



Aspectivity

Reg No A0001504U

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

November 2007



Issue 405



A skeleton found at Briggs Field recently...

General Meeting

**Glen Waverley
Primary School**

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

EDITOR

David "Numb Thumbs" Jones

Deadline : November 30th

Upcoming Events

| | | | |
|---------------|------------------------------------|---------------------|--------------|
| Nov 11 | Training 10am— VARMS Trophy 1pm | Briggs Field | VARMS |
| 18 | RCGA F3B League 2 | Unknown | RCGA |
| 25 | Training 10am | Briggs Field | VARMS |
| Dec 01 | Scale Aerotow | Briggs Field | Scale SIG |
| 9 | Training 10am | Briggs Field | VARMS |
| 14 | Tw-Fly Meeting | Briggs Field | VARMS |
| 16 | RCGA Thermal League | Unknown | RCGA |

VARMS Monthly Meetings – Presentation Topics

Our October 12th meeting:

A really good night, not only because we all enjoy our annual “trash and treasure” auction night as nearly 100 of us who attended, can attest, but because:

Most of us got there early (from 7.00pm) and did the registration stuff quickly – well done and thanks to all involved.

And many members helped set up the hall before and after – thanks guys.

And we got through the formalities quickly – thanks Max.

And devoted nearly all of our time to the auction – thank-you Colin and auctioneer team.

And we had tea room support from 9.00pm until close of play – thank-you Geoff.

And we were finished by 10.30pm – better than usual.

And guess what:

the new layout for our hall worked well

sold models were protected for collection – which was possible all evening.

And the books balanced first time and everyone got their models without fuss.

And finally, those involved received a nice personalised letter with their cheque from VARMS shortly after the auction.

None of this would have happened without Ian Pearson reshaping how we conducted the night, and then leading it all from the stage behind the auctioneer!

A great professional effort from our Treasurer. Thank-you Ian.

Our November 9th meeting:

As I mentioned last month I've been waiting for ages for this event. Alan Mayhew is going to show us how to set up our gliders with a computer radio transmitter. The combination of all the possibilities now supported by the latest TX functions in the hands of an expert glider pilot – can't wait to learn the principles and practices.

Having bought an old Graupner elevator/aileron electric glider at the auction I am hoping that Alan will come down to my level so that I can learn a little about setting this simple rig up competently. Meanwhile, some others may have more pressing requirements as this extract below from RC Groups about the Multiplex Cularis set up illustrates.

Contents

| | | |
|-----------|---|--|
| 2 | Monthly Meetings | “I got the Cularis done and up it went. Got it trimmed out and time to have some fun. I found a thermal and turned. The ship slowed and tip stalled – hmmm. Every turn it seemed to tip and dive. I got it to the ground and adjusted the cg back. No better, cg forward the same. When I came in low and turned it tipped and spun into the ground. Well it is toast. I don't think I will buy another - too much money for what it is.... Back to the Easy Glider for me.” |
| 3 | President's Report | |
| 4 | Monthly Minutes | |
| 5 | Mowing Roster/At the NAB | Then this helpful answer from Ian Pullar : |
| 6 | Smiddy's Stuff and Nonsense | “Tip stalls? That's an easy fix. Simply put both ailerons UP 2mm (either through your radio or adjusting the linkages) and you will give it WASHOUT (ie rear outer tips raised). This changes the angle of the outer wing. When the wing starts to stall (because of insufficient air-speed), the MIDDLE of the wing will stall before one of the tips, so the nose simply drops, your plane picks up speed and you keep flying.” |
| 7 | Subjects for Scale | |
| 8 | Scene at the Slope | |
| 9 | The Joy of Flying a Discus Launched Glider | Our December 14th meeting |
| 10 | The usual suspects... | This will be held at Briggs Field – flying and BBQ with daylight saving too – magic! See next month's Aspectivity for details. Raoul Wynn |

Cover Photo: I'm assured it will fly better once covered!

Photo: Henryk Kobylanski via Silent Flight Network web site

President's Report November 2007 Max Haysom

What is happening at the moment?

The Auction has been and gone. Maybe it wasn't as big as some previous years but considering that we did not advertise it was good fun night. Thanks to all those directly involved for a great effort.

I am currently negotiating with the 3 bodies controlling the properties we pass through when entering the HSR flying field. The object being to provide a safe exit off HSR and only one locked gate to secure our site. This is becoming very time consuming and communications are difficult, but hopefully commonsense will prevail and we will succeed. I have also been negotiating to get a supply of road metal to spread on the new car park; I believe we have some available from the EastLink construction to use as needed. Martin Hopper is trying to coordinate the local contractor to scrape up the balance of the old southern car pad, and unused road section, to provide a firm base in the new car park. I have had more complaints about the condition of the track/road. If everybody travelled slowly (sub 15kph) we would not have a problem. Some members actually think it is fun to scatter the road surface all over the field. Until we see members taking a more sensible approach to the use of this road, the committee will not take any action to repair the road.

We have been asked to make changes to the club keyboards to bring them into line with the MAAA recommendations. The club policies of allowing only "uneven" frequencies and 20 KHz keys will be retained. Simply, the MAAA policy allows the separation of the "paired" frequencies at both ends of the 36 MHz band. Since it is our policy to use only 20 KHz spacings it will mean that Ch 10 (29 MHz), 601 and 659 will not be provided for in the new keyboard because an ACA ruling states that these frequencies can only be used on equipment certified for 10 KHz. We will provide 10 – 50mm wide key slots for the 2.4 GHz on the new boards so that these users can be readily identified. The balance of the 29 Mhz, 40 Mhz and 27 Mhz will be as existing. It would be wise to disallow the use of any transmitter certified as 40 Khz. If any members are **currently using** 40 KHz rated TX and Rx then please contact me and we can discuss the situation.

The committee are reviewing the MAAA Insurance policy as provided by VMAA Secretary. It is very complex document and it may take some time to get the various sections of the policy to make real sense.

Finally, it has been reported that a car, or cars, has been driving down our field on the western side to the southwest corner and using this area to inject drugs. Rubbish left at the scene included a sharps container part filled with syringes and needles. The matter has been reported to Police. Do not try to stop these people, as there may be dire consequences. Leave it to the Police to act on this matter.

That's all for now.

Max Haysom

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.

Send stuff for Aspectivity to:

David Jones

17 Aitken Street, Clifton Hill 3068

9481 8516 / 0427 371442

Better yet, Email to:

aspectivity@hotmail.com

MINUTES OF THE GENERAL MEETING AND AGM , OCTOBER 12 2007

Held at Glen Waverley Primary School-.Comm. 8.20 P.M.

President Max Haysom

Apologies Roger Stevenson.

Visitors: Paul Winter, Chris Caulcutt, Darryl Gunst from VMAA.

New members: Adrian deVos and Ken Donnelly – welcome!

Presentation: VMAA presentation to Ray Cooper for electric glider World Record plus induction into Hall of Fame. Congratulations Ray! Recorded 142.8 kilometres duration driving/flying from Yarrowonga to Nathalia and return – 75% above previous record. Sadly, this record was broken six days later by a new distance only a kilometre or so longer. Ray is kicking himself for not going just another 10 kilometres. But “watch this space” as another attempt is tempting!

See the next VMAA newsletter for details of this great achievement from Ray - to add to his already impressive collection of World Records.

President Max Haysom - Report.

New Security Keys distribution: as advised in October Aspectivity, - keys swap at Nov or Dec 07 Club General Meeting. Otherwise collect at Briggs Field by prior arrangement with Max. Don't lose them as \$20 cost to members for replacement keys.

MAAA insurance: documents received, analysis planned, then report to members.

Site Liaison: liaison problems persist. No resolution on gate/entry location.

VARMS 40th Birthday Celebrations: Suggested Briggs Field event for Friday 11th April 08 meeting plus nostalgia event at Torquay – location of VARMS inaugural meeting. If you have ideas for 40th celebrations and commemorations please email to Max.

Registrar: Club membership stands at 154 paid up members.

Club Training: Was a superb day with lots of thermals. However, only 3 participants for VARMS Trophy later that day – disappointing.

Treasurer: Club Finances in good shape. General Account \$13,700 balance.

Contest Director: State Slope Champs – Sunday October 14. Mt. Hollowback. – Peter Cossins agreed to run contest this year. – comp a friendly relaxed one, for all comers. 2nd round Open Thermal at Mildura on 21 October - clashes with electric fun-fly at Briggs. Alan Mayhew will be at Mildura, so other members will support fun-fly in his absence.

Around the Shops: Multiplex EPP Cularis ARF on display from Roj's Hobbies – flies superbly – just ask Max McCullough who has a glider (non electric) version.

Colin Collyer. Scale Glider Group: Aerotow at Briggs Field on 5th October 07. Tim Moreland arranged great weather and managed the day well too – thank-you. Don't forget next meetings at Briggs on Saturday 3rd Nov. & 1st Dec.07.

Meeting moved quickly to the annual club auction and closed at 10.30pm.

At The NAB

Income V's Spending

Between 1/10/07 and 31/10/07

Income

| | |
|----------------------|-------------------|
| Bank Interest | \$0.49 |
| Fundraising | \$1,939.65 |
| Auction | \$1814.00 |
| Raffle | \$125.65 |
| Subs 06/07 | \$1,889.00 |
| Total Income | \$3,829.14 |

Expense Categories

| | |
|---------------------------------|-------------------|
| Administration | \$410.95 |
| Postage | \$50.00 |
| Stationery | \$23.70 |
| Equipment | \$298.65 |
| Committee Affairs | \$38.60 |
| Aspectivity | \$132.20 |
| - Printing | \$97.20 |
| - Postage | \$35.00 |
| Auction Payments | \$1,606.50 |
| Bank Charges | \$9.00 |
| Fee Refunds | \$123.00 |
| Briggs Field | \$23.55 |
| - Maint. | \$23.55 |
| Insurance | \$607.00 |
| Flying | \$607.00 |
| Rent | \$45.84 |
| - Flying | \$45.84 |
| Supper/BBQ | \$17.95 |
| Training | \$77.40 |
| Total Expense Categories | \$3,053.39 |

Mowing Roster

| | | |
|--------------------|-----------|-------------|
| Bruce Robinson | 9887 8996 | 8 December |
| Geoff Moore | 9802 2044 | 15 December |
| Greame Hollis | 9739 4886 | 22 December |
| Ross Peasley | 9877 2215 | 29 December |
| Robert Cassell | 97951330 | 5 January |
| Henri Wohlmuth | 9764 1921 | Completed |
| Keith Heale | 9509 6829 | 10 November |
| Malcolm Buckmaster | 9763 1632 | 17 November |
| Jim Baker | 9803 2185 | 1 December |

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

Volunteers needed for Mowing Contact The "Grass Hopper" on 9873 8256

Training Dates
November 11 & 25, December 9

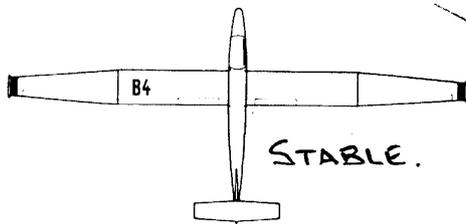
Have you paid your membership renewal for 2007 / 2008?
Without your continued support we will not be able to continue to develop and maintain our facilities.

GATE KEY SWAP

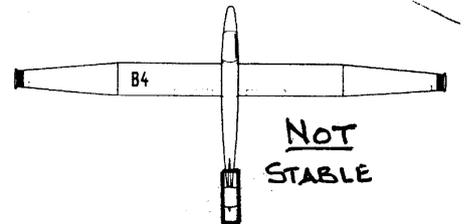
The gate padlock for Briggs Field will be changed after the December Meeting. Both locks will be in use between the November and December Meetings. New keys will be available in exchange for your current key at the November and December Meetings and by arrangement with Max Haysom at the field. No swaps via mail.

Smiddy's.....STUFF and NONSENSE

Couple of things came to the fore for this months column...both slope related. The first was my Multiplex semi scale B4 which suffered a mild collision with the only other plane in the air at that time. That always happensits called Sods Law. However in this case the collision was mild and both machines flew away from the bump. Until mine suddenly developed a lack of stability and violently attacked the ground. It appeared on inspection that the Stabiliser on top of the T-tail had been



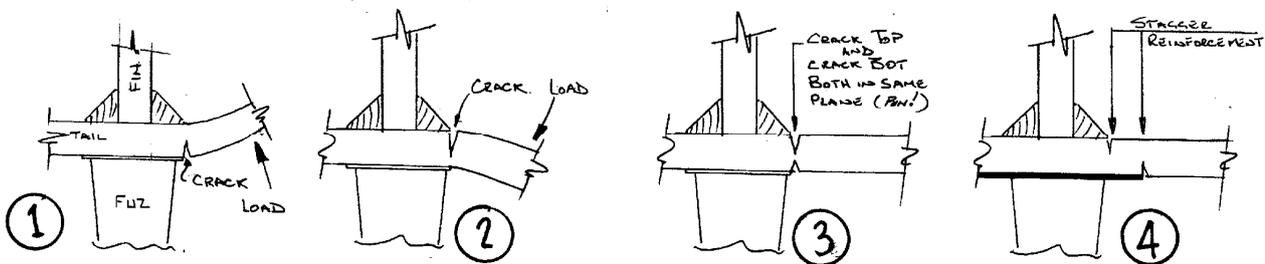
knocked sideways thus causing lack of aerodynamic balance and flyability. Multiplex in their wisdom deemed that a single bolt would be sufficient to hold the tail on...



and in fairness it was. BUT it wasn't enough to stop it pivoting sideways in a collision. Lesson learnt...don't trust manufacturers to always get it right.

Second casualty concerns a group build Schweizer 1-26 which was flying very nicely and had recently seen off the resident Eagles at Kilcunda when its pilot yelled that he was having a glitch ! It was a biggun cos the plane snap-rolled on to its back and headed groundwards... RAPIDLY!!!. Subsequently dissemination of available facts and the wreckage confirmed that the tailplane had probably broken on one side causing the snap-roll and crash....but WHY? I think the following sketch's may help solve a few problems, they have been simplified and exaggerated to aid explanation (I hope):-

Diagrams 1 and 2 indicate general flightloads and especially those hard landing loads we all incur, they form due to hard points caused by reinforcement we apply to help strengthen an



area we know will be under high stress. Now if the reinforcement is opposite or close to each other the cracks will be in the same area:- thus causing weakness. The answer may be as simple as either doing away with reinforcement or staggering the top and bottom widths. This is exactly how and why my Lo 100's tail used to fail and simply by staggering the ply top and bottom....problem cured..... it flies like a new'un.

Back the Pilatus....it was purchased second-hand and was quite old when I got it. One problem the recent re-kitting has shown up is how fragile the glue joints in the built up wing have become over time. Balsa dries out and loses moisture content, all timber does, its a fact. So be very wary when buying old planes...they may look lovely and strong but in fact under that covering old age may have taken hold and as us old'un's know we get more fragile as the years pass. Be Warned !

Finally here is a brilliant tip.....

Never, under any circumstances, take a sleeping pill and a laxative on the same night.

Got any ideas...lemme know

Smiddy 9874 3480 colinkay@lizzy.com.au

“And now for something completely different” was it Monty Python uttering words a bit like those or another zany crowd? Who knows, but it would seem that Bert Rutan may have had thoughts similar when designing this months offering :-

The Rutan Solitaire

The Rutan name is synonymous with canards and weird and wonderful layouts. However his canard layout for a sailplane was not the first, that honour goes to SZD with their Kaczka which wins the ugly duckling award way back in 1949. The Solitaire is without doubt the most beautiful but that is probably due to the lack of constraints allowed by the use of modern high stress materials and advanced fabrication techniques, or in layman terms foam and epoxy....sound familiar? The following text is taken directly from a website but I have forgotten which one.

“The prototype was exhibited at, among other places, Oshkosh 1982. It had the usual fore-plane, but a conventional tail boom and rudder. Uncharacteristically for one of his designs, it didn't have winglets. The retractable motor was stowed in the fuselage ahead of the cockpit. The fixed undercarriage consisted of two equal sized wheels mounted in tandem under the fuselage. The Solitaire was reputed to fly well, though it was not a very high performance machine (I have seen a figure of 35:1 quoted), but that was not the aim. It was to be a simple-to-build unstallable glider, with the advantage of having an engine. Unstallable? Well that was one of the reasons for the tail-first layout in Rutan's aircraft. The fore-plane design is such that it stalls before the main plane. The nose will then dip, unstalling the foreplane. In fact the Long Eze can be flown with full aft stick, the nose bobbing up and down as the fore-plane stalls and unstalls, while the main-plane stays well within its critical angle. The other advantage of the tail first configuration is that both surfaces provide lift, unlike the normal layout where the tailplane produces a down-load and the main plane has to lift the aircraft's weight plus this down load. The main wing has trailing edge flaps which also operate as spoilers by the leading edge coming above the top surface of the wing when deploying. The unusually effective 'spoilerflap' trailing edge surfaces provide good glidepath control. Oh, and the engine with electric starter for air starting, erects (erupts?) from and retracts into a bay in the forward fuselage by means of electro-hydraulic power. So why aren't there any home built Solitaire's flying around? It seems that no one wanted one. Whether that was conservatism, or whether those building gliders wanted something with a higher performance, I don't know. Pity, as it would have been interesting to see a few of them flying around.”

As far as the technical stuff :-Span 12.7m Aspect ratio 20.78 that's about it!!! But it did win the Sailplane Homebuilders Association Design Contest in 1982 so somebody loved it

Happy Building.





It seems that when told that he would be working overseas in New Zealand for a while Andrew Allen's first thoughts were.....NZ that's where they have lots of hills, sorry "Hulz", for slope soaring ... "Now what have I got to fly that will fit in a suitcase?". An old Model Flight Tornado or Typhoid or somesuch name was still floating around so with a bit of pruning and dismemberment it was fitted inside the suitcase. Here are his words and a few pictures :-

"The weather over here (NZ) has been terrible. Today 130kmh gusts, don't have enough ballast to fly in that. But I did find a couple of 1/2 hr spots during the last week where the wind was OK. And.....the suit case modified wing flew just like new. The slope was a challenge. Lots of trees, shrubs and gullies lower down and to the sides. (this is a site recommended by the local club) A very strong sweet spot, with strong turbulence once outside the zone. Several times the wing was flicked into a vertical position, or whipped up at a great rate of knots... All good fun.

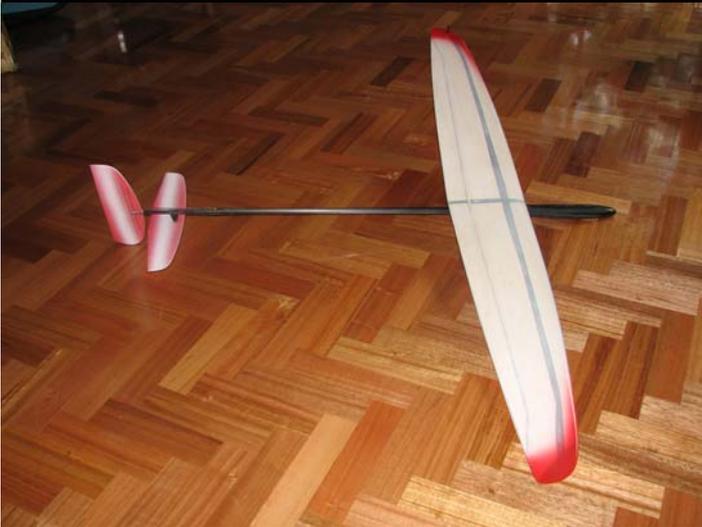
The conversion would be much easier on a new wing, make the tip fins removable, maybe split the ailerons and use 2 servos for each aileron which would leave them fully hinged even when dis assembled. Still not much trouble to apply some tape hinge after the wing pieces are assembled, and it keeps with the KISS principle".

Its interesting to see how Andrew has left the ailerons alone because the servos are mounted in the middle bit. Might need a bit more colour with all that scrub around and of course a lost model alarm is invaluable when the thing gets lodged in a vertical position among the bushes. Have fun Andrew and many thanks for the pictures

See you on the slopeSmiddy



The Joy of Flying a Discus-launched Glider Neil Pollock



Up to now discus or side-arm hand launched gliders appear to be playthings for the expert thermal duration and F3B fraternity. However on the basis of recent experience I believe they have much to offer the mere mortals of the soaring community, like myself. Through a set of accidental circumstances I found myself the proud owner of a kit for a hot European discus launched glider made by Mibo Modeli in Slovenia. This appears on the basis of photographs to be the same DLG that is now available from David Pratley. The good news was that the fully molded pieces were of beautiful quality and finish. The bad news was there was not a single word of in-

structions, not even a suggested CG location! The biggest challenge was getting all the radio stuff into the carbon fiber eggshell, which formed the fuselage pod. All the servos had to be accommodated in the fuselage since the wing was too thin and fragile to contemplate putting servos in there. However I managed to get it all together and a very nice model weighing 320 gram resulted (doing a quick change of units this gave a wing loading of 4.8 oz/ft²). With total focus on weight saving around 290 gram would have been possible, but for general fun flying a bit of penetration takes precedence over absolutely minimum sink rate.

The model turned out to be an absolute pleasure to fly in a variety of circumstances. Despite being on the wrong side of 60, at least as far as athletic ability goes, I found it easy to get quite satisfying launch heights. The discus launch is not too physically demanding and the height achieved was way above what I could manage with a javelin launch that just about ripped my arm off. For flat field thermal soaring the only new challenge is finding small low-level thermal feeders to get up into the more familiar large thermal structures.

My overall impression was that flying a DLG had a Zen like tranquility and peace. The model flew slowly in complete silence and responded to every tiny air movement. It revealed small areas of lift and sink that one would never have expected. In gusty conditions I had fun using quite aggressive control throws to effectively “surf” the gusts. Close to the ground it drifted along in ground effect for a seemingly endless period. It was nice to be able to walk into a piece of parkland with just a model and a radio, throw it into the air with no extra equipment or noise, pick it up or catch it at the end of the flight and throw it again. In a light breeze it was possible to walk to windward flying the model so close that you could reach out and touch it. It was a novel experience hearing the servos operate, seeing the control surfaces move and the model responding.

As familiarity grew I found that it was an excellent light-lift slope-soarer. It would stay up in conditions that would normally only see 2 metre or larger “floaters” in the air, but with much sharper maneuverability. Discus launches were useful in getting up into slightly stronger lift in marginal slope conditions. All the basic aerobatics were easily achieved and despite the low wing loading it had a fair turn of speed with a little bit of reflex camber when pointed towards the ground. The model had really nice and forgiving handling characteristics and never tried to surprise the pilot. If it was floated up smoothly into a stall the nose dropped very gently and it recovered with little loss of altitude. To my great surprise I found that the model was quite tough despite its eggshell like structure. When experimenting with launch presets I managed to have it stall from a vertical climb, too close to the ground to recover. The model ended up sticking out of the ground, which admittedly was on the soft side, like a fence post with absolutely no damage.

Neil Pollock

All material published in *Aspectivity* is the copyright of the author of the article.
Opinions expressed in *Aspectivity* may not represent the views of VARMS Inc. the Editor or the Printer.
VARMS Inc., the Editor and the Printer accept no responsibility for the accuracy of content.

| | |
|--|-----------|
| President Max Haysom..... | 9801 3899 |
| Secretary Roger Stevenson..... | 9830 8293 |
| Treasurer Ian Pearson | 5996 5019 |
| Contest Director David Pratley..... | 9887 0558 |
| Editor - Aspectivity David Jones..... | 9481 8516 |
| Ordinary Member Alan Mayhew..... | 9886 9015 |
| Ordinary Member Martin Hopper..... | 9873 8256 |
| Registrar Raoul Wynn..... | 98579029 |
| Scale Group Rep Colin Collyer..... | 9561 9097 |

VARMS Web Site : <http://www.varms.org.au>

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.



**If undelivered return to:
VARMS Inc.
P.O. Box 4096
Knox City Centre VIC 3152**