

# NSWRA Newsletter

New South Wales Rocketry Association Inc.

March-April 2016



## Mullaley weekend - report

Unfortunately it was very windy at Mullaley on the Anzac Day weekend. Despite this, there were a number of great launches, with David H gaining his L2 certification and Kevin his L1. Congratulations, gents!

Jeff's L2 attempt looked good in flight, with his "Leo 2" rocket achieving an altitude of over 7000 feet on a J357 motor and deploying its parachute, only to find that the nosecone had separated. Next time for sure!

The October long weekend has been scheduled for our next launch – mark this in your calendars now!



## Macquarie University Astronomy Open Night

NSWRA will again have a stand at this event this year, to be held on Saturday 14<sup>th</sup> May.

The event runs from 6:30pm to 10:00pm.

This night is a good opportunity for us to promote model rocketry and the club to the general public.

[www.mq.edu.au/about/about-the-university/faculties-and-departments/faculty-of-science-and-engineering/departments-and-centres/department-of-physics-and-astronomy/association-for-astronomy/astronomy-open-night](http://www.mq.edu.au/about/about-the-university/faculties-and-departments/faculty-of-science-and-engineering/departments-and-centres/department-of-physics-and-astronomy/association-for-astronomy/astronomy-open-night)

All members are welcome to help out - please contact the committee in person or via the club's email address.

Note: If you are helping out on the stand, there is no charge for admission.

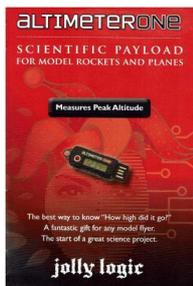
## Competition Day and Registration Day - Saturday 28<sup>th</sup> May

Make sure you have a rocket ready for the competition on 28<sup>th</sup> May! This will be an altitude-duration contest, allowing any rocket/motor combination to be used. The target altitude is 400 feet. The aim is to launch a rocket so its peak altitude matches this target, and the duration of the flight is as long as possible.

Details of the rules and scoring are on our website.

The altitude of the rocket will be measured by an altimeter. The club has several "AltimeterOne" units that can be borrowed on the day. In order for these units to sense the change in barometric pressure, one or more small holes (approx. 1.5mm) should be drilled in the airframe of the rocket, just below the shoulder of the nosecone.

We have some fantastic prizes on offer, with the winner getting first choice:



We are also using this as a Registration Day so members can renew their membership for 2016-17.

Please bring your completed membership form with exact payment of \$150 (cash, or cheque made out to "NSW Rocketry Association Inc.") and give to George. You will be eligible to receive a free parachute (Estes or Quest)

Note that the membership form has changed recently. Make sure that you use the current version from the website.

In addition, Berg's Hobbies will be on site with a number of rocket kits on sale at drastically reduced prices.

## Restrictions on Sparky Motors

The committee continually reviews and refines the club's policies and procedures in order to best suit the needs of the club and its members. The use of sparky motors has been a topic of discussion for some time. These motors include those with names "Skidmark", "Metalstorm" and "Dark Matter". These motors are formulated to produce a shower of burning titanium particles when the rocket is launched, which significantly increases the risk of causing a fire. There is evidence of this occurring at other clubs, resulting in the motors being banned at those sites. Accordingly, their use at the Whalan site is discouraged, and most likely will not be allowed. It is preferred that if members want to use these motors, they should only plan to do so at other more appropriate sites, such as Mullaley. This would be dependent on conditions at the time.

# Aerotech Motors on Sale – Limited Offer

As a result of Hobbies Australia taking over from Dawn Trading, some of the existing stock of Aerotech motors will be offered for sale at discounted prices. There's too many to list here, an email will be sent out to members shortly with the list of products and prices. If you want to take advantage of this offer, please contact Peter Berg (Berg's Hobbies) in person or on 9635-8618. Payment will be required up-front.

## Upcoming Events

All launches are at Whalan Reserve unless otherwise noted

### May

- 8 Launch Day. Mother's Day
- 14 Macquarie Uni Astronomy Open Night
- 28 Launch Day. Registration Day and Competition

### June

- 12 Launch Day. June long weekend
- 30 Launch Day

## Launch Reports

### Launch Day 13<sup>th</sup> March

Number of launches: 10

Jason started off the morning with his "Patriot" and "Mercury Redstone" on C6 motors, before Basil launched his large "OK 1.0" for a successful MPR accreditation flight. Congratulations, Basil!

Jeff and Adam had a couple of ignition failures before nice flights of their rockets "Eagle Two" on an E20 and "Leo I" on an F52 motor.

Jason's "Zenith" had a great launch on an A8.

David C had an old A6 motor that he used in his "Toblerone" rocket for a nice CATO, before the last flight of the morning, Jeff's "Eli" rocket on a D12



Jason gives his "Redstone" a final check



### Launch Day 26<sup>th</sup> March

Number of launches: 18

Lots of great flights today in light winds.

Kevin's "Mosquito" disappeared off the pad with an A10 motor, followed up by his "G.R." on an A8, and then using B6 motors in his "Rascal" and "Hijinks" rockets.

George launched his "Axion" and "Axion 2" rockets at 120psi, and his son Paul launched the "Pod 2" twice on C6 motors.

With the good conditions, Anthony and Callum were able to launch and recover their "Alpha III" using C6 motors (amazing altitude with this combination)

Jeff used a G64 (nice!) in his "Leo I" rocket, and D12 motors in his "Eli" and "Eagle II" rockets – unfortunately the chute didn't deploy in this, so a rebuild is in order.

David C launched his "Mimas" on a C6, and also used a C6 for the maiden flight of his scale model "Nike Smoke" (Quest kit)

### Launch Day 10<sup>th</sup> April

Number of launches: 12

Conditions today were ideal, with virtually no wind.

Tim took advantage of this, launching his "Weasel", first on an F24, and then on an F40, for 2 great flights.

David C launched his "Tempest" on a D12, and his "Quokka" on a C6 motor.

Lawrence used D12 motors in his "Aura" rocket. First flight was nominal, but the chute didn't deploy on its second flight.

The most fascinating flights today were George's water rockets where he was testing using a mixture of cornstarch and water (a non-Newtonian liquid, also called "Oobleck") I don't think this will be the liquid of choice for future launches, however!



Lawrence's "Aura"