

NSWRA Newsletter



New South Wales Rocketry Association Inc.

March - May 2018

Please Renew Your Membership

Membership renewals are due by 1st July. Please do so promptly. We need to advise NSW Fair Trading of our membership numbers, and it allows us to help satisfy our insurance obligations. If you can't make it to the next launch day – and you never know, it may be rained out (!) - you can simply email us a completed membership application form, available on the website:

www.nswrocketry.org.au/Documents/NSWRA_Membership_Application_Form_Nov2017.pdf

We can then provide you with the bank details so you can pay by direct deposit.

Payment on the day can be made by cash (exact amount, please) or cheque.

The membership fee is still \$150 (senior rate), with the junior rate (under 18, restricted to low power) at \$90.

And remember - all who renew with payment before the due date are eligible to receive a free NSWRA T-shirt!

A voucher for this is at the end of this newsletter.

Mullaley Launch weekend 5th - 6th May Report

What a fantastic weekend! Light to moderate winds made for some great flights on both Saturday and Sunday, with relatively short walks for recovery. Highlights included: four successful L1 HPR certifications - for Scott, Israel, Melanie and Sam – congratulations, guys; George's "Dark Shadow" water rocket launched at 740psi to a personal best altitude; and Andrew's "R8 Firebird" going supersonic on a K700 motor. And of course, there was David Bell's "little" rocket – his half-scale "Patriot" on a M2150 - what an awesome flight!

Further details are on page 3.

Macquarie University Astronomy Open Night Report

This year more than 2500 people attended the Astronomy Open Night, so it was no surprise that we were kept very busy. It was a big help to have extra people on the stand this time – thank you to David Bell (with his "Patriot"!), David C, Jason, Phill, Tim, and George with his sons John and Paul.

Thanks also to Peter Berg, who was able to show up during the night to also help out.

We are again grateful for Macquarie Uni giving us the opportunity to be part of this fantastic event.



Competition Day Results

There were 10 flights recorded for the altitude duration competition, held in ideal conditions on Saturday 26th May. Coming in first was David H, with his new "FAI 66" rocket attaining an altitude of 454 feet on a D12 motor – just 4 feet from the target altitude of 450' – and a flight duration of 59.5 seconds. He chose an Estes "Hijax" kit for his prize. In second place was David C, who launched his "Hopscotch" on a C6-5, with an altitude of 419 ft and duration of 60.0 seconds, winning a "Zenith II" kit.

Kevin came in third, just edging out Rhys. His "Sunny Side Up" on a D12 reached 479 feet, and had a flight duration of 43.5 seconds. Kevin won a "Big Rage" kit.

Thank you to everyone who competed, and to the time-keepers. Next year we hope to see more entries in this competition.

Upcoming Events

All launches are at Whalan Reserve unless otherwise noted

June

30 Launch Day

July

28 Launch Day

August

25 Launch Day

Launch Day 31st March

Number of launches: 23

Phill's "Dinky 2" was first off the pads, on a B6 motor, followed by Kevin's "Sunny Side Up" on an E9, and Toby's "Riptide" on a C6.

David H launched 2 rockets for the streamer duration contest, his "FAI 40-A" on an A3 had a flight time of 27.98 seconds, and "Meeka" on an A8 stayed aloft for 23.85 seconds. The challenge is on!

David H's "Super Baby Bertha" had a less than nominal flight, with a CATO of the E18 motor. Paul Katz's usually reliable "Pod 2" failed to open its chute, but his "Fire Flight" had a good flight.

Rhys' "Kookaburra Mini 2" had a good flight on a D12.

Andrew's "R13" took to the skies on an F40 motor.

Josh launched his "Eliminator" 3 times on D12 motors.

Ulysses had a good flight of his "Vega 1" with a C6-5.

Sam successfully launched and recovered his "Initiator" on a F52 motor for his MPR assessment – congratulations, Sam!



Toby's "Riptide"

Launch Day 28th April

Washed out!



Launch Day 26th May

Number of launches: 29



Jason's "Navajo AGM"

Conditions today were ideal for the competition, being dead calm early. Light winds developed through the morning

David H's "Hail Buster" literally shot off the pad with a F70 motor.

George's water rockets performed immaculately as usual.

There were plenty of great flights, some highlights being:

- Adrian's "Ranger" on a cluster of three B6 motors
- An unexpectedly unstable flight of David H's new "SAAB Saucer"
- Travis achieving his MPR with his "T1.1" rocket on a E16 motor
- Toby's 2-stage "Zenith II" going unstable after the booster had burnt out, due to separation of the nosecone. He would then launch the sustainer separately, for a good flight
- Jason's beautiful "Navajo AGM" (a prize from last year's competition) flying on a B6, and "Mercury Redstone" on a C6
- Sam's "Initiator" on a G40. The 4 second delay was a bit short



Rob's "Vector Force"

Mullaley Launch weekend

Saturday 5th May

Number of launches: 24



David Bell's half-scale "Patriot" lifts off - on its way to over 6000 ft

George wasn't holding much back for the first launch of the weekend. He loaded his "Dark Shadow II" to its highest pressure to date – 740psi (5.1MPa). The rocket shot off the pad to reach an altitude of 2016 feet (614m) – George's highest altitude with a water rocket so far. You wonder how much higher it can go until the airframe can't withstand the extra pressure – wait and see!

Paul flew the "Pod 2" in its 2-stage configuration, with two C6 motors, for a great flight.

Scott's "Hitech" had a late ejection with the G88-8 motor, but was otherwise OK. This was enough to encourage him to attempt his L1 certification with his impeccably finished "Wresat" rocket on an I175 motor – a perfect flight and recovery. Israel also had a nice flight with his "Arzkicker" on a H135 for his L1 certification. Congratulations, guys!

Andrew's "R8 Firebird" using a K700 motor wasn't as fortunate, with an event occurring on ascent as it went supersonic. He managed to recover most of the bits. Ariana (Tim's Daughter)'s "Uranus", a 2-stage rocket with three C6 motors in the booster and a D12 in the sustainer, also had an erroneous flight, with the booster stage being burnt at stage separation.

David C used an old G64 motor in his "Jester", which resulted in an early ejection and a core sample of the aft section – a relatively simple re-build with mailing tube. His "Gambit" had a perfect flight on an H123.

Josh and Israel both launched their "Eliminator" rockets on D and E motors for nice flights.

Sam attempted his L1 certification using a H123 in his "Phoenix", but was unsuccessful. He would try again tomorrow. His "Astrobee D" had a good flight on a G78.

Melanie did a test flight of her "Marcus Aurelius" on a G40, in preparation for her L1 cert attempt.

Other great HPR flights included Kevin's "Ariel" on a H152, and David H's "Minnie Magg" on a H125 and "Warlock" on a J354.

Of course, the other highlight was David Bell's half-scale "Patriot". A perfect flight on a M2150 to 6100 feet, with on-board commentary by LISA

Sunday 6th May

Number of launches: 15

Nice weather again, with light winds.

First off the pad this morning was David H's "Hot Point" on a H410. These motors really pack a punch, and it was a bit too much power for this rocket. David C used another H410 in his new "Ersatz" for a good flight, and launched his "Bunyip" on a I161.

Josh's "Eliminator" had another 2 nice launches on D12 motors

After a successful flight of her "Marcus Aurelius" yesterday, Melanie attempted her L1 certification using a H135, with a nice flight and recovery. Congratulations, Mel!

Sam then launched his "Phoenix" on a H125, to also gain his L1 cert. Congratulations, Sam!

David H had a good flight with his "Minnie Magg" on a H120, and launched his "Big Red Saucer" on a G80.

Scott launched his "Airshow" on a C6, the smallest motor used this weekend, for an excellent and fun flight – the Mullaley site can be used for any size rocket and motor, and is ideal for those rockets that may be marginal at Whalan.

Andrew used an F12 motor in his "Galaxy" for a perfect flight.

Kevin launched his "Callisto" on a H135.

Sam had a good flight using a G80 motor in his "Astrobee D". He wasn't as fortunate with the last flight of the weekend - another core sample with his "Phoenix" on an I211.

In summary, a fantastic weekend with a great bunch of people – thank you, everyone!

Watch for announcements about the next one, which is likely to be held early-mid September.



Melanie's "Marcus Aurelius"

T-shirt voucher

Member Name:

Please indicate number required of each size

	Cost \$	S	M	L	XL	XXL	Cost \$
1 T-shirt	Free						0
Extra shirts	20						
Kids	15					----	
Total							