



PROP TORQUE

Official Newsletter of Launceston Model Aero Club Inc. PO Box 1204 Launceston TAS 7250

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From the President

Hello All

Hello Everyone

I'm writing this column with yesterday's LMAC Christmas BBQ still fresh in my mind. A good crowd turned up to enjoy the day, with a nice lunch for good measure. The weather started off generally windy from the NW, but improved as the day progressed. It never settled down completely, however, as there were occasional strong gusts that blew straight across the strip. The weather was bad enough early in the day for the planned jet demo flights to be cancelled.

The highlight of the day had to be the Tomboy event that was run after lunch. I counted eight participants. It was altogether fascinating to see so many small models all launched at the same time and winging their way skyward. Because the wind was blowing across the strip, spectators were treated to the sound and smell of eight small diesel engines all running at the same time. Everyone seemed to be having a lot of fun!

We have previously commented in this column on the versatility of Vic Smeed's designs, especially the Tomboy. This was demonstrated in no uncertain manner when, earlier in the day, one flier performed a test flight with his Tomboy. The model climbed away and then flew flawlessly, but seemed to have a mind of

its own. It did not take long for the owner to discover he had not switched the radio on. The model was eventually retrieved from some considerable distance away. The point of this is that provided the control surfaces are set in the right position, the model has sufficient inherent stability to allow it to fly unaided. (Do not try this test with a pattern model).

I have not been near my workshop lately; it seems to be a very busy time of the year. However there are one or two projects under way that I will report on next year.

As this is the last newsletter for 2009, I would like to take this opportunity to thank the Committee for its efforts during the year; also our tireless canteen workers, volunteers and our Contest Director, for a job well done. I would also like to thank our Webmaster George Carnie for his efforts in keeping our web site up to date and also for revamping the web site. I know personally that members are very appreciative of George's efforts.

I hope you all have an enjoyable and happy Christmas and that 2010 is a good year for all.

I look forward to catching up at the flying field

.....Gerry.

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From the Secretary's Desk

Hi all,

Well here we are at year's end and whilst we are officially in summer now it does not really feel like it. As I write this, it has been raining off and on all day with quite strong wind gusts at times and I have my heater going, so the weather is quite strange compared to what I recall it used to be say 10 or 20 years ago.

Club day for December was really a non-event as I am lead to believe, as I was not the only one who was not able to be there, and those who could be there had to contend to strong and cool winds.

You will find in this issue of Prop-Torque the latest if

not the last of the MAAA news-letters for this year. The Federal Secretary Kevin Dodd has written an article on member protection policy for the MAAA, which in turn incorporates all affiliated bodies. There is so much these days of addressing safety measures and having a duty of care not only by a club to its members, but member to member as well.

We have rules in place for the conduct of keeping things flowing in some semblance of order safely. These rules are in place not to be an annoyance to members but to keep every one safe so that we may all go home at day's end instead of to hospital for the stitching up of body components or worse.

The committee have decided that to catch up a bit on missed Pattern events, we will be having 2 days of pattern flying in January namely the 9th and 16th, so there will not really be any general flying on those days, except for during the lunch break and after the events finish.

I mentioned in my last report that we were going to discuss at the December meeting the matter of some recognition of pilots achievements during the contest calendar year, this will be done again as was the practice some years ago, when trophies will be awarded at our annual dinner, in the latter part of each year.

I shall be away interstate for a few weeks over the Christmas and New Year break, returning on the 5th of January, for members' information, in case of need.

This edition of Prop Torque will be the last one till about the end of February, and Your Committee will not be meeting again till February.

We have another new member to welcome into our midst and that is Michael (Mick) Green who has just recently moved back to Tassie from the Mainland and wishes to continue his flying, He is a Gold wing flyer. His Father Brian was a member of our club some years back, we do welcome him as he joins us in the high's and low's of model aircraft flying.

The birthdays for December are Merv Cameron, George Carnie, Bill Evans, Kevin Hay, and Max Wiggins; and for January, Robert Laing and myself.

So from the club we do wish them all a great day on their special day and all the best for the year ahead.

That is about all from me for this month and yes the year, but I leave this thought with you to ponder on - --.

One of the greatest mistakes you may make in life, is to be continually fearing that you will make one

May I wish you all in the aero modelling fraternity a very merry Christmas and a truly great year ahead in 2010

So as always
May you all have many Happy landings.

Geoff.

Contest Director's Report

.Due to bad weather there are no contests to report on this month.

From the Editor's Desk

Erratum: I am sorry to have made the error last month that there was to be no news letter in December; I was a month ahead of myself.

Floppy Landing gear.

Jacques Wakae has found a very useful article on treatment of wire for fashioning undercarriages and other rigging. This is reproduced below. The quality of wire in some of the ARF aircraft can be quite poor: I have been looking for information on this for sometime so this looks very helpful for strengthening wire structures.

Vision Problems.

While watching the extreme heights apparently attained by the tiny Tomboys last weekend, I was reminded of various questions I have been asked over the years on vision: it would take a long time and several hundred pages to explain all the various problems and their solutions obviously, but the main problem is that many people (about 25% from most surveys) have no idea that their distance vision is sub standard and that they are driving illegally, simply because they haven't bothered to have a proper eye test! Near vision is easier for most people to be aware of because of the need to read the prices in the shops and to read instructions at the very least! If you are driving illegally, your distance vision is less than 50% in your better eye! There are fines for being caught. I shall work out the vision required and the best colour schemes for best visibility for a future comment.

Christmas and New Year.

I shall repeat last month's wish for you all to have a Happy Christmas and New Year Holiday.

...Richard.

"Around the Hangar" or jottings from George Carnie - Club Day, November 7, 2009

Apologies for the lateness of this report. An oversight on my part.

The weather was picture perfect for club day on Saturday, November 7 which resulted in a reasonable turn up for the day. The recent favourable weather and subsequent mowing of the strip and surrounds shows a marked difference in the state of the strip as the photos will attest.

A welcome return to the field was Craig Homan who brought out his Piper L34 "Grasshopper" and his SIG "Rascal". Now we need to see you more regularly Craig so you get some regular flying under your belt and obtain those elusive "wings". We also welcomed new member Mark Lucas who was introduced to the club through Terry Pearson. Mark has a Boomerang trainer and will be under Terry's tuition to get his "wings". Greg R flew his electric powered pattern model, the Adrenaline 90. Power comes from a Hyperion ZS4025-14 with a 16x10 APC-E prop. Electrons provided by 6S 5000mAh Hyperion G3 battery capable of 5C charging (25A). The model was very swift in a straight line and required very little of the strip to get airborne. Geoff Hays brought his electric Rainbow out for a flight and balanced that with his IC powered Ugly Stick. President Gerry de Groot brought along his Piper Cub. Jacques Wakae and Dave Jacobs also took part on the day. Jacques flying his Buzzard Bombshell and doing a lot of low level "buzzing" of the field!

The proliferation of "Tomboy-esque" models never ceases to amaze proving that this is a very popular category. Merv Cameron brought out 2 new 75% Sportsters - why two? One for Merv and one for Kevin H. Both were powered by engines from Merv's collection. Merv's powered by an Allbon Super Merlin .75cc (red cylinder) and Kevin's using the standard Allbon Merlin. Kevin has since returned (reluctantly?) the Merlin to Merv and repowered with an MP Jet 0.40 cu in that I got for him. Kevin reports many flights using the MP Jet and states it is "10 times the engine the "Boddo" Mills he originally used. Kevin also reports that the MP Jet took a little bit to get the settings right but once set he locked the compression screw and has never touched since. He also reports flights of up to 2.5 minutes of engine run.

Pattern models were a plenty as pilots were no doubt getting in some practice in preparation for the Pattern event scheduled for November 21. Andrew McEntyre flew his "Super and Cheaper" pattern model however

a dead stick downwind landing resulted in the loss of his undercarriage. This happened to Kevin's, Terry's and now Andrew's similar models - Could this be a new design trend? Given the demise of the S&C Extra and the older ex GR Extra, Kevin Hay dusted off his Magic to get some practice in. Terry also flew his S&C Extra. All in all a good day was had and for once the weather gods were smiling.



Greg Robertson's Adrenaline 90 electric.



Craig Homan & Andrew McEntyre with SIG Rascal.

Working Heat Treated Music Wire.

By Roy Vaillancourt

The music wire that we use for landing gear and cabane struts is medium carbon steel that has been heat-treated to a spring temper. It is generally very useful to us in this form.

Spring temper defines a metal hardness that, if measured on the Rockwell hardness scale, would be about Rc 45. At this temper steel is referred to as being in the "tough" hardness range, with Rc 20 being considered soft and Rc 60 being considered hard.

When in the tough temper state wire can be worked, but not as easily as if it were soft. In this tough condition it can be bent and cut using the proper tools and techniques, however, sometimes this tough state is just too tough for us....

To work steel more easily we can heat it up, and as it heats it becomes softer. While in this softer state we can bend it the way we need it. After we have bent or formed the wire it may cool at an uncontrolled rate. This cooling rate is directly responsible for the hardness of the wire after it is formed. As a result the finished part may be much softer (or harder) than its previous state. Now for some parts that's alright but for landing gear we just can't leave it in the soft state because on the very first landing the wire would simply bend and not spring back to its original position or shape. If we left it in a hard state the next landing would snap the wire. So, to return the steel to its springy condition we must restore that specific spring temper by heat treating the appropriate area.

The steps that should be taken in order to form wire more easily would be to first anneal it (that is to soften it), form or bend to desired shape and then re-heat treat the part back to the spring condition. First the wire should be annealed at the location to be bent. To anneal, heat your wire with a torch until it becomes a bright cherry red (this color represents about 1400 degrees F). Let the wire cool completely to the touch. Don't quench it or blow air on it. Just let it cool naturally away from any drafts. The wire should now be in the Rc 25 range. This is considered soft and you will find the wire bends very easily at this hardness. After forming, once again heat your wire with a torch until it becomes the bright cherry red but this time quench it (rapidly cool) in room temperature water. When plunging the steel into water, do it with a twisting swirling motion to prevent water vapor from insulating the wire from the coolant action of the water. This will insure that a more even quench is therefore obtained.

At this point the wire should be very hard-- probably above Rc 60. To test whether this is so attempt to file a mark on the super-hard area. The file should slide off without cutting into the steel at all. If, however, it does not slide off but cuts, you did not heat and quench properly or you do not have high carbon steel. Try the heat and quench cycle again. If your file still cuts then you definitely don't have high carbon steel. So get another piece of wire and start over again because you will not be able to add the necessary carbon to low-carbon steel. If you are successful in getting it very hard do not try to use the wire while it is in this very hard state. It is quite brittle and will snap off.

The next step is to temper the wire back to the desired hardness. Tempering is a form of annealing but is controlled so that the steel stops at a specific hardness.

Start by shining the wire with steel wool or emery cloth. Then heat it up gradually using the torch and watching for the following colors as a guide: The first color will be straw (350 degrees), followed by a dark blue (600 degrees), which is followed by a medium blue (750 degrees). At this point remove the wire from the heat source and allow it to cool slowly. **DO NOT QUENCH IT OR BLOW ON IT!** Just let it stand to cool on its own at room temperature away from any drafts. Once the steel returns to room temperature it should be at the target RC 45 hardness, which is a good spring temper. Perform the file test again. You should be able to make a mark now, but with some effort. If it passes this test you have tempered your wire to the proper degree. Good luck!

Tempered music wire can also make great special purpose tools. Instead of tempering to the 750 degrees, stop at the straw color stage and you'll have the wire at about Rc 60; it is still very hard, but not so brittle. Wire at this temper makes great drills for wood and plastics and most Aluminum and Copper.

MODEL AERONAUTICAL
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The MAAA Council and Executive wish all our members and friends a very Happy Christmas and safe New Year.

Manual of Procedures

The Manual of Procedures is a "live" document and is continually being updated. Please check the MAAA web site from time to time to ensure that you are aware of the latest editions of the documents. The MAAA has recently released the following amended and new documents in the Manual of Procedures:

MAAA MOP 027 Guideline for the Award of MAAA Wings – Amendments made to clarify the meaning of ‘State Senior Flying Instructor’ and to delete the words from the form which is where the principal misunderstanding had occurred.

MAAA MOP 041 The Member Protection Policy – This Policy replaces the MAAA Code of Ethics MOP041 and is enhanced with provisions including antidiscrimination, as required by the Australian Sports Commission to comply with Australian legislation.

(See item Play by the Rules)

MAAA MOP 058 2.4GHz Equipment – Amended to eliminate any potential for confusion between what is required for 2.4GHz transmitting devices by Australian legislation and what is required under MOP058 by the MAAA.

Play by the Rules – Introducing the MAAA Member Protection Policy

Member Protection is a term used by the Australian sports industry to describe the practices and procedures that protect an organisation’s members – including individual members, instructors and officials, and member organisations such as clubs, state associations, other affiliated associations and the national body. Member Protection involves:

- protecting members from harassment, abuse, discrimination and other forms of inappropriate behaviour
- adopting appropriate measures to ensure the right people are involved in an organisation, particularly in relation to those involved with juniors
- providing education and training
- promoting and demonstrating positive behaviour.

There were two main reasons for this policy. Firstly, there was the MAAA’s duty to expand its Code of Ethics to include policies and procedures required by Australian legislation in the above bullet pointed areas. Secondly, with its Member Protection Policy now in place, the MAAA meets all required criteria to gain formal recognition through the Australian Sports Commission as a National Sporting Organisation. This recognition will assist members of the organisation when making applications for assistance from State/Territory Departments of Sport and Recreation and other purposes to benefit aeromodelling. The ASC also currently provides funding to 60 recognised NSOs.

The MAAA Member Protection Policy was written with reference to the ASC guidelines and templates and the final document, MOP041, has been officially approved by the ASC, with the following

commendation: *“Congratulations on providing the range of clear policies on various administrative, safety, membership and other aspects of your sport. Your sport provides one of the best examples of how all these policies relate and also in terms of easy access to the policies”.*

Associations and Clubs are now urged to familiarise themselves with this important MAAA document. Where State legislation applies, such as ‘Working with Children’ requirements, links to this information have been supplied. It is assumed that Associations and Clubs will align their State and Local Member Protection documents with MOP041. ‘Piggy backing’ a club policy which takes local needs into consideration onto MOP041 (especially in areas where Junior members are involved) is recommended. At the very least, Clubs should ensure that ALL their members and parents of Juniors are fully aware of the Club’s policy regarding the protection of Juniors. To assist committees with the writing of a Club MPP, the ASC provides a basic, easy to use template. This can be found at www.ausport.gov.au/_data/assets/word_doc/0012/311214/Club_Member_Protection_Policy_July_2009.doc

For any member who wishes to learn more about Commonwealth laws and requirements regarding Member Protection, a basic online course ‘Play by the Rules’, which is free and takes about 2 hours to complete, is available through ASC at: <http://playbytherules.moodlesites.com/user/view.php?id=7602&course=2>

Concessional Membership

From 1 January 2010, a person who has not been an MAAA member the previous membership year is entitled to half MAAA fees. Current MAAA Rules require that any person who was a member in 2008-2009 shall pay the full fee. Clubs should note that Concessional Membership is only available to new members and those who have not been affiliated since 1 July 2008.

Visitors from Overseas

All visitors from overseas associated with officially recognised FAI bodies, who are in Australia temporarily and wish to fly models, need to make an application for Honorary Membership during their stay. Members of MAAA are encouraged to read the requirements regarding Visitors from Overseas in MOP042 if making an invitation.

2010 Council Conference

The 2010 MAAA Council Conference will be held on Saturday & Sunday, 22 - 23 May 2010 at The Lakes Resort Hotel, West Lakes, South Australia. The Council Conference will commence at 9:00am Saturday. Submissions of Agenda Items and Reports

should be sent to the Federal Secretary and must arrive by **Friday 5 March 2010**. Naturally, submissions will be welcomed earlier than this date.

Agenda Items

Affiliate members who wish to submit items for the Council Conference should forward these to their State Association for approval well before the due date for submission. Please contact the State Association for information on how to format the item.

2010 F5B & F5D Electric World Championships

Team selection trials for the 2010 F5B & F5D Electric World Championships in the USA are scheduled to be held at the VMAA 63rd Nationals at Albury. Dates of the event are Sunday 3 and Monday 4 January 2010. For further details contact Ray Pike stingray_f5b@westnet.com.au

2010 F2 World Championships Team Trials

63rd MAAA Nationals (VMAA): F2A, F2B, F2C, F2D, 28 Dec 2009 to 4 Jan 2010.

2010 F4C Scale World Championships

Team selection trials for the 2010 F4C Scale World Championships in Poland are scheduled to be held at the VMAA 63rd Nationals at Albury. Dates of the event are Thursday 31 December 2009 and Friday 1 January 2010.

2011 F1A, B & C World Championship Team Trials

Multiple Team Trials for this event to be hosted by Argentina in early 2011 are programmed as follows:

Proposed Events Program

63rd Nationals

F1A	Wed 30 th Dec 2009	Springhurst
F1B	Sun 3 rd Jan 2010	Springhurst
F1C	Tue 29 th Dec 2009	Springhurst

Southern Cross Cup

F1A	Tue 30 th Mar 2010	Narrandera
F1B	Mon 29 th Mar 2010	Narrandera
F1C	Tue 30 th Mar 2010	Narrandera

AFFS Championships

F1A	Sat 3 rd Apr 2010	Narrandera
F1B	Fri 2 nd Apr 2010	Narrandera
F1C	Sat 3 rd Apr 2010	Narrandera

Qld State Championships

F1A	29 th May 2010	Dalby
F1B	30 th May 2010	Dalby
F1C	14 th Mar 2010	Dalby

Victorian State Championships

F1A, F1B and F1C flown over 8-9-10 May 2010
Location tentatively Springhurst

Western Australia State Championships

F1A	16 th May 2010	Meckering
F1B	24 th Jul 2010	Meckering
F1C	25 th Jul 2010	Meckering

Additional Team Selection event for F1A classes
5th to 7th Jun 2010 Meckering

NSW State Championships

No firm date or location as yet.

International Events

All these events are to be F1A, F1B and F1C classes open to all flyers, sanctioned by CIAM and published on the CIAM website, flown to FAI rules and conducted within the selection period.

World / Continental Championships and Trans Tasman Events Calendar

2010	
EVENT	Awarded to
F1 A,B & C	Trans Tasman
F2A, F2B, F2C, F2D	Hungary Dates: 23 July – 1 August
F3J	France Dates: 28 July - 8 August
F4C	Poland - Czestochowa 30 July – 8 August
F5B, F5D	USA - Muncie 20 – 25 August
Space Models	Serbia - Irig 21 – 28 August
F3A Asia-Oceanic	Offers Invited –(location and dates TBA)
F3C Asia-Oceanic	China (Tentative)
2011	
EVENT	Awarded to
F1 A,B & C	Argentina- Late April early May (dates to be confirmed)
F3A	USA – Late July early August (dates to be confirmed)
F3B	China
F3C	Italy Dates: 18 – 28 August
F3D	Australia Dates: 12-14 August
F3K	Sweden Dates: 4-10 July

EVENTS CALENDAR

Date	Events
2010	
Jan 9th	<u>Club Pattern Contest - Practice 9am Start</u>
16th	<u>Club Pattern Contest - Practice 9am Start</u>
Feb 6th	Club Day
20th	LMAC Club Pattern Champs
Mar 6th	Club Day- AM Gen flying -- PM Electric Glider
20th	State Electric Glider Champs
Apr 3rd	Club Day
17th	Fun Fly Novelty events
May 1st	Club Day
15th	<u>Proposed scale fly in</u>
June 5th	Club Day
19th	To be advised--Possibly special Old Timer event

Note: Starting times: - F/Flight----- 9 AM
 Old Timer-----11 AM
 All Other events except where noted----- 10 AM

This Calendar is subject to change that will be notified as required

Club AGM will be held Thursday June 10th 2010 venue TBA

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