

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

TWR 118.6 / 118.25  
APP 120.3  
124.05  
ACC 133.25

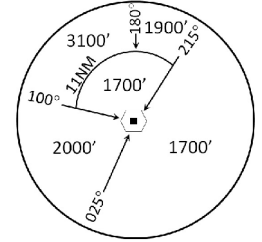
TRANSITION ALTITUDE  
11 000ft

D-ATIS AP ID-WSSS  
128.6

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

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

DISTANCES IN NM



MSA 25 NM  
from TEKONG DVOR

**MASBO**  
02° 02' 48" N  
102° 52' 51" E

296°  
27

**SABKA**  
01° 50' 51" N  
103° 17' 13" E

278°  
25

**AGVAR**  
01° 47' 19" N  
103° 41' 45" E  
**A110**

**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 TO  
EXPECT RADAR VECTURING,  
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

**GENERAL INFORMATION**

**INITIAL CLIMB  
3000FT**

ALL SIDs INCLUDE NOISE PREFERENTIAL ROUTES.

**RWY 02C**

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

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

331°  
18

**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

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

NOT TO SCALE

21 MAR 2024

**MASBO 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 AGVAR at or above 11000ft.	AGVAR [A110+] -	TF	N
To SABKA, turn right.	SABKA [R] -	TF	N
To MASBO.	MASBO	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	AGVAR	-	278(278.4)	13.0	-	A110+	-	RNAV1
TF	SABKA	-	278(278.4)	25.0	R	-	-	RNAV1
TF	MASBO	-	296(296.4)	27.0	-	-	-	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.