# AUSTRALIA

# AIP SUPPLEMENT (SUP)

H126/25

# Effective: 202507040400 UTC

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# GILMOUR SPACE - ERIS MSN001 ORBITAL ROCKET LAUNCH

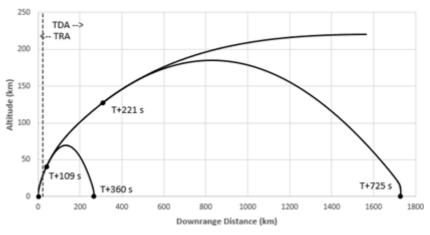
# 1. INTRODUCTION

- 1.1 This SUP cancels and replaces SUP H107/25 with a change to the airspace boundaries in para 3.1 (b).
- 1.2 From 18 June 2025, Gilmour Space Technologies have attempted to launch its Eris orbital rocket over the Coral Sea from the Bowen Orbital Spaceport (BOS), located in Queensland.
- 1.3 Two Temporary Restricted Areas (TRA) and three Temporary Danger Areas (TDA) will be activated to alert airspace users to potential hazards posed by the activity.

# 2. OPERATIONAL INFORMATION - AIRSPACE

- 2.1 The Eris orbital rocket is a 3-stage vehicle that disposes of spent stages throughout its mission profile.
- 2.2 Stages 1 and 2 are intended for disposal over the Coral Sea in scheduled debris drop zones corresponding to TDA STAGE 1 and TDA STAGE 2 (section 3 refers).
- 2.3 Between these TDA there is a significant region of airspace which, under nominal launch conditions, will not be exposed to any hazard. However, an off-nominal launch condition could result in the presence of hazardous debris between the scheduled debris drop zones.
- 2.4 The non-scheduled debris drop zone between TDA STAGE 1 and TDA STAGE 2 corresponds to TDA DRA-YBBB (section 3 refers).

2.5 A nominal mission profile graphic is provided in Figure 1.



MSN001 Mission Profile

Figure 1: MSN001 nominal mission profile

# 3. RESTRICTED AIRSPACE FOR ERIS LAUNCH

3.1 Two TRA will be activated via NOTAM to segregate airspace users from airspace risks associated with the attempted launch of the Eris vehicle.

### a) TRA FILL

TRA FILL separates airspace users from an area within which an explosive hazard exists while the launch vehicle is undergoing filling operations.

### YBBB/TRA FILL

### EXPLOSIVE HAZARD

LATERAL LIMITS: Within 2NM radius of PSN 195729S 1480649E

VERTICAL LIMITS: SFC - 5000FT AMSL

### HOURS OF ACTIVITY: NOTAM

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### b) TRA LAUNCH

TRA LAUNCH is for the land and ocean segments up to 12NM from the coastline overflown by the Eris first stage.

### YBBB/TRA LAUNCH

### **ROCKET LAUNCH**

LATERAL LIMITS: 195940S 1480049E - 195535S 1480058E -194651S 1480645E - 193118S 1482031E - 194713S 1483415E -194900S 1484035E - 195042S 1485657E - 200043S 1482449E -200343S 1481551E - 200231S 1480545E - 200153S 1480224E -195940S 1480049E

VERTICAL LIMITS: SFC - UNL

HOURS OF ACTIVITY: NOTAM

CONTROLLING AUTHORITY: Gilmour Space, PH: 07 5618 9041

### 3.2 Stage 1 and 2 Returns

The areas within which there is debris scheduled to return are declared as two distinct TDA.

### a) TDA STAGE 1

TDA STAGE 1 (Brisbane FIR) corresponds to the area beyond 12NM from the Australian coastline intended to capture Stage 1 scheduled debris return.

### YBBB/TDA STAGE 1

### LAUNCH DEBRIS

LATERAL LIMITS: 193118S 1482031E - 185732S 1484620E - 180713S 1501907E - 191317S 1505639E - 195620S 1493429E - 195042S 1485657E - 194900S 1484035E - 194713S 1483415E - 193118S 1482031E

VERTICAL LIMITS: SFC - UNL

HOURS OF ACTIVITY: NOTAM

CONTACT: Gilmour Space, PH: 07 5618 9041

### b) TDA STAGE 2

TDA STAGE 2 is designed to capture Stage 2 scheduled debris return.

### TDA STAGE 2

### LAUNCH DEBRIS

**LATERAL LIMITS:** 140000S 1572821E - 103241S 1631224E - 113543S 1635240E - 140000S 1595515E - 140000S 1572821E

VERTICAL LIMITS: SFC - UNL

### HOURS OF ACTIVITY: NOTAM

CONTACT: Gilmour Space, PH: 07 5618 9041

### 3.3 Debris Response Areas (DRA)

The Debris Response Areas corresponds to the area within which there is a risk of unscheduled debris following a failure of the launch vehicle during the Stage 2 burn. The DRA are declared as two distinct TDA.

### TDA DRA-YBBB

TDA DRA-YBBB is defined as a polygon, 75NM wide, joining TDA STAGE 1 and TDA STAGE 2.

### **TDA DRA-YBBB**

### LAUNCH DEBRIS

**LATERAL LIMITS:** 180713S 1501907E - 140000S 1572821E - 140000S 1595515E - 191317S 1505639E - 180713S 1501907E

VERTICAL LIMITS: SFC - UNL

### HOURS OF ACTIVITY: NOTAM

CONTACT: Gilmour Space, PH: 07 5618 9041

# 4. ACTIVATION TIMES AND HAZARD DURATIONS

4.1 Expected NOTAM activation times (other than TRA FILL) are presented as follows:

Daily NOTAM Activation Period 1 -

2130 to 0115 UTC daily as per NOTAM

### Daily NOTAM Activation Period 2 -

0330 to 0730 UTC daily as per NOTAM

- 4.2 TRA FILL will activate prior to all other TRA/TDA.
- 4.3 All other TRA/TDA will be activated simultaneously.
- 4.4 All NOTAM will be published 14 days prior to an identified launch window.
- 4.5 Should a launch delay occur, NOTAM will be reviewed as required.
- 4.6 The maximum duration of the TRA/TDA activations is detailed below.

	TRA FILL	TRA LAUNCH, ALL TDA
Nominal	36 hours (18 hours before activity to 18 hours after activity)	90 MIN
Delay/Hold	Per published active period	5 hours
Failure	Per published active period	90 MIN (no delays) 5 hours (with delays)
Scrub	Per published active period	30 MIN (no delays) 5 hours (with delays)

# 5. DIVERSION TRACKS

- 5.1 Orbital Rocket Launch Activity (refer Appendix 1).
- 5.2 Pilots should be aware that flight is restricted when operating in the vicinity of ERIS MSN001 Orbital Rocket Launch Temporary Restricted Areas (TRA).
- 5.3 The following routes are restricted during ERIS MSN001 Orbital Rocket Launch TRA activation:
  - Q67 YBBN-YBCS
  - B462
  - V153 YBTL–YBMK

- Q141
- W112
- W387
- Z17
- Z25

The following routes are affected during ERIS MSN001 Orbital Rocket TDA activation:

- B220
- G591
- G205
- Aircraft requesting User Preferred Routes (UPR) in the YBBB FIR in the vicinity of the TRA.
- 5.4 Pilots intending to operate on these routes are advised to plan in accordance with the diversion tracks specified in the following tables.
- 5.5 The diversion tracks below are also available for pilots intending to operate on routes impacted by the ERIS MSN001 Orbital Rocket Launch Temporary Danger Areas (TDA).

### 5.6 Diversion Track Tables

Affected Route	Q67 YBBN - YBCS
Use diversion track	RUNLA – BITAS – WALTA – RUMKA
Purpose	Separation from activity airspace

Affected Route	B462 (southbound)
Use diversion track	NONIR – WALTA – BITAS – MK VOR
Purpose	Separation from activity airspace

Affected Route	B462 (northbound)
Use diversion track	MK VOR – BITAS – WALTA – NONIR
Purpose	Separation from activity airspace

Affected Route	V153 YBTL - YBMK	
Use diversion track	WALTA – BITAS – DAGSI	
Purpose	Separation from activity airspace	
Affected Route	Q141 (joining B462 northbound)	
Use diversion track	NITIT-BITAS-WALTA then;	
	track to NONIR to join B462 or;	
	track to PIPPA to join G205	
Purpose	Separation from activity airspace	
	[]	
Affected Route	W387 (southbound)	
Use diversion track	LINBO-WALTA-BITAS-PN VOR rejoin W387	
Purpose	Separation from activity airspace	
Affected Route	W387 (northbound)	
Use diversion track	PN VOR-BITAS-WALTA-LINBO rejoin W387	
Purpose	Separation from activity airspace	
Affected Route	Z17 (southbound)	
Use diversion track	AKROM-WALTA-BITAS-DAGSI then to a position to join next air route	
Purpose	Separation from activity airspace	
Affected Route	Z17 (northbound)	
Use diversion track	DAGSI-BITAS-WALTA-AKROM then join next air route	
Purpose	Separation from activity airspace	
Affected Route	Z25 (southbound)	
Use diversion track	AKROM-WALTA-BITAS-DAGSI then a	
	position to join next air route	
Purpose	Separation from activity airspace	

Affected Route	Z25 (northbound)
Use diversion track	DAGSI-BITAS-WALTA-AKROM then join next air route
Purpose	Separation from activity airspace

### 5.7 Diversion Track Tables (TDA)

Affected Route	B220 (southbound)
Use diversion track	DOTOD – WALTA – BITAS – KELPI
Purpose	Separation from activity airspace

Affected Route	B220 (northbound)
Use diversion track	KELPI – BITAS – WALTA – DOTOD
Purpose	Separation from activity airspace

Affected Route	G205 (southbound)
Use diversion track	PIPPA-WALTA-BITAS-DAGSI to a
	position to join next air route
Purpose	Separation from activity airspace

Affected Route	G205 (northbound)
	From a position (prior to OVRON), DAGSI-BITAS-WALTA-PIPPA
Purpose	Separation from activity airspace

Affected Route	G591 (eastbound)
Use diversion track	CS-WALTA-BITAS-DAGSI-PUGEL join G591
Purpose	Separation from activity airspace

Affected Route	G591 (westbound)
Use diversion track	PUGEL-DAGSI-BITAS-WALTA-CS to join J151
Purpose	Separation from activity airspace

	UPR (northbound – tracking west of the activity airspace)
Use diversion track	DAGSI – BITAS – WALTA
Purpose	Separation from activity airspace

	UPR (southbound – tracking west of the activity airspace)
Use diversion track	WALTA – BITAS – DAGSI
Purpose	Separation from activity airspace

5.8 Please direct all enquiries relating to Diversion Tracks to atm.director@airservicesaustralia.com

# 6. CONTACT DETAILS

6.1 TRA Controlling Authority is the Gilmour Space Range Safety Officer.

VHF Radio - CTAF: 126.7 MHz.

Phone: 07 5618 9041

Email: rso@gspace.com

# 7. CANCELLATION

7.1 This SUP is associated with ongoing rocket launching activities and remains in force until cancelled.

# 8. **DISTRIBUTION**

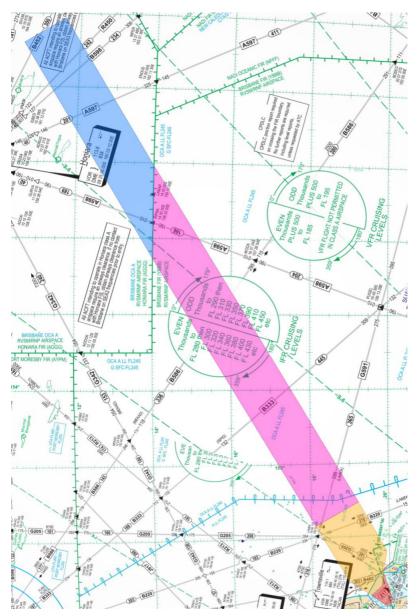
8.1 Airservices Australia website only.

# Appendices

- 1. Temporary SUA Overview
- 2. TRA FILL
- 3. TRA LAUNCH
- 4. TDA STAGE 1 Brisbane FIR
- 5. TDA STAGE 2 Honiara FIR
- 6. TDA DRA-YBBB Brisbane FIR

# Appendix 1 to SUP H126/25

# 1. Temporary SUA Overview



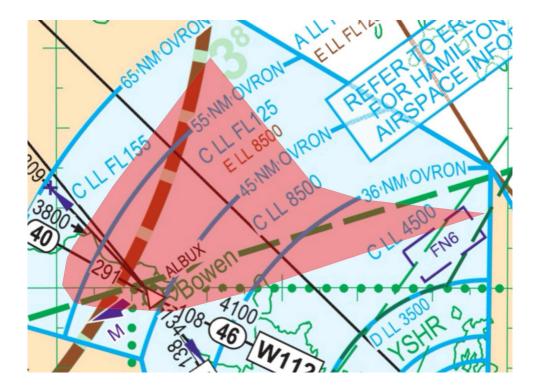
# Appendix 2 to SUP H126/25

# 2. TRA FILL



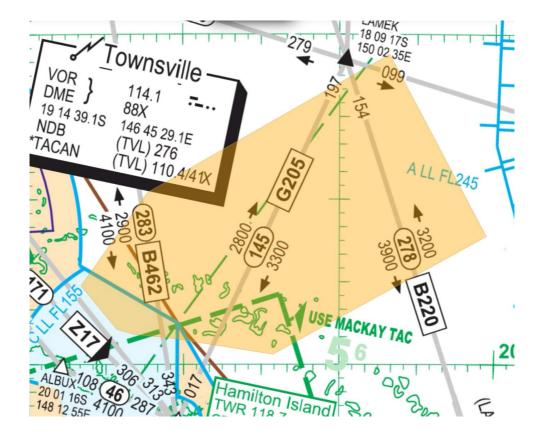
Appendix 3 to SUP H126/25

# 3. TRA LAUNCH



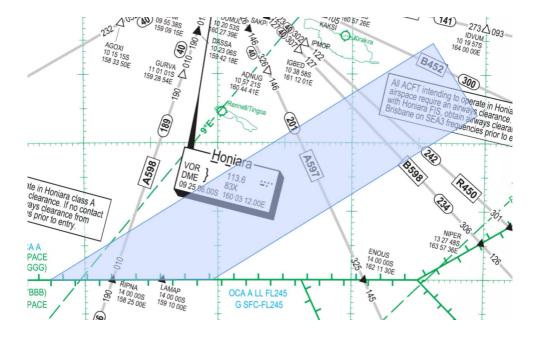
Appendix 4 to SUP H126/25

# 4. TDA STAGE 1 – Brisbane FIR



Appendix 5 to SUP H126/25

# 5. TDA STAGE 2 – Honiara FIR



Appendix 6 to SUP H126/25

# 6. TDA DRA-YBBB – Brisbane FIR

