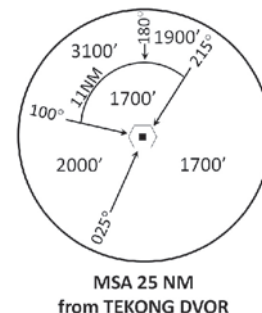


STANDARD DEPARTURE CHART
RNAV (GNSS) -
INSTRUMENT (SID)TWR 118.6 / 118.25
APP 120.3
124.05
ACC 133.25TRANSITION ALTITUDE
11 000ftD-ATIS AP ID-WSSS
128.6**SINGAPORE/Singapore Changi**
RWY 20L
MASBO DEPARTURES
MASBO 1DELEV, ALT IN FEET
BEARINGS, TRACKS AND
RADIALS ARE MAGNETIC
VAR 0°23'E (2022)

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**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 3.4.3
- FOR RWY 20L 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 9%
UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%.

GND SPEED - KNOTS	75	100	150	200	250	300
9% V/V (fpm)	684	911	1367	1823	2279	2734
3.3% V/V (fpm)	251	334	501	668	835	1003

DER(RWY 20L)
01°19'19"N
103°59'59"E**UKIBO**
01°17'58"N
103°59'24"E**POVEB**
01°13'44"N
104°01'30"E**TEKONG**
DVOR/DME 116.5
VTK
01°24'55"N
104°01'20"E
60M**SALRU**
01°17'01"N
104°08'02"E**ADPON**
01°12'03"N
104°05'14"E

MASBO 1D (SID) RNAV GNSS RWY 20L - DESCRIPTIONS

Formal & Abbreviated Descriptions

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
To UKIBO on course 203°, turn left.	UKIBO [M203; L] -	CF	N
To POVEB at or above 2500ft, turn left.	POVEB [A025+; L] -	TF	N
To ADPON at or above 4000ft, turn left.	ADPON [A040+; 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	UKIBO	-	203(203.4)	1.5	L	-	-	RNAV1
TF	POVEB	-	153(153.4)	5.0	L	A025+	-	RNAV1
TF	ADPON	-	114(114.4)	4.0	L	A040+	-	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: PROCEED DIRECT TO SAMKO HOLDING AREA (SHA) CLIMBING TO THE LAST ASSIGNED ALTITUDE, THEREAFTER REFER TO SINGAPORE AIP ON RADIO COMMUNICATIONS FAILURE PROCEDURE.