



Fly Rockets!

Ever wanted to build and launch your own rockets? Rocketry creates challenges and is a creative outlet for innovators and thinkers. The NSWRA exists to provide a focus for all rocketry activities in the state, and is open to all interested individuals and organisations.

The NSWRA was formed in June 1997 and is a non-profit incorporated association whose charter is to promote safe model rocketry in NSW. It provides access to insurance, air clearance, organised events, and launching areas.

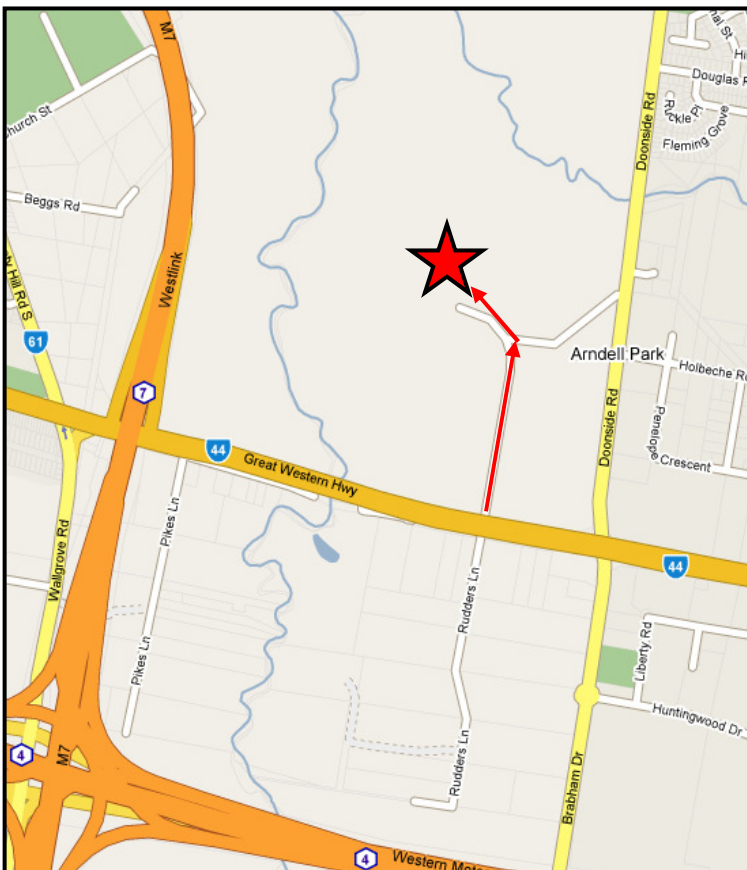
5..4..3..2..1..LIFT-OFF! With a flash, a roar, and a cloud of smoke, your rocket leaves the launch pad heading skyward. A few seconds later another puff of smoke, and the parachute ejects. Your rocket looks like a tiny speck against the clouds as it drifts down to a gentle landing ready for a new motor – maybe a different size motor which will take your rocket to a higher altitude!

Model Rocketry has an excellent safety record and everyone would like to see it stay that way. Follow the Model Rocket Safety Code and you will find model rocketry to be an enjoyable and safe hobby/sport for everyone.



Where do we launch?

The NSWRA flying field is in Doonside on the corner of the Great Western Highway and Doonside Road. The club holds a regular launch days on the last Saturday of each month and the second Sunday of each month starting at 8am. The Civil Aviation Safety Authority (CASA) has given approval to launch up to 2,000ft or 600m. No launches are held in strong wind or rain. Everyone is welcome to come and watch, however, to fly rockets you will need to become a member.



What types of rockets are there?

The most common rockets are single engine, single stage models, scale models, boost gliders, multi-stage, saucer shape models, and high-power rockets. Rockets can be either purchased ready-to-fly or in kit form from hobby shops, or built from scratch (known as scratch-built rockets). All rockets flown on NSWRA sites are examined by the Range Safety Officer before flight. All launches are remotely controlled from a safe distance using electrical ignition.



What type of Rocket Motors are there?

The only rocket motors available for public use are commercially available, Australian legal, solid fuel motors. These motors have a long history of safe reliable use throughout the world. Motors are given a letter designation such as A, B, C, D, etc. The letter stands for the level of impulse of the motor with every next letter being twice as powerful as the previous. For example, a B motor is twice as powerful as an A motor, a C motor is twice as powerful as a B motor. Persons outside the NSWRA have limited access to motors larger than D and CASA regulations restrict the size and the power of rockets that can be launched as well as restrictions on airspace. Medium Power Rocket Certification with the NSWRA can provide you with access to E, F, and G motors. High Power Certification will give you access to anything up to N motors – now this is really big stuff!! A person wishing to use an H motor or above will be required to undertake a certification program covering theory and practical tests. Launches at Doonside are restricted to G motors. More powerful motors are launched at other NSWRA sites.

Who can join?

The NSWRA is open to anyone aged 9 years or older who has an interest in rocketry. There are different levels of membership available:

Type of membership	Cost	Description
Full membership (18 years and over)	\$150 per year	Organised events, insurance, waiver, use of equipment, access to E+ motors, voting, etc.
Junior membership (under 18 years)	\$55 per year	Parent/guardian supervision required.
Family membership	\$150	Up to two parents and any number of children under 18years
Associate membership	\$20 per year	For those who are not flying rockets but wish to participate in activities and voting.
Participating visitor	\$10 per meeting	\$10 per meeting for a maximum of three meetings
Visitors	-	Feel free to come along and ask questions or watch.

Upon joining, you will have 'Low Power Rocketry Certification'. By proving yourself, you will achieve 'Medium Power Rocketry Certification', and if you're really keen and want to advance your skills further you can go for 'High Power Rocketry Certification'.

Further information can be found on the website:

<http://www.nswrocketry.org.au>

Send correspondence to:

The Secretary, NSWRA
PO Box 3345
Westfields
Liverpool NSW 2170

Other resources:

Civil Aviation Safety Regulation (CASR) Part 101
Civil Aviation Safety Authority, Advisory Circular 101-2

National Association of Rocketry (NAR) USA www.nar.org

Email: nswra@nswrocketry.org.au

Tripoli Rocketry Association (TRA) USA www.tripoli.org