

A U S T R A L I A N U N I V E R S I T I E S R O C K E T C O M P E T I T I O N

2024 AURC Event Schedule

Version 1.0: 20th March 2024







Purpose and Scope

This document outlines the event schedule of the 2024 Australian Universities Rocket Competition (AURC). Subsequent information about the event including assessment criteria, restrictions placed on rockets and range procedures is available in the "2024 AURC Rules", "2024 AURC Competition Deliverables", "2024 AURC Rocket Specifications" and "2024 AURC Range SOP" documents. Please contact an AURC representative for further queries either by email at <u>aurc@ayaa.com.au</u> or through the AURC 2024 Slack channel.

William's "Wildfire" Westernationals

The 2024 AURC will occur at Williams Wildfire Westernationals (WWW), a rocket launch festival occurring from Thursday the 19th to Monday the 23rd of September 2024. The festival is run by the Western Australian Rocketry Society (WARS) and is taking place 15 minutes outside of Williams, Western Australia. More information including purchasing of tickets to attend for non-competitors is available on the WARS website <u>here</u>.

The 2024 AURC

1.1 Attendee Requirements

Attendees of the AURC agree to the following terms and conditions:

- 1. Competitors attending the AURC will only be admitted given they meet the following criteria:
 - Are a student at the university and member of a competing student rocket team as recognised by section 4.1.1 of the "2024 AURC Rules" document.
 - Hold a valid "2024 AURC Competitor" ticket to attend the event (see here).
 - Have registered there details with WARS to attend WWW (see <u>here</u>).
 - Are wearing their competitor lanyard, which is provided upon arrival.
- 2. Entry to the event is further subject to the approval of the Western Australian Rocket Society and landowner and can be revoked at any time for unexceptional conduct.
- 3. WARS reserves the right to refuse entry to the launch site and refund competitors based on biosecurity concerns. Any persons who have travelled to areas of risk for diseases, pests or other types of concern regarding agriculture will be required to take reasonable steps to prevent these issues spreading onto the venue, for example by inspection and cleaning of shoes prior to entering.
- 4. Competitors agree not to disclose the event location to individuals who are not registered to attend WWW without permission from the organisers.
- 5. Whilst attending the AURC, competitors will conduct themselves in accordance the restrictions laid out in the following documentation:
 - "2024 AURC Range Standard Operating Procedures" document
 - "2024 AURC Rocket Specifications" document
 - "2024 AURC Rules" document
 - <u>Civil Aviation Safety Regulations 1998: Part 101 Regulations for Unmanned Aircraft and Rockets</u>
 - <u>Tripoli Rocketry Association Safety Code Guidelines</u>
 - <u>Australian Communications and Media Authority (ACMA) Australian Radiofrequency Spectrum Plan</u>
 - Other applicable federal, state, and local laws, bylaws, rules and regulations.
- 6. The Australian Youth Aerospace Association (AYAA) are not liable for any errors, omissions, acts, failures, or harm caused to or by any individual.



1.2 Facilities

1.2.1 Site Location

The launch site is located on a working farm in Western Australia, a 15-minute drive from the town of Williams, 6391. The exact location will be provided only to ticket holders and is not to be shared at the request of the landowner.

- The site is accessible by most vehicles via a gravel road and does not require a 4WD.
- It is not possible to use public transport to access the venue.
- Cell service is retrievable but may be unreliable depending on the provider.
- Access to the launch site is restricted to the hours of the event as outlined in section 1.3

1.2.2 General Amenitites

Teams will have access to the following:

- A 30 x 10 m marquee with lighting and power, used as a communal rocket preparation area.
- A 5 x 5 m region within this area for each team, outfit with one trestle table and 10 chairs
- Restrooms
- Drinking water
- A communal shaded area with outdoor tables
- Shared, locked, overnight storage.
- A first aid tent with personnel, with emergency services on call

1.2.3 Rocket Range

The rocket range onsite is managed by WARS, and they hold full authority on controlling who enters and which rockets are permitted to launch. More information about the facilities available and required procedures for launching of rockets is available in the "2024 AURC Range SOP" document.

Teams who have procured propellent through WARS will be able to receive it on-site when the range is opened and are required to return it at the conclusion of each day if not used.

1.2.4 Food

Food is not provided for competitors and will need to be brought to the venue. There will be some limited availability of food-trucks on site. Consumption of alcohol is not permitted at the rocket range.

1.2.5 Shops and Amenities

There is limited availability of shops within the immediate vicinity of the launch site and hence it is vital that competitors come prepared with items they might need for the entire day including medicine, food, clothing, tools, and chargers. It is recommended that teams ask event organisers or fellow competitors for general items like tools and hardware before embarking on a drive to purchase them. A list of nearby shops which may be useful has been put together <u>here</u>.



1.2.6 Accommodation

Competitors are able to stay on-site through purchase of camping tickets available on the WARS website <u>here</u>, noting that camping is external to the AURC. For those who do not wish to stay on-site, a list of alternative nearby accommodation options has been put together <u>here</u>.

1.3 Schedule

A schedule for the competition is shown in Figure 1 with all times in AWST. Registered AURC competitors will be permitted to access the property during the following hours, shown in grey in Figure 1.

- 10:00 AM 4:30 PM Thursday 19th
- 8:00 AM 6:00 PM Friday 20th
- 8:00 AM 5:30 PM Saturday 21st
- 8:00 AM 9:00 PM Sunday 22nd

The AURC event is limited to these hours only, and competitors will be required to vacate the rocket range at the conclusion of each day. Competitors with tickets to stay at WWW will be permitted to remain at the campsite, but not to work on their rockets in the prep area.

1.3.1 Check-in and Setup

Check-in for the 2024 AURC will begin at 10:00 AM on Thursday the 19th of September. Teams will be required to present a valid ticket for each competitor, where they will be given a lanyard and briefed on the location specific rules. Teams will then have until 12:00 PM to setup their indoor areas for the showcase.

1.3.2 AURC Showcase

The AURC showcase will take place from 12:00 – 4:00 PM on Thursday the 19th of September. Teams will have a designated area to display their rocket with a table to setup stands, posters, banners etc. This showcase is intended to work similar to a science fair, where teams, judges, sponsors and organisers are free to roam and discover the booths whilst judging is occurring in the background.

Teams will be required to be available for two scheduled assessments as per the timetable in Figure 2, lasting 30 minutes each:

- A **judging critique**, where team will present a brief presentation of their rocket design and payload to judges, who will then ask further questions as they mark the Interview and Payload assessments items outlined in the rules.
- A **safety review**, where teams will bring their rocket and all components needed to launch it (besides the motor) for inspection from a safety reviewer.

In conjunction with this, judges marking build quality will move around separately throughout the period. Further details of the marking criteria for these will be published in the '2024 AURC Competition Deliverables' document.

1.3.3 Group Photo.

A group photo with all competitors and their rockets will be taken next to the rocket range at the conclusion of the AURC showcase on Thursday, at 4:00 PM.



Time (AWST)	Thursday 19th	Friday 20th	Saturday 21st	Sunday 22nd	Monday 23rd
8:00			•		
9:00			AURC	briefing 8:30 AM	
10:00	Check-in		Flyers briefing 8:45 AM		
11:00	and setup 10:00 AM - 12:00 PM				
12:00		Range open	Range open day 2	Range open day 3	WWW closes 12:00 PM
13:00	AURC Showcase 12:00 - 4:00 PM	day 1 9:00 AM - 5:30 PM	9:00 AM - 5:00 PM	9:00 AM - 5:00 PM	
14:00					
15:00					
16:00	Group photo				
17:00				Pack-down	
18:00	Access to property for AURC competitors (grey)			5:00 - 6:30 PM	
19:00					
20:00			WWW Banquet 7:00 - 10:00 PM	AURC Awards Ceremony 7:30 - 9:00 PM	
21:00					
22:00					

Figure 1: AURC 2024 Timetable



Time	Safety	Review	Judging Critique	
(AWST)	STREAM 1	STREAM 2	STREAM 1	STREAM 2
12:00				
	1	7	4	6
13:00	2	8	5	10
	3	9		11
14:00				
	4	10	7	1
15:00	5	11	8	2
	6		9	3

Figure 2: Thursday assessment timetable according to team number.

1.3.4 Range Hours

The rocket range will be open Friday, Saturday and Sunday from 9:00 AM, closing at 5:30 PM on Saturday and 5:00 PM on Saturday and Sunday. This is the only period that launching of rockets, including conducting of ground ejection tests, is permitted.

Competitors may access the property from 8:00 AM to prepare their rocket for launch. All teams are required to attend an AURC briefing at 8:30 AM, and teams intending to launch their rocket will be required to attend a flyers briefing that day, before the range is opened at 8:45 AM. Also accessible during range hours will be AURC personnel who can assess Flight performance, Recovery, and remedial safety reviews as required.

1.3.5 Banquet

Competitors are welcome to purchase tickets to the WARS 'Banquet' dinner held on Saturday night at the launch site. More information including purchasing of tickets is available on the WARS website <u>here</u>.

1.3.6 Pack-Down

A communal range pack-up session will commence after the festival has concluded on Sunday afternoon. Competitors are encouraged to help the launch site pack-down where necessary.

1.3.7 AURC Awards Ceremony

The AURC awards ceremony will take place after all rocket launching has concluded on Sunday night at 7:30 PM. The ceremony will include speeches from sponsors and organisers as well as announcement of the winners of the 2024 AURC. It will go for 90 minutes.