#### Holdfast Model Aero Club Inc.

Volume 5, Issue 2 February 2014

# HOLDFAST BUZZ

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## Like Father, Like Son They start 'em young at HMAC!



Matt Jamieson's 3 year old son Isaiah was concentrating hard while "at the controls" of a Boomerang trainer at the Holdfast Club Flying Field. While Dad was firmly in control of the model, Isaiah was certain that all of the stunts were of his own doing. Nonetheless, he already 'has the bug' and no doubt will be flying solo in the not too distant future.

The HMAC newsletter is your vehicle for sharing information, experiences, building projects, etc with your fellow members. If you have photos of your latest model, a construction in progress or handy tip you'd like to share, please send it to Geoff at buzz@itapps.com.au for inclusion in a future edition of BUZZ.

#### Fun Fly Resumes in March

The Fun Fly is a popular event for both contestants and spectators.

Even if you don't participate, come to the field on Sunday March 16th and enjoy watching the events.

**Kingsley** Neumann

" ... While there is a lot of RF

"noise" in the area, none of it

is likely to cause problems on

the 2.4 GHz band ...'

From the President

Some good news! We held a very fruitful meeting with SA Water a few weeks ago and I am pleased to announce that they have listened to our requests and have agreed to build that new radio tower on the Majors Road side of their compound, removing the threat of a tower close to our final approach path from the north. We will still require to be vigilant with our operations at all times, as usual. We have been reassured that radio frequency interference is not going to be an issue.

Coincidently, we have received reports recently from several Members of quite severe interference on the 2.4 GHz band, noticed on the ground before flying. The Committee is quite concerned about this as there have been other reports of glitches observed in the air and also occasional loss of control. We have had two independent scans of the radio frequency spectrum at the field as a result of these reports. While there is a lot of RF "noise" in the area, none of it is likely to cause problems on the 2.4 GHz band. Radio equipment these days is very good generally but it is still in our interests to ensure that we follow the manufacturer's recommendations for all operations of the radio. This is not suggesting that the most recent reports have occurred due to any particular shortcomingwe are unable to explain them. There can be many causes of radio problems.

Please be vigilant with your radio installation and equipment generally. Always check your battery power, antennae installation and of course ALWAYS do a range check before the first flight for each model, daily. Any instances of radio interference should be reported to the Committee. We are now keeping a record of all reports. The tractor has given us some grief again lately. We discovered that the overheating was caused by a badly cracked cylinder head. We had already had the radiator cleaned and serviced but we thought we would have trouble fixing the head on a fifty year old machine. Fortunately we were able to source a new head and an engine overhaul was done by Graham Paterson and Allan Ayles. They both worked like Trojans, even on those very hot days to get the machine up and running again. Everything now appears to be alright and we are ready for some mowing. Our thanks go to Graham and Allan for the work they did, including a lot of running about to obtain various parts.

As a result of the unusually high expenditure on maintenance and also another huge water bill thanks to the hot and dry summer, the budget figures will be exceeded in those areas. Fortunately we are in a strong financial position and the overall budget should still be within limits at the end of the financial year. The monthly financial figures are available for the perusal of any Club Members if required.

After the cancellation of our first Pylon Day for the year due to a 43C temperature forecast, we are ready to try again on Sunday 2<sup>nd</sup> March. The usual events will be on and so will the BBQ Lunch. I am pretty sure that the weather should be more suitable. If you are a new Member and have not seen our competition flyers in action why not come along and watch? The action starts at 1.00 PM but BBQ lunch is available from 11.30 AM.

Kingsley Neumann

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#### Security and Gate Procedures



Members please note that it is a requirement of the Transport Department and therefore a Club Bylaw (Part 18) that the **double gates must be BOTH opened** for access to the field. It is not good enough to open only half the gate even if you only have a small car.

Also please snap the padlock back onto the chain when you have unlocked the gate. This is to prevent theft of the padlock which has happened several times and of course last person to leave should check that the shed is closed and then lock the gate on leaving.



#### Hey Charger! — by John Jefferson



Apologies to Chrysler Motors but I'm referring to battery charging, not the classic Chrysler Charger from the 1970s which some of us can recall, and its catchy advertising slogan "Hey Charger!".

Our investment in model aircraft can be quite significant, whether it's time spent scratch building, assembling an almost ready to fly (ARF) model, the amount of balsa and other material used, equipment such as internal combustion (IC) engines and electric motors, servos, batteries, and usually some dollars (often lots!). So how do you protect your

investment? One of the key factors is battery management.

Old hands will generally have a good understanding of battery management, so for those of you new to model flying, this article is intended to give you some insight into this black art.

Newcomers who front up to Sunday morning training will more than likely arrive with an IC powered ARF trainer. Some of these trainers will have their electrical equipment factory fitted, whilst others will need equipment to be purchased separately and fitted during the model's assembly process. The instructions that come with these kits can be very cursory, particularly relating to proper charging of the on-board flight battery. If a charger is supplied, most times it will be a basic unit where you plug it in a wall socket and leave it for about 15 hours, after which you assume it is fully charged. But is it? How do you tell? Get a battery checker – they're available from model shops or online and should be an essential item in your field box. Indeed, you should be checking the status of your flight battery frequently during flying sessions.

Now, there are batteries and there are batteries; their chemistry varies significantly. If you have some older batteries they are likely to be nickel cadmium (NiCd). Nowadays flight batteries are generally nickel metal hydride (NiMh). There's also your starter battery, a 12 volt sealed lead acid (SLA) unit; and your glow driver which is probably a NiCd unit. If you have an electric powered model it will almost certainly use a lithium polymer (LiPo) battery. Let's not forget your transmitter, which may have disposable AA alkaline batteries; or rechargeable NiCd, NiMh or LiPo batteries.

Unfortunately, failures can occur mid-flight if the battery is not sound and cannot cope with the current drawn by one or more servos. The consequences of such power loss are potentially catastrophic: an unguided missile is a major risk to safety.

The good news is you can minimise the risk of such an event by keeping these varied rechargeable battery types in good condition. How? Get yourself a good quality charger. There are many computer controlled chargers available which can accommodate the main battery chemistries we use, have the capability to detect the status of the battery and charge it to its peak. In addition, they can balance each of the cells in a LiPo battery. These units can also be programmed to cycle your batteries (discharge and charge), which is strongly recommended. However, be careful when discharging batteries as they should not be discharged completely, only to their safe minimum advised by the manufacturer.



Rechargeable batteries do have a finite life, so it's prudent to replace them after a reasonable time - the amount of use or charging cycles. I make a point of replacing mine every two-three years, depending on how often the particular model is used. I see it as an important maintenance requirement that will help prolong the life of the model.

Another factor to consider is the quality of your intended battery checker and charging unit. Check out the model shops, talk to the old hands at the field, check what Google has to say, but please do not grab the cheapest until you've done some research. Regrettably some units purchased online do not live up to their promise. Invest in your investment by buying quality equipment.

Happy flying!



"...There are many computer controlled chargers available which can accommodate the

main battery chemistries we

use ..."

#### HMAC Annual Awards Guidelines

Annual Awards available at HMAC are given in several different categories and trophies presented at the Annual Christmas Function. The Award categories are:

- 1. President's Award
- 2. Miscellaneous Awards
- 3. Model Building Awards
- 4. Competition events

**President's Award**. This prestigious award is given to a Member who has contributed in an outstanding manner to the functioning of the Club. It is usually (but not always) given to a non-Committee person who has gone beyond normal Club Member involvement and in the opinion of the President should be recognised. The President reveals the name of the person to the Committee prior to the award being made.



**Miscellaneous Awards**. There have been several of these that were introduced over the years and they are not always given due to the nature of them. The Committee considers these awards individually each year. Examples are:

- Axe Award. Given to commemorate a particular physical happening.
- 2. Encouragement Award. Occasionally given when a student has had a particularly long and difficult transition to the first Solo Rating.
- 3. Bob Bouwens Award. This commemorates a popular Member from a few years ago. Bob was something of an inventor and modifier of all his models and his equipment, searching unceasingly for a "Better Mousetrap". It is a serious award and can be given to anyone who shows similar characteristics.

**Model Building Awards.** These awards are given following a judging session at a Social meeting of the Club. In the past, judging has been done by one person, namely me. However for 2014, I would like to have two independent persons make individual assessments of the models presented. The final score will calculated by averaging the totals given by the two assessments. Judging sheets are always used and the results kept in Club Records. I will explain the scoring system in another article. Not every award is made every year. Sometimes no award is given.



The sub-categories are:

- Model of the Year. Basically this is the prestigious award achieved by presenting a really good model to a Meeting and also flying it at least once. Allowance is made for the extra effort required to scratch build a model compared with modifying a ready built plane. However, due to the proliferation of "ARF" kits members are encouraged to show their latest acquisitions.
- Johnson Award for Scale Models. This commemorates HMAC Life Member Cyril Johnson, a WW2 RAF pilot and also a Private Pilot and importantly an avid aero modeller. Cyril insisted that this award should only be given to Scratch-builders.
- Johnson Award for Innovative Modelling. This award is not necessarily limited to model planes, but can be anything to do with flying machines. Cyril's idea was to encourage lateral thinking and inventiveness ... cont. on p. 5



"... Allowance is made for the extra effort required to scratch build a model compared with modifying a ready built plane ..."

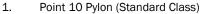
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Advertise What you Want to Buy or Sell on our Web Site Send details & photos to Geoff Haynes —buzz@itapps.com.au

#### HMAC Annual Awards Guidelines - cont.

**Competition Events.** Currently the competitions at HMAC are held on the first and third Sunday of each month. (These times can vary so please keep an eye on BUZZ and the MASA Events Calendar for the latest information). They are very popular and are open to all MAAA Members. Scores are given in the various categories and records kept. Rules for Pylon are published on our Website. The events are:



- 2. Point Ten Pylon (Open Class)
- 3. WW1 Combat
- 4. WW2 Combat
- 5. Fun Fly (various contests, held intermittently but aiming at an aggregate score by the year's end)

Kingsley Neumann (President)

Good pilots ALWAYS perform a Range Check before their first flight.

Are you one of those?

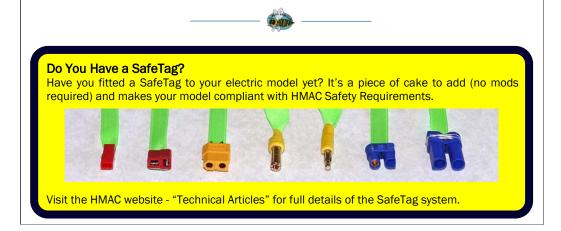
#### Advanced Flying Training at Holdfast



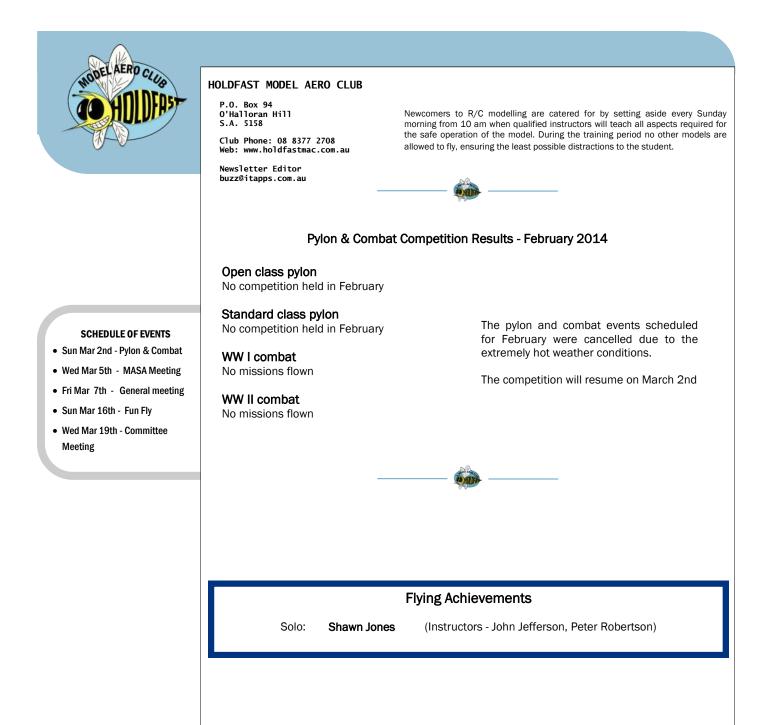
A number of people have asked about advanced flying training. This is certainly available to any Member. If you want to progress from Solo to Bronze or even from Bronze to Gold please come along on a Sunday Morning at about 11.30 and there will be someone who can help you with the test schedule and some flying tips.

If you would like more formal training for competition (for example IMAC aerobatics) we can arrange that too. In the early stages the sessions would be with an Instructor and would follow on from the beginners sessions. As you progress you might find it beneficial to fly when not many other people are at the field.

Aerobatics are done to a strict pattern or routine and that is hard to do when the sky is full of other planes. Of course you can practice individual manoeuvres in a quiet patch of sky or up high and out of the harm's way if you wish.







Instructor Roster (March - April)				
Date	Instructor	Instructor	Assistant	
MAR 2nd	Peter Robertson	(open)	Max Thomas	
MAR 9th	Kingsley Neumann	Graham Paterson	Ted Carter	
MAR 16th	Ross Lloyd	Matt Jamieson	Trevor Baudinette	
MAR 23rd	Graham Paterson	Peter Robertson	Max Thomas	
MAR 30th	Kingsley Neumann	(Open)	Ted Carter	
APR 6th	John Jefferson	Ross Lloyd	Trevor Baudinette	
APR 13th	Matt Jamieson	Peter Robertson	Max Thomas	
APR 20th	Graham Paterson	Kingsley Neumann	Ted Carter	

We are fortunate in having so many rated instructors and our thanks go to those keen instructors who turn up even when they are not rostered on. We expect to see more learners as the warmer weather approaches. Advanced Flying Training is available on request, so if you want to brush up your flying for a Wings test, please arrange a session with one of the Instructors. There are still a number of "Solo Only" flyers out there who could easily qualify for the Bronze Wings.