

TRANSMITTER



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Committee Members.

| | | |
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| Committee member (Liaison Officer). | Will Sipma | 3901 2208 |
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| Committee member | Glenn Crossley | |
| Committee member (Field maintenance) | Gregor Kruberg | 3397 5697 |
| Committee member | Allen Danvers | |
| Committee member | Michael Hobson | |
| Plan Library. | Ted Hacker | 3355 4714 |

TMAC Life Members

Doug Kent, Will Sipma

TMAC Life Member's Trophy.

Dave Gibbs

Flight instructors.

Tony Gliddon (07) 3899 0885
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Noel Wilson (07) 3890 2520

Heavy model inspectors.

Chris Howarth, Richard Symes,
Ian Howard, **Heavy & giant models**
Kevin Dodd, Doug McLlwraith

Turbine model inspectors

Kevin Dodd, Phil Collins.

On The Cover
Mike Ross with his birthday
present, a Comp ARF Extra
260.

From the Editor.

Welcome to 2009. Was it my imagination or did 2008 go quicker than previous years. Perhaps I'm just further down the hill and things are speeding up.

Apologies in advance for the shorter version of the newsletter this time, There just was not so much to write about and I have been rather busy with other projects.

I have finished off the article on flaps left over from the September—October issue so I hope some of the mystery of flaps has been revealed.

It is with great sadness we learnt of the passing of long standing member Adrian Allen a short time ago. A short tribute is included on page four.

One new thing I have started in this edition is a regular column on safety issues. In each edition we will address some of the major safety issues concerning our hobby in general and our club in particular.

All the best for 2009.

Peter Biddle

PS. The next edition of the Transmitter, due at the end of February might be a bit late as I will be overseas for most of January and part of February.



Presidents Report

2008 has been a very successful year in achieving a great many things, and I take this opportunity to thank the people for making them happen.

We have run many successful events this year, and I thank the event co-ordinators for their work, and all the helpers on the day, especially the BBQ organizers.

For the 40th Anniversary Dinner, thanks to Will Sipma and his merry band.

For the erection of the motor start up area, I thank Dave Sipos and his many helpers.

For the co-ordination of the grant for our new mower, a great many thanks go to Joel Davison and Gregor Kruberg.

For the ongoing mowing of the runway, our greatful thanks again go to Dave Walker.

The ongoing maintenance work by Gregor Kruberg, is what keeps our facilities in great condition, and Gregor's tireless work and enthusiasm for the club and aero-modeling is much appreciated and admired.

For the committee for their continued work behind the scenes, I thank them one and all.

I wish a Merry Christmas to all TMAC members and their families.

Stay well and good health.

Good Flying
Peter Stevenson

From the Secretary

MAAA Instructors at TMAC

We are always looking for ways to assist members get the best out of model aero sports. To this end, TMAC sponsored 4 members to undertake the MAAA two day Instructors course on the weekend of 13/14th December.

It was a full day on Saturday completing the classroom component starting at 8.30am and Noel Stewart's home. Many thanks to Noel for hosting the day. The candidates included four from TMAC and Lindsay Moore from Townsville. Lindsay is also the MAAQ Vice President. The two hour exam took us between 2½ and 3 hours to complete, finishing up at about 4.00pm. Maybe we weren't as bright as some.

On Sunday we turned up at RAAID, which is adjacent to on the Warrego highway near the Brisbane Valley highway turnoff, bright and early to be greeted by eight octars blue, and a windsock standing straight out from the pole. Lucky for us, it was blowing straight down the strip, however taxiing was interesting. To make it even more interesting, the recent rain gave us a 200m stretch of water just off the end of the strip down wind. No undershooting boys! Having said that, we all managed to fly the required manoeuvres and nobody put a plane in the drink.

Mick Snabaitis (MAAQ CFI) had also arranged for some of the RAAID members to come and attempt their Gold Wings, so the newly qualified instructors got to do some testing straight up. The RAAID crew took the whole thing with good humour, and were very helpful throughout.

In short, TMAC now has four shiny new MAAA Instructors. Congratulations to:

- Phil Gartshore
- Dave Sipos,
- Noel Stewart;
- Michael Hobson.

Well done boys! Congratulations also to Lindsay Moore, many thanks to Mick Snabaitis, and to all at RAAID for hosting to our Instructional endeavours!

Engine Run-up Area

Unfortunately, as many of you will have noticed, we have had the new shade cloth over the Engine run-up area stolen. The words from Dave Sipos cannot be reproduced here. On the positive side, most of the stainless steel cabling and fixtures are undamaged and can be reused. Thanks to Gregor Kruberg for taking these down and storing them; this also resolves the safety hazard.

We will be replacing the shade cloth in January, and this time it will have TMAC painted onto it in metre high letters, hopefully making it less attractive to would be thieves.

Signage



You may have missed the new TMAC sign at the front gate. The new sign sports the updated TMAC

logo, and the web site address. The lack of bullet holes is also a bonus.

Thanks to Will Sipma for arranging the signwriting, and mounting the sign with assistance from members at the field.

TMAC Committee

At this time of year, it's always good to reflect on the last 12 months. We have worked well together, and pulled as a team to get many things done this year, and will endeavour to keep the momentum going in 2009. Many thanks to Peter Stevenson, Jim Viles, Noel Stewart, Peter Biddle; Gregor Kruberg; Randall Mowlam; Will Sipma; Allen Danvers; and Glen Crossley for their hard work.

Incidents

I wrote in the last column about an incident with an aircraft landing on the entrance road to the field. In recent weeks we have also had a fly away incident, where an aircraft stopped responding and flew unassisted for some time before landing in the yard of a resident near the Carina Bus depot. There were no injuries, and the owners kindly put the wreckage into their and drove it back to the field.

It was only by sheer dumb luck that no members of the public were injured or worse. Please check and double check your setup and failsafe settings before flying.

We have now posted the MAAA incident form on the web site. (http://www.tmac.asn.au/miscdocs/tmac_docs/MAAA%20Form%2010%20INCIDENT%20REPORT%2002-10-08.pdf).

If you have an incident, please download a copy of the form, complete it, and return it to the TMAC Secretary.

Festive Season

Well, it's that season again. Best wishes to everyone, and may Santa leave a new piece of aero modelling equipment under the tree for you. I also look forward to seeing the "Rudd Air Force" take flight in the New Year.

Safe flying everyone,
Phil Gartshore.

In Memory of Adrian Allen

It is with sadness that we note the passing of Adrian Allen (AUS 56605).

Club records show that he joined TMAC in 2000. Adrian was a keen aero modeller and builder, and along with his brother Wayne would have owned over 100 planes and kits. I'm told his favourite aircraft was a Super Sky-bolt, with which he was noted for doing inverted flat spins. Adrian also had the last two large Wilson stunt scale aircraft which were built by Noel Wilson many years ago for formation flying at an air show. He also did some racing with the SID class at Coolum and other fields.

Outside of aero modelling, Adrian also enjoyed fishing and RC Model Boats, was a scuba diver and instructor, and was a member of the Army Reserve for many years.

His unfailing cheerfulness, camaraderie, and generosity will be greatly missed by all TMAC members.



Why All The Flap? (part 2)

Peter Biddle concludes a look at the dark art of flaps and what it all means

Back in the September—October edition of the 'Transmitter' we took a look at the theory behind aircraft flaps and the different types of flaps used. In this edition we will take a flight in my imaginary, fully flap equipped model to see how we can use these devices and some of the issues involved.

From the previous edition we learnt that flaps can both increase lift and increase drag. If you lower the flaps by a small amount (say 10 degrees) this will provide increased lift with only a small increase in drag. This is useful if you wish to maintain level flight at a much slower speed. Conversely if you lower the flaps further to around 40 degrees this will significantly increase the rate of descent with little increase in speed.

To make the best use of flaps requires a disciplined approach to flying. It is no use flying around flat out then shutting the throttle and lowering the flaps while diving towards the ground hoping to make a tidy landing.

Approach and landing

So how do we do it? All good landings start with a good approach (my old flying instructor told me that), which means a constant attitude and speed on the glide path. Therefore if you are constantly pushing and pulling on the elevator the speed and attitude will be constantly changing, ergo bad approach and landing.

A good approach starts on the downwind leg. So after you have finished tearing holes in the sky descend to circuit height and when established on downwind slow the aircraft down by reducing the throttle to around half throttle. When the aircraft has slowed lower the flaps to around 20 degrees (if you have only one flap setting I suggest you set them at 20 degrees. If you also have a second level then set this at around 40 degrees). At this stage you may need to introduce some down trim to maintain level flight, although some aircraft may pitch down due to the change in downwash over the tailplane. You will discover that if you lower the flaps at too great an airspeed the attitude change will be much greater and more abrupt and you also risk ripping them off the wings. You may wish to consider programming (mixing) some down elevator when the flaps are lowered. If you have retractable undercarriage then put the wheels down now.

At this stage you should be approaching the base leg. Fly gently around the corner avoiding tight turns and maintaining level flight on the base leg. Then turn onto final and reduce the throttle to a high idle and lower the flaps to 40 degrees. Again more elevator trim will be required to counter the pitch up tendency. The aircraft will now be descending. The trick here is to keep the level attitude and constant speed by controlling the

rate of descent with throttle. If undershooting increase the throttle and conversely if overshooting reduce the throttle. Elevator should only be used to keep the aircraft level and not for speed control.

Once over the runway threshold the throttle can be closed completely. When the aircraft begins to sink it is a sign that speed is reducing due to the drag caused by the flaps. Now you can start to slowly ease back on the elevator trying to hold the aircraft in that level attitude all the way to the ground and a perfect landing. The operative word here is 'level', do not try to extend the approach by keeping the nose up. Remember high angle of attack equals stall which equals crash.

Once you have landed and come to a stop retract the flaps and taxi back to the pits. If you leave them down a gust of wind may pick up wing and cause some damage.

Going around

If you got it all wrong and are still too high over the threshold to manage a landing then you need to go around and try again. Be careful. With full flap down the sudden application of full power will result in a strong pitch up. Be ready for it but do not be tempted to put the flap up until you have reached a safe altitude and have good control over attitude and speed because when the flaps are raised lift is reduced and the aircraft will sink unless other compensating action is taken. The natural tendency here is to pull back on the elevator resulting in a stall (not good). The initial climb out with full flap will be much less than you are used to due to the large increase in drag caused by the flaps.

If you have two stage flap you can easily fly the circuit with one stage still down thus setting yourself up for the downwind leg.

Taking Off

What about flaps on take off?

A viable option yes, but remember anything over about 20 degrees of flap will result in an increase in drag. While the take off will be good the rate of climb will make the boundary fence look like the Great Wall of China.

However given the average size of models, the enormous power advantage (models are generally significantly over powered compared to the full size counterpart) and relatively long runway we use, flaps on take off are probably unnecessary and just an added and complication.

Lessons learnt

So what have we learnt about flaps. They allow

- a slower approach and touch down speed
- a steeper approach allowing better obstacle clearance into short fields
- a shorter 'float' after flaring due to the increased drag
- a shorter ground roll after landing due to the slower landing speed and breaking effect of the flaps.

Flaps also cause

- a pitch up when extended but this can be reduced by flying at an appropriate speed before extending the flaps

- a pitch up when power is applied during a go around
- a reduced ground roll during take off but also a reduced rate of climb if too much flap is used.

I hope this article has dispelled some of the myths associated with flaps and perhaps also encouraged you to go out and try. As the saying goes if you've got them, use them. You will soon work out how they can improve your landings.

Safety Issues

In this issue we are introducing a regular safety column. The aim of this column is to provide information on various safety issues associated with model aircraft operation.

First up lets take a look at the problem of aircraft restraints. TMAC Operational By-Law 02 states (in part)

'Any model or engine operated at the field will be restrained or tethered unless it is being taxied or flown. This will be done by other member(s) holding the model/engine or by using an effective tether that holds the model/engine to be operated in such a way as to prevent it from moving towards any persons at the field or presenting any recognised risk during its operation.'

Many of you will be aware that one of our members recently suffered the loss of part of a thumb and significant damage to other fingers as a result of an insufficiently restrained model. Also the following is a quote from the minutes of the last MAAQ General Meeting

'Secretary informed meeting of injury to member's hand due to trying to stop model from falling off a bench with motor running. Prop cut fingers and palm.'

What constitutes a suitable restraint or tether? The top three pictures on the right, taken at the field recently provide a few examples of what not to use. All of these are accidents waiting to happen (including the thongs). The screw driver / spanner / bolt are relatively easily pulled out of the ground (I have had a larger screw driver pulled out by a .46 size model) and the piece of string/ rope provides a tripping hazard. Unless you were a Boy Scout how good is the knot in the rope and how easy is the rope tether to attach to and remove from the model?

The club can supply a suitable restraint

similar to the one shown here holding my Texan for a



cost of approximately \$25. These are all steel with a rod approx 200mm long which fits into the holes in the pits area. The two uprights hold the model securely even at full throttle with no tendency to jump out of the restraint.

These are suitable for models up to around the 1.60 size or if you have a larger model please use the large model restraints supplied at the field.



Finally a quick word about mobile phones. As per Operational By Law 09 these are not permitted within 30 meters of the flight line. Basically this means if you are not on the concreted pits area you should not have a mobile phone switched on.

2009 TMAC Events Calendar

| Event Date | Event Type | Event Details | Convenor |
|---|------------------|--|------------------|
| 2nd February Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 2rd March Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 15th March Sunday | Event | WARBIRDS DAY in conjunction with <i>Southern Cross Air Force</i> (9.00 AM – 12.00PM Porter Field) | Richard Symes |
| 6th April Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 10th April Friday | Good Friday | Porter Field <u>closed</u> for all flying | Secretary |
| 18th April Sunday | Event | ELECTRIC DAY (9.00 AM – 12.00 PM Porter Field) | Ray Perrin |
| 25th April Saturday | Anzac Day | <u>No flying</u> before 12:00 Midday | Secretary |
| 4th May Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 17th May Sunday | Event | FUN FLY (9.00 AM – 12.00 PM Porter Field) | Ron Dobbie |
| 1st June Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 20th & 21st June Saturday & Sun- day | Event | PETER CUTLER MEMORIAL SCALE DAY (9.00 AM – 12.00 PM Porter Field) | Richard Symes |
| 6th July Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 19th July Sunday | Event | UNUSUAL MODEL DAY (9.00 AM -12.00 PM Porter Field) | Allen Danvers |
| 3rd August Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 7th September Monday | AGM | Club Annual General Meeting Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 13th September Sunday | BBQ | NEW COMMITTEE WELCOME BBQ (9.00 AM – 12.00 PM Porter Field) | President |
| 20th September Sunday | Event | HELICOPTER DAY (9.00 AM – 12.00 PM Porter Field) | Dave Walker |
| 5th October Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 2rd November Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 15th November Sunday | Event | BI-PLANES & WARBIRDS DAY including a <i>Swap & Sel</i> (9.00 AM – 12.00 PM Porter Field) | Richard Symes |
| 7th December Monday | Meeting | Club General Meeting (7.30 PM at Moreton Bay Sports Club) | President |
| 25th December Friday | Christmas Day | Porter Field <u>closed</u> for all flying | Secretary |

If undeliverable, please return to:

The Secretary,
Tingalpa Model Aero Club Inc
PO Box 2108
Tingalpa QLD 4173

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Upcoming Events at TMAC

| | | |
|---------------------|---------|----------------------|
| Monday 2nd February | Meeting | Club General Meeting |
| Monday 2nd March | Meeting | Club General Meeting |
| Sunday 15th March | Event | Warbird Day |

NOTE: For events the field may be closed to general flying.

Next TMAC event is the Warbird day. The field will be closed to general flying during this event.