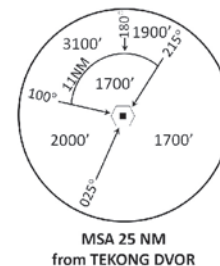


STANDARD DEPARTURE CHART
RNAV (GNSS) -
INSTRUMENT (SID)TWR 118.6 / 118.25
APP 120.3
124.05
ACC 134.4TRANSITION ALTITUDE
11 000ftD-ATIS AP ID-WSSS
128.6**SINGAPORE/Singapore Changi**
RWY 02R
KIRDA DEPARTURES (RADAR)
KIRDA 1CELEV, ALT IN FEET
BEARINGS, TRACKS AND
RADIALS ARE MAGNETIC
VAR 0°23'E (2020)

DISTANCES IN NM

**EXPECT RADAR vectors
to waypoint HOSBA****TEKONG**
DVOR/DME 116.5
VTK
01°24'55"N
104°01'20"E
60M**DER(RWY02R)**
01°21'22"N
104°00'51"E**HOSBA**
01°19'48"N
104°24'18"E
A070**VANBU**
01°06'43"N
104°27'40"E
A090**VIRET**
00°39'40"N
104°35'11"E
FL160**GURES**
00°28'14"N
104°38'35"E**IKIRO**
00°08'49"N
104°44'20"E**KIRDA**
00°00'09"N
104°59'34"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 VECTORING IF NECESSARY**NOTE:** WHEN TAKEN OFF THE SID, AS INSTRUCTED BY ATC,
REFER TO ENR 1.5, SECTION 3, PARAGRAPH 3.5
- FOR RWY 02R 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

NOT TO SCALE

KIRDA 1C (SID) RNAV GNSS RWY 02R - DESCRIPTIONS

Formal & Abbreviated Descriptions

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
Climb heading 023°, Gradient 5% to 2500ft, thence 3.3%. Expect radar vectors to waypoint HOSBA.	-	VA	N
To HOSBA at or above 7000ft.	HOSBA [A070+] -	DF	N
To VANBU at or below 9000ft, turn left.	VANBU [A090-; L] -	TF	N
To VIRET at or above FL160, turn left.	VIRET [FL160+; L] -	TF	N
To GURES.	GURES -	TF	N
To IKIRO, turn left.	IKIRO [L] -	TF	N
To KIRDA.	KIRDA	TF	N

Tabular Descriptions

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Distance (NM)	Turn Direction	Altitude	Speed Limit	Navigation Spec
VA	-	-	023(023.4)	-	-	A030	-	-
DF	HOSBA	-	-	-	-	A070+	-	RNAV1
TF	VANBU	-	165(165.4)	13.0	L	A090-	-	RNAV1
TF	VIRET	-	164(164.4)	28.0	L	FL160+	-	RNAV1
TF	GURES	-	163(163.3)	12.0	-	-	-	RNAV1
TF	IKIRO	-	163(163.3)	20.0	L	-	-	RNAV1
TF	KIRDA	-	119(119.3)	18.0	-	-	-	RNAV1

Radio Communications Failure Procedure

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