

Welcome to another issue of Tale Feathers.

#### The usual Disclaimer:

Articles and comments by the Editor and contributors may not necessarily reflect the views of the Club Committee, often won't be Politically Correct, but will be published anyway.

This newsletter is an information exchange and open forum for anybody to have their say.

With the move to bi-monthly meetings, the CLUB CORNER section will contain additional information on Committee plans & actions, to make sure everyone is kept up-to-date.

#### **CLUB CORNER-from the Committee**

Next meeting, Sunday 14 December at the Clubhouse at 0930

# 15 good reasons to stay off the roof of your house

I'll let Mike McDonnell tell the story.

"Hi Guys as the story goes, I'm out of hospital and walking though sore, on the morning of the 23<sup>rd</sup> Oct I was commissioning the evap cooler for the summer, I needed to get some more tools so attempted to get off of the carport roof via a 7' pair of steps, I found the step ok but when I hailed my fat gut over the gutter the step went out from under my feet, I came down about 2 meters landing on my shoulder blades. quickly followed by my head hitting the concrete, I was winded for some 10 to 15 seconds though I must have been able to get a scream out, the postie who was delivering a parcel next door arrived first followed by a couple of the neighbors, they called 000 and three ambulances and four Para's turned up as they had to put me on a spine board, off to hospital over Wagga's shitty roads, x rays and cat scans followed, results, broken left collar bone, left shoulder blade is in five pieces, right shoulder blade is in two pieces, T5 vertebrae is fractured, though should heal out and not back into the spinal cord, and finally eleven ribs with multiple fractures, all will most likely heal by themselves if left alone, but I will be sore for a couple of months, evidently I need to be cons is of my breathing with the broken ribs as shallow breathing can lead to pneumonia that's it guys hove to get off and have a red."

#### **Regards Mike McDonnell**

After that lot, Mike's lucky to be able to walk, and all those planning to send him lots of funny jokes, please don't! We do hope you make a speedy and complete recovery, Mike.

#### Power system

The charge bench is functioning very well and once

again, handled the drain of several large helicopter batteries on a recent weekend.

I know this plea has been in previously, BUT:

Please do not attempt to take power directly off the battery terminals for any reason. This will unbalance the bank and lead to expensive, premature failure.

There have been further queries/complaints/whinges about the placement of the new solar panels.

We questioned their placement when the installation was taking place and the explanation by the professional installer completely satisfied the inspection team.

We can only repeat that they were installed by a very competent professional, are of the latest type that has a much wider tolerance of sun angle, the Club saved some money by not having to pay for frames and braces, and the performance of the panels and the system has easily met or exceeded expectations.

Yes. With a lot more messing around, they could have been installed on frames aligned to the best average sun angle for morning/afternoon & summer/winter, but if they are working very well as they are, what's the problem?

#### Club Operations Manual & Rules

As discussed last time, the Rule changes have been revised many times and the process hasn't finished yet. The October meeting generated some useful discussion and those suggestions will be incorporated in the next version.

This is the right and proper way to generate a new Operating Manual for the Club.

We will continue the process of sending a new version out to members for consideration well before the next meeting. Our apologies for some obvious typo's and duplications: it's the old 'too deep in the forest to see the trees' thing.

#### Toilet upgrade

As was correctly pointed out at the meeting, the Club cannot really afford to pay for a decent upgrade, completely from its own funds. The Committee is looking at ways to reduce the considerable cost. These include grants and the option of a kit-type building that could be erected by Club members at a working bee.

# Flying field upgrade

The refurbishment of the main grass flight strip has happened, and although several members have expressed their dis-satisfaction with the way it was done, after several weeks there is a thick mat of fresh green grass poking up.

The pink mat and the grass on the other side of the refurbished strip, remain available for take-offs & landing as usual.

#### Working Bee

We have decided to hold a working bee at the field on Sunday 9<sup>th</sup> November to tackle some small jobs. At the moment the list is:

- Build up the ramp to the small container to improve access for the mower.
- Install whirly-bird ventilators in the small container to reduce summer temperatures which will affect the fuel and grease
- Clean out excess/unwanted equipment from the large container
- Remove the old battery cells

We are also looking at the feasibility of doing the pink mat refurbishment ourselves with obvious cost benefits. If we go this way, it will require a very positive effort from Club members to achieve.

Those who have been complaining about the way the Committee has been spending money on Club improvements, should take this as an opportunity to flex their arm muscles instead of their gums.

# WMAC 3-year plan

As the end of the year approaches it may be timely to take a look back at the Club improvement plan first proposed by the new Committee in September 2013. Work that has been achieved:

- Clean up of the grounds. Involving the removal of leftover materials and rubbish that had, in some cases, been left lying around for years. The Club grounds look very neat and tidy.
- Purchase of a replacement mower with much greater speed and cutting width, reducing the time and effort needed to keep the entire grass area neat and tidy by 70%
- Repair the toilet block. Proposals to hand. Work pending.
- Container upgrade. Due to the extreme generosity of member Bruce Dicker, and some hard work by a few members, this upgrade was achieved at minimal cost to the Club.
- Upgrade of the Club power system. The charge bench has been relocated to allow for opening up the clubhouse interior and the solar power system upgraded to a high and

very functional standard at minimal expense.

• Refurbishment of the primary grass flight strip. Recently achieved as per the report.

There are several other projects under discussion or close to action, but this is what has been achieved in 12 months.

#### **Temora Show**

Report on the Temora Show model aircraft and helicopter display.

I organized a display of my model aircraft and helicopters at the Temora Show on Saturday, September 27 October 2014.

The display was in the general pavilion where lots of activities of the Temora area are opened to the public. I had two tables for my models to be displayed, I hung models from the ceiling and ran the Real Flight simulator on my computer all day. Numerous individuals and families stopped to chat about the models and tell their modeling stories from past years. Most of the children had an attempt to fly an aircraft and/or helicopter on the simulator, whilst most adults would not try for fear of embarrassment!

Late in the afternoon I was able to do a flying display of my T-Rex 700 out on the main showground and brought the heli back in one piece!

I set up the display on Friday, September 26 and stayed with the display all day on the Saturday. There was a lot of interest shown, but no one said that they wanted to build or fly models. The show organizers were very pleased with the display and asked me to do it again next year.

George Bishop



#### HOUSEKEEPING

Last one out each day checks; GAS OFF, FENCE UP & ON, CAT OUT, MICE IN, CLUBHOUSE DOWN & LOCKED, PIT GATES CLOSED & MAIN GATE LOCKED.

#### **Club Bank Details**

Direct Deposit available: Wagga Model Aero Club, Inc. Beyond Australia Bank, Wagga Wagga BSB: 805022 Account: 38700257

(Please include your name and the word "renewal/membership/contribution," etc. with your deposit)

#### TECH TALK Fail-Safe

This is a subject that was raised at the last meeting as a safety issue.

As a generic technical term, fail-safe denotes a safe (or at least less than catastrophic) condition that a component, apparatus or mechanism is designed to revert to when its primary function fails in some way. For example, it could describe the redundant braking system on all cars, where there is a back-up set of hydraulics that takes over when the first one fails.

In the same way, multiple engines on a full-scale aircraft are a form of fail-safe. If one fails, you're still safe. Maybe!

In fact, the vast majority of modern twin-engine airliners are able to keep flying on one engine. It may not be able to maintain the same height as when the failure occurred, but it will still be high enough to stay away from the hard stuff.

(As a 'by the way', one light aircraft, the Piper Twin Comanche, was not able to keep flying on one engine. It slowly descended after an engine failure, which at least gave the pilot a bit more time than usual to find somewhere suitable to crash.)

In the context of R/C radios, the term refers to a setting that is input to your receiver via your transmitter, which commands your servos to take up pre-determined positions in the event of loss of radio signal from the transmitter.

These pre-determined servo settings are designed to minimise the damage caused by what would otherwise be a catastrophic incident when the radio signal was lost.

(Please note that a fail-safe setting **cannot** do anything about a receiver or airborne battery failure.)

## Fail-safe settings

As there are almost as many different ways of setting fail-safe as there are radios, this discussion will not try to tell you how to set the fail-safe on yours.

I have an old (mid-1980's) JR Apex radio which had basic a fail-safe that could be set via buttons on the back of the Tx.

I believe that there are some older 36mHz radios that may not have a fail-safe facility at all, in which case there is nothing you can do.

Most recent Futaba 2.4gHz radios operating with the FAAST system are able to program the fail-safe servo settings very precisely via a separate page on the Tx screen. I imagine recent Spektrum/JR/HiTec radios would be similar.

The most important fail-safe setting for a powered model, (electric or I.C.) is the throttle. In all cases, it **must** be set to go to either low idle or full cut-off when the Tx signal is lost.

There is absolutely no benefit in doing otherwise and this will reduce the damage to the model and perhaps to others when it spears in.

#### Elevator/rudder or not?

Some pilots like to set a small percentage of UP elevator as well as throttle cut so as to slow the model down, while other set a small amount of rudder to keep the model circling as it descends to prevent a straight-line flyaway.

The jury is out on the effectiveness of fail-safe elevator and/or rudder settings with power models, since the model may not be in perfectly level flight at the time of signal failure. It would be a good idea to set a trainer or a glider up like this since it has a strong self-righting tendency built in, but would be far less effective on any sort of pattern or aerobatic model.

The best and most common fail-safe setting for power models is:

- Throttle cut or low idle
- Aileron, Rudder, Elevator to neutral
- Retracts UP to minimise damage

# Never, ever select 'hold' on any fail-safe setting.

Even though this option is offered, this will hold those selected servo's in their last position when the radio link failed which won't help anything and most certainly will make the crash much worse.

#### Fail-safe test

This test should be made before the first flight of the day, only takes a few moments and is just as important as the range check.

The test for a successful fail-safe setting is made with the model on the ground and restrained, engine running at low power, but preferably above idle and some aileron or elevator deflection held in:

- Turn your Tx off
- The engine should cut or reduce to idle
- The control surfaces should snap to neutral.

Any behaviour other than this means the fail-safe isn't and must be corrected before you fly!

# **Electric power safety**

Virtually all speed controllers in electric models have the following excellent fail-safe features built-in.

- ESC will not arm if the throttle stick isn't fully closed when power is connected
- If the throttle signal is lost, (either a Tx or Rx signal loss) the ESC will shut-down the motor completely within 2 to 3 secs

Unless you have an old radio with no provision for fail-safe, there is absolutely no reason why you should risk your own and other's safety by flying without a fail-safe operational.

If you can't work out the fail-safe instructions for your radio, please ask around the pits. We have lots of cluey blokes and someone is sure to be able to work it out.

#### On another subject entirely.....



I'm always disappointed when a liar's pants don't actually catch on fire.



<u>Hobby-King's new autonomous operation, self-</u> <u>refuelling, micro Ornithopter with refuelling</u> <u>probe extended</u>

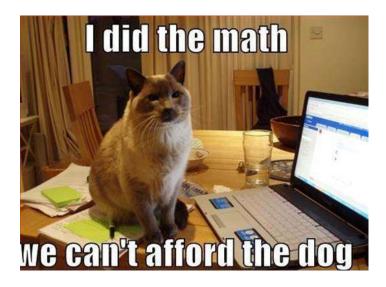
Pearls of Aviation Wisdom from that venerable Asian aviator, Confuze-us.

"Do, or do not. There is no try!"

*"Knowledge is knowing a tomato is a fruit; Wisdom is not putting it in a fruit salad."* 

"You're never too old to learn something stupid."

# TALE PIECE FROM THE CAT.



Straight Take-offs, Soft Landings and stay away from the tyres.