



# Airwaves

**Sports Aeromodellers Association Moreton Bay Region**

**Monthly Newsletter - October 2015**

## **President's Report**

**From Barry Evans**

At the time of writing the IMAC and The Pattern events have not been held so nothing is available to report. I have heard numerous comments at the field as to whether these events are of any interest to the general membership. They may not be, but to the people who fly these events they are very important.

We must all realize that there are many numbers of facets to this hobby and it can only be of benefit to the hobby as a whole if we encourage people to enjoy and investigate different avenues of aeromodelling.

If we did only one thing it would become boring and modellers would soon lose interest. Try some other aspect of our hobby and you may find you are hooked. We should all get behind the people wishing to diversify and give them some support.

These days it is rare for a modeller to build a model as the cost of doing so is usually greater than buying an ARF model. You will hear various reasons mentioned for not building your own model and most of them are valid.

I prefer to build most of my own models because I know I can build a very strong model that looks reasonable and can survive a moderate crash that would total an ARF. Can I build it cheaper than an ARF? , probably not but my model will not be the same as any other model at the field. It will be unique.

We have some very good builders in this club and they should be appreciated by all members for their building skills and knowledge .It would be a great pity if building skills were lost

Next Meeting  
**Friday 30th October 7.30pm**  
Community Hall  
Cnr Todd & Ellis Sts  
LAWNTON  
7.30PM

as we would then be in a position of nobody being able to repair even minor crash damage.

Thirty years ago you only got to fly a model aircraft if you first built it. How things have changed.

We will need a minute taker for the October and following meetings. As president and needing to chair the meeting it will be time consuming and annoying to the rest of the meeting if I have to continue taking the minutes as I am presently doing.

Recently one of the seating rails was removed from the pilot area as a safety and insurance measure. Unfortunately there were some members who took it on themselves to attempt to put the rail back. Before you attempt to take measures into your own hands please check with a committee member first as there will be a very good reason for a change being made in the first place. If you want to change something please check that it is okay first.

Some very important things that need to be discussed at the October meeting are as follows: Repairs to the entry grid. Have a think about this and see if you can come up with an easy cost effective solution. Updating of the club rules as some rules are no longer needed. Read the rules on the web site (<http://www.saambr.asn.au/content/pdfs/bylaws.pdf>) and see if you think anything needs changing.

The situation with the operation of Quadcopters at the flying fields. This is one real contentious subject which will be elaborated on at the meeting. So far I have not been able to get MAAA's slant on this.

Recently seen at the field is that transmitters other than approved 2.4ghz are not being put in the pound when not in use and no key being put in the board before these transmitters are turned on.

All Tx's on 29, 36 and 40Mhz must be in the pound when not in use. The 27Mhz frequencies are not to be used at the fields under any circumstance due to interference from the CB band.

See you at the meeting.

Bazza



# SAAMBR's Biggest Event in 2015 Is Here !

This weekend Sat 31 Oct—Sun 1st Nov.

Jim Gibson Field Uhlmann Road .

...and we need you to help make it a success. Whatever you've got lined up this weekend, **cancel it !** We need car parking assistants, cooks, registration takers, plane spotters, judges, helpers to put up the big marquee. Turn up on the day and there'll be something for you to do.

Saturday night is a night-fly and campover for members and competitors.



SAAMBR  
Bayside Buzz IMAC  
31st Oct-01st Nov  
(Sat night fun fly)

Come and experience two days of Aerobatic Competition as SAAMBR hosts its first IMAC event at the new Jim Gibson field located at 501 Uhlmann Road Burpengary East.

Pilot Briefing 8am Sharp  
Flying from 9am Sharp

#### Facilities Available

- Camping (no power) \$10 per site
- Firewood available \$5 per night
- Toilets
- Showers (at fishing club across from Club (\$5 per day)
- BBQs available for cooking at all times
- Canteen open daily (food and drinks available)

This is not a Public Event  
Members Guests are Welcome

Everyone is welcome to have a go. You don't need to be an expert pilot or own an expensive model, you just need a current FAI Licence issued by MAAA and the ability to safely conduct the sequences required for the competition.

Sequences available for all level at [www.scaleaeros.com.au](http://www.scaleaeros.com.au)  
All pilots start out at the Basic level.

Most of all you need to be able to have fun.

Experienced pilots will be on hand to guide you during the event and to offer advice when needed.

For further details contact:  
Dan Imhoff  
Mb 0427006290 or email [danimhoff1@gmail.com](mailto:danimhoff1@gmail.com)



### Just For Laughs

Dave woke up after the annual office Christmas party with a pounding headache, cotton-mouthed and utterly unable to recall the events of the preceding evening.

After a trip to the bathroom, he made his way downstairs, where his wife put some coffee in front of him.



"Natasha," he moaned, "tell me what happened last night. Was it as bad as I think?"

"Even worse," she said, her voice oozing scorn. "You made a complete tit of yourself. You succeeded in antagonising the entire board of directors and you insulted the Chairman of the company, right to his face."

"He's a right scum-bag," Dave said. "I could pee on him."

"You did," came the reply. "And he fired you."

"Well, \*%#@#\$ him then," said Dave.

"I did," said Natasha, "You're back at work on Monday ...."

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### Meeting Dates for 2015

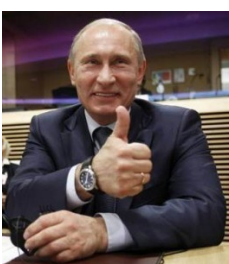
There's only two more meetings to be held this year.

Friday: **October 30th**, November 27th 2015.



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### Thank You TMAC



Tingalpa Model Aero Club has kindly donated their old PA System to our Club which will come in handy for future events. Much appreciated guys.



**Warbirds Day  
Jim Gibson Field,  
Uhlmann Rd.  
14-15 November**



It's on again.....now's the time to spruce up your model and bring it out for a fly. It's always a great day and an opportunity to see some magnificent planes. Contact Dave Mount 0427 650 737.

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### **A Quick Word**

Incase you missed it we're having an **IMAC** event this weekend. Most members know that it stands for "*International Miniature Aerobatic Club.*"

Events are conducted at heaps of clubs all over Australia year round and allows flyers to not only showcase their flying prowess, but see what facilities other clubs have to offer. The sport of RC flying is a smorgasbord with a delicious menu of warbirds, pylon, scale , pattern, control line, gliding, free-flight, drone racing, choppers, or whatever takes your fancy.

But lets put one myth to bed first. You don't need to fly a monster 50cc (or bigger) plane to compete. If you've got a Scanner and can do a barrel roll you're in !

Members need to have a current licence and be affiliated with a club in Australia. Yep, that's you. There's different levels depending on your skill. Basic is a very gentle introduction and can be flown with pretty much any aircraft that is capable of gentle aerobatics . So come along and have a go ! Check this site out. <http://www.scaleaeros.com.au/> ).

A few rookies from our club who've been bitten by the IMAC bug will willingly tell you they've had a ball at every event they've been to...and one might add, stuck it up some of the older fellas in just a couple of competitions.

There's a couple of younger ones doing very well, not just at a local level, but at a state level too. One youngster... with hair.... recently competed in the Queensland Championships in on-ly his second IMAC event and took out second place in his division.

His Dad was so chuffed everyone else thought he was having a seizure.

Another member won the Queensland Championship for his division and a committee member also finished Second in his division.

However, these events don't happen by themselves and I ask all SAAMBR members to volunteer some time during the weekend to help make this a successful event that will showcase our club and its facilities as being one of the better venues in Queensland, regardless of what the event is. Our goal is to host an event at the Nationals in the future.

We are looking for people to act as Safety Pilots, Cooks, canteen helpers, camping directors, parking assistants, marquee erection fellas, ..... just to name a few. (Major sponsor is..)

Dick Hall  
Editor



### **Gibson Field progress report-Oct 2015**

By Graham Tattersall

Hi all, as seen in the last Airwaves, the tank and drainage has been installed and I must give Col Parry a big thank you for his assistance, especially the concreting of the slab (done to Col's usual excellent standard!) and his help with the drainage.

Col has been a long serving member of this club and given his expertise and hundreds of hours above and beyond normal working bees to help the club grow and develop.

Thanks Col.

The pipe work (downpipes/overflow etc) have now been painted to match the shed and due to recent rain we now have about 8000 ltrs of water in the tank. There was some tidying up of the trenches at the working bee last weekend. Barrows, shovels, rakes etc got a good workout and some of the Grounsel that was making a come-back got a touch up of weed spray.

Mike Lewis has been busy looking after the electrics (at both fields) and has now hard wired the water pump ready for the plumbing to be connected from the tank to a sink/or sinks in the future. While doing the trenches for the drainage we also ran a power conduit and poly water pipe across to the toilet block for future use when the showers become a reality.



If there are any plumbers/cabinet makers etc in the membership that would like to help in that area (sink set up etc inside the shed) it would be much appreciated. Please contact me or any of the committee if you can help.

The blade for the tractor is now at the Gibson field and has been put to good use levelling

the mess I made when digging the trenches! In recent months the field has hosted a Pattern event (very successful) and there will be another done and dusted by the time you read this.

For those that have not been up there for a while you will notice there is a lot more of the outfield has been slashed with more to be done in the near future. Our next priority is to get internal plumbing/sink area done and expand the slab under the toilet roof ready for the installation of showers so you can better use the facilities.

Team Stihl has also been busy with about thirty trees being pruned to ground level making the approach from the northern end less hazardous, particularly for the larger models.

Thanks to all those that helped at the last working bee . We just needed to do some tidying up for next weekend so it all looks spick and span.

Some members also attended the Flag ceremony at the Caboolture Historical village recently and we represented the club with about fifteen models on display with quite a few questions and a lot of interest from the public.

By the time you read this we hope to have the final inspection done on the shed by the certifier. Finally, a big thanks to the outgoing committee for all their work and particularly their support in getting the Gibson field up and running.

Good luck and safe flying.

Tatts





## Mueller College Wins Outback Joe UAV Outback Challenge Campaign 2015

The UAV Outback Challenge – High School Airborne Delivery is an annual event held alternatively at Kingaroy Airport or Graton Field at Calvert.

It is held in either the first week or the second week of the September school holidays but actually involves a lot more time than this.

For 2015, teams from South Australia, Victoria and Queensland as well as three teams from the US descended on Calvert to do battle and hopefully claim UAV immortality...or crash their aircraft in the process.

The theme of the Outback Challenge has changed little since the inaugural event which was held in 2007 – it is essentially about saving lives using UAV technology.

The main aim for contestants is to deliver some sort of survival package to ‘Outback Joe’. Joe is a store manikin who sits between two 4 metre hurdles which are placed 20m apart. Joe is exactly half way between. The UAV controller can stand anywhere on the field but is NOT allowed to deploy the payload – another team member called the Mission Manager does that.

The catch, however, is that the Mission Manager is NOT allowed to view the aircraft; they judge when to drop using an on-board video camera which transmits a live video feed back to their FPV goggles or video screen.



Other team members act as engineers, gophers (go fetch the plane), ensure safety or whatever else is needed. All this takes place inside a mission boundary, three sides of which incur a time penalty if the aircraft crosses over them.

The 4<sup>th</sup> side is the no-fly zone and if an aircraft crosses over this during a scrutineering flight or during the mission, then it is a complete disqualification for the rest of the competition.

This can be heartbreaking

Around Joe, there are a series of concentric circles each radiating out at increments of 2m. The bulls-eye is where Joe sits and has a 2m radius around him; this is worth 20 points. The next circle is 4m out and is worth 16 points, the next 6m out and worth 12 till it vignettes down to 0 which is outside the hurdles.

The UAV controller is required to fly accurately OVER the hurdles (not under people!) which allows the Mission Manager to accurately deploy the payload. This essentially is an exercise in targeting and to do that, the pilot has to fly consistent circuits in terms of height, speed and track.

Only when the pilot is flying in such a manner can the Mission Manager hope to deploy the payload accurately. Any variance in these three essential variables will throw the poor old Mission Manager's aim off.

All this has to be done inside 20 minutes. Failure to do this results in loss of points. As mentioned above, flying outside of the mission boundary incurs a time penalty – the pilot must land their aircraft and then take off again.



Back in 2007, the payload to deliver was a golf ball. This was changed in subsequent years to a 40 gram survival package; in fact it was a Mars Bar.

Yes, Outback Joe was bombed with chocolates!

For 2015, the officials changed the payload to an EpiPen but there was a catch (oh, there's always a catch)...the payload was NOT allowed to exceed 75G when it impacted the ground. This sounds like a lot but an EpiPen, released from chest height onto grass, can sometimes hit 75G's worth of deceleration.



To measure this, a small device called a Shock-Watch duo-clip was attached to the EpiPen. If 75G was exceeded, a small drop of dye was displaced into a tiny glass window thus indicating excessive impact forces. This meant that even though a team may have scored a bulls-eye, if the Shock-Watch triggered, the score was zero.

There is more to the competition, though, than simple flying. It is multi-faceted and has many sections that have to be 'ticked' before a team is allowed to fly on the final day. Most teams will begin preparing when school starts at the beginning of the year. At this stage, aircraft are designed, made and test flown although some teams will have hand-me-down aircraft; old clunkers that are given a new lease of life.

Teams will also have to prepare a 12 page technical document that outlines their design approach and rationale, safety management, and CASA/ACMA compliance amongst a host of other things.

They will have to shoot and edit a short video to prove that their design flies and that it is stable after payload delivery. On the first day of competition, the teams will then give a 10 minute oral presentation to 3 or 4 judges from industry...while we are here, a quick thank you to the sponsors might be in order...Queensland Government, Boeing, Northrop Grumman, Insitu Pacific, CSIRO, ARCAA, Data 61 and QUT...thanks guys. The officials you send, the hard work you put in, and of course, the prize money is very much appreciated.



This all happens on the day before the 'mission' is flown, however there are still a few more 'hoops' to jump through, or in the student's case – fly through. Each aircraft undergoes static scrutineering to check that Loctite has been used on any fasteners, props are balanced, video transmitters and flight radios are compliant, cables are secure and tidy, airframe is in air-worthy condition, fuel tubing or suitable equivalent is used on clevises, C of G checks, and the like.

Students are also asked questions on their system at this stage. Finally, each pilot will demonstrate their ability to fly within the mission boundary, perform a left and right hand circuit, an outward figure 8, and finally a missed approach.

While these might seem like simple skills to MAAA club members, you have to remember that many students from participating schools don't have the luxury of being able to join a club; they have perhaps only been flying for a matter of months on their school oval.

Each stage is judged and scored; in fact if a team's technical document isn't up to speed, then

they are given a 'NO GO' and not allowed to proceed in the competition. Fortunately, the judges are very understanding of a high school student's technical document writing skills and are willing to assist teams to get over the line and thus able to compete. Likewise, if a student is struggling to fly the prescribed patterns, the judges will talk them through the issue and help them get their aircraft back safely.

It really is a challenge! This is what makes the UAV Outback Challenge such a great event.

This year, Mueller College nominated six teams. All six made it through the scrutineering day as did all teams from the other schools. Our teams consisted of a few older, more experienced heads, to the newcomers – students in year 7 and 8.

Once again, we submitted an all-girl's team. Our competitors consisted of some familiar faces along with an extra team from the US (there were three teams in total from the States) and a privateer team from Victoria; these guys were sponsored by a professional UAV company. As per usual, there was a fairly even mix of fixed wing and multi-rotors. Absent this year were a Canberra College however it was good to see South Australia represented again.

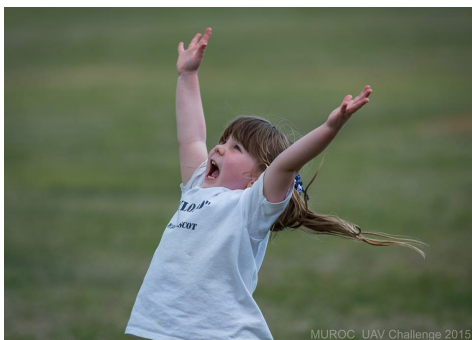
Once mission flying began, it became very apparent that the 75G limit was going to be a huge factor; in fact most teams found that ALL their drops were triggering, thus resulting in a score of zero for each drop.



The US teams seemed to favour a payload that was encased in foam which was working quite well for them. We didn't go down this path as the high winds that we tend to train in easily blow a payload with a large surface area off track. The Mueller teams designed payloads that could be aimed (think rocket body) and utilised different methods for decelerating the payload inside the body tube – these designs worked well in windy conditions but that's not what happened at Calvert...it was a very calm day! Indeed, the foam wrapped payload design appeared to be delivering the goods to our US allies; was the coveted UAV trophy going to be heading overseas?

Just when it seemed likely that our American counterparts were going to take gold, up stepped a Mueller team called 'The Double Duo'.

This crew comprising of two year 10 boys and two year 9 girls, had grafted two Bixlers together to make a 'Double-Bixler'...think P-82/F-82 Twin Mustang. This design had a nice big wing and ample power delivered by two electric brushless motors.



It really was an eye-opener at the competition and flew as sweet as anything according to Michael the pilot. Their payload device was an air ram configuration made from a rocket body tube and inner toilet rolls; the rest is proprietary information that the Double Duo just aren't going to give out! The design worked with all three drops scoring highly.

Another Mueller team came second. This team were called 'Par Hexcellence' – you guessed it, they flew a hexacopter, but their strategy was to use an APM autopilot to deliver an auto-drop of the payload – this scored bonus points. Note that in this particular competition,

no autonomous flight was allowed, however the APM was allowed to trigger the drop autonomously via a GPS drop waypoint. The 'Hex' only had one drop that counted but due to the autonomous nature of it, and also scoring highly for their technical document/video/oral presentation, they were only marginally behind the winners.

That night, after all teams had returned home (except interstate and overseas teams), the captain of the Double Duo, Michael P, was interviewed on ABC radio. This is great interview and actually holds a few surprises which haven't been mentioned in this report. It is well worth listening too.

<https://soundcloud.com/612abcbrisbane/who-found-hapless-outback-joe>



If you are on **Facebook**, feel free to look up our aviation page called '**Mueller College Aviation and MUROC**'. It has a stack of photos from the Outback Challenge as well as showing flying at SAAMBR.

"**Like**" it if you like it and receive up-to-date information on what the students are doing - we'd certainly like you to be part of our aerial adventures.

Mueller College would particularly like to thank the SAAMBR Executive as well as the members for the opportunity to fly at Sid Bray Field each week. Our hurdle-specific practice occurred on the school oval but without regular weekly flying occurring at SAAMBR over a long period of time, our pilots wouldn't have been as well prepared as they could have been.

To all the people who support student flying, we offer up our thanks.

Hope to see you next year at the UAV Outback Challenge!

**Mr Anthony Banks**

Teacher-in-Charge

Mueller College Aviation & MUROC



## Events Calendar 2015-2016

### November

**7th** Queensland Turbine Flyers Suncoast (SMF)

**14-15th** Southern Cross Warbirds SAAMBR **Jim Gibson** Field Uhlmann Rd Morayfield.  
Dave Mount 0427 650 737

**28th** MAAQ General Meeting. Venue TBA. Refer to [www.maaq.org](http://www.maaq.org)

### Indoor Flying

**Last Friday** of the month for MAAA members at the Sleeman Sports Complex Chandler Arena 13.  
From 7-10pm. Electric models only. Huge area.  
Powerpoints available. Cost \$10 per flyer. Spectators welcome. Enquiries Tyson Dodd [president@maaqa.org](mailto:president@maaqa.org).

### December

**12-13th** Team selection trials for 25016 World Championships for scale model aircraft F4H. WHERE ??

### January 2016

**31st** F1 Air Races Sandown Victoria. Like Top Gun, experience the thrill of 300kmh jets , heli's , aerobatics and giant scale aircraft . More info visit..  
[www.sandownairrace.com.au/](http://www.sandownairrace.com.au/)

### NEXT WORKING BEE

**SUNDAY DATE TBA**

**FIELD TBA**

**8.00am**

(Sign in book gets taken away at 8.30am )

### HOLD BACK BOYS...

Some keen worker bees have been arriving much earlier than the majority who find they have nothing to do when they arrive.

"Why bother coming in future?" some have said.

Please wait until the rest turn up ...but your enthusiasm and eagerness is much appreciated and noted.



### SAAMBR

#### Contact Information:

PO Box 574 Chermside South Qld 4032

#### Sid Bray Field located at:

Elizabeth Road, Griffin, North of Brisbane 4503

#### Jim Gibson Field location:

Uhlmann Road, Burpengary East, North of Brisbane 4505

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with fellow flyers!

<https://www.facebook.com/SAAMBRRC>

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