

DECEMBER 2013



Tingalpa Model Aero Club Inc

UAV Outback Challenge 2013: Chris Paterson

Over the 24-25th September my students competed in the Unmanned Aerial Vehicle (UAV) Outback Challenge for the 4th year running. I took 2 teams, the Calamvale Reapers and the Calamvale Raptors II. The teams consisted of

Calamvale Reapers – Jackson Woodward- Pilot, Mathew Beecheno- Mission Specialist, Mitchell Thompson – Search Phase manager and Josh Downs – Co Pilot.

Calamvale Raptors II – Laughlin Kelly – Pilot, Sylvester Young – Mission Specialist, Brendan Martin – Search Phase Manager and Mick Adcock Co-pilot and Luke Falcone second co-pilot and helper

We competed in both the Airborne Delivery Challenge and the Search Phase for each team. The Airborne Delivery Challenge is where the students have to deliver 3 chocolate bars via the aircraft to Joe using on-board cameras in the plane to view the drop zone.

To complete the task the teams deliver the parcels and try to get all closest to Joe as possible. The Search Phase is reading letters and directional arrows from the planes cameras to find Joe and complete the task in the quickest time.

There were 11 teams who made it through all the rounds of the competition from Calamvale Community College, Aviation High, Mueller College, Dickson College (ACT) and Riverton High School (SA).

The rounds consisted of building their plane, 12 page 3500 word report, 3 min video about the plane they had built, 15 min oral report as a team about all the things they had learnt, Static aircraft scrutineering and flight scrutineering and finally flying the plane to complete the missions.

I am very proud of all my boys as the Raptors II won the Airborne Delivery Challenge wining \$5000 and the Reapers Team won the Search Phase of the competition wining \$2000. It was also a pleasure to see how each team worked so well together to achieve and work towards the final goal of the competition to save Outback Joe.

Over the last 4 years of entering the UAV Outback Challenge we have now won the Airborne Delivery Challenge 3 out of 4 and our 1st time to win the Search Phase of the Challenge.

Photos can be found on UAV outback challenge Facebook page - www.facebook.com/UAVChallenge. Also, both teams were featured on Channel 10 Totally Wild.

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Management Committee

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TMAC Life Members

Kevin Dodd, Will Sipma, Noel Wilson

Heavy model inspectors. (FW25)

Ian Howard, Phil Collins, Noel Stewart

TMAC Life Member's Trophy

Phil Gartshore

Heavy & giant models (FW25 / FW50)

Kevin Dodd, Doug McIlwraith, Richard Symes, Tyson Dodd

Commercial Flight Instructors

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Noel Stewart 0412 525 127
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Photo's—UAV Outback Challenge





President's Report: Phil Gartshore

Welcome to the new Committee

A warm welcome to the new committee. To those who are continuing, thank you for your efforts on past committees, and I look forward to working with you moving forward. A warm welcome to Graham Matthews, who joins the committee this year as Secretary. Graham's jovial attitude and commitment will keep things moving along, I'm sure. If members have particular issues they wish to raise, please let us know via the contact details on the web site. Here is the full list of Committee members.

Role	Name
President	Phil Gartshore
Secretary	Graham Matthews
Registrar	Randall Mowlam
Treasurer	Martin Homann
Web Administrator	Randall Mowlam
Newsletter Editor	Clair Alston
Liaison Officer	Will Sipma
Working Bee Contact	Allen Danvers
Committee	Tyson Dodd
Committee	David Walker
Committee	Noel Stewart

Safety, Safety, Safety

TMAC published an article on Electric model safety in the last Transmitter, so just a further reminder that it is important that we all take care when operating models. Injuries from Electric Models have risen significantly in the past couple of years, so we all need to be vigilant in this area. Just a reminder to observe the following:

1. Tether your model or have another pilot hold it, when working on it in the pits
2. Re-test Failsafe prior to bringing a model to the field after making any changes to the setup.
3. Program a throttle override switch to allow you to work safely on electric models
4. Consider arming your model at the Flight Line rather in the Pits.
5. No taxiing towards the Pits past the "Stop Engines" sign.
6. Always Hand Launch outside the Pilots Position

President's report continued...

G20 Act – Implications for TMAC Members

In November 2014, Brisbane will be hosting the G20 meeting, and for the period 16 September 2014 to 17 November 2014, the *G20 (Safety and Security) Act 2013* will be in force. Prohibited items under Schedule 6 of the Act, include the following:

a remotely controlled device, including a vehicle or a model of a vehicle, including, for example, any of the following operated by remote control:

- (a) a toy car
- (b) a model plane
- (c) a drone or unmanned aerial vehicle

Possession of the above when entering, leaving or in a security area is an offence under the Act. The Committee is being proactive in this area, and has taken the following steps to ensure it understands the implications of the Act for TMAC members, even though they may be unintended consequences:

1. Contacted the MAAQ asking them to provide guidance. This has been done because the effect spans multiple clubs in South East Queensland and Cairns areas.
2. Contacted the State member for Chatsworth, Mr Steve Minnikin MP for assistance liaising with authorities responsible for enforcement during the G20 period.
3. Contacted MAAA regarding any additional CASA restrictions that may apply during the G20 period.

It is expected that TMAC will receive the appropriate guidance in the first quarter of 2014, after which members will be provided with information on areas affected, and guidance of reasonable precautions to take when travelling with model aircraft during the G20 period.

Porter Field Master Plan

The Committee has commenced work on a Master Plan for Porter Field. This covers the next 5 years, and will provide clarity on the direction for development projects as well as assisting with TMAC's renewal of its BCC lease every 5 years. Once drafted, the committee will publish a draft to members for feedback, and then bring the document to a General Meeting for approval. Projects being considered include (in no particular order) the following:

1. Toilet Block Development
2. Club House Development
3. Pits Expansion
4. Grounds Keeping
5. Parking
6. Solar System Development
7. Kitchen fit-Out
8. Access Strategy
9. Helicopter Pits Structure

The Committee anticipates completing the draft by the end of the first quarter 2014.

Secretary's Report: Graham Matthews

As the year draws to a close it is good to be able to reflect on yet another successful year for the Club. Events this year have been well patronised and successful and significant progress has been made with projects and development of the facility. One minor negative has been a slight increase in safety incidents and the President will address this further in his report. All in all, another great year! There are some administrative and other issues of interest which have arisen since the last Transmitter and which I will address below. Please feel free to provide feedback on any of these matters.

TMAC Calendar

A new calendar has been developed for 2014 by the Committee and appears elsewhere in this newsletter. Whilst the Committee will endeavour to hold to this calendar, there will always be circumstances conspiring to cause change. We will try as much as possible to maintain an updated copy on the web site and draw your attention to changes. Of particular note is that the Club General Meetings next year will now be held on the first Tuesday of each month at 19:30 at Carindale Library. There will not be a meeting in January.

MAAQ Meetings

For information of members, the MAAQ meetings for 2014 will be held on the following dates:

1 February 2014

3 May 2014

23 August 2014 – AGM

29 November 2014

If there are any issues you would like raised with the MAAQ, please advise the Committee well in advance of these dates so that we can get items introduced to the agenda if required. In addition, the next MAAA Council Conference (the peak body meeting) will be held in Darwin on 17 – 18 May 2014. Our inputs are required to MAAQ by 14 March 2014.

MAAA Manual of Procedures

The following is a summary of changes to the MAAA Manual of Procedures (MOP) issued in the past few months. The MOPs are available on the MAAA web site and constitute the rules under which we operate. It is suggested that all members familiarise themselves with the MOPs relevant to them. If you have any questions, we invite you to refer them to the Committee so that clarification can be provided.

Helicopter Operations

There have been some questions raised to the Committee in recent times regarding helicopter operations on the main strip prior to 14:00. These questions have been raised by way of seeking clarification rather than by way of complaint; however, they have prompted the committee to take another look at the situation. There is currently no By Law related to this issue and the Committee is not of a mind to add complexity and rigidity by introducing unnecessary By Laws. That said, there has been a protocol in force for some time whereby helicopters do not operate on the main strip prior to 14:00 unless either there are no fixed wing aircraft operating or, if there are fixed wing aircraft operating, the helicopters fly conventional circuits (i.e. no extended hovering or 3D in front of the pilot's position). The Committee sees no need to change this protocol unless feedback suggests otherwise. We would ask both helicopter and fixed wing pilots to respect this protocol. As always, we would appreciate feedback, both positive and negative. If negative, please try to provide an alternate, practical suggestion.

Secretary's report continued...

MOP	Title	Change
058	Policy 2.4GHz Equipment	Updated to include some new 2.4GHz equipment in Appendix A
019	Display Procedure	Updated to include revised definitions and introduction of risk management procedures
057	Policy Insurance Conditions	Updated to reflect new wording regarding excess payable
067	Policy SGMA	Updated to reflect changes in policy for operation of self guided model aircraft (SGMA) in line with development of technology
030	Gas Turbine Rules	Updated to remove MAAA authority to issue "fire ban waivers"
058	Policy 2.4GHz Equipment	Further updated to reflect that MAAA no longer conducts testing of 2.4GHz equipment and places the responsibility on the operator to ensure equipment conformity to Australian Government requirements

Reporting Accidents

There have been informal reports in recent times of incidents/accidents at the field which have resulted in damage to property. Club By-Law 06 states in part *"Any accident involving the operation of a model aircraft which results in injury to another and/or damage to another's property shall be reported to the TMAC Secretary immediately"*. This is a little outdated in terms of "injury to another". It should read simply "which results in injury". This will be amended in due course. The reason for this is that the Club has a duty of care to investigate these incidents and put in place any remedial measures to prevent a reoccurrence. The Club also has an obligation to assist members with insurance claims in the event that a claim becomes necessary. In terms of damage to property, this does not mean every time you lose an aircraft; however, the Committee does want to know when third party property is involved (i.e. you take out someone else's model in the pits, crash onto a building adjacent to the field, hit a car in the car park, etc). There is an MAAA Incident Form 010 on the TMAC web site which will need to be filled out in most cases; however, don't be daunted by this, the Committee will assist with completion of this form. Your primary responsibility will be to notify the Secretary as soon as practicable by telephone or preferably by e-mail. Your assistance will then be sought as appropriate to complete the MAAA form. We seek the support of all members in collection of this data. The intent is definitely not to attribute blame, it is to try to make the system safer for all concerned. There is also an issue of self-interest here in that the more we do to combat accidents, the more our insurance premiums DON'T increase. This is becoming increasingly important as we move into an era of big models, sophisticated electric models and very sophisticated self-guided model aircraft.

Approved 2.4GHz Equipment

In the past the MAAA tested most 2.4GHz equipment and issued a list of equipment which met Australian requirements and which was approved for use in Australia. As a result of a decision taken earlier this year, the MAAA will no longer undertake this testing and has amended MOP 058 to reflect this. As a result the onus is now on the user to establish that the equipment conforms to Australian government requirements. This can be established in a couple of ways, the easiest being if the equipment carries a "C Tick" similar to that shown here. This means that the manufacturer or the importer has secured documentation from other testing sources or has carried out an appropriate level of testing to establish that the equipment conforms. There are other mechanisms for establishing conformity but these are a little more convoluted. It is recommended that you take care in future when buying this equipment that you read MOP 058 and seek evidence from the vendor that it conforms.



Secretary's report continued...

First Person View Operations

With the proliferation of relatively inexpensive stabilised models which feature first person view (FPV) and autonomous guidance, some questions have arisen at the Committee level about the safe operation of such models (primarily from a lack of knowledge of the technology). The Committee is taking steps to educate itself and the membership at large; however, some basic safety matters are easily discernible from the MAAA MOPs. FPV is a mode of flight where the pilot flies the aircraft through goggles or a screen with a view from the aircraft rather than an external view of the aircraft. The MOPs prescribe a number of mandated design features and pre-flight checks to be carried out with these models. MAAA also prescribes that there must always be two pilots; one on the goggles and one maintaining the aircraft in view and ready to take control in the event of the FPV pilot losing control. This is normally achieved using buddy box transmitters; however, a single transmitter can be used where the aircraft has a return to base function installed and activated. The non FPV pilot is designated the pilot in command and must be rated on the aircraft being flown. As this is new and emerging technology, the Committee will arrange for an MAAA representative to attend a future Club Meeting to provide an overview of MAAA requirements and intent behind those requirements. In the meantime, if you intend to invest in this technology, please familiarise yourself with the MAAA requirements.

Identifying Current TMAC Members

There have been a number of reports (both confirmed and unconfirmed) that non Club members have been seen operating model aircraft at Porter Field (one group confirmed testing a commercial drone). As I'm sure you are all aware, our insurance is predicated on all people operating on the field being club members or authorised visitors from another MAAA affiliated club. This because we all operate under the umbrella of a policy arranged by the MAAA which, in turn, requires that operators are affiliated with the MAAA through a club. This essentially means that those unauthorised operators may not be covered by insurance. This is both high risk for other club members and also contravenes the terms of our lease with Brisbane City Council. With 269 members at the moment it is clear that the Committee alone cannot police this and it is therefore it falls to the membership at large to assist. Again, there is an element of self-preservation here. If an unauthorised pilot manages to hit you or your property, there may be no insurance to cover the injury or damage. The Committee understands that identification of Club members is difficult given the large membership numbers and, in the past, introduced a coloured yearly membership flag to be attached to each transmitter. The intent was to ensure that there was an easy method of recognising current financial members on the flight line and "challenging" unauthorised operators. The Committee has recently become aware that not all members use this flag as it can cause some annoyance and distraction when flying. Hence the issue of policing membership becomes difficult to the point of perhaps being impossible.

Secretary's report continued...

The Committee believes strongly that we must find a method of identifying financial members at least on the flight line (given that actual operation of the model presents the greatest risk) acceptable to all members and then enforce it. This, in essence, means having some form of identification mark on the person or the transmitter. We have some ideas (perhaps the most promising a short coloured tie wrap printed with TMAC and the year to be attached the handle of the transmitter) which we will trial on a group of members; however, we would welcome input from all members. If you have an idea about how we could achieve this, please do not hesitate to let the Committee know. More about this in future editions.

This is a lot to take in in one go; however, I hope that it goes some way toward keeping you up to date with what is happening in the Club and also the wider model aircraft community. I trust that you have all had a great year and I wish you a merry and safe Christmas and a happy New Year. Keep safe and return next year ready for another even greater year.

Aero Space and Aero Skills Education **Educational Fun Fly Wednesday 30 October 2013**

Chris Paterson

The event was planned and run on Wednesday 30 October from 8am through to 2pm. Calamvale Community College and Mueller College who both run Aero Skills and Aero Space subjects met up at Tingalpa Model Aero Club (TMAC) for our first interschool fly in. The idea was discussed during the time both of our schools were preparing for the UAV Challenge Outback Rescue 2013, run at Grattan Field Calvert.

As I was the current member of TMAC I followed it up with the previous management to current club committee. It was pleasing to have them take the idea of the event on with open arms.

I took my year 12 Aero Skills consisting of 16 boys and 52 aircraft and Anthony Banks of Mueller College brought 10 year 7 to 11 boys and 20 aircraft. The day's proceedings were to complete the Calamvale CC boys assessment for 2013, run an event between both schools, buddy box my 1/6th scale F16 Viper and sport jet (Voyager) for the students of both schools to feel what it is like and just to have an overall fun day in a safe flying environment from the rigger of school.

The assessment of my Aero Skills class included the test flying of all the current aircraft that they had just finished scratch building. The types of aircraft were all electric and varied from SR71, red bull type planes to flying wings. The student's projects all flew extremely well for their first plane they had designed themselves from scratch. All the other aircraft flown by Calamvale students were also all built by the students in Aero Skills over the previous 2 years of study.

The event we had run as a group was the Limbo. Using crepe paper as the streamer across the runway the limbo height got down to 400mm in the finals. As the day proceeded I flew my F16 and Voyager on buddy box. 6 students and teachers were game enough to have a go and were amazed on how, fast, smooth and precise they flew. Finally rounding out the day we had general flying as a group, break up BBQ and presentations given for Most Flights, Best Crash, Best Pilot, Limbo Winner and Fastest Pilot.

Thank you to

Tingalpa Model Aero Club for providing the facilities, BBQ and drinks for the day,
 The Teachers helping out on the Day, Mark Tunstall, Anthony Banks, Francine Baxter and the parents from Mueller college,
 Calamvale Community College PNC for providing the sausages and steak and Mueller College for helping out with the organisation of the event and providing the bread rolls for lunch.

All the help allowed the day to be cost neutral to the students and be an awesome education event for the students in respect for their flying abilities, socialising and further knowledge of what can be achieved with model aircraft.

The focus of Aero Space Studies and Aero Skills has been to engage the students in the introduction to the principles of flight and an understanding of aerospace as working environment for possible future career aspirations out in the general aviation industry or the military forces.

Planning is now in progress for the next schools event with more schools in attendance for 2014.

Aero Space and Aero Skills Education

Educational Fun Fly Wednesday 30 October 2013



See the TMAC website for more great pictures



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