



## Mullaley launch weekend report

We had a fantastic weekend at Mullaley, with plenty of great flights in light-moderate winds.

A highlight was George's successful Level 1 Certification with his "Light Shadow" rocket. Congratulations, George! The full report is on page 3.

## Macquarie University Astronomy Open Night

NSWRA will again have a stand at this event this year, to be held on Saturday 20<sup>th</sup> May, 6:30pm to 10:00pm.

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

<https://students.mq.edu.au/study/faculties-schools-and-colleges/faculty-of-science-and-engineering/department-of-physics-and-astronomy/association-for-astronomy/astronomy-open-night>

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

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

## Competition Day and Registration Day - Saturday 27<sup>th</sup> May

Try to make sure you have a rocket ready for the competition on 27<sup>th</sup> May!

This will again be an altitude-duration contest, allowing any rocket/motor combination to be used. The target altitude this time will be **350 feet**. The aim is to launch a rocket so its peak altitude matches the target, and the duration of the flight is as long as possible.

The score will be determined from the flight time in seconds, minus the recorded distance in feet away from the target.

The fine print: *The judges' decision is final, and no correspondence will be entered into.*

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 diameter) should be drilled in the airframe of the rocket, just below the shoulder of the nosecone.

The winners will get first choice of one of the fantastic prizes on offer.

We are also using this day as a Registration Day so members can renew their membership for 2017-18.

Please bring your **completed membership form** with **exact payment of \$150** (cash, or cheque made out to "NSW Rocketry Association Inc.") to give to George. All who renew on the day will receive a free drink bottle!

[This is the link to the membership form: [www.nswrocketry.org.au/Documents/NSWRA\\_Membership\\_Application.pdf](http://www.nswrocketry.org.au/Documents/NSWRA_Membership_Application.pdf)]

Please get to the launch site early so we can sort out everything as quickly and easily as possible.

## NSWRA is now on Facebook

To make it easier for members to share their rocketry experiences, NSWRA now has a Facebook page:

[www.facebook.com/NSWRocketry/](http://www.facebook.com/NSWRocketry/). Please note that the website should still be used as the primary reference.

### Upcoming Events

All launches are at Whalan Reserve unless otherwise noted

#### May

- 14 Launch Day (Mother's Day)
- 20 Macquarie University Astronomy Open Night
- 27 Launch Day. Competition/Registration Day

#### June

- 14 No launch (June long weekend)
- 24 Launch Day

## Launch Day 12<sup>th</sup> March

Number of launches: 28



Mitch's "Super Neon"  
lifting off

There is usually less activity at Sunday launches, but today we had several visitors with their low power rockets that made for quite a busy morning.

George's "Axion G6" water rocket had 3 perfect flights at 205psi and 210psi, and his son, John, launched his "Dust Devil" on a C6 motor.

We had 2 new members join us today. Welcome, Mitch and Scott! Mitch launched several rockets on E12 motors – an Estes "D Region Tomahawk", a Semroc "Thunderstrike" and an Estes "Super Neon", a tube-finned rocket.

Scott has launched with us previously when we were at Doonside. Today he launched his beautifully finished scale model of "Juno 1/Jupiter C", on a G68 motor for a successful progression into mid-power. Congratulations, Scott!

He also launched another scale model, a "Falcon 9" on an E9 motor for another nice flight.



Scott's beautiful  
"Juno 1" on a G68

## Launch Day 29<sup>th</sup> April

Number of launches: 16

Ideal conditions today – not too hot, and virtually no wind. Blacktown City Council were even mowing the area for us!

Jason's "Phoenix" and "Little John" rockets were the first in the air, using C6 motors.

David H attempted to launch his "Lil Hustler" on an E12 motor, only to suffer a spectacular CATO.

Undeterred by this, Mitch attempted his MPR accreditation with his "Phobos" on a G64 – successfully. Congratulations, Mitch!

George flew his "Axion" water rocket at 210 and then 220 psi.

David C used a C6 in his "Saucer B" for a nice straight flight – better than last time.

Jonathan flew his "Type 31" on an F15 motor.

Next on the pad we had 3 identical "Nike Smoke" rockets – David H used an F79, Kevin used an F26, and Mitch used an F50 – all nice flights.

Mitch then launched his "LOC Iris" on a G64.

Tim also used a G64 motor in his "Cweasel". Despite the high altitude attained and a separation occurring, the light winds meant that both sections were recovered within the reserve, with little damage to the rocket.

Last flight for the morning was David C's "Toblerone 2" on a C6.



Jonathan's "Type 31" lifts off amongst a  
group of "Nike Smoke" rockets

See the next page for the report of the Mullaley weekend

## Mullaley weekend 1 – 2<sup>nd</sup> April

Number of launches: 28

There had been some rain in the days leading up to this weekend, so we expected the ground to be a little sticky. As it turned out, the fields were quite firm, and with winds only being moderate on the Saturday, we had 20 great flights on the first day.

George's first flight of the weekend was his "Polaron G2b" water rocket at 220psi, followed by another flight at 230psi, then his "Galactic Express" on a D12 motor. Tim also used a D12 in a spool for a nice stable flight. David C's "Ganymede" had a good flight on a G38.

Scott launched his "Jupiter C" on a G68 and his "Mammoth" on a G83.

We also had new members join us – welcome Israel and Melanie!

Israel launched his "PE 1" 3 times, increasing the motor power each time – first on a D12, then an E9, and lastly on an E20 for his MPR flight. Congratulations, Israel!

The power of the motors used jumped when David H, the certifying officer, arrived in the afternoon.

This gave George the opportunity to attempt his HPR level cert with his "Light Shadow" rocket on an H120 motor, for a perfect flight and recovery – congratulations, George!



A very happy George after recovering his rocket to achieve HPR L1 certification

David H and Kevin also used H120 motors in their "Arcas" and "Spitfire" rockets, and David C launched his "Gambit" on an H148 while Andrew prepped his "R8 Firebird" for his level 2 attempt.

The "Firebird" had a spectacular flight on a J335, the drogue chute deployed as expected, and we all waited for the main chute to pop out... unfortunately, it didn't emerge. Better luck next time, Andrew!

More excellent launches followed: Tim launched his "Cweasel" on a G64, David H's "Warlock" used a J335, and George flew his "Light Shadow" again on an H125.

Kevin's "Calisto" flew on a G74 before the last launch of the day, David H's "Zephyr" on an H410.

The wind had picked up a bit overnight, so there weren't a lot of launches on Sunday, but there were still some great flights. David H started the morning with a G33 motor in his "Big Red Saucer". The wind may have been a little strong for this. Israel launched his "PE1" another 3 times on D12 and E9 motors.

Kevin used an H135 in his "Ariel". David C launched his "G3" on an H410.

David H's "Hot Point" flew well on an F24.

The last flight of the day was Rhys' "Kookaburra 5", flown by Tim, using a cluster of three D12 motors and a central E16. After some last-minute adjustments, the rocket was loaded onto the pad and launched. A nominal flight, but... no chute! After so many fantastic flights this weekend, I guess someone had to appease the rocket gods – bad luck, Rhys.

Overall, a fantastic weekend, and we're really looking forward to the next one!



David H's "Warlock" on a J335 motor – awesome!