



AEROMODELLERS
NEW SOUTH WALES



It was with great sadness we learned that John Kastelan (aka JK) recently lost his battle with pancreatic cancer. John was the Secretary of the Blacktown Aeromodellers Club and a founding member of NSW Scale Aircraft Society. John Rolfe shares his memories of JK on page 4. As well, the NSW Scale Aircraft Society is holding the Metford Scale Competition (see page 32) on Saturday, 24th June 2017 – 8am to 5pm in memory of John with \$10 from every entry fee going to the Pancare Foundation.

Contents

Contents	2
Diary Notes	3
Contacts.....	3
Vale John Kastelan.....	4
General Monthly Management Committee Meeting Minutes.....	7
2017 Annual General Meeting Minutes.....	13
Aeromodellers NSW 2017 Calendar.....	23
Club News & General Interest.....	25
My Ultimate 3/D Flying Challenge and My Ultimate Depron Machine.....	25
Paragliders	29
Black Wire Corrosion.....	30
Upcoming Events.....	32
Metford Scale Competition.....	32
Pylon Racing at Nowra	33
Tarmac Scale Rally.....	34
Cowra Oily Hand Day 2017	36
Millennium Cup dates for 2017	37
RCM News F1 Air Race Championship.....	38
2 nd Annual Australian F5J Trophy.....	39
NAAS Annual Mammoth Fly-In	40
FOR SALE.....	41

Diary Notes

Next Aeromodellers NSW Meeting

Friday 23rd June 2017, 8:00pm at **Dooley's Waterview Club**, Cnr of Clyde Street and Silverwater Road, Silverwater.

Following Aeromodellers NSW Meeting

Friday 14th July 2017, 8:00pm at **Dooley's Waterview Club**, Cnr of Clyde Street and Silverwater Road, Silverwater.

Newsletter #398 (July 2017) deadline for submissions:

Tuesday 27th June 2017.

Contacts

President	Tim Nolan	president@nsw.aeromodellers.org.au	0412 173 440
Vice Pres	Greg Hoy	vicepresident@nsw.aeromodellers.org.au	0412 173 440
Secretary	Clive Weatherhead	cliveweatherhead@hotmail.com c/o Battery Business Unit 14, 3 Vuko Place Warriewood NSW 2102	0404 826 880
Treasurer/ State Field Officer	Steve Norrie	treasurer@masnsw.org	0418 874 740
Registrar	David Lewis	dave.lewis@internode.on.net PO Box 7291, SOUTH PENRITH 2750	02 4736 2611 0439 264 220
Newsletter Editor	Rob Masters	editor@nsw.aeromodellers.org.au	0418 160 295
Public Relations Officer and Webmaster	Aranka Nolan	publicrelations@masnsw.org	0419 540 104
CFI	George Atkinson	cfi@exemail.com.au	0414 972 118
Deputy CFI North	Martin Cochrane	mwc.scale@bigpond.com	02 6658 2364
Deputy CFI South	Brendan Tucker	bjtucker23@gmail.com	02 6931 1025

Please forward any changes of mail or email address together with your AUS Number directly to the Registrar

Vale John Kastelan

John Rolfe

18 February 1954 - 19 March 2017

The passing of John Kastelan (AKA JK) was a very sad time for the aeromodelling fraternity. JK was a very passionate and keen modeller and his love for building and flying model aircraft will be sorely missed by all who knew him.

I personally knew JK for more than 20 years and we had some damn good times both here and whilst away. JK was a true and loyal member of the Blacktown Aeromodellers Club. He maintained the club field and was tireless, working in the background to both preserve access to the old field and later in obtaining access to the current field at the Sydney International Shooting Centre when urban growth finally foreclosed on the club.

With the help of his wife Fran and the backing of his family they kept the club together. JK was one of the founding members of the NSW Scale Aircraft Society and was also on the committee for many years. Once again he was always there, helping to run the events and always brought the refreshments to the meetings at our house.

JK would travel with his good friend Kel Thomas to many of the away events and there were some funny stories to tell. The one that I particularly recall was at Wingham where Kel took his mini fry pan and did his cooking in the motel room. JK disowned him on this as it was illegal due to the likelihood of setting off the smoke alarms and summoning the Fire Brigade (being a motel), resulting in a massive fine.

I have never seen John get cranky other than one time at Metford where the plane he was flying would not keep its wheel on. Losing it on take-off, John would finish the round then have to land one

wheeled and not damage the plane, which he did because he was getting real good at it. He would then spend an hour looking for the wheel, but anyway he had a heap of spares. After losing four wheels though he did get very cranky and threatened to jump on the model – luckily he was all talk and his good humour always won out.

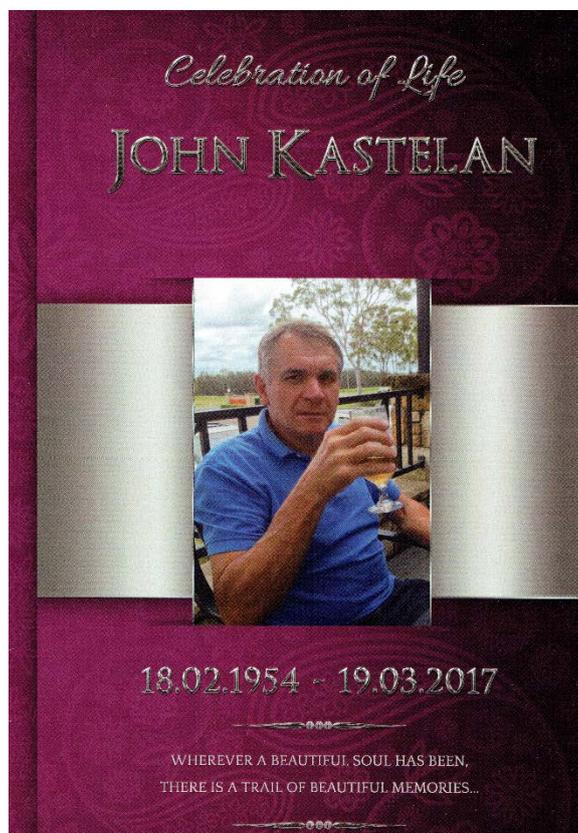
JK loved a good red wine and there were many times we shared a bottle or two, or..... John would always take his two great friends, Alf Williams and Bill Mansell out for dinner when they were in the area.

John was very accomplished in martial arts although not many people knew this as JK was in some ways a very private man who loved his family. He was always there to help anyone and never whinged about it. I remember one time at the Richmond scale round JK had problems with his plane while flying and it went dead stick on him - there was a bit of wind and as it happened, I was one of the judges. Well John managed to get the plane sort of heading for the strip – we all dived for cover but the plane hit John right in the groin, self-sacrificing himself ha ha. Next

day John called me over to his car said “have a look at this” and he dropped his jeans. He was just totally black - he did see the funny side though.

JK will be missed greatly by all who knew him and I believe we are all better for having been counted among his friends. JK fought this battle with pancreatic cancer with everything he had right up to the very end and was with all of his family to say goodbye.

John may you have blue skies and no wind – Rest in Peace my friend.







General Monthly Management Committee Meeting Minutes

Aeromodellers NSW Inc

DOOLEY'S Waterview Club
Cnr Clyde St & Silverwater Rd, Silverwater
Friday 12th May 2017

Meeting Opened: 8:05pm

Attendees: R Masters WPMAC, Dave Lewis CANSW, J Randle NSW Pylon, G Atkinson WRCS, G Hutchinson ROW, J Deece HMAS, A Nolan ROW, G Hoy CMAC, B Thrift CVRCMAC, S Keep PMMAC, W Girdstone WMAC, J Martin SMRC, C Rigan SMRC, T Sparkes WRCS, C Weatherhead WRCS, M Stone HSL, B Young CMAC, B Carpenter HMAS, T Nolan ROW, S Norrie NSW Scale, T Kennedy RAAFMAC, J Slaverio HMAS

Visitors: Nil

Apologies: E Ashley CVRCMAC, A Luckett Cowra, D Costelloe QFS

Minutes: Motion: That the minutes of the meeting held on the 7th April 2017 at DOOLEY'S Waterview Club, Silverwater as published in Newsletter 396 be accepted as a true and correct record of that meeting.

That the financials from the April 2017 meeting as published in Bulletin 23/2016-17 and attached to the May 2017 Business Meeting agenda be accepted.

Moved: WRCS **Seconded:** CVRCMAC **Carried**

Business Arising:
Nil.

Correspondence: *(N.B. Items of correspondence with one * are for information, items with two ** require a decision).*

Correspondence In:

From MAAA:

* M 1.1 Secretary, drop-box details for the MAAA Conference – Note: most documents for the Conference have been received.

From other than MAAA:

- C 2.1 James Martin, SMRC Feedback from Royal Easter Show.
- ** C 2.2 Brendan Tucker, application for NSW F3C/ F3N titles, 24-28 August.
- C 2.3 T Turner, FATMAC, flight training enquiry – CFI responding.

Awards:

Applications received for the approval of MAAA Fixed Wing Power – Silver/Bronze

Dennis Fragias	HEMFC	83204	Bronze
Luke Dale	CMAC	84672	Bronze
Rhys Wyatt	Rebels	77217	Silver

Applications received for the approval of MAAA Fixed Wing Power – Gold Wings:

Mathew Bass	LMMAC	73856
Rhys Wyatt	Rebels	77217
Daryl Henry	EMAC	76623*

* send wings to the club

Applications received for the approval of MAAA Fixed Wing Instructors – Wagga Course on 1 May

Jordan Kendal	WMAC	37073
Paul Schumacher	SSSFA	44104
Roger Scott	(VMAA)	75902 **

** forwarded to VMAA for ratification

Motion: That the nominations for Gold Wings be ratified.

Moved CVRCMAC **Seconded:** WMAC **Carried**

The President suspended the General Monthly Management Committee Meeting to open the Annual General Meeting at 8.30pm

The General Monthly Management Committee Meeting resumed at 10pm

The new President, Tim Nolan addressed the meeting on future the direction of ANSW and advised what the new Executive is planning to achieve over the next 12-18 months.

The goal is to continue to build on the work that has been done to help ANSW grow and promote this great recreational activity.

Bob Carpenter has provided sound and stable leadership throughout this period as President...and in fact over all the time he has spent on the Executives of RCAS, MASNSW and in helping it become Aeromodellers NSW. This is not an insignificant contribution and spans more than 25 years. He has held positions on the Executive at various times and in numerous roles. For those who can recall, he was so appreciated that he was even elected to positions in his absence!

His grace and commitment to the development of aeromodelling has been demonstrated time and time again. He is a life member of Aeromodellers NSW and also the MAAA. These awards are in recognition of his longstanding efforts within the aeromodelling community. Over time, he has been a strong supporter of the MAAA Nationals, having flown in and been responsible for the management of several.

Perhaps the most notable aspect of Bob's leadership is the culture of open and transparent management and collaborative decision-making. This has put us in good stead and will continue.

Bob is moving on with his new ventures and we all wish both he and Jackie the best with One Giant Leap, and may it take them to the stars.

The Executive and I had to think long and hard on what to get the man who has more toys than most, a garage and hangar and workshop that wants for nothing! To that end Bob I would like to present this award to you in recognition of all of your service to aeromodelling at both the State and National level, and for the man who has it all, a small token of our appreciation.



NOW to the FUTURE

As some of you are aware the Executive has been developing a Strategic Plan for Aeromodellers NSW aimed at moving us from a reactive organisation to setting some meaningful goals to help promote and grow aeromodelling within NSW.

The full plan is almost complete and we are waiting till after the MAAA Conference next week in order to ensure that there are no significant issues arising from the Conference that will influence the direction of our plan. One element that is scheduled for discussion on Sunday's workshop is direct entry and the relevance of the State bodies and will include how the MAAA interacts with clubs.

Now before you shout the roof down we are all very aware that the principal objectives of the MAAA are (from the Statement of Rules):

BASIC OBJECTIVES

"2.1 Its function is to coordinate and control all aeromodelling related activities taking place in Australia through the medium of member bodies in each State and Territory. The basic objects of the Association are:

2.2 To promote the development of aviation in Australia by, in particular, the promotion, protection, organisation and encouragement in every way of the building, flying and development of model aircraft and model aeronautics generally within and in conjunction with Australia".

Notwithstanding, these discussions are critical to our future viability and existence. The Executive however is fully committed to ensure that ALL members of the MAAA, and not just the Ordinary

members, have a say in the future and an opportunity to engage in meaningful consultation on any changes to the Statement of Rules and the future of the MAAA.

So, getting back to ANSW and our plans, you will see that we have made some changes to how we are going to operate starting next membership year. This is an opportunity for us to move towards agreed goals with purpose rather than being a reactive association as we have had to be over the past few years.

To that end our operational plan has five main elements.

1. Cootamundra State Field

Firstly all of us owe the Cootamundra Club a huge thank you for their amazing efforts in developing and maintaining what is one of the best fields in the country. As you heard in Steve's report (see AGM Minutes), the hump in the strip is gone, and the watering is helping with the re-growth on the strip.

There is no more significant capital investment planned at this stage and the focus is on increasing the patronage of the field.

2. Field Purchase

Greg and Grahame have been actively looking to secure a second field in NSW, this is ongoing and, given the cost of any such investment, a joint venture with other parties may possibly be required given the size and likely cost of the land required.

3. Operational Roles

CASA Liaison

During the year we will be looking to appoint two additional people to help manage the CASA workload. This will include specific training on Risk Assessment and the expectations of CASA and the MAAA.

Secretary

Clive Weatherhead has stepped in to take over some of the Secretary role. With his vast corporate experience his counsel will be important in keeping us on track. It is planned that we will be out sourcing the basic tasks of correspondence, agenda preparation and the preparation of minutes for circulation.

4. Club Support and Administration:

Flight Training

George Atkinson, having taken over the CFI role from Bob will continue to provide quality training of our new instructors and to work with the existing ones to improve their skills.

Governance training

I will be attending training on the recent changes to the Incorporation's Act and its implications for bodies and associations/clubs like ours. When the training is completed we will provide notes to all clubs to help them with these changes.

Business Cases

A number of clubs have applied for grants and have struggled with developing Business Cases. To this end we will help with some specific training documents and templates, assisting you to navigate the process.

Risk Management

This term, although not new is now very much something that all clubs will have to develop, there is a very clear expectation that clubs will have such a document. I would appreciate it if those clubs that have completed one could find their way clear to assist others in trying to complete one for their flying field.

Member Registration

Dave has done well in helping members and has posted some on-line “how to” videos to help club registrars. If you would like more details, or videos on other subject matter please contact Dave Lewis so we can add them to our Plan.

Establishing a New Club

Dave Lewis has indicated that he will do another video on the requirements and forms needed to establish a new club.

5. Constitution

Given the changes occurring to the NSW Incorporations Act along with other elements, we are obliged to review our Constitution again. This will include looking at changing the terms of the various office bearers to avoid having an all-out, all change situation. To ensure continuity, experience and corporate memory we propose to stagger the election times of roles, each over a two year term - we will develop a draft and circulate to our member clubs for consultation. We will also develop some flexibility surrounding meetings, their frequency and location.

This will also include exploring different technology for video conferencing so that we can try to involve more clubs.

As mentioned above, some of us will be attending the Department of Fair Trading Workshops covering the recent changes to the Incorporations Act and their implications so that we can ensure our compliance with the legislation.

General Business:

The first item of General Business is:

1. The next Business Meeting of Aeromodellers NSW will be held in Sydney at DOOLEY’S Waterview Club, Cnr Clyde St & Silverwater Rd, Silverwater commencing at 8pm on Friday 23 June 2017, all members and visitors are welcome.
2. There was a presentation made to Bob Carpenter in recognition of his 25 years of service to aeromodelling in NSW in various Executive positions and as well, his significant contributions on the National stage. The entire meeting looks forward to seeing Bob and Jackie’s success in their new ventures and of spending some more time flying, leaving it up to the “younger ones to have a go”.

There being no further business before the meeting, the meeting was declared closed at 10.23pm.

2017 Annual General Meeting Minutes

Aeromodellers NSW Inc

DOOLEY'S Waterview Club

Cnr Clyde St & Silverwater Rd, Silverwater

Friday 12th May 2017

Meeting Opened: 8:30pm

Attendees: R Masters WPMAC, Dave Lewis CANSW, J Randle NSW Pylon, G Atkinson WRCS, G Hutchinson ROW, J Deece HMAS, A Nolan ROW, G Hoy CMAC, B Thrift CVRCMAC, S Keep PMMAC, W Girdlstone WMAC, J Martin SMRC, C Rigan SMRC, T Sparkes WRCS, C Weatherhead WRCS, M Stone HSL, B Young CMAC, B Carpenter HMAS, T Nolan ROW, S Norrie NSW Scale, T Kennedy RAAFMAC, J Slaverio HMAS

Visitors: Nil

Apologies: E Ashley CVRCMAC, A Luckett Cowra, D Costelloe QFS

Minutes: Motion: That the minutes of the 2016 Annual General Meeting held at DOOLEY'S Waterview Club, Silverwater as published in Newsletter 386 be accepted as a true and correct record of that meeting.

That the Audited Financial reports from the 2016 Annual General Meeting as published in Bulletin 03/2016-17 be accepted.

Moved: ROW **Seconded:** WRCS **Carried**

Business Arising:
Nil.

Correspondence In:

- C 1.1 nomination for the position of President – Tim Nolan
- C 1.2 nomination for the position of Vice President – Greg Hoy
- C 1.3 nomination for the position of Secretary – Clive Weatherhead
- C 1.4 nomination for the position of Treasurer and State Field Secretary – Steve Norrie
- C 1.5 nomination for the position of Registrar – David Lewis
- C 1.6 nomination for the position of Newsletter Editor – Rob Masters
- C 1.7 nomination for the position of Public Relations Officer – Aranka Nolan

Motion: That the inward correspondence is accepted.

Moved: RAAFMAC **Seconded:** CMAC **Carried**

Reports

Treasurer Steve Norrie

In my role as Treasurer I am pleased to report a small surplus at years end suggesting that our budget and planning have been well managed by your committee.

Our Web site was a major expense this year. Most of this was due to a hacking incident which led to the total rebuild of the site. The new site is based on WordPress, this platform is much more secure and is monitored for weaknesses and enhanced as required by the service provider.

The State Field at Cootamundra costs are for maintenance (mostly fuel for the mower and water pumps) there has been no capital expenditure this year and none planned over the coming year.

Travel expenses are up this year. These were mostly incurred during the fourth body dispute with MAAA and some additional training courses. The fourth body dispute also added to meeting expenses and there are some sundries for Associations Forum consultations.

The audit of our financials went smoothly with only one occurrence, whereby I was required to enlist the assistance of the MAAA President, that being the lack of response from the MAAA Treasurer to requests from our Auditor and myself for an activity report, required to complete the audit. This incident delayed the process by two and a half weeks. Thanks to Neil Tank for his assistance in expediting this matter.

The full details are contained in the Auditors report that will be sent out to our members by bulletin in the usual manner. If you have any additional questions please email or call me.

Motion: That we reappoint Crimmons and Co as the Auditors for ANSW Inc for 2017-18.

Moved: NSW Pylon **Seconded:** PMMAC **Carried**

Registrar Dave Lewis

- Slight decrease again this year- down by 128.
- Some 83 Clubs, three of which are pure FPV
- 3 Clubs did not renew from last year (West Wyalong, Sunset Soaring, & Scale Model Aircraft Society)
- 70+ Users of the Database now, hopefully more this coming year
- Tutorial “How to” videos have been released to Club Contacts

2016 2017 Season

Age Group	No. Members	Percent
18 or under	93	4.27 %
19 - 29	69	3.17 %
30 - 39	166	7.63 %
40 - 49	320	14.70 %
50 - 59	456	20.95 %
60 - 69	508	23.33 %
70 - 79	451	20.72 %
80 or over	114	5.24 %
Total: 8	2,177	100 %

2015-2016 Season

Age Group	No. Members	Percent
18 or under	86	3.73 %
19 - 29	65	2.82 %
30 - 39	179	7.77 %
40 - 49	360	15.62 %
50 - 59	466	20.22 %
60 - 69	531	23.04 %
70 - 79	475	20.61 %
80 or over	143	6.20 %
Total: 8	2,305	100 %

2014 – 2015 Season

Age Group	No. Members	Percent
18 or under	92	3.96 %
19 - 29	76	3.27 %
30 - 39	170	7.32 %
40 - 49	356	15.34 %
50 - 59	493	21.24 %
60 - 69	553	23.83 %
70 - 79	457	19.69 %
80 or over	124	5.34 %
Total: 8	2,321	100 %

2013 – 2014 Season

Age Group	No. Members	Percent
18 or under	108	4.35 %
19 - 29	85	3.43 %
30 - 39	203	8.19 %
40 - 49	375	15.12 %
50 - 59	486	19.60 %
60 - 69	599	24.15 %
70 - 79	486	19.60 %
80 or over	138	5.56 %
Total: 8	2,480	100 %

2012 – 2013 Season

Age Group	No. Members	Percent
18 or under	90	3.67 %
19 - 29	90	3.67 %
30 - 39	191	7.78 %
40 - 49	370	15.07 %
50 - 59	491	20.00 %
60 - 69	564	22.97 %
70 - 79	495	20.16 %
80 or over	164	6.68 %
Total: 8	2,455	100 %

In closing I would like to thank all the Club Registrars for their continued support during the year, it has been a pleasure working with them and Executive of ANSW.

Special well wishes to Bob Carpenter for his leadership and guidance over the past years and a big thank you to Jackie Slaverio for her initiatives and hard work.

Secretary and CASA Liaison Tim Nolan

This brings another year to a close, and one that has been an opportunity for Aeromodellers NSW to stabilise a little after what has been a rather tumultuous period.

One big change for the year has been that all model aircraft activities are now managed out of the CASA Remote Piloted Aerial Systems (RPAS) Section, this is the same area that looks after all Commercial Drone operations.

In the Secretary and CASA Liaison role I have been very active, helping clubs and individuals preparing CASA applications for Public Flying Displays and Area Approvals. Most people I have worked with would agree that the risk assessments have been the hardest part and so to assist with these in the future we will be developing some templates, tutorials and simple examples to help clubs develop their own Risk Assessments. With a broader knowledge of Risk Assessments clubs can develop and review their own each year ensuring their fields are as safe as possible.

CASA have now started issuing Instruments for 5 years rather than one instrument for one activity. Now we can obtain variable dates at a location. An example of this has been Kempsey where they have approval for numerous events to be conducted during the year and the dates are set by the club in consultation with the land owner.

There has been some discussion with our CASA delegate, advising that there is an opportunity for him to travel to Sydney and speak at one of our meetings about Risk Assessments, CASA's expectations of these documents and the sort of information they require to complete a CASA Instrument. The Executive will co-ordinate this with a flying event so that he can meet as many people as possible and you can approach with your questions.

While the relationship with CASA is sound, they have made it very clear that they will take decisive action against any clubs that do not follow the conditions of any Instrument, Display Approval or general flying that is not carried out in accordance with the MAAA MOPs, as is required under our Deed of Agreement with CASA. Some clubs have already been spoken to and advised that any further breaches of their Instruments/Approvals will result in their Area Approval being revoked. This is a general warning to clubs and individual members, and we need to take this warning seriously. If you are not sure of what a condition means then please ask your Club Executive, or the ANSW Executive.

The models that were housed in the Museum at Bankstown have been left in the care and custody of the MAAA and Val Vickers at the direct request of the MAAA President. Presently they are coordinating the return of the models that were on display. Any enquires concerning these should be directed to them.

It has been great to see a number of clubs making applications for the MAAA Grants assistance scheme. If your club needs some financial help for specific improvements these grants are available. If you need any assistance to make an application get in touch with us. Applications open early in the New Year so start your planning now.

Congratulations to all those who have received their Wings over the past year. It is great to have so many taking the challenge to improve their flying skills. For those considering it, don't be put off. Push yourself and the discipline will make you a better pilot.

Thanks for all the support that you have given me over the past year. As we move into a new era, I look forward to continuing to develop this great activity that is aeromodelling in all its forms.

Public Relations Officer Aranka Nolan

As a volunteer organisation we live with a number of constraints that limit what we can achieve and there is always the desire to do more. Regardless, we have made great inroads into defining our strategic direction and building solid relationships within the Sport of Aeromodelling. Increasing our membership is an important focus as is protecting the fields and flight areas we have and our ability to take to the skies in our aircraft of choice when we want. These seem to be privileges that we have to safeguard.

In the past year, from a public relations point of view we have rolled out a more professional campaign into the community through the Bunnings Nights. Working with the management of the individual clubs has enabled us to start supporting activities where the action is, at club level with community engagement that we know is required to increase our presence.

We have developed marketing assets (outdoor banners, table cloths, flyers) that can be repurposed for other events and increased our marketing kit for presentations, including templates for Word and PowerPoint.

We have moved our content to a new WordPress website so that a greater number of people can upload content and make changes to the site.

Our present challenges are that we need to get a bigger profile. It is clear that we are not top of mind when it comes to media or decision makers in government, specifically local government where land usage decisions are made. Our relationship with CASA is in a great place thankfully as they too want to do more but their human capital is stretched to capacity.

We have started to better utilize digital technology to engage people. The plan is to do much more this coming year.

As I watch the energetic enthusiasm for First Person View (FPV) and Drone flight increase, so our intentions to increase the support in that area of our sport becomes an obvious decision. It makes sense that this technology has such great appeal. It is satisfying to the novice as well as the engineer and all levels in between.

We also want to support clubs with templates and documents that will help in applying for funding from the MAAA and for other grants.

We will also be providing an opportunity for people to place orders for the Aeromodellers NSW Clothing twice throughout the year. The winter order is about to go in so if you are interested you need to get in touch with me.

Thanks for all the support you have given us as a team through the year now closed and we look forward to more engagements in 2017-18.

Chief Flying Instructor George Atkinson

It has been only a few months since Bob retired and I became CFI. He has left some big boots for me to fill.

Although I had been active in the role of Deputy CFI for some time, the next level is a new experience and I look forward to meeting the challenges going forward.

On the 1st & 2nd of April, Wagga Model Aero Club hosted an Instructors Course at their field just south of Wagga. Seven attendees participated with spirited participation in the theory sessions each morning and great practical sessions both afternoons. Dinner on Saturday night proved quite entertaining as well.

Completing an open book style exam post course is a mandatory part of the course and to date the pilots that have successfully completed all components are Paul Schumacher of Sutherland Shire Sport Flying Association and Roger Scott of Wodonga.

Brendan Tucker has accepted the position of Deputy Chief Flying Instructor South. He brings a wealth of modelling and flying experience and will be an asset to the team together with Martin Cochrane, our Deputy Chief Flying Instructor North.

Clubs that would like to nominate candidates for future courses, please contact me through the Secretary or directly via the contact details on page 3 of the Newsletter.

It is our intention to visit numerous clubs in the coming year. I would invite any club CFIs to contact me for any support our team may be able to provide.

Newsletter Editor

Rob Masters

After the ups and downs of 2015/16 and the fourth body, the 2016/17 year has been relatively quiet as far as the newsletter goes. In 2015 we published an August issue for the first time; primarily because coincidentally we had just completed and compiled the results of the Aeromodellers NSW Member Survey and didn't want to leave it for another month before we could publish them.

By way of explanation for those that are unaware, we have traditionally published ten Newsletters per year. The Exec/Committee has a holiday (and there is no Business Meeting held) in January and we normally don't do an August issue because at the time of publishing we would only have a small percentage of re-registrations locked in. On this occasion we decided to use the previous year's member listing, without any issues and so have decided to carry on and continue doing eleven issues per year, missing only January.

My only other dramas have me banging on again about ensuring that your email address is updated when changing ISPs or jobs and to please, please send me photos and a few words from time to time. Irrespective of the small successes Dave (Lewis) and I have contacting Club Registrars I still get around 60 to 80 email bounces from just over 2,000 members per month – I'd dearly love to reduce this. Up to five or 10 are often "mailbox full" messages so do make sure there is room in your inbox.

Finally, I would like to thank Bob and Jackie for their hard work and friendship over the time that I have known them and wish them all the best for their future and for "One Giant Leap".

Land Committee

Greg Hoy

Through the 2016/2017 year, Aeromodellers NSW have considered a number of options for a second, alternate State flying field. The current field at Cootamundra, which is owned outright by Aeromodellers NSW and has been developed into a high quality field over many years. However, to many NSW modellers, Cootamundra is just too far to travel for day use and thus it is felt that a flying field closer to where the bulk of the membership reside would be more beneficial and result in greater use. The ANSW committee determined that a second field within 2 hours or 150km of the Sydney basin would be ideal.

In this regard, a number of options have been considered, including purchase, long term lease and use of Crown or Local Government land.

Areas within the Sydney basin that would be suitable for all disciplines with capability for increased height limits without impact to Civil Aviation are difficult to find and any suitable sites just outside the metropolitan area are expensive.

Despite the expense, opportunities do exist to the South of Sydney that are within a reasonable distance and afford alternative activities for partners and families not directly involved in aeromodelling.

The areas of Mittagong, Kangaroo Valley, High Range and Penrose have properties up to 100 acres available with the price extending to about \$1.5m.

One of the primary problems encountered is the majority of properties are zoned farming/grazing and a rezone or additional zone is required to RE2 private recreation. Such re-zonings or additional zonings can be complex, expensive and take time with no guarantee of a positive outcome. Many vendors, are thus reluctant to have extended settlement periods whilst such discussions are undertaken with the local council.

Of course the suitability of the property is a key factor. The committee is seeking out properties that have existing dwellings that could provide for a "property caretaker" on a pro quo basis. This would minimise the need to have a caretaker club and willing club members to manage day to day maintenance activities.

At this stage no decisions or considerations have been given to the long term future of the Cootamundra field. So it is business as usual and we will continue to invest in the maintenance and use of that field.

Aeromodellers NSW remains committed to the needs of its members and will continue to have discussions with the likes of Crown Lands and local councils in finding a site that can be developed as a long term secondary State flying field.

In the interim, any club or member that may know of a suitable area or opportunity, we always welcome your input.

State Field **Steve Norrie**

Firstly and most importantly I would like to express my appreciation to the other members of the committee for their support throughout the year. I also wish Bob and Jackie all the best in their endeavours.

The State Field at Cootamundra is looking great, the hump on the main runway has been removed by a grader at a very reasonable rate. The grass is growing over the graded area, by the time spring arrives regrowth will be complete. The Cootamundra Club has once again exceeded all expectations, without these gentlemen the place would be little more than a dust bowl, their efforts are greatly appreciated.

This field is 100% owned by Aeromodellers NSW and as members that means all of us. The property has toilets and a HOT shower, camping and caravans are welcome.

Use of the property by ANSW members is free of charge; if you wish to make a booking just send an email with your required dates and contact details to stevenorrie001@gmail.com.

President **Bob Carpenter**

Once again we are at that time of year where we conduct our Annual General Meeting, election of officers for the coming 12 months and reflect on the activities of the past year. We also take this time to take the opportunity to look at the future and how we can improve the management of the organisation for the benefit of all our member clubs and individuals. I would like to thank all our member clubs and individuals for the support you have provided to this Executive during the past year. I welcome feedback and suggestions from all members, both club and individual. It is only by this feedback that your Executive is guided to provide what the membership requires.

Membership: Our membership has basically maintained our numbers. You will always see changes in the numbers as we reach out to new members and current members leave us. Drones continue to be a major area that needs to be focused on and the outcomes of the Senate inquiry are sure to have a major effect on this area of aviation. We also welcome the Gosford club back into the ANSW family. This will increase our numbers for next year.

Working with MAAA: This has been a year of consolidation after the last few years. I remain firmly of the belief that we as an organisation must always be protecting all our members and that your Executive should not shy away from addressing the issues with the MAAA.

MAAA Grants and Loans: The 2017 round is now closed. Details of those clubs that are successful will be announced following review of all the applications. I wish the clubs that have taken this opportunity every success and can only suggest that if you wish to have improvements made to your field that your club should apply.

CASA: Once again we have worked with CASA on your behalf to obtain Area Approvals. This is undertaken by the State Organisation and over the past couple of years we have obtained many Area Approvals from CASA. The provision of an Area Approval for 5 years provides two important items. Firstly, all aviation bodies, not just aeromodelling are made aware of your location and the limits of your height clearance, and secondly, once you have an Area Approval then display approvals are handled from within Aeromodellers NSW with no further charges made by CASA, providing that the approvals are within the Area Approval limits.

Competitions: We continue to host competitions for our members. It is a sign of the times that a very small percentage (3%) of our members are now involved in formal competitions but the Fun Flies and Rallies seem to be increasing. We will continue to support all forms of competition.

Finances: Our Treasurer's Report will show that ANSW has made a very small profit. This shows that the budgeting undertaken at this time last year was very accurate. It is also very important to be aware that this happened with a decrease in income. This year we will be recommending no fee increase.

Signing Off: As you will all be aware I will not be standing for the position of President this year. I have been on the Executive for a total of 24 years in two sessions; over this time, I have held the positions of Vice President (twice), President (twice) and Secretary (once). I have decided that it is time to step aside, and as we continually say; it is time for the young ones to have a go.

I look forward to hear the outcomes from the ongoing challenges with MAAA and hope that the new Executive continue to challenge the way forward on behalf of the total membership of ANSW.

Thank you all for the privilege of being your President.

Motion: That the reports be accepted.

Moved: WRCS **Seconded:** CMAC **Carried**

The President requested that Secretary, Treasurer, Registrar and Newsletter Editor leave the meeting.

Review of Honorariums

Discussion of the honorariums and in accordance with previous years it was considered against the national CPI increase which was 2.1% (The CPI rose 2.1 per cent through the year to March quarter 2017, source: **6401.0 - Consumer Price Index, Australia, Mar 2017, from the Australian Bureau of Statistics**).

Position	2016	2017
Secretary	\$2.20	\$2.25
Treasurer	\$2.20	\$2.25
Registrar	\$2.20	\$2.25
Newsletter Editor	\$2.20	\$2.25

Election of Office bearers for 2017-18

As there is only one nomination for each position the Chairman asked the nominees if they accepted their Nomination,

President	Tim Nolan
Vice President	Greg Hoy
Secretary	Clive Weatherhead
Treasurer	Steve Norrie
Registrar	Dave Lewis
Newsletter Editor	Rob Masters
Public Relations Officer	Aranka Nolan

Motion: “That an amount of \$2,500 (still awaiting a final quote) be allocated for professional Secretarial Services to respond to correspondence, prepare Agendas for the meetings, take the minutes and prepare them for publication (the final cost will ratified at a future Business Meeting, if recommended that this option is taken up).

Moved: WRCS **Seconded:** CVRCMAC **Carried**

Having accepted the nominations, the Committee Members were appointed by the meeting.

Setting of the Aeromodellers NSW Affiliation Fees 2017-18

The Executive is recommending no change in the fees for the 2017-18 membership year.

Motion: That the Fees for Aeromodellers NSW for the membership year 2017-18 will be:

Seniors \$40-00
Juniors \$0

Half Year (available from 1 Jan 2018 for new members only)

Seniors \$25
Juniors \$0

Moved: NSW Pylon **Seconded:** RAAFMAC **Carried**

NOTE THIS DOES NOT INCLUDE THE MAAA FEE.

J Randle, NSW Pylon congratulated the Committee on their commitment to keeping the Junior fees at \$0 and was disappointed that the MAAA continued to charge juniors. He requested that the Committee continue to try and encourage the MAAA adopt a similar position.

In Accordance with Part 4, Section 5 of our Constitution regarding setting the dates for the Business Meetings for the next year.

Included in our Strategic Planning Process are proposals as to how your new Executive can better serve our members. Part of this process will include holding country meetings (the first to be scheduled for February 2018).

To compliment this, members of the Executive will also visit local clubs on a regular basis to get more timely feedback as to the direction our members want to see the Association develop and grow. (Constitution Part 3 sect 1 (2) (d).

It is further proposed that our business meetings will change from being held monthly to bi-monthly on the second Friday commencing in June 17 and then in August 17, October 17, December 17, February 18 and April 18.

Presently the ANSW AGM is held in May each year. The Executive is proposing to move the AGM to the June meeting as experience is that currently it is too close to the MAAA Conference (usually the week prior). Thus, if there is a change in the Executive following our AGM it is very difficult for the new Executive members to bring themselves up to speed with the various items for the MAAA Conference which is only one week. This change is still in compliance with the Legislation requiring that the AGM be held within six months of the close of the Association's financial year, which presently ends on 31 March.

Moving the AGM to June also has implications for the setting of fees for the next financial year and enables clubs to have sufficient time to set their fees and to also factor in the MAAA fees. To this end, it is proposed the setting of Aeromodellers NSW Fees for the following membership year will be a standing agenda item for the April business meeting rather than the AGM.

General Business:

The next Annual General Meeting of Aeromodellers NSW is scheduled to be held in Sydney at DOOLEY'S Waterview Club, Cnr Clyde St & Silverwater Rd, Silverwater commencing at 8pm on **Friday 8 June 2018**, all members and visitors are welcome. Note the AGM for Aeromodellers NSW will be conducted during the normal Business meeting, in accordance with normal practice.

There being no further business before the meeting, it was declared closed at: 10.00pm

Aeromodellers NSW 2017 Calendar

(Compiled 6 June 2017)

Unless otherwise advised Aeromodellers NSW Meetings are held the 2nd Friday of every Month.

Jun 2017

17–18	New England Gas Championships Events - Burford, Duration, 1/2A Texaco, Texaco, Cabin Scramble	Tamworth	Gary Whitten	0428 620 358
17-18	NSW Pattern Flyers – SRCS	Gunderman	Felix Nieuwenhuizen	0428 880 633
18	Seaplanes - Regatta Centre	Penrith	Tim Nolan	0412 173 440
23	Aeromodellers NSW General Mtg Dooleys Waterview	Silverwater	Tim Nolan	0412 173 440
24	Metford Scale Competition	Metford	James Price james.price@optusnet.com.au	
25	Pylon Racing at Shoalhaven	Nowra	Peter Kearney	0407 013 230

Jul 2017

15-16	Bega District Model Aircraft Club Events - Old Timer Glider, Burford, Duration, Standard Duration, Texaco, Cabin Scramble	Bega	Peter van de Waterbeemd	02 6496 4769
15-16	NSW Pattern Flyers – Manning MAC	Wingham	Felix Nieuwenhuizen	0428 880 633
22-23	Camden Valley Scale Competition (CVRCMASC)	Menagnle Park	Chris White	0488 483 088
23	Seaplanes - Regatta Centre	Penrith	Tim Nolan	0412 173 440

Aug 2017

6	Seaplanes - Regatta Centre	Penrith	Tim Nolan	0412 173 440
11	Aeromodellers NSW General Mtg Dooleys Waterview	Silverwater	Tim Nolan	0412 173 440
18-19	Warialda Fun Fly Day	Warialda	Barry Powers	0427 885 058
19-20	NSW Pattern Flyers – Shoalhaven MAC	Bomaderry	Felix Nieuwenhuizen	0428 880 633
19-20	TARMAC 2017 Scale Rally (Somerton Field)	Tamworth	Allan Potter	0413 184 301
20	Seaplanes - Regatta Centre	Penrith	Tim Nolan	0412 173 440
24-27	NSW F3C, F3N State Titles	Cootamundra	Brendan Tucker bjtucker23@gmail.com	
25–27	Cowra Oily Hand 2017 Events - Various, SAM1788 Cabin Scramble	Cowra	Andy Lockett	02 6342 3054

Sep 2017

9–10	Coota Cup Old Timer Weekend Events - Old Timer Glider, Burford, Duration, 1/2A Texaco, Texaco, Cabin Scramble	Cootamundra	Grant Manwaring	02 6241 1320
16-17	NSW Pattern Flyers - Gunnedah District	Gunnedah	Felix Nieuwenhuizen	0428 880 633
16-17	NSW Scale State Championship (RAAFMAC) Classes to be flown: F4C, F4H, Clubman Class and Large Scale	Richmond	Chris White	0488 483 088
30 Sep	Eastern States Gas Championships	Wangaratta	Grant Manwaring	02 6241 1320
1 Oct	Events - 38 Antique, Burford, Duration, 1/2A Texaco, Texaco, Cabin Scramble			

Oct 2017

1	Seaplanes - Regatta Centre	Penrith	Tim Nolan	0412 173 440
13	Aeromodellers NSW General Mtg Dooleys Waterview	Silverwater	Tim Nolan	0412 173 440
14	NSW Pattern Flyers (CVRCMASC)	Camden Valley	Felix Nieuwenhuizen	0428 880 633
19-22	Twin Cities Float Plane Fly In	Albury	TBA	
21-22	RCM News F1 Air race Championship (NAAS)	Canberra	Jeremy Randle	0418 390 446
21-22	Wings Over West Wyalong	West Wyalong	Grant Manwaring	02 6241 1320
	Events - Various Aeromodelling Activities			

Nov 2017

4-5	NSW Pattern Flyers – RAAFMAC	Richmond	Felix Nieuwenhuizen	0428 880 633
4-5	2 nd Annual Australian F5J Trophy (NAAS)	Canberra	http://www.aefanet.com	
11-12	Golden West Old Timer Weekend	Parkes	Peter Smith	0423 452 879
	Events - 2CC Duration, Burford, Duration, 1/2A Texaco, Texaco, Cabin Scramble			
22-26	Invitational Scale Classic Downunder 2017	Cootamundra	Cheryl Rolfe	cheza1954@iprimus.com.au
24-26	NAAS Mammoth Scale weekend	Canberra	John Amerigo	0409 917 806
25-26	NSW Pattern Flyers – Queanbeyan MAC	Queanbeyan	Felix Nieuwenhuizen	0428 880 633

Dec 2017

8	Aeromodellers NSW General Mtg Dooleys Waterview	Silverwater	Tim Nolan	0412 173 440
9	Seaplanes - Regatta Centre	Penrith	Tim Nolan	0412 173 440
17	Seaplanes - Regatta Centre	Penrith	Tim Nolan	0412 173 440

Club News & General Interest

My Ultimate 3/D Flying Challenge and My Ultimate Depron Machine

Going back to the good old eighties, my main hobby was sitting at my grand piano for 5 to 6 hours a day learning new songs while at the same time fumigating my lungs with 50 or more cigarettes a day.

Despite all that I'm still alive and an aviation enthusiast from early childhood with the dream of one day becoming an airline pilot. I never dreamt I'd become an RC nut-case instead. It all happened by pure chance one day while browsing through the old "Trading Post" index, looking at sport cars. I spotted the "Radio Control models For Sale". Out of curiosity I checked the section and my eyes almost popped out of my head, seeing only one listing.

FOR SALE

"Large second hand scale RC Bell-212 helicopter"

At the time I simply couldn't comprehend such a complex machine as a real helicopter being replicated as a radio controlled toy. After few phone calls and a long trip, there I was the next day with the new toy that I had to have, despite having absolutely no clue about it. I was simply impressed and fascinated just by seeing the servos move when the seller was wiggling sticks on the old vintage 4 channel transmitter.

To cut the story short, well over decade later I ended up to my ears in building and flying some of the finest RC scale model helicopters, mainly in dedicated helicopter Clubs.

I had very little exposure to fixed wing model aircraft other than a some basic '40' sized trainers that a few of my friends flew back in those days, and which gave me little or no inspiration at all. Things changed dramatically one Saturday after a visit to our helicopter Club by the editor of major Japanese RC magazine. Proudly showing off and

demo flying some of my creations paid off when the gentleman informed me that in a few weeks time he wanted to send a journalist to do a story for his magazine on a few of my models – that ended up being a large five page magazine spread. I was rather impressed after receiving a complimentary copy of the magazine, which was at the time the largest monthly RC publication on the planet with some 400 pages - and it now had one of my models featuring on the front cover.

Even more impressive, soon after I received an invitation to attend and demonstrate one of my scale model helicopters as a "Special Guest" at the "IAM" (International Air Meet) held annually in Ojima, Japan. This was a massive event attracting up to 50 thousand spectators every year over the 4 days, with hundreds of RC models of every kind shape and size, ranging from gliders, multi engine airliners to the finest jet turbine powered fighters. The climax of the show was a competition between some of the ten best RC pilots, invited from every corner of the globe to compete for a \$25 grand cheque as the first prize and scaling down to a pretty hefty amount even for the last spot. All expenses paid to every participant and special guests. "Those were the days!" This was the time that really opened my eyes to what this hobby is all about, watching and being inspired by some of the finest pilots of the day showing their skills. Watching Chip Hyde, representing the US and doing his special display with his 1/2 scale Ultimate bi-plane, hovering at ground level and just about licking the rudder along the ground was more than impressive. Even more challenging was when the organizer came up with additional prize money for the winner of the "Hovering square torque roll challenge" which must be one of the most difficult patterns to do with an RC model - in this case, two metre IC powered pattern ships. The requirement was to place the model into a hover at a very low altitude at point "A". Whilst doing a gentle torque

roll along its vertical axis the next step was to move/side-slide the model horizontally to point "B". The next step, climb up to point "C" then slide back horizontally to point "D", just above the starting point and finally, bring it back by tail slide to point "A". The pattern square was meant to be within 10x10 metres. There were a few clumsy tries and few of the masters managed it well. Shaun McMurtry from the US won the challenge and a bonus cheque of some \$2000 for his effort.

After the final presentations and a few more days of Japanese hospitality, fully invigorated with new inspirations I couldn't wait to get back home, all the while thinking about what would be my first fixed wing project?

Approaching things as always in somewhat of an unconventional manner, I thought I'd give it a go and start with a second hand wreck – an "F-18" Hornet jet. It was a copy of the Yellow Aircraft kit powered by a 127mm ICDF that I'd managed to get my hands on. After lot of advice on the subject I managed to rebuild the model to its former state of flying glory but, as it was well overweight I decided to have it maiden by one of the best jet pilots in the country. After his successful flight I took his advice and got rid of it!! Start by crawling and then walking before you try running he added.

So there I was, suffering a dose of reality and building the ultra-light electric powered "Ikarus" and hiring the brand new indoor basketball court



A selection of practice 3/D foamies

just completed in my neighbourhood for a mere \$5- an hour. A great start into my new venture, the

transformation from helicopters to fixed wing and the long road to master my dream of 3D flying. After hitting the overhanging ball baskets on numerous occasions I soon learned "what not to do" and gradually progressed onto more serious models, spending just on 1000 hours building a large 104 inch span 4 engine IC airliner and thereafter all sorts of sport, 'scalish' or aerobatic models.

After a while the regular aero routine became a bit monotonous so I started to experiment with some 3/D maneuvers, mainly hovering torque rolls which always fascinated me the most, especially seeing it at very low level. After a few attempts to do these with one of my larger 1/4 scale 55cc gas powered models I could never succeed for more than few seconds due to the lack of engine power. This was at the time of electric brushless motors and lighter weight LiOn batteries as a novelty but it was a great opportunity to start experimenting, building my



Morning prax session in my early days

own models using 'depron' sheets to minimize the all up weight of the model in relation to the power. I soon learned that the old airfoil law of physics had nothing to do with the success of my flying, where the power to weight ratio plays the more important role. Anything close to 'two to one' (power to weight) and I was laughing. It was easily achieved with scratch built foamy depron models but much harder to find a nice scale looking model to get the same results with and a lot more costly when things didn't go exactly to my expectations. Beginnings were pretty hard and on one occasion I even drew blood when trying to pull out of trouble from a ground level maneuver and flying into

myself. Luckily the transmitter took most of the impact! Nevertheless, the hard daily exercise for many years gradually paid off, with me becoming more confident and daring enough to bring even my largest 1/3 scale fully composite model into my favoured maneuver at rather dangerously low levels on special occasions.

One of my favourite models to date, now in its 7th year of action and well over 2000 flying sessions is a large (just under 6 feet long) depron built model that I designed to emulate the 3/D and stability of a pattern ship in one package. The success of this plane is based on my experience over the years in building dozens of smaller ones. Using 6mm depron sheets, laminated 3 ply in the most crucial areas and reinforced with various thickness of carbon fibre tubing eliminated any sort of flexing which I have found to be the biggest issue in using this thin foam base. Powered by a 46 equivalent size brushless electric motor on 5S LiPo, the power to weight ratio is easily 2 to 1, giving me unlimited performance and a reasonable flight time duration of 4-7 minutes, subject to the battery capacities I use on any particular day or conditions. The size and the stability of this model is impressive even while flying it in windy conditions, which is normally no-no for smaller foamy models. The quietness is another great advantage so I can fly it just at about anywhere, without any noise disturbance. My preferred flying site though is a



After another flying session

deserted beach where the winds prevail most of the time, giving me extra points of difficulty and making it so much more enjoyable than in perfect

calm conditions, which is the ideal for precision 3/D flying. The thing I like most about this model is that over the years it has gone swimming in the ocean four times and the only things I had to replace were burned out ESCs and in one case a 10ch. SPCM receiver.

On two of these occasions the spinner with the propeller attached took off from the motor shaft during hovering maneuvers. Pilot error was another one and my final wet bath happened while I was having such a ball flying the model that I totally forgot about my flight time and just didn't quite make it on my final approach - with the battery totally dead. It was all recorded with my cap video camera and proudly posted on



Battery result after prolonged flight time ending in the ocean

YouTube to be seen, and enjoyed by everyone, except my ego. My usual quick action in pulling the motor apart, washing it in fresh water, followed by a bath in methanol and a good soak in kerosene, brings it back to life, so far so good, even with its original bearings believe it or not! It's an "Eflite-46" and there is not a sign of a stain or rust. I wonder where it was made, probably not in China!

Just recently while taking off from the uncut portion of a grass strip I lost both ends of the elevator stab as it dragged along the longer grass and I hardly noticed any difference in performance, during an enjoyable flight with some 50% of the area of this primary control missing. The Magic of 5 minute epoxy with a touch of fibre tape and I was back in the air soon after. That's what I call an ultimate flying machine

Enjoy and safe flying, Joseph Frost



With this damage I hardly noticed difference in performance



Takes lot of hard work to master models of this calibre



Paragliders

Col Buckley (WRCS)

It's very difficult to buy a present that's out of the square for an aeromodeller. So, what's purchasable that's a little bit different?

Three years ago, my wife gave me a wonderful birthday present that I still enjoy flying today. It's a Paralight.

<http://www.paralightaviation.com/>

These powered paragliders, expertly made in Israel, are a heap of fun to fly. Just two controls – throttle which controls height and speed plus a steerable bar which pulls down on the edges of the canopy to give right or left. You may have seen me flying my yellow and orange machine at the various Scale Days round the State.



Paralights come in either electric, nitro or you can now power it with the new breed of small petrol's. My machine is electric - employing a 5s 5000 LiPo which gives around 10 mins flying time. The only downside to these Paragliders is there're nearly impossible to fly in strong wind. Increasing throttle into wind just gives height with no forward penetration. Believe me, I have been caught out more than once!

After a few early flights, I engineered a couple of mods to make the craft fly better. The first is to remove the front wheel on the trike and replace it with a trailing castor wheel. This allows the Paraglider to weathercock on take-off. With the supplied fixed front wheel, the Paraglider is prone to tipping over when power is applied as the canopy, seeking wind, tends to tip the trike.

As there's strong shearing forces on the servo arm when the craft falls over, it can strip the spline (due

to leverage from the steering bar), I changed the plastic servo arm for a stronger metal design.

In the kit, all is supplied except choice of powerplant. It comes complete with canopy (choice of colours), wheels, propeller (hint - buy an extra six props as they chip easily) heavy duty servo and all assembly hardware. When purchasing, nominate your choice of either electric or IC as the

trolley has different mounts for both. These Paralights are not the small plastic ones seen on YouTube but are very robustly constructed. Components are metal and wood for longevity and strength. Flying weight is approx. 4kg including battery. A fellow modeller was so impressed with my Paralight,

he invested in one. It was him (ex QANTAS engineer) who suggested the trailing camber nosewheel. His unit has a three-bladed prop powered by a 5000 6s LiPo which gives shorter take-offs, great when there's lack of room.

Useful tip. Before clipping on the shrouds to the steering arm, take time to ensure they are not twisted. Taking off with twists in the shrouds will severely limit turn in one direction.



It will take a few flights to get a feel for the craft. They can be tricky to get off the ground with a breeze. It does help to have someone holding the

canopy for take-off as you apply power. After a while you'll be able to do touch and goes, tight turns, low passes and I've even heard of pilots performing loops with the Paraglider!!

So, there you go. Something different to take to the field that's easy, great fun to fly and takes up very little room in the car.

Black Wire Corrosion

Clive Weatherhead (WRCS)

I work in the battery industry, and I thought the following might be of interest, and might save a few planes, and a few bush walks.

I was recently flying a model that is several years old, and had been stored for at least a year. The 4 cell NiMh RX battery was about 3 years old and had been cycled, and then charged up normally on a trickle charger, but the model's battery indicator behaved oddly - showing a full battery as expected after just one flight but, when I moved any control surface, the indicator dropped very quickly to low battery, and then settled back to full when I left the sticks alone.

The cause? Black wire corrosion. See the photo. This is a common issue, usually manifests as the copper strands in the negative wire on a battery turning black over time, and the resistance in the wire building up at the same time. So, when checking voltage, everything seems normal, but when under load (wiggling servos), the resistance is so high that the voltage drops, massively, by the time it gets to the switch. Under even heavier load (pulling up elevator at speed, for example), the resistance might be too great to allow sufficient current through to the receiver and servo, and the plane would be in tatters moments later. I checked this model, and it delivered 5.7v at the battery and less than 3.5v at the receiver when two of the servos were moved together.

There is plenty of speculation, quite a bit of science and a lot of people pontificating on forums about this. It has been a known issue for well over half a century and There is some thought that the wire coating, and/or the lubricant used in manufacture and/or damp conditions, and/or nickel and/or a dozen other factors have an involvement in creating the problem, but this article is about spotting the problem, not writing a thesis.

So the important things are:

- Keep an eye out for the signs - the example above is classic, but also look out for sluggish control movement and difficulty in charging
- Voltage without a load doesn't tell you everything about a battery. It's a bit like taking the petrol filler cap off your car. You can smell fuel in the tank, but have no idea how much fuel is there based on smell alone. You'll see the effect of resistance when the battery is working servos etc
- This corrosion usually happens on the negative wire, and will affect the whole wire, not just the exposed strands (you can't solder effectively onto blackened wire and flux won't help, nor will cutting back the exposed bit and stripping a fresh bit)
- It can also affect the connector and battery switch harness assuming the battery has sat in the plane, connected to the switch harness
- You can replace the wires on the battery (but I doubt it is worth it, given the battery will be a few years old as well) - don't solder direct onto a battery though, the heat will damage it. You should solder onto spot-welded tags (there will be a stream of people keen to tell me that they have been soldering onto batteries for years without a problem – please resist the urge!)
- You can't clean the wires or do anything to put it right or reverse the problem other than replacement of wires (actually you can, but it involves removing the wire covering, separating the strands of copper and using chemicals – not practical)
- It tends to occur more where a battery is kept below peak voltage. The lower the voltage compared to the cell maximum, the worse the corrosion
- It is very hard to see without stripping some wire, but you can check it by setting a multimeter to the resistance setting and comparing the resistance down the length of the red wire and black wire. You'll see no, or almost no, resistance down the red, and if the black shows a different result then the time has come to fit a new battery. You can also compare old wire and new down the same length.
- If a plane is going to be stored for a long time, taking the battery out will help (at least the

switch wire won't degrade), and keeping the battery charged from time to time will also help

- If you have a charger that can cycle NiCd and NiMh batteries, it's a good idea to do so from time to time. A few deep discharges and recharges will help the battery generally (this is less important with Eneloop NiMh batteries, incidentally, due to their lower self-discharge

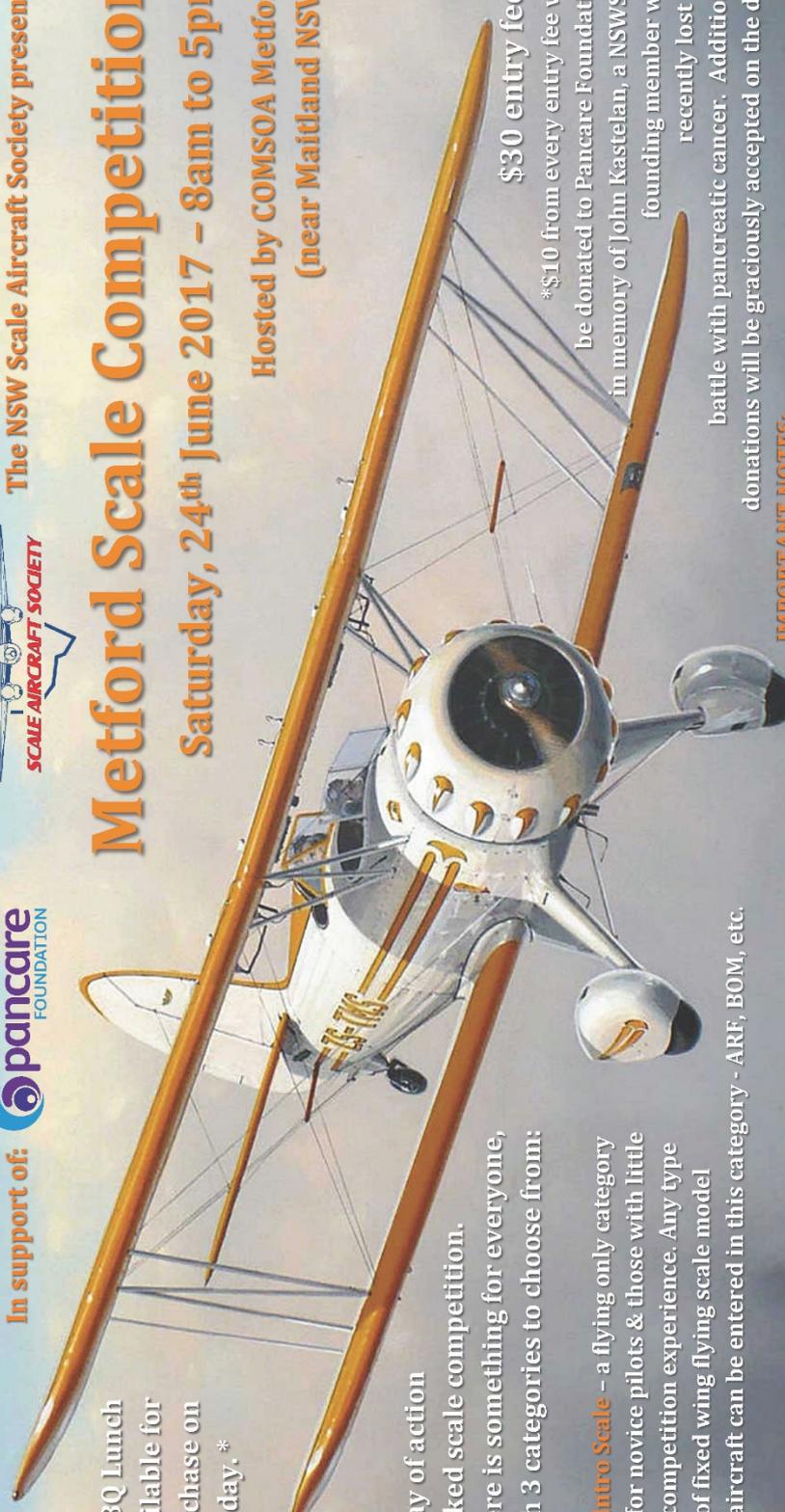
behaviour, but still can be done every few months).

I have batteries that are almost 20 years old, and are still serviceable for many applications, but they don't go in planes or transmitters. I was lucky to catch this one in time and walk away with an intact plane.



Oh, and by the way, if you run a classic car and have been noticing sluggish starting, you might take a look at the negative wire to the car body or engine. Black wire corrosion happens there, too. If your negative wire is a bit too stiff and the copper has discoloured, you now know why. **Clive**

Upcoming Events



In support of:  **pancare** FOUNDATION

 **SCALE AIRCRAFT SOCIETY**

The NSW Scale Aircraft Society presents:

Metford Scale Competition

Saturday, 24th June 2017 – 8am to 5pm

Hosted by **COMSOA Metford**
(near Maitland NSW)

* BBQ Lunch available for purchase on the day.*

1 day of action packed scale competition. There is something for everyone, with 3 categories to choose from:

- o **Intro Scale** – a flying only category for novice pilots & those with little competition experience. Any type of fixed wing flying scale model aircraft can be entered in this category - ARF, BOM, etc.
- o **Open Scale** – a flying only category for more experienced competitors. Aimed primarily at out of the box ARF or prebuilt non-BOM models, however any type of fixed wing flying scale model aircraft can be entered in this category.
- o **Advanced Scale** – a category for more experienced competitors with both flying and static components based around current F4H scale rules. Minimum requirements apply for models entered in this category - e.g. from refinished ARF to scratch built models.

*\$10 from every entry fee will be donated to Pancare Foundation in memory of John Kastelan, a NSWASAS founding member who recently lost his battle with pancreatic cancer. Additional donations will be graciously accepted on the day.

IMPORTANT NOTES:

1. Only 1 entry allowed per pilot (i.e. only 1 model in 1 category).
2. 8am registration on Saturday morning. Flying and Static judging will commence at 8:30am sharp.
3. Flight scoring will be to current FAI F4 Scale Rules and Static scoring will be to modified F4H rules.**

**For a copy of the rules please go to our website www.nswsas.com.au or visit us on facebook 

Contact: James Price – james.price@optusnet.com.au



PYLON RACING

SUNDAY 25 JUNE 2017

AT SHOALHAVEN MODEL FLYING
CLUB NOWRA

Practice from 12 noon Saturday 14 June

LOCATION: The Archer Racecourse off Albatross Rd

Sunday Breakfast and Lunch time catering

Entries close 9:00am

Entrants must have proof of current MAAA membership

Entrants and callers must bring hard hats

Fuel supplied on race day

FURTHER 2017 DATES

Pittown Sat 29July, Richmond 24Sept TBC, Marulan 18/19 Nov TBC.

Large Scale --- 21/22 Oct NAAS Field Tharwa ACT

Q500

F400

F3D

F3T

E500

Other classes
depending on
numbers Please
contact organisers
to register
New racers always
welcome

NSW PYLON RACING
CLUB INC.
www.nswpylon.org

Peter Kearney
0407 013 230
pkerney@nswpylon.org

Tarmac Scale Rally



At our Somerton Field

August 19th and 20th

Flying starts at 10:00am on the Saturday

\$15 per pilot (any number of aircraft)
(All pilots must have MAAA insurance)

Visit our web page at www.tarmac.org.au

Contacts:

Neil Jewell – 0417 467 864

Larry Hoskins – 0417 463 484

Allan Potter-0413 184301



NEW SOUTH WALES F3C F3N STATE TITLES

HOSTED BY COOTAMUNDRA AEROMODELLERS ASSOCIATION INC



THURSDAY 24TH – SUNDAY 27TH AUGUST 2017
NSW STATE FIELD, COOTAMUNDRA
FOOD AND DRINKS AVAILABLE AT THE FIELD
ENTRY FEE; \$30 SENIOR, \$20 JUNIOR

**All MAAA classes catered for. Must have at least 3 committed pilots registered in the class or class wont be run.
Information on MAAA classes can be found at : <https://www.maaa.asn.au/images/pdfs/Australian-Rules-S9-Helicopter-2014.pdf>**

For more information email: bjtucker23@gmail.com

Oily Hand Day 2017



25th ,26th & 27th August

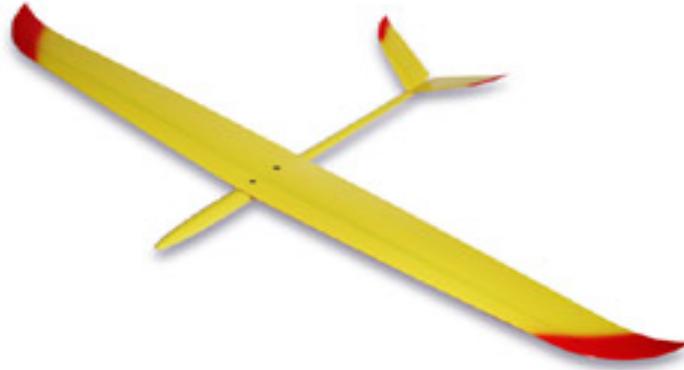


**Cowra MAC cordially invites you to their
2017 Oily Hand Event**

for all information, updates and to download the brochure go to

<http://www.cowramac.asn>

also visit <http://controlline.org.uk> - look in Forums - Coming Events



Millennium Cup dates for 2017

January 15	Appin
February 12	Goulburn
April 9	Lake George
May 21	Salt Ash
September 23 & 24	Gloucester
October 22	Maddens Plains
November 12	Shoalhaven

* = awaiting confirmation of dates

Millennium Cup Committee contact details:

Les Morris - carolandles@optusnet.com.au
Fred Lodden - felodden@hotmail.com
Paul Gibson - piglytoo@gmail.com
Doug Lacey - doug1947@bigpond.com



RCM News F1 Air Race Championship Sat 21st and Sun 22nd October 2017

Formula 1, Formula 2, Red Bull, AT6 Texan, Reno, Golden Era
Sat night dinner at the field, ★★★★★ on field Camping or local Hotels

Australian Large Scale Pylon Racing: www.facebook.com/groups/LSRCA/

F1 Air Race Championship: rcmnewssjg.wixsite.com/f1nar

Information: www.naas.org.au

Contact: Jeremy Randle 0418 390 446 airracecanberra@gmail.com



2nd Annual Australian F5J Trophy



The Australian perpetual F5J trophy 2nd annual event is to be held at the NAAS field near Canberra
Presented by the AEFA in conjunction with the NAAS Club

Two days of flying 4-5 November 2017 Two classes - Open F5J and Limited F5J



**Dave's Toys
for Big Boys
Open F5J
Trophy**
up to 4.0m class



**Modelflight
Limited F5J
Trophy**
up to 2.6m class

First prize:
30A or 40A Power Supply
- winner chooses
www.hyperionaustralia.com.au



First prize:
Ultra Power AC400 Duo
Charger
www.modelflight.com.au



Other Sponsors:

Dave's Toys and Modelflight will also donate items
flyelectric.com www.flyelectric.com
Sky Soaring Robots www.skyrob.com
AEFA www.aefanet.com

Product types distributed to Participants:

Electric Motors LiPo Batteries
Battery Checkers Folding prop blades
Prop adapters Speed Controllers
Servos Spinners

Special Feature: Seminars by the F5J team that competed in Slovakia. Learn about how they do it overseas and prepare for the World Championships

Pre-registration required - Entries close 28 October - see the AEFA web site for a registration form:

www.aefanet.com

Prizes for placegetters - and a give-away of products by draw from the hat - \$50 entry fee
Data loggers available for loan - just bring your electric glider. Food available on the field.
Enjoy the great NAAS site - camping permitted \$15 per night - toilets and shower provided.



NAAS Annual Mammoth Fly-In 24-25-26 November 2017



FLY-IN

Primarily large models, but if you want to be part of this great experience bring what you have.
Field will be open from Friday Morning

Pilot entry Saturday & Sunday \$35.00
Saturday night roast/baked Dinner at the field \$25.00 per head

Enjoy the great NAAS site:
Camping available \$15.00 per night
Toilets and shower provided.

Food and drink, tea and coffee will be available all weekend

To register and assist with catering please use this link address:

<https://goo.gl/forms/qCf1PZhoCuIIDxav1>

For more information will become available, please refer to:

Web: www.naas.org.au Email: naasact@outlook.com

FOR SALE



Just run in

**2.6m "YAK-55", DA120, Twin Can, all fitted out for flying.
Bargain at \$3250-**

Contact Joe, 0403 116 491, or Email me frostjos@gmail.com



**Deadline for submissions to Newsletter #398
(July 2017) is
Tuesday 27th June 2017.**

*Please forward any changes of mail or email address together with your
AUS Number directly to the Registrar.
dave.lewis@internode.on.net*