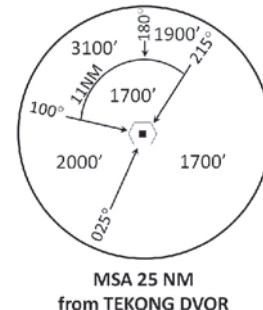


**STANDARD DEPARTURE CHART**  
**RNAV (GNSS) -**  
**INSTRUMENT (SID)**TWR 118.6 / 118.25  
APP 120.3  
124.05  
ACC 133.25TRANSITION ALTITUDE  
11 000ftD-ATIS AP ID-WSSS  
128.6**SINGAPORE/Singapore Changi**  
**RWY 20C**  
**MASBO DEPARTURES**  
**MASBO 5B**ELEV, ALT IN FEET  
BEARINGS, TRACKS AND  
RADIALS ARE MAGNETIC  
VAR 0°23'E (2022)

NOT TO SCALE

DISTANCES IN NM

**MASBO**  
02° 02' 48" N  
102° 52' 51" E**SABKA**  
01° 50' 51" N  
103° 17' 13" E**AGVAR**  
01° 47' 19" N  
103° 41' 45" E**AKOMA**  
01° 45' 22" N  
103° 54' 43" E  
**A110****GENERAL INFORMATION****INITIAL CLIMB**  
**3000FT****CAUTION: RWY 02R/20L NOT AVAILABLE FOR CIVIL USE UNTIL FURTHER ADVISED****NOTE:** RADAR REQUIRED**NOTE:** RNAV-1 NAVIGATION SPECIFICATION GNSS REQUIRED**NOTE:** ACFT UNABLE TO FLY THE SID PROFILE  
SHALL INFORM ATC PRIOR TO DEPARTURE AND  
EXPECT RADAR VECTURING IF NECESSARY**NOTE:** WHEN TAKEN OFF THE SID, AS INSTRUCTED BY ATC,  
REFER TO ENR 1.5, SECTION 3, PARAGRAPH 3.4.1  
- FOR RWY 20C 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 7%  
UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%.

| GND SPEED - KNOTS | 75  | 100 | 150  | 200  | 250  | 300  |
|-------------------|-----|-----|------|------|------|------|
| 7% V/V (fpm)      | 532 | 709 | 1063 | 1418 | 1772 | 2127 |
| 3.3% V/V (fpm)    | 251 | 334 | 501  | 668  | 835  | 1003 |

**DER (RWY 20C)**  
01° 19' 42" N  
103° 59' 05" E**IBIXU**  
01° 16' 21" N  
103° 57' 40" E  
**A015****IBIVA**  
01° 13' 51" N  
103° 56' 37" E  
**A025****DUBOT**  
01° 08' 46" N  
104° 01' 03" E  
**A040****TEKONG**  
DVOR/DME 116.5  
VTK   
01° 24' 55" N  
104° 01' 20" E  
60M  
**A070****SALRU**  
01° 17' 01" N  
104° 08' 02" E**ADPON**  
01° 12' 03" N  
104° 05' 14" E

MASBO 5B (SID) RNAV GNSS RWY 20C - DESCRIPTIONS

Formal & Abbreviated Descriptions

| Formal Description                          | Abbreviated Description | Path Terminator | Fly-Over required |
|---------------------------------------------|-------------------------|-----------------|-------------------|
| To IBIXU on course 203° at or above 1500ft. | IBIXU [M203; A015+] -   | CF              | N                 |
| To IBIVA at or above 2500ft, turn left.     | IBIVA [A025+; L] -      | TF              | N                 |
| To DUBOT at or above 4000ft, turn left.     | DUBOT [A040+; L] -      | TF              | N                 |
| To ADPON, turn left.                        | ADPON [L] -             | TF              | N                 |
| To SALRU, turn left.                        | SALRU [L] -             | TF              | N                 |
| To VTK at or above 7000ft, turn right.      | VTK [A070+; R] -        | TF              | N                 |
| To AKOMA at or above 11000ft, turn left.    | AKOMA [A110+; L] -      | TF              | N                 |
| To AGVAR.                                   | AGVAR -                 | 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        | IBIXU         | -        | 203(203.4)    | 4.0           | -              | A015+    | -           | RNAV1           |
| TF        | IBIVA         | -        | 203(203.4)    | 3.0           | L              | A025+    | -           | RNAV1           |
| TF        | DUBOT         | -        | 138(138.4)    | 7.0           | L              | A040+    | -           | RNAV1           |
| TF        | ADPON         | -        | 052(052.4)    | 5.0           | L              | -        | -           | RNAV1           |
| TF        | SALRU         | -        | 029(029.4)    | 6.0           | L              | -        | -           | RNAV1           |
| TF        | VTK           | -        | 319(319.4)    | 10.0          | R              | A070+    | -           | RNAV1           |
| TF        | AKOMA         | -        | 342(342.4)    | 21.0          | L              | A110+    | -           | RNAV1           |
| TF        | AGVAR         | -        | 278(278.4)    | 13.0          | -              | -        | -           | RNAV1           |
| TF        | SABKA         | -        | 278(278.4)    | 25.0          | R              | -        | -           | RNAV1           |
| TF        | MASBO         | -        | 296(296.4)    | 27.0          | -              | -        | -           | RNAV1           |

Radio Communications Failure Procedure

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