

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 20C
VOVOS DEPARTURES
VOVOS 1B

ELEV, ALT IN FEET

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

DISTANCES IN NM

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 VECTORING 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

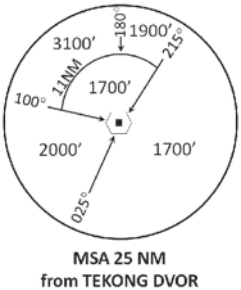
NOTE: VOVOS SID WILL NOT BE AVAILABLE FOR
FLIGHT PLANNING UNTIL FURTHER ADVISED

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 |



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

DER(RWY 20C)
01° 19' 42.00"N
103° 59' 05.00"E

IBIXU
01° 16' 21"N
103° 57' 40"E
A015

IBIVA
01° 13' 51"N
103° 56' 37"E
A025

SAMKO
01° 05' 30"N
103° 52' 55"E
A040

BOKIP
01° 04' 21"N
103° 43' 53"E

VOVOS
01° 11' 23"N
103° 26' 51"E

ATLEX
01° 03' 02"N
103° 33' 31"E

NOT TO SCALE

VOVOS 1B (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 right. | IBIVA [A025+; R] - | TF | N |
| To SAMKO at or above 4000ft, turn right. | SAMKO [A040+; R] - | TF | N |
| To BOKIP. | BOKIP - | TF | N |
| To ATLEX, turn right. | ATLEX [R] - | TF | N |
| To VOVOS. | VOVOS | 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 | R | A025+ | - | RNAV1 |
| TF | SAMKO | - | 204(204.4) | 9.0 | R | A040+ | - | RNAV1 |
| TF | BOKIP | - | 262(262.4) | 9.0 | - | - | - | RNAV1 |
| TF | ATLEX | - | 262(262.4) | 10.0 | R | - | - | RNAV1 |
| TF | VOVOS | - | 321(321.4) | 11.0 | - | - | - | RNAV1 |

Radio Communications Failure Procedure

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