

## AVIATION STATE ENGAGEMENT FORUM

NSW

Submission date: 22/03/2024

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| <b>TITLE</b>        | <b>USYD Rocketry Team – High-Power Rocket Launch</b>   |
| <b>SUBMITTED BY</b> | Girisha Puri: <a href="mailto:rocketry.team@sydney.edu.au">rocketry.team@sydney.edu.au</a>   |
| <b>PURPOSE</b>      | To seek members feedback on the proposal to establish a temporary restricted area (TRA) due to high-power rocket launching activity  |
| <b>KEY ISSUES</b>   | <ul style="list-style-type: none"><li>• Rocket launching activity on the following dates:<ul style="list-style-type: none"><li>○ Sunday 21<sup>st</sup> of July 2024</li><li>○ Monday 22<sup>nd</sup> of July 2024</li><li>○ Tuesday 23<sup>rd</sup> of July 2024</li><li>○ Wednesday 24<sup>th</sup> of July 2024</li><li>○ Thursday 25<sup>th</sup> of July 2024</li><li>○ Friday 26<sup>th</sup> of July 2024</li></ul></li><li>• TRA proposed from Controlling Authority</li></ul> |
| <b>FEEDBACK TO</b>  | Girisha Puri: <a href="mailto:rocketry.team@sydney.edu.au">rocketry.team@sydney.edu.au</a>   |
| <b>CLOSE DATE</b>   | 5/04/2024  |
| <b>ATTACHMENTS</b>  | N/A  |

## OVERVIEW

The University of Sydney Rocketry Team is seeking to conduct a high-power rocket launch of our competition rocket - the 10000ft hybrid Rocket Pardalote. The Team is seeking to conduct the launch at Tolarno Station - approximately 23NM south of Menindee, NSW on the following dates: Sunday 21<sup>st</sup> of July 2024, Monday 22<sup>nd</sup> of July 2024, Tuesday 23<sup>rd</sup> of July 2024, Wednesday 24<sup>th</sup> of July 2024, Thursday 25<sup>th</sup> of July 2024 and Friday 26<sup>th</sup> of July 2024. AvSEF members should check NOTAMs closer to the date to confirm whether the activity will proceed or not.

The proponent is in the process of conducting a consultation regarding the activity with known airspace users such as commercial airlines, as well as other stakeholders. This mitigates any commercial airline activity during launch and communicates the companies of activity progress within the proposed TRA.

Single rocket launch to an apogee of FL200 is proposed in small launch windows between 0900 – 1600 local time between July 21-26<sup>th</sup>. The multiple windows are due to potential preparation delays, such as adverse weather conditions.

As part of the procedures for the launch activity, contact will be made with Air Services at least 30 minutes before the flight of the rocket intended to be launched into controlled airspace. This will confirm the activation of the TRA and ensure no objection to the launch timing.

Additionally, Class G Airspace will be monitored for aircraft before and during the launch activities. This will include maintaining a visual watch of the airspace, monitoring VHF Radio transmissions,

and monitoring ADS-B Transmission from the area.

## PROPOSAL

To mitigate residual airspace risks posed by the activity a TRA is proposed from SFC to FL125 within Class G airspace, and from FL125 to FL200 in the controlled airspace above (kindly refer to images for further visualization)

### TRA - Class G

- Lateral Limits: 6NM radius of 32°45'32"S 142°29'6"E
- Vertical Limits: SFC to FL125
- Controlling Authority: USYD Rockery Team

### TRA - CTA

- Lateral Limits: 6NM radius of 32°45'32"S 142°29'6"E
- Vertical Limits: FL125 to FL200
- Controlling Authority: Air Services Operations Management

### TRA Illustrations

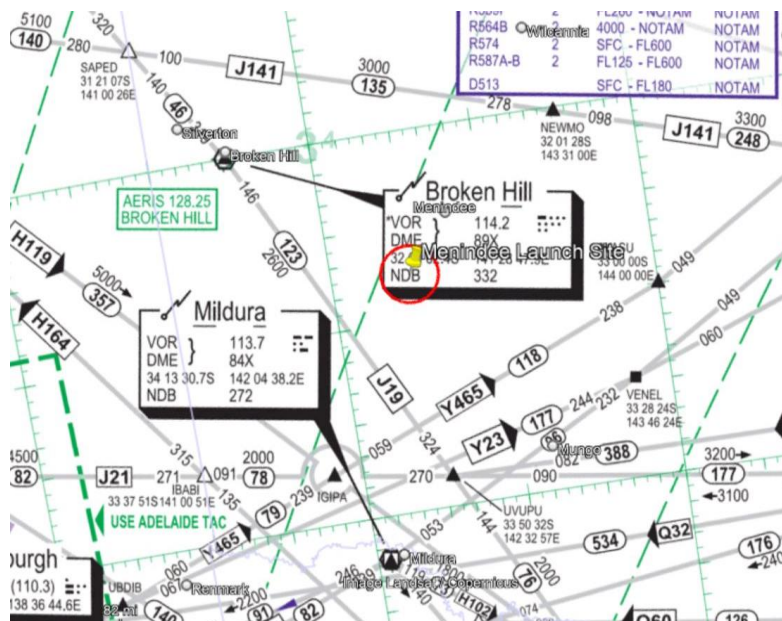
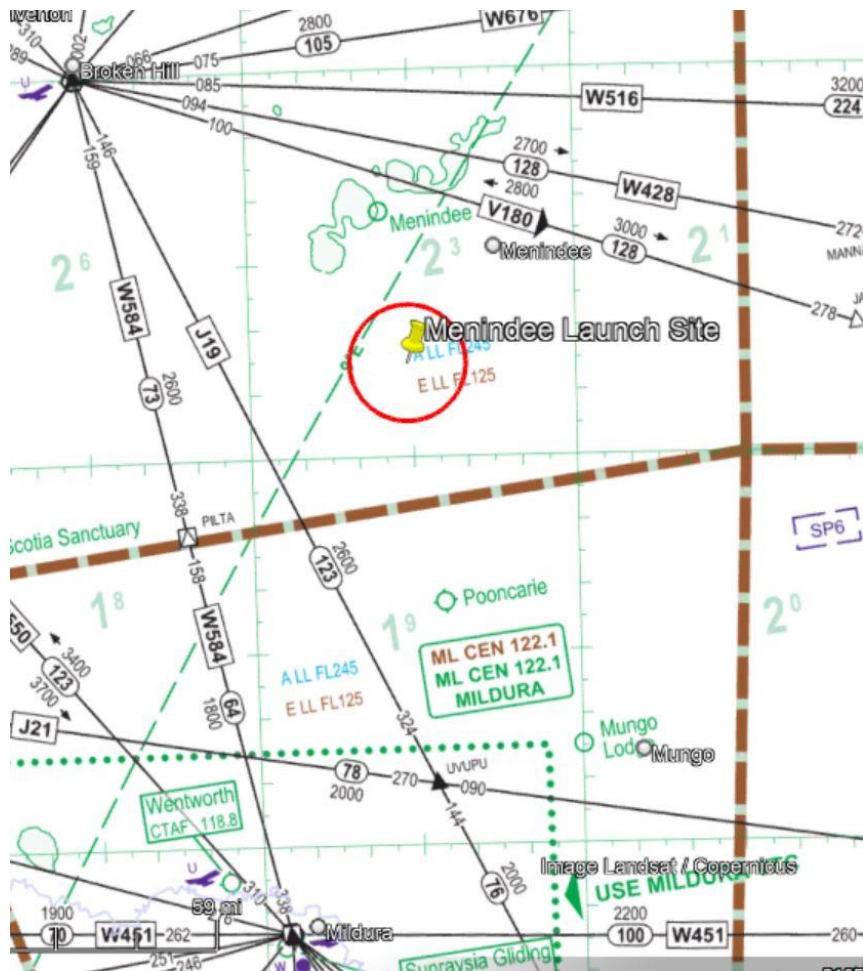


Figure 1. TRA illustrated on the ERC High (ERCH 3)



**Figure 2. TRA illustrated on the ERC Low (ERCL 5)**

If any stakeholder has input concerning the following, please provide feedback. This will ensure consideration can be made on these issues during the assessment process:

- Safety
- Environment
- National security
- Equity of airspace
- Any activities scheduled for the same volume of airspace over the same period