



# Aspectivity

Reg No A0001504U

...monthly newsletter of the Victorian Association of Radio Model Soaring Inc

**March 2007**



**Issue 397**



**Next General Meeting  
Glen Waverley  
Primary School**

**Friday  
March 9th at  
8:00pm**

EDITOR  
David "Numb Thumbs" Jones  
Deadline : March 28th

## Upcoming Events

<b>March 10-12</b>	Scale Slope	Camperdown	Scalies
11	VARMS Electric Glider	Briggs Field	VARMS
18	VARMS Training	Briggs Field	VARMS
18	RCGA F3B #3	Diggers Rest	RCGA
25	VMAA State Champs Thermal Glider	Briggs Field	RCGA
25	RCGA #6	Briggs Field	RCGA
April 1	VARMS Training	Briggs Field	VARMS

## President's Report March 2007 Max Haysom

Currently, the most popular activity at Briggs Field is Scale Glider / Aero tow. Although very spectacular, it comes with a certain amount of increased risk. Being located in a suburban area and close to a major 4 lane highway, and the soon to be completed EastLink Tollway, it is the responsibility of all members to ensure that all operations, sport flying, competition gliding and aero tow events are to be conducted in accordance with CASA, MAAA, VMAA and VARMS club rules. All members are to be encouraged to keep up to date with all of these rules. Briggs Field is registered with CASA as an "Approved Model Flying Site" and it has a permanent extended height clearance. A VARMS club imposed 1000 feet AGL height limit applies.

The field boundaries are simply defined as: North, 100 metres south from High Street Road and this approximates to an east west line through the large tree close to the access road, or about 60 metres south of the field entrance gate. East, no further than the access road for the full depth of the site. The Southern and Western boundaries are virtually unlimited. We have cleared another 50 metres of the southern end of the field. Also it is recommended that no transmitters be operated with extended aerials away from the established flight line. There shall be only one flight line in operation at any time.

In relation to the above, we are advised that the CASA Part 101 Rules are only the absolute minimum and, as the MAAA is an Approved Aviation Organisation, they can apply further rules and regulations to reinforce and supplement the CASA Rules. Thereby giving States and Clubs the right to set and enforce further rules and regulations to suit their own needs. Members upon joining such a club, accept the condition of the Club rules, and must abide by such rules.

We remind you that models should not be taxied in the pits and anyone not engaged in actual flying operations should be 30 meters back from the flight line. This especially applies to children. Obviously to meet these MAAA rules, we may have to alter our power field pits / flight line layout. Until then be very careful in regard to spectators.

**Training:** At the last General Meeting we had no real response to our appeal for help. Maybe some of you will reconsider?

In my last report I mentioned several changes we could make to the VARMS Rules and Purposes (Constitution). The items under consideration are elsewhere in this newsletter for your perusal and acceptance before moving to next stage.

That's all for now.

**Max Haysom**

Send stuff for Aspectivity to:

**David Jones**

17 Aitken Street, Clifton Hill 3068

**9481 8516 / 0427 371442**

Better yet, Email to:

**aspectivity@hotmail.com**

### The keyboard

Your key should have your full name written clearly on it so that you can be easily recognised and contacted in case of a frequency clash. Mobile phone number is a good idea too.

**Cover Photo: A long suffering Camperdownite—who will suffer again this weekend!**

## **Mumblings from Numb Thumbs**

Well, we have an very enthusiastic group of kids doing "Flight" at work. They are getting stuck in to their simulator time, carefully recording their flying hours in their log books. They have started work on construction of their Gene Bond designed "Gym Blu" planes, sorting out their copies of the plans and starting to cut out the foam.

We have even started them on flying indoors with a couple of tiny—200mm wing span— bi-plane trainers which use twin motors to steer and throttle to control climb and drop. The students have worked out that there is a real difference between flying on a simulator and suddenly having four walls, a roof and floor rushing up at their plane! Hopefully we will get 4 more of these little planes so we can have 3 kids flying in the gym and 3 in the hall at the same time. These "trainers" are on 27 MHz and only come in 3 frequencies. The kids will also have to learn about frequency control!

Most kids have taken to it like ducks to water, but some of the boys are having trouble transitioning from Xbox to transmitter. They are really ham-fisted and seem to think there is nothing between centre and full throw. The girls are much better at delicate movements than the boys! The boys also tend to remove their thumbs from the sticks all the time, another bad Xbox habit. Maybe some Zap will fix this problem...

**Numb Thumbs**

## **VARMS TROPHY 2006/2007**

**This competition for 2 metre, 2 channel rudder/elevator thermal gliders will be a 7 event competition in 2006/2007. It will be held on the following dates:**

**November 12, December 10, February 4, March 4, April 1 and May 13. As usual, we will endeavour to provide a low key, fun introduction to competitive thermal gliding. Assistance will be freely available on each day. The club winch will be available for all competitors.**

**HOPE TO SEE YOU THERE.**

## **VARMS ELECTRIC GLIDER DAY Sunday March 11 from 10 am.**

**This will be in the form of a FUN DAY ( not a comp). If you need some help setting up your new model, bring it along, there will be plenty of help. Come and see a wide range of models and enjoy the fun.**

**Alan Mayhew**

# MINUTES OF THE GENERAL MEETING 9 FEB, 2007

At Glen Waverley primary School Hall High Street Rd. Glen Waverley. Meeting Comm. 8.30.p.m.

**President Max Haysom.**

**Apologies:** Ian Slack, David Jones & Lynda Allen.

**New Members:** Richard Wynn.

**December, 2006 General Meeting Minutes:** Matters arising – Peter Cossins confirmed that 2.4ghz sets ARE compatible with glider use – Insurance issues on usage of these sets, provisionally approved by VMAA Minutes approved & passed with these amendments. – current issue of 2.4ghz set key hooks on Club frequency board, to be taken up with VMAA by Max Haysom & Peter Cossins.

**Correspondence In:** VMAA December 2006 Minutes- Various Accs & E Mails from TJH, PV & GWPS

**Correspondence Out:** Several E mails (Pres) to TJH & PV.

**President Max Haysom. Report.**

**Club P.O.Box address:** Problems over last few months, due to Australia Post re-naming mail delivery point without notice—resulting in non receipt of various items – incl .response from Airborne Magazine, to our request for permission to use article on David Hobby and his recent 2<sup>nd</sup> World F3J contest win. **N.B. VARMS Mailing address** is now VARMS Inc. P.O.Box 4096 KNOX CITY CENTRE VIC.3152. Also ,include return mail address on all mail.

**Club Website:** Henryk Kobylanski loading items & articles on website – general members feeling that Club website is an excellent source of information and articles of interest.

**Club Rules & procedures:** enlarged version for mounting at Club field entrance, being prepared and list of current members displayed on keyboard case lid-some new members to be added.

**Briggs Field works:** Previously cleared 30x 115 metres section of scrub at Southern end of glider field shaping up well—more of this area being progressively cleared.

**Members 'participation in Club events:** Views sought – eg .only 2 members turned up to VARMS Trophy event -4th Feb.

**Briggs Field club house:** No response as yet from Parks Vic on request to locate surplus portable classroom on site for clubrooms. Max suggest not pushing matter meanwhile for fear of out right refusal.

**Use of Spektrum DX7 & DX6, 2.4 ghz sets:** Approved for use at Briggs field, subject to review on 1 July, 2007. N.B. all users of these sets, MUST hang std frequency key on board-as per MAAA requirements.

**Changes to Club Rules & procedures:** (Constitution) these proposals to be covered in March Aspectivity to cover removing limit of 2 ordinary members on committee, clarification of fees for juniors & pensioners, removal or adjustment of 5% limit & timing of granting of life memberships.

**Site Liaison:** VARMS sign produced & awaiting Council and Vicroads approval re siting of same.

**Briggs Field – alternative entry:** Access from new tip road – unsuitable to Council & Vicroads requirements- so no decision to date.

**Editor:** Need for more general interest articles for Aspectivity. Copy Deadline shown on front cover of previous edition.

**Registrar:** Membership now stands at total of 165 – Raoul producing a new Joining Kit & new membership forms for Club website—sincere vote of thanks passed by members, for a sterling job by Raoul!

**Club Training:** Brief report by Max Haysom, in absence of Ian Slack – proposed roster of experienced flyers to act as Trainers – list to be produced prior to next Club meeting.

**Treasurer:** Club Finances in good shape. General Acc.\$8662 Cr cost of Aspectivity production dropping ,due to downloading E mail version from Club website..

**Field Maintenance:** Martin Hopper- new roster members for mowing called for.

**Electric Glider Competition:** Alan Mayhew – promotion for next meet on 11 Feb.

**Around the Shops:** David Pratley – large range of Hyperion ARF kits & elec heli for Spectrum syst. Plus 2 great “Minimoa “ glider ARF kits – see David for details.

**Contest Director report:** David Pratley – calling for Club members to join VARMS Team for VMAA Trophy results of recent Nationals Glider events to be published on Club website..

**Special Interest Groups:**

**Colin Collyer. Scale Glider Group:** Upcoming events - Camperdown March.; Swan Hill over April “Anzac Day “ –.W.E. – for details, see Colin. Bacchus Marsh, full size glider meet prospects to be investigated, any interest? See David Down.

**Slope Soaring Website:** [www.silentflight.net](http://www.silentflight.net) – great articles on slope flying etiquette & tips on flying.

# At the NAB

**The Financial Statement was not available at time of publication owing to a computer melt down (there seems to be a bit of this going around at the moment...)**

**Copies will be available at the meeting.**

## Mowing Roster

Bruce Robinson	9887 8996	24 March
Geoff Moore	9802 2044	31 March
Greame Hollis	9739 4886	7 April
Ross Peasley	9877 2215	14 April
Brian Spencer	9878 7207	21 April
Henri Wohlmuth	9764 1921	28 April
Keith Heale	9509 6829	Completed
Malcolm Buckmaster	9763 1632	10 March
Jim Baker	9803 2185	17 March

**Any questions or queries regarding the mowing roster to "Grass" Hopper on 9873 8256**

**Volunteers are needed for the Mowing Roster.**

**Now is your chance to ride around on the mower and tractor. Go on, you know you want to...**

**Contact The "Grass Hopper" on 9873 8256**

## Aspectivity Classifieds

### FOR SALE

#### ELECTRIC WINCH

(Drum style, suitable for Sport flying, **NOT pedal to the metal**)

In working order and includes :

M 40 motor, Battery leads (NO battery), Foot operated BUTTON on frame, Turnaround, 200M+ winch line & Chutes,

**\$100.00**

Des Bayliss  
5593 2402

### Minutes of General Meeting Continued:

**General Business:** Query re genesis of interference problems described by Neil Pollock in Feb.07 - Aspectivity.-no definitive answers from members.

**VARMS Trophy 05-06 Presentation:** –to Frank O'Neill.-congratulations Frank!

**Club raffle draw:** Thanks to Martin Hopper ,for his generous donation of a Hi tech battery checker.  
**Meeting Closed** 9.50.p.m.

## THE MANOEUVRES

The basic aerobatic maneuvers most pilots would like to master are the Loop, Roll, Outside Loop (bunt), Inverted Flying, Stall Turn, Cuban Eight and the Spin. There are others of course, but they don't really fall within the scope of this article (it's quite long enough already!) As mentioned earlier, my approach to performing some manoeuvres may offend some dedicated aerobatic flyers, but please remember, that the purpose of this article is to encourage less experienced flyers to have a go at slope aerobatics by minimising the risks involved.

## THE LOOP



This is the most basic of aerobatic maneuvers, and one that I recommend is initially practiced into wind. Position the model as previously described, i.e. straight in front, at an angle of  $60^\circ$  and approximately 150 to 200 feet high. Dive the model straight away from the slope with the wings level to build up speed, again as previously outlined, and then slowly apply approximately 25 to 30% of the available up elevator to smoothly enter the loop. If the model has insufficient speed or not enough up elevator has been applied, the model will stall. Recover and try again, this time either building up more speed or using more elevator control as the situation dictates. This time,

assuming the model has sufficient speed and you have applied the right amount of up elevator, continue with the loop until the model is upside down. When the model is upside down, and has just started the recovery, dive slowly, releasing some of the applied 'up' elevator input. This will help to prevent an inverted stall and to allow the model to build up speed for the recovery to level flight. For the recovery, slowly re-apply the up elevator until the model is again in level flight. To prevent the model zooming up into a stall, it may then be necessary to apply a small amount of down elevator until the excess speed has been 'burnt off'.

Common faults when performing a loop are:

- 1) *Incorrect initial positioning i.e. model off to one side, too low or too close to the hill*
- 2) *The dive is either too steep or not held on long enough to build up sufficient speed.*
- 3) *The loop is entered with one wing low, then the model corkscrews off to one side during the loop.*
- 4) *Too much up elevator at the start of the loop, resulting in either a very tight loop that could overstress the model, a flick roll, or the speed being 'scrubbed' off, leaving the model with insufficient speed to complete the maneuver.*
- 5) *Too much up elevator at the top of the loop, resulting in an inverted stall or poor recovery.*
- 6) *Too much elevator during the recovery resulting in a zoom climb and stall.*
- 7) *Inadvertent introduction of rudder or aileron control when applying up elevator, resulting in the model 'screwing out of the loop.'*

Once you have successfully looped the model a few times, try a loop with a little more speed and less elevator. This will open the loop out, and, should the model start to screw off to one side, there will be more time to take corrective action (that is once you have worked out which control to use and which way to apply it!). Experiment with the maneuver until you have got the feel of how much speed and elevator is required. This will take a few sessions,

and when you are confident that you have mastered 'into wind loops' try 'crosswind loops'. These are often easier because you can see what the model is doing and there is less wind variation during the maneuver. Take care though that you leave enough space between the hill and the model, because whilst the model is performing the maneuver, it's also drifting back towards the hill. Remember also, which direction you need to turn to get back into wind after you have completed the maneuver.

### THE ROLL

The roll is another maneuver, the rudiments of which are best learnt flying into wind. The secret of performing a good roll is:

- 1) *To have sufficient entry speed.*
- 2) *To recover the model to a level attitude before commencing the maneuver.*
- 3) *Good co-ordination between the aileron and elevator controls.*

To perform a roll, first position the model as for a loop, but a little lower. A roll doesn't require quite as much speed as a loop, so consequently the dive is shorter and can be started closer in. Dive as before to build up speed, recover to a level attitude and apply full aileron, in whichever direction you feel happy with. As the model starts to roll inverted progressively apply a small amount of down elevator to keep the nose up during the inverted phase of the maneuver. The amount of down elevator required will vary widely from model to model; the less symmetrical the wing's section is, the more down elevator. As the model rotates through the fully inverted phase and starts its recovery to the upright position, so the elevator is returned to the neutral position. Sometimes it may be necessary to apply a small amount of up elevator to stop the nose dropping at the end of the roll, but be careful, as too much 'up' applied at this point will cause the tail to 'wag'. For initial attempts, it is often easier if you start the maneuver with a slightly nose-up attitude, as when doing so there is often no need to apply down elevator correction.

As you've probably realised, the most difficult part about performing respectable rolls is the synchronization of the elevator control input with the lateral rotation of the model, and this is one reason why full aileron control is used during early attempts at rolling. Another reason is that a large proportion of models do actually require full aileron movement applied to successfully complete a roll!

Minor control input errors will manifest themselves as rear end wagging. More severe errors will result in loss of control. If this happens, let the controls go, and after a suitable pause recover the model from the ensuing dive. Novice pilots will find it virtually impossible to fly their way out of these situations. Doing so does require a certain amount of height and, although it may sound a bit drastic, a common failing amongst tyro pilots is that they won't admit defeat in such circumstances and try to fly their way out of trouble, often with disastrous results. Most models when out of control will, if left to their own devices, end up in a dive, recovery from which is usually straightforward. Try it. Position the model at a safe altitude, then briskly apply full control on all control surfaces, hold for a second or so, then let the sticks go. The model may flick roll and start to spin, but when the controls are neutralized, a dive will result, honest!!

Well there you go.....useful isn't it.

# **Proposed Changes to the VARMS Rules and Purposes**

As per the discussions at the last General Meeting, the following changes are proposed. The matters can be discussed at the March 2007 General Meeting and the final altered clauses to be put at the April General Meeting. The April Aspectivity will include a Proxy Voting Form should this be considered necessary.

## **Clause 3 (1) (iii) Qualification of Membership**

Associate Members – those living outside 100 kilometres of the Melbourne GPO, but who still receive newsletters etc.

Replace above with:

Associate Members – Those members, senior, pensioner, junior and full student, who have paid the MAAA Insurance via another club.

## **Clause 3 (10) Qualification of Membership**

A full Member may be elected a Life Member by the club at an Annual General Meeting upon the recommendation of the committee to recognise outstanding contribution to the Association over an extended period of years. The number of Life Members shall not exceed **5%** percent of the total membership of the Association. Life Members shall have the same rights as Full Members.

Replace above with:

A full Member may be elected a Life Member by the club at an Annual General Meeting, or by Special Resolution in accordance with the Act, upon the recommendation of the committee to recognise outstanding contribution to the Association, as a whole, over an extended period of years. Life Members shall have the same rights as Full Members

## **Clause 4 ((2) Entrance fee and Subscription**

In no case will the Entrance Fee be less than **\$10** for Full Members and **\$5** for Junior Members. Pensioners may be admitted at the same rate as Junior Members.

Replace above with:

In no case will the Entrance Fee be less than **\$20** for Full Members and **\$10** for Junior Members.

## **Clause 33 (2). Winding Up**

To the extent it is permissible within the Act if the Association is to be disbanded, the remaining funds, equipment, etc shall be held in trust by a firm of Solicitors nominated by the Committee of that time, for a period of two (2) years. If the Association does not re-form in that time, then the said funds, equipment etc. are to be offered for sale and after legal charges etc., the balance to be paid to a recognised non-political or non-religious charitable organisation nominated by the firm of Solicitors.

Replace above with:

To the extent it is permissible within the Act if the Association is to be disbanded, the remaining funds, equipment, etc shall be held in trust by a firm of Solicitors nominated by the Committee of that time, for a period of two (2) years. If the Association does not re-form in that time, then the said funds, equipment etc. are to be offered for sale and after legal charges etc., the balance to be paid to The Model Aeronautical Association of Australia Inc. (MAAA Inc.)



# **Australian UAV Outback Challenge      John Bird**

In September this year Queensland is hosting an Australian UAV competition with generous prizes~\$30-40K ref: <http://www.uavoutbackchallenge.com.au/>

## **The Challenge**

The challenge will be based around an Outback Rescue theme, and will demonstrate how UAVs can save lives by quickly and cost effectively delivering medical supplies to critically ill patients in remote regions.

## **When?**

Uninhabited Aerial Vehicle (UAV) Challenge will be held at Kingaroy airport in late September 2007 . Similar UAV inter-university competitions have been held in the US for over a decade. These 'competitions' are an obvious extension of the USA's long history of pioneering R&D in Aviation and Aerospace and recognition that we have entered the new Aviation Age of "UAV's".

A notable feature of the proposed Australia competition is the inclusion of section for Secondary Schools.

I would encourage members to read the US article as it helps place this local competition in an international and historical context. <http://www.bowheadsupport.com/paxweb/seafarers/default.htm>

From what I am able to deduce from preliminary information, the proposed Australian UAV 'Outback Challenge' competition is likely to be for UAV's under 'R.P.V control' (Remote Piloted Vehicles) i.e. R/C line of sight.

Essentially there will be three levels.

1. This level is focused towards high-school students (Queensland only in year 1) and opening up to national high-schools in subsequent years. Prize money ~\$10K
2. University under-graduates and privateers or amateurs. Prize money ~\$30-40K.
3. Documentary competition to appeal to film and media students/amateurs. Prize money \$5-10K

Essentially the competition is about building and operating a UAV system to locate people lost in the Australian outback (hence the name). There is a complex points system that will be made available shortly. We expect multi-disciplinary teams of electrical engineers, aeromech, mechanical and IT to enter.

Essentially we are using this event to try to interest more Australian students (and private individuals/amateurs) to get involved in the aerospace industry, and specifically the UAS industry. We firmly believe that Australia is a country that can significantly benefit from UAS technology.

**John Bird**

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<b>Ordinary Member</b> Alan Mayhew.....	9886 9015
<b>Ordinary Member</b> Martin Hopper.....	9873 8256
<b>Registrar</b> Raoul Wynn.....	98579029

**Current Members:** If you change your address, please notify the Registrar and VMAA, so that we can maintain the correct addressing of this Newsletter.  
**Potential Members:** If you are interested in joining VARMS, or learning more about our activities, please contact the Secretary, or other Committee member.

## Victorian Association of Radio Model Soaring

VARMS (Inc.) was formed in 1968 to get together aero-modellers who were interested in building and flying radio controlled gliders. Members fly at many places, but have a home field on High Street Road, Wantirna South (Melways Map 72, C1), where training classes are free to all and are held on Sunday mornings, generally on a fortnightly basis. Exact dates and times are posted on the field gate.

VARMS organises regular competitions in both Slope and Thermal Soaring, for many kinds of radio controlled gliders, ranging from fun-fly models to competition models and scale replicas.

General Meetings are held on the SECOND FRIDAY of each month (except January) - at the Glen Waverley Primary School Hall, in High Street Road, Glen Waverley (next to McDonalds on the corner of High Street Road and Springvale Rd.). Meetings start at 8:00pm and visitors are welcome. Formalities are usually followed by lively discussions on matters of interest to all modellers.



<p><b>If undelivered return to:</b>  <b>VARMS Inc.</b>  <b>P.O. Box 4096</b>  <b>Knox City Centre 3152</b></p>
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