

## AVIATION STATE ENGAGEMENT FORUM

### South Australia

Submission date: 17/08/2020

<b>TITLE</b>	<b>Southern Launch Rocket Launching</b>
<b>SUBMITTED BY</b>	Alex Dallwitz – Office of Airspace Regulation (OAR): <a href="mailto:oar@casa.gov.au">oar@casa.gov.au</a>
<b>CONSULTATION SUMMARY</b>	To seek members feedback on the proposal to establish a temporary restricted area (TRA) due to high level rocket launching activity
<b>KEY ISSUES</b>	<ul style="list-style-type: none"><li>• Rocket launching activity from 14 – 20 September 2020, with a backup window from 28 September – 4 October 2020</li><li>• A TRA is proposed to mitigate residual airspace risk remaining after the application of other mitigation strategies</li></ul>
<b>FEEDBACK TO</b>	Alex Dallwitz – OAR: <a href="mailto:oar@casa.gov.au">oar@casa.gov.au</a>
<b>CLOSE DATE</b>	31 August 2020
<b>ATTACHMENTS</b>	Nil

#### OVERVIEW

On 8 January 2020 SA AvSEF members were consulted by Southern Launch in relation to rocket launching activity proposed for late March near Ceduna. Due to factors related to COVID-19 the proposed launch was delayed. Now Southern Launch is intending to proceed with the activity from 14 – 20 September with 28 September – 4 October as a backup window. The proponent has also conducted further consultation with a wide variety of airspace users including airlines and local operators to advise of their activities.

Two rocket launches have been proposed using a rocket consisting of a two stage 'boosted dart'. The first stage is a solid rocket motor and the second stage is a free flying dart with no propulsion. The first stage detaches during flight, leaving the dart to reach its maximum apogee. One launch will be conducted to a height of 85km under CASA approvals and the other may go to a height of 101km under approvals from the Australian Space Agency (ASA). However, if approval from ASA is not received in time the launch will only be conducted to a height of 85km. The total flight time will be approximately five minutes.

Southern Launch and Airservices Australia (Airservices) have created a Letter of Agreement which details the agreement between the parties on operational issues such as confirmations of launch time, obtaining launch approval, ensuring NOTAM has been promulgated, broadcasts by ATC in the Forrest Sector and advice of completion of the activity. Southern Launch has further procedures for securing the range area prior to commencement of the activity. This includes the Area Controller broadcasting warnings on the Ceduna CTAF frequency every five minutes leading up to launch, starting from 60 minutes prior.

The TRA proposed below is the result of extensive analysis by Southern Launch and evidence of how the various components of this area were calculated has been supplied to the OAR. Activation of the proposed TRA, if approved, will be minimised to reduce impacts on other airspace users and will not be activated whilst the nearby Woomera restricted areas R222I and J are active.

#### PROPOSAL

To mitigate the residual airspace risks posed by these launches, a TRA is proposed as below:

## Southern Launch TRA

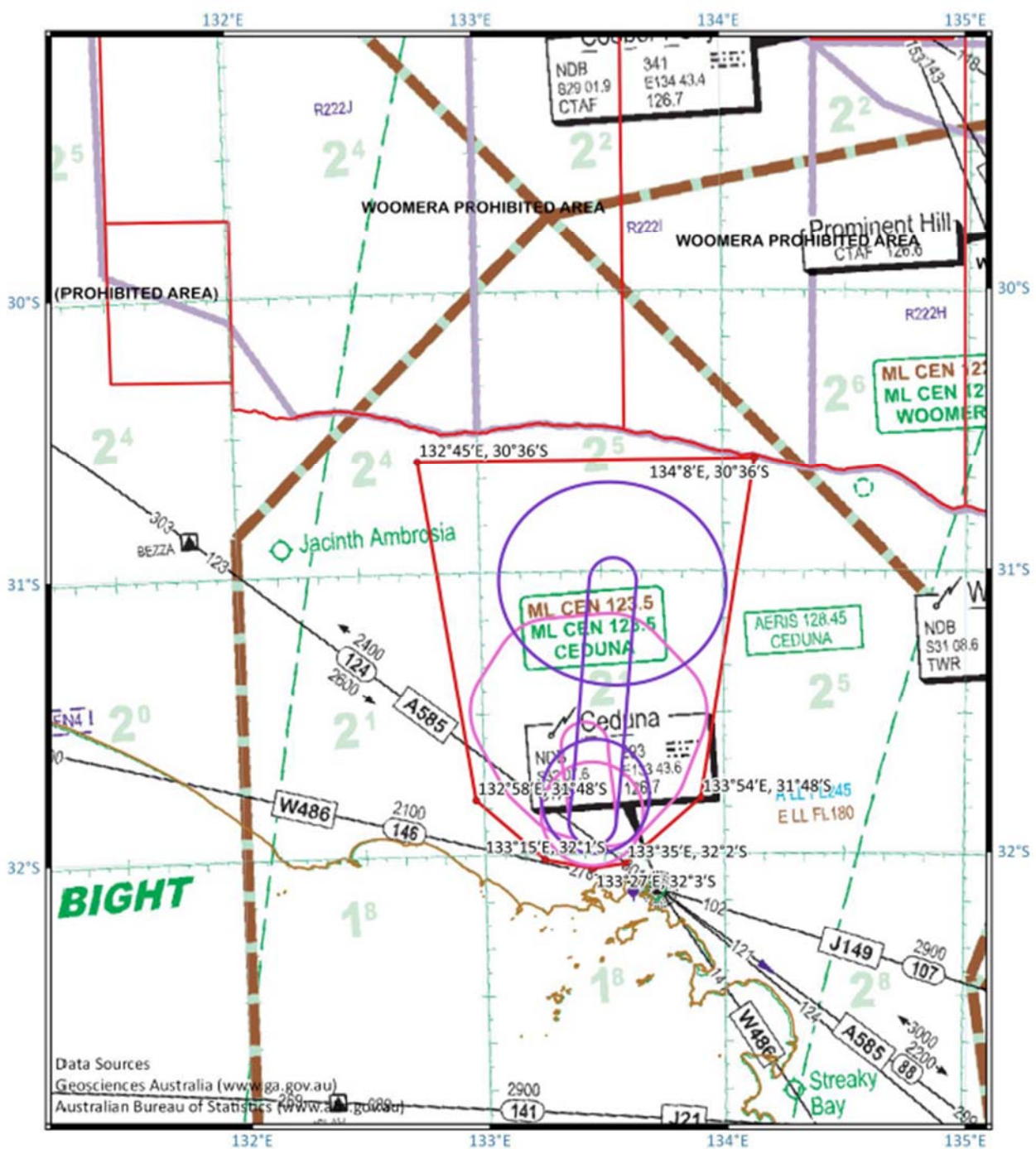
**Lateral Limits:** 314800S 1325800E, 303600S 1324500E, 303600S 1340800E, 314800S 1335400E, 320200S 1333500E, 320300S 1332700E, 320100S 1331500E

**Vertical Limits:** SFC to FL600

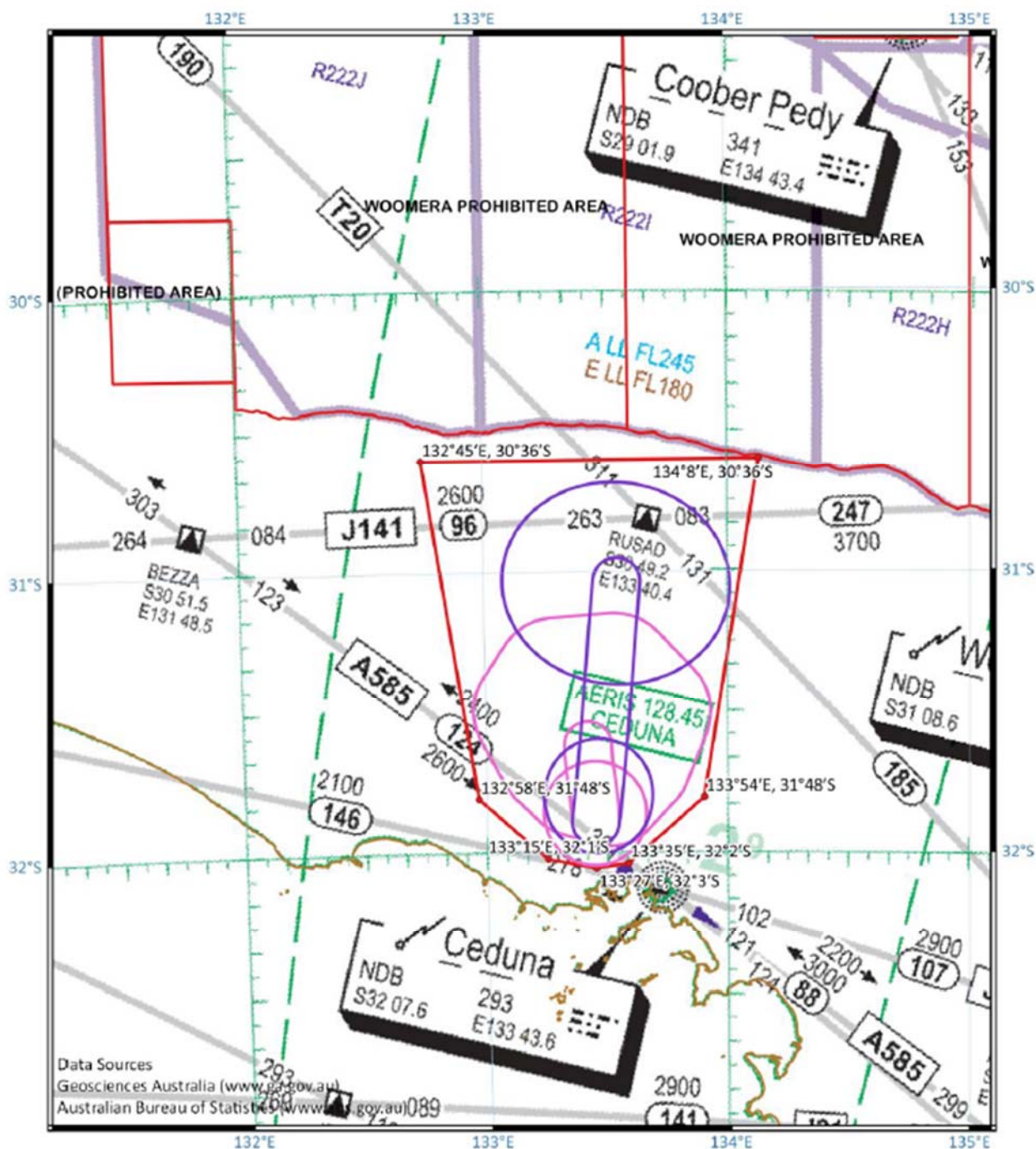
**Controlling Authority:** Airservices ML OPS MGR

Illustrations of the proposed TRA are below:

### ERC Low



### ERC High



If any stakeholder has input in relation to the following, please provide feedback as this will ensure the OAR considers such issues during the assessment process:

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