

Ballarat Radio Model Flying Club Inc.

Web site: www.brmfc.org.au Inc. No. A0062781D

NEWSLETTER – August, 2019

Committee 2019/2020

President: Alan Crisp (0414 487 856) Vice President: **Peter Evans** (0438 643 949) Treasurer: Nick Katsikaros (0438 559 985) Secretary: **Nigel Newby** (0408 420 794) Ordinary member 1: Max Rowan (0422 761 022) Ordinary member 2: Murri Anstis (0413 353 739)

Officers

Returning Officer: (The Secretary)
Public Officer: (The Secretary)

Publicity Officer: Roger Carrigg (0437 842 277)
Safety Officers: Murri Anstis (0413 353 739)

(Vacant)

First Aid Officer Nigel Newby (0408 420 794)
Newsletter Editor: Roger Carrigg (0437 842 277)
Field Maintenance 1: Murri Anstis (0413 353 739)
Field Maintenance 2: Peter Weston (0447 792 911)

Contacting BRMFC: Secretary: Nigel Newby.

Mob: 0408 420 794, Email: secretary@brmfc.org.au

Newsletter Editor: Roger Carrigg.

Mob: 0437 842 277, Email: editor@brmfc.org.au

Note the meeting location.

The next general meeting is to be held at the <u>Eastwood Street Leisure Centre in the Canteen</u>, on Wednesday August 28th commencing at <u>7.30PM</u> (Turn left after entry to the Complex, and the Canteen is on the left again). <u>Don't forget to bring a plate for supper</u>.



Agenda Items for the next meeting

- 1. Trawalla Estate Update
- 2. Strategic Plan
- 3. Field Maintenance
- 4. Burrumbeet Airstrip

AGM - 24th July 2019

The Annual General Meeting was held on Wednesday 24th July prior to the ordinary meeting. The minutes of the previous AGM were read by the outgoing president and the treasurer presented the financial report for the 12 month period. The president, treasurer and other reports were included in the July newsletter while the secretary's report is included below. Minutes of the AGM and general meetings are sent out to club members by email.

6. Secretary's report:

• It has been a busy year at the field with much work done to improve the field and the facilities. Thanks go to Murri

- 5. Pits replacement matting
- 6. BAMI fly-in (Len Astbury)
- 7. Progress for Fly-in organisation

Anstis and Pete Weston for diligently carrying out their Field Maintenance officer roles; the strips are really looking at their best at the moment. Alan Crisp has also been busy with tasks such as making some excellent start-up tables and a new windsock. Max Rowan has made a replacement heater after the old one started to collapse. Thanks also go to every other member who did their part in maintaining our facilities at Trawalla, which is what being a club member is all about.

 Thanks to the members who assisted when we had the Bunnings Sausage Sizzle days, these add a significant number of dollars to our accounts. They are what pay for the purchases we make, such as new engine for the mower, electric fence parts, materials to construct picnic and start-up tables. Not to mention the "free" BBQ lunches at the field following the sizzle days to use up the leftovers....

- A pleasing thing has been the increased interaction with BAMI, which has included the Wednesday night indoors flying at Haddon and the inter-club Fly-ins. It is planned these will be twice yearly, each club hosting one event a year. It is very interesting to see the different models preferred at each club and I personally am impressed with the glider-guiders skills and the beauty of the "old timers" (the planes not the pilots!).
- Our member numbers increased slightly last year and renewals for this year are very close to the same. I should like to thank all members for promptly paying before the end of the financial year. This makes my task so much easier when it comes to entering the details into the MAAA database and only having to write one cheque. Your new membership card should be arriving soon from the MAAA as the cheque was sent to the VMAA on the 9th July.
- Renewed field registration with CASA is still ongoing and will be approved in the near future hopefully.

Once the reports were presented the committee positions were declared vacant and Secretary Nigel Newby chaired the re-election of the new committee and office bearers. The positions are listed below with the previous incumbents alongside to show what has changed.

Committee 2019/2020

President: Alan Crisp (Fred Eggleston) Vice President: Peter Evans (No change) (No change) Treasurer: Nick Katsikaros Secretary: **Nigel Newby** (No change) Ordinary member 1: **Max Rowan** (Alan Crisp) Ordinary member 2: **Murri Anstis** (Max Rowan)

On behalf of all the members, congratulations and many thanks to Alan for standing for president. Although Alan hasn't been in the club all that long, he has made many contributions, has a keen eye for detail and getting things done. Also many thanks to the retiring President Fred Eggleston for steering the ship with a steady hand over the past two years. His reasoned input will be missed on the committee and hopefully will return to a committee position in the not too distant future.

Office Bearers 2019/2020

Publicity Officer: Roger Carrigg (No change) Safety Officers: Murri Anstis (No change) Vacant (Peter Weston) First Aid Officer Nigel Newby (No change) Newsletter Editor: Roger Carrigg (No change) Field Maintenance: Murri Anstis (No change) Peter Weston (No change)

Whilst updating the club web site with the new committee, I created a new page listing the <u>past committee members</u>. It goes back to 1998 which was easy enough to compile

because those records are in electronic format. Ie. The newsletter header lists the current committee.

To go back prior to 1998, we will have to consult the hard copy minutes of the AGM's. A task which should be achievable although tedious.



Points of interest from the last meeting

Extract of newsworthy items from the minutes of the last general meeting which followed the AGM. Note: Some events/activities may have concluded or been modified as circumstances change.

7. Reports

- a) Committee of Management: No meeting
- b) Other: Nick went dynamic soaring at Johanna Beach (west of Apollo Bay) and promptly tried to bury one of his models in the sand. There were pilots from all over Victoria. The maximum speed achieved on the day was 240mph by a 60-inch wingspan glider, impressive.
- 8. General Business
- a) Trawalla Estate Update:
 - Sheep and cattle are back in the paddock so the electric fence was reinstalled and it is functioning well.
- b) Strategic Plan:
 - Pits' matting has been collected and waits to be laid.
- c) Field Maintenance:
 - Murri to pick up 2m3 of soil to fill a dip.
 - More granite sand will also be required to fill holes in the pits area to provide a level base for the new matting.
 - An option discussed is to remove all the old matting prepare a base and then install the new matting.
 - Second option is to cover existing matting with sand to level it then place the new matting over it.
 - Six additional pipes for the electric fence posts to be installed.
 - Drive belt was replaced on the John Deere mower.

d) Burrumbeet Airstrip: No actions required at the moment. Strip will be mowed in the spring.

9. Other Business

- October 20th Fun Fly is it a goer?
 - No flyer developed (need to send to the VMAA for inclusion in their calendar plus to be sent to clubs)
 - No organizing team has yet been arranged
 - What are the toilet and catering arrangements?
 Decision made that no additional toilet will be required. Roger will arrange the catering.
 - Responsible person for organizing the day Nick volunteered; responsible person who will coordinate the day has not been arranged. Working-

bee prior to the day to tidy the field will need to be arranged.

 Spring inter-club fly-in with BAMI; details for which are yet to be finalized.

Dates put forward are November 10th or 17th?

- The database for the holders of container keys requires updating by Max.
- There is a mouse problem in the kitchen: beware, clean up any crumbs etc. and put away all crockery.
- Bunnings Sausage Sizzles With the opening of the second store we need to decide which store we wish to register at (as only one site is allowed).
- As a point of interest Roger presented the "Sausage sizzles" grand running total, an impressive \$19,500 (\$15,000 at Bunnings). 2001 was the first time that one occurred and this was at Safeway Sebastopol.

10. Agenda items for the next meeting.

- BAMI fly-in (Len Astbury)
- Progress for Fly-in organisation
- 11. Meeting Closed at 9.38pm Next meeting date will be the 28th August 2019.







Membership Renewals

If you haven't renewed your subs for the 2019/20 year, can you please do so ASAP? If you have please disregard.

Secondly, if you don't intend re-joining please give the secretary the courtesy of a message to that effect.

The renewal form was included with the June 2019 newsletter and can also be found online at: http://www.brmfc.org.au/Forms/MembPayment%202019 20.pdf

Remember, you can't fly at any MAAA sanctioned field until your subs are paid.







VMAA News

Information gathered from the Minutes of the VMAA Executive Committee Meeting held on the 8th August 2019 which might be of interest to members. Note: some situations may have changed since then.

- 9.1 Area approvals Are ongoing with several Clubs submitting documents to address the issue. Existing instruments/NOTAMS that are older than five years are revoked and require to be reviewed and reissued. Height approvals have been between 900 and 1800 ft AGL. There are still several approvals to be reviewed/submitted for completion as soon as possible.
- 9.1.1 SAM600/ Old Timer SIG submission has been submitted for consideration by CASA/RPAS. Conditions for six field is being investigated. There will be a requirement to

identify the height requested and ensure risks assessments are provided for each field.

- 9.4 Heavy Model Inspector Renewals Based on a decision at the 2017 MAAA Conference, the renewal of the position is no longer required. As long as the member remains part of the association, his HM certificate is current.
- 11.2 Registration The Registrar tabled that the current processes are running fairly well with most submissions being successful. There are still a couple of clubs that do not have identifying details when submitting members for renewal. Clubs are under the belief the changes to their respective club executive is the responsibility of the VMAA Registrar to update the database. Club registrar are required to make all changes to details of the membership. Need to remind clubs that individual club members can also make changes themselves by registering on the MAAA Membership Register system.

13. Editors Report:

- 13.1 Next bulletin is prepared. However, the website (VMAA) has been hacked and will need to be repaired before sending. A refresh of the site is scheduled before any action is taken.
- 14. Web Master's Report: 14.1 As per 13.1, the refresh is scheduled as soon as possible. Additional changes to submission forms are in progress. Fake emails are going out to committee members and all need to be aware.

18. SFI Report:

- 18.2 Instructor Notification We have 235 listed. Have received 116 response to complete the refresher course. Nineteen have responded in the negative and will not complete the refresher and will not continue as instructors.
- 18.3 Instructor Course Report The first of the MAAA Instructor courses was held at Sale Greyhound Racing Club on Saturday 27th July. Ten people, including seven new instructors and three experienced instructors, took part. All participants qualified, and the course finished approx. 2.30pm. There were some interesting comments about how they realise during the hands-on session that their communication skills could be better. Next course will be conducted at GMAC Saturday, 10 Aug 2019.
- 18.4 I am progressing with a schedule of courses. Certain clubs do not have facilities for running the course.

21. General Business:

21.1 Train and Hobby Show 2020 – Update from the VMAA Sandown Coordinator. Discussion centred around what the VMAA will be presenting and possible display for the event. Contact with the organisers with an initial informal meeting held. Have had retailer/wholesalers showing interest in the event. Naming rights of the event were briefly discussed. Comes at a cost and may not be worthwhile for the VMAA. On completion of discussions, keen to establish a central point of contact. MAAA members can attend the event. Room availability will depend on display type/size. Flying

display needs to be reviewed. Clubs to be involved which will assist try fly days. Flat Out RC magazine in attendance to promote the sport. Printing of flyers/cards/swap cards will be considered — the opportunity to promote VMAA. An event is a three-day event, Friday to Sunday.



New Models seen at field

On Sunday 28th July, Mark Williams had a couple of new models at the field which caught my eye both visually and how well they perform.

Mark has been kind enough to provide a few details of the two Planes.

The F4U-1A Corsair is a FlightLine (by Freewing) Plug n Play Model with so-called "Birdcage" canopy and 3 bladed prop as the early Corsair versions had. Finished in US Marines Pacific scheme.



Mark Williams with his F4U-1A Corsair on Sunday 28th July.



Another shot of Mark's F4U-1A Corsair.

It has a 1600mm Wingspan and comes complete with 60 size 5055-390KV electric outrunner motor, 80 amp ESC, 18 inch three blade prop and uses 11 servos.

Fitted with rotating retractable main gear with suspension main struts and sequenced main gear doors. Retractable tail wheel with scale detailing. Has scale four panel split flaps Balances perfectly with the Zippy Compact 6200mah 6S 40C LiPo's that I use.

he E-Flite Prometheus P2 Aerobatic Biplane is a licenced scale version of Skip Stewart's full size, custom one off, hand built and very highly modified Pitts S-2S Biplane that he travels the air show circuit in the USA with and wows the crowds.

Wingspan 1219mm, flying weight 3.5kg, 50 size 525KV outrunner motor with 70 amp ESC and 15 inch two blade prop.

Balances perfectly with the Zippy Compact 5000mah 6S 25C LiPo's I use.



Mark Williams with his Prometheus P2 Aerobatic Biplane.



Looks fast just sitting on the ground. The full size is a custom version of a Pitts S-2S.

Video of the show routine https://www.youtube.com/watch?v=C3DQ9rcLBXE if you want to have a look.



Pity I can't fly like this bloke and do the plane justice. And just as a matter of interest Skip Stewart still flies RC planes as well as his P2 and has a commercial pilots licence. He got his initial interest in flying from model planes as a boy.

Cheers Mark



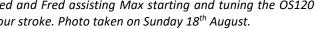
Also on Sunday 28th July Dave Turner had a new (well new to him – it was either his brother's or father's model) Trojan T28 electric foam model to test fly. After some minor adjustments to the control surfaces I (Ed.) test flew it and it went well. Dave was then okay on his own.

ax acquired this semi scale Spitty from Glenn recently which he bought down at the Hamilton Fun Fly either last year or the year before. The model has retract undercarriage and flaps and Max has fitted an OS120 four stroke engine. Whilst the model looks very much a spitty the wide undercarriage track is far from scale so it should ground handle much better than if to scale. I'd reckon the narrow U/C track on the Spitfire would have been for structural reasons rather than operational effectiveness.





Ted and Fred assisting Max starting and tuning the OS120 four stroke. Photo taken on Sunday 18th August.



Goin's on at the Field

Wayward Muffler

On Sunday 4th August I (Ed.) had taken off on the third flight for the day with my Super Stearman. After a few circuits it was heading out over the south west corner of the field banking around when small parts could be seen coming off the plane. Immediately I thought it must have been the spinner cone because the prop loosened when the OS200 was started and maybe it wasn't tightened sufficiently. I flew over the strip and could see the spinner was still attached but then noticed the back of the muffler was missing so landed straight away.



The old Super Stearman lost the OS200FS muffler nozzle.

I had a pretty good idea of the direction from where I was standing where the muffler backend or nozzle jettisoned and so did others who saw what happened from the club house.

A number of us went out to see if the nozzle could be found but to no avail. The rye grass sown in the paddock is beginning to grow rapidly so it was literally like looking for a needle in a hay stack. After about half an hour searching the likely area, we headed back to the club house and I'd resigned to buying a replacement muffler.

I then leisurely dissembled the Super Stearman and loaded it back in the car. Then I thought before leaving, why not have another quick search. I went out to where I was flying from and lined up on one of the trees in the south/west corner which I reckoned lined up with where the muffler came off. Then headed off in that direction and started searching when about 150-200m away. After about 10 minutes I found the muffler gasket sitting flat on one of the sheep tracks. It was the sheep track that saved the day.



One of the gaskets found on a sheep track. (44mm diam.)

I then rang Nick K. to ask him to bring over a witches hat to mark the spot and also saved the location in Google Maps as a parking spot.

Once one part was found I thought there is some hope of finding the nozzle but more searching straight away proved fruitless.

From the photo of the gasket and also the location saved in Google Maps as a parking spot I had the GPS coordinates. Using Google Maps I measured the distance from where I was standing while flying to where the gasket was found and that was 220m.

Late Monday afternoon I got a phone call from Nick Jankovic. He went on to say he went out for a fly earlier on in the day and thought he would go out and have another look for the muffler and that he found the nozzle about 20 metres south east of where I'd marked the position of the gasket. I thought that's it all recovered, but then wondered if there was a baffle as well (many years since the back of the muffler had been off so was unsure.) A quick lookup of the OS200FS manual showed the nozzle, baffle and two gaskets so still needed the baffle.

Alan Crisp said he has a metal detector that I could borrow and the weather forecast for late in the week was heavy rain so I had to act fast and arranged to pick up the metal detector Wednesday morning and head out to the field. Murri was also going out to do some field maintenance.



Alan's lifesaving (well pocket saving!!!) metal detector.

Armed with the metal detector I started searching the area around where the gasket and nozzle had been recovered. Murri also came out to help search. The metal detector has to be tuned for the ground conditions and be right over a metal object to register an audible beep. The pair of us searched for 15 minutes or so, me with the metal detector and Murri having a general search. I said to Murri you might as well do the mowing and I'll continue with the metal detector. After about 20 minutes searching in a logical pattern the machine beeped. I waved it over the ground and it beeped again and again. Had a look and couldn't see anything and then there it was, the other gasket lying vertically in the long grass just to the west side of the same sheep track where the other gasket was found and about 10 metres further south. Things are looking up at last and gives you confidence that the machine is effective. Whilst searching with the detector I had the recovered nozzle in my pocket and frequently got it out to make sure the detector was still tuned being inexperienced using it.

After another 20 minutes or so I decided to search more to the north east of where Nick J. found the nozzle and it

wasn't long before the detector beeped. Once again I couldn't see anything in the grass and had to look really closely at where the beeping came from and there it was the elusive baffle.



The baffle lying elusively in the long grass some 220m metres away.



All the while searching, the metal detector never found any other metal apart from this big gold nugget, but that was of no use to me so I just threw it back in the paddock!!!

On Wednesday afternoon after finding the baffle I located the M2.6x12 cap head screws on the modelflight web site and ordered a packet of ten. These arrived on Friday afternoon which was great service. While the metal detector was excellent, I didn't like the chance of finding the screws although one had come down with the nozzle!!! Anyway I reckon some of the screws must have come out on previous flights and maybe on other days. More maintenance required it would seem, but I always glance at the muffler after each flight to make sure it hasn't moved on the header pipe and also for any black oil which is a fair indication something is loose.

Before Nick Jankovic had found the nozzle on the Monday which was the most important part (I could have fabricated a baffle of sorts) however I had already put a wanted ad on RC Trader. The next day I received a reply saying a new one was available minus the header pipe but the respondent was away and couldn't confirm until returning home in a few days' time. I decided if it was an OS200 muffler I would get it which I did and it arrived today (Monday 26th August).

Interestingly though on the following Saturday I received another reply. This time from the owner of Monaro Models & Hobbies which closed some 2 months ago. He said he has the exact part I need new in packet. I replied outlining the situation to which he replied.

Thanks for your response, Roger. I have responded to a few "Wanted" ads in the last week or two, and you are the only one who has taken the time to reply. I don't have my OS parts lists in an easily transmittable format, as my POS system in the shop was "cloud-based", and data disappeared into the ether when I stopped subscribing). But

my holdings are extensive, and includes a NIB OS FS-200S! If you need anything, email me the OS part numbers (the 8 digit numbers in the manual, not the new truncated numbers on the OS website), and I'll see what I can do. Cheers, Terry Griffiths.

So if anyone needs OS parts Terry can be contacted at: sales@monaromodels.com.au



Anyway the muffler is all back together again now and I have a low cost new spare as well plus spare M2.6 screws.

fter finding the muffler baffle on Wednesday 7th August the wet weather really set in as it was forecast to do. By the time some of us got out to the field on Sunday 11th the low parts were under water. Fortunately the main runway being on the high part of the paddock remains pretty much unaffected. There was a lot of rain over the Thursday to Saturday and definitely the wettest we've experienced in the five years at Trawalla.





The East/west runway goes under water but it seems to drain away in a few days once the rain stops. Photo taken on Sunday 11th August.



The ducks thought it was okay though and weren't too concerned about Alan's model overhead.



Tips & Tricks

Radio Interference at Mt Hollowback

By Nick Katsikaros

Mt Hollowback is an excellent, popular and well-known site for RC slope soarers and hang gliders. However, it's most distinguishing feature is a pair of communication towers providing TV, radio and mobile phone services for Ballarat. Until recently, this hasn't been an issue, but it is now clear that the recent installation of more and more mobile phone and Wi-Fi transmitters means that using 2.4GHz is no longer feasible.



Mount Hollowback from the North West.



Several towers within the Mount Hollowback Complex.

Since at least early this year there have been sporadic reports of radio interference with planes being lost flying on 2.4GHz with all brands of radio control units. This was highlighted during a club event on ANZAC day when a number of planes were lost. The word went out about radio interference at Hollowback; people were avoiding it and no one knew where the interference was coming from or on what frequencies. People started looking for reasons, including a suspected illegal transmitter, but there was no clear answer.

Three VARMS members, Greg Egan, Peter Cossins and Ray Cooper, with qualifications and real knowledge and experience of radio communications investigated and put out an excellent report on the VARMS webpage. https://www.varms.org.au/members area/doc/mount hollowback.aug-2019.pdf I had the good luck to meet them last Saturday, August 24, on Hollowback, while they were doing a follow up to confirm their earlier conclusions and further investigate 36MHz.

Without going into details, they measured the background radiation on different frequencies then flew a powered foam glider with two receivers (36MHz and 2.4GHz) and recorded the number and length of any "hits" where the control signal was lost to either receiver. The conclusions were pretty frightening. Everywhere they flew on the west hill, they had hits on 2.4GHz, up to about 15sec.

On 36MHz there were a few short hits near the towers and power transmission lines.

Looking at the background radiation levels told the story. Basically the noise level in the 2.4GHz band was very high with occasional bursts higher again. This makes it very hard for the receiver to distinguish the signal from the general background noise, like listening to a conversation in a noisy pub. Unfortunately, this also makes it very hard to fix, since it's the sheer power of the transmitters near our frequencies that is the problem. In fact, the experts were joking about frying eggs in the carpark area between the towers.

The "good" news is the noise on other frequencies appears to be much lower, by about one thousand fold (30dB), probably not much worse than before. This was measured on Saturday in the 36MHz and 900MHz bands. There should be another report put out by VARMS about Saturday's testing.

In conclusion, it is **NOT** recommended to fly on Hollowback with **2.4GHz** equipment of any brand. 36MHz does not appear to be affected, at least for now.

Many thanks to Greg, Peter and Ray.

few more interesting YouTube clips arrived on my phone over the last month which I thought may be of interest.

Watch "Giant Scale RC de Havilland DH.88 COMET G-ACSS 'Grosvenor House' twin engine RACER" on YouTube https://youtu.be/Q2jijXCqotw

Watch "STUNNING RC SYNCRO FLIGHT SHOW WITH 2 GIANT RC L-39 MODEL TURBINE JETS" on YouTube https://youtu.be/OBzTY90f6xY

Watch "Drone and RC plane news (6 August, 2019)" on YouTube https://youtu.be/HjD1drHnGBk

Watch "Crane Collapses And Drops Plane" on YouTube https://youtu.be/p87Gs55h7e0

Watch "BIG turbine RC Grumman F9F Panther LOSES WHEEL ON TAKE-OFF...WHAT NEXT? CRASH LANDING!" on YouTube https://youtu.be/L-OskDN-6el

Watch "F-16 from USAF Viper Emergency Landing at RIAT 2019" on YouTube https://youtu.be/2lEhdJXfEKo

Watch "The old grandfather three pieces of wood seamlessly locked into a triangle, this technology got" on YouTube https://youtu.be/7KUHDfi0YbE

Thought for the day...





Coming Events

Indoor Flying at Haddon Hall – 2019

Don't forget the indoor flying at the Haddon Hall is held on the **first** and **third Wednesday** of each month, 7pm to 9.30pm.

The upcoming dates are September 4th and 18th.

October 20th (Sun) Len Astbury Fun Fly – Trawalla



For Sale

I (Roger) have for sale an Irvine 72 engine which belonged to the late Graham Waterhouse. The engine is in excellent condition externally without a mark on it and one would assume it is internally as well. Has heaps of compression and the crank turns over smoothly so bearings are good.

Unfortunately is missing the prop nut & washer as well as the 2 x M4x40 muffler attachment bolts.

Price: \$160.









If anyone is interested please contact me via the editor details at the top of the newsletter.

Humbrol 14mL paint tins

5 trays of assorted unopened Humbrol paints, approx. 70 tins per tray. In many cases, there are several tins of the same colour. There are 306 unopened tins.

SELL FOR \$1 each.



The colours are those that would be used for cockpit detail undercarriage wheel wells etc.

If anyone is interested I can send a PDF file of the list of colours with Humbrol colour number, colour swatch and number of tins available.



Event Calendar

August 7th (Wed) Indoor Flying at Haddon Hall 7 - 9:30PM – BAMI. August 21st (Wed) Indoor Flying at Haddon Hall 7 - 9:30PM - BAMI. Sep 4th (Wed) Indoor Flying at Haddon Hall 7 - 9:30PM - BAMI. September 8th RCGA Glider Competition - Mt Wallace Sep 14th/15th Shepparton Mammoth Scale Fly In - VRF September 15th BMMAA Inaugural Float Fly-In – Mt Wallace Sep 18th (Wed) Indoor Flying at Haddon Hall 7 - 9:30PM - BAMI. Oct 2nd (Wed) Indoor Flying at Haddon Hall 7 - 9:30PM - BAMI. Oct 16th (Wed) Indoor Flying at Haddon Hall 7 - 9:30PM - BAMI. October 20th (Sun) Len Astbury Fun Fly – Trawalla, BRMFC October 27th NFG "Twins and More" fly in – Darraweit Guim Nov $1^{st} - 3^{rd}$ MossKosh Annual Fun Fly - Ararat & DAC Nov 10th Scratch & Kit Built Scale Rally - P&DARCS Nov 23rd/24th Fun Fly & Swap Meet – HMAC, Hamilton

Feb 22nd/23rd 2020 Leura Fun Fly – Camperdown

and the second s	
Mar 8 th	Fly-In – Trawalla, BRMFC ?????
Mar 21 st /22 nd	Warrnambool Annual Fun Fly – WMAC
March 22 nd	Monty Tyrell Scale Rally – P&DARCS
April 4 th /5 th	Echuca Moama Annual Fun Fly - EMMAC
April 10 th -13 th	Easter long weekend

See the VMAA Calendar for all Victorian events.

That's all for now. Happy landings. Roger.