

**STANDARD DEPARTURE CHART  
RNAV (GNSS) -  
INSTRUMENT (SID)**

TWR 118.6 / 118.25  
APP 120.3  
124.05  
ACC 133.25

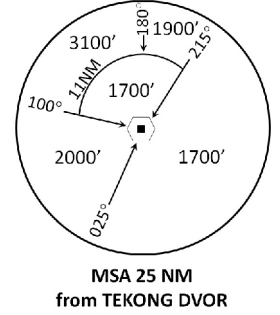
TRANSITION ALTITUDE  
11 000ft

D-ATIS AP ID-WSSS  
128.6

**SINGAPORE/Singapore Changi  
RWY 02C  
AROSO DEPARTURES  
AROSO 3A**

**ELEV, ALT IN FEET  
BEARINGS, TRACKS AND  
RADIALS ARE MAGNETIC  
VAR 0°23'E (2020)**

DISTANCES IN NM



**AROSO**  
02° 08' 46" N  
103° 24' 21" E



**AKMET**  
01° 53' 55" N  
103° 43' 39" E  
**A110**

**GENERAL INFORMATION**

**INITIAL CLIMB  
3000FT**

**CAUTION: RWY 02R/20L CLOSED UNTIL FURTHER ADVISED**

- NOTE:** RADAR REQUIRED
- NOTE:** RNAV-1 NAVIGATION SPECIFICATION GNSS REQUIRED
- NOTE:** CLOSE-IN OBSTACLES (AIRCRAFT UP TO 80FT) EXIST ON TAXIWAYS WEST OF RUNWAY 02C
- NOTE:** ACFT UNABLE TO FLY THE SID PROFILE SHALL INFORM ATC PRIOR TO DEPARTURE AND EXPECT RADAR VECTORED IF NECESSARY
- NOTE:** WHEN TAKEN OFF THE SID, AS INSTRUCTED BY ATC, REFER TO ENR 1.5, SECTION 3, PARAGRAPH 3.3 [A] - FOR RWY 02C MINIMUM CLIMB GRADIENT
- NOTE:** REFER TO BACK PAGE FOR - FORMAL AND TABULAR DESCRIPTIONS - RADIO COM FAILURE PROCEDURES

**PROCEDURE INFORMATION**

SID SHALL NOT EXCEED IAS 230KTS UNTIL PASSING 4000FT AMSL AND NOT EXCEED IAS 250KTS UNTIL PASSING 10000FT AMSL.  
CRUISING LEVELS WILL BE ISSUED AFTER TAKE-OFF BY SINGAPORE RADAR.  
SID SHALL BE ON A MINIMUM CLIMB GRADIENT OF 5% UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%.

GND SPEED - KNOTS	75	100	150	200	250	300
5% V/V (fpm)	380	506	760	1013	1266	1519
3.3% V/V (fpm)	251	334	501	668	835	1003

**DER (RWY 02C)**  
01° 21' 45" N  
103° 59' 57" E

**AKOMA**  
01° 45' 22" N  
103° 54' 43" E  
**A070**



**MOXIB**  
01° 29' 33" N  
104° 03' 15" E  
**A020**

**TEKONG**  
DVOR/DME 116.5  
VTK  
01° 24' 55" N  
104° 01' 20" E  
60M

NOT TO SCALE

21 MAR 2024

**AROSO 3A (SID) RNAV GNSS RWY 02C - DESCRIPTIONS****Formal & Abbreviated Descriptions**

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
To MOXIB on course 023° at or above 2000ft, turn left.	MOXIB [M023; A020+; L] -	CF	N
To AKOMA at or above 7000ft, turn left.	AKOMA [A070+; L] -	TF	N
To AKMET at or above 11000ft.	AKMET [A110+] -	TF	N
To AROSO.	AROSO	TF	N

**Tabular Descriptions**

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Distance (NM)	Turn Direction	Altitude	Speed Limit	Navigation Spec
CF	MOXIB	-	023(023.4)	8.0	L	A020+	-	RNAV1
TF	AKOMA	-	331(331.4)	18.0	L	A070+	-	RNAV1
TF	AKMET	-	307(307.4)	14.0	-	A110+	-	RNAV1
TF	AROSO	-	307(307.4)	24.0	-	-	-	RNAV1

**Radio Communications Failure Procedure**

1	<b>SET TRANSPONDER TO MODE A/C CODE 7600</b>
2	<b>COMMUNICATIONS FAILURE OCCURS IMMEDIATELY AFTER DEPARTURE:</b> PROCEED DIRECT TO NYLON HOLDING AREA (NHA) CLIMBING TO THE LAST ASSIGNED ALTITUDE, THEREAFTER REFER TO SINGAPORE AIP ON RADIO COMMUNICATIONS FAILURE PROCEDURE.