

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

TWR 118.6  
APP 120.3  
124.05  
ACC 134.4

TRANSITION ALTITUDE  
11 000ft

D-ATIS AP ID-WSSS  
128.6

**SINGAPORE/Singapore Changi**  
**RWY 02L/20R**  
**KADAR DEPARTURES**  
**KADAR 1E (R02L)**  
**KADAR 3F (R20R)**

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

DISTANCES IN NM

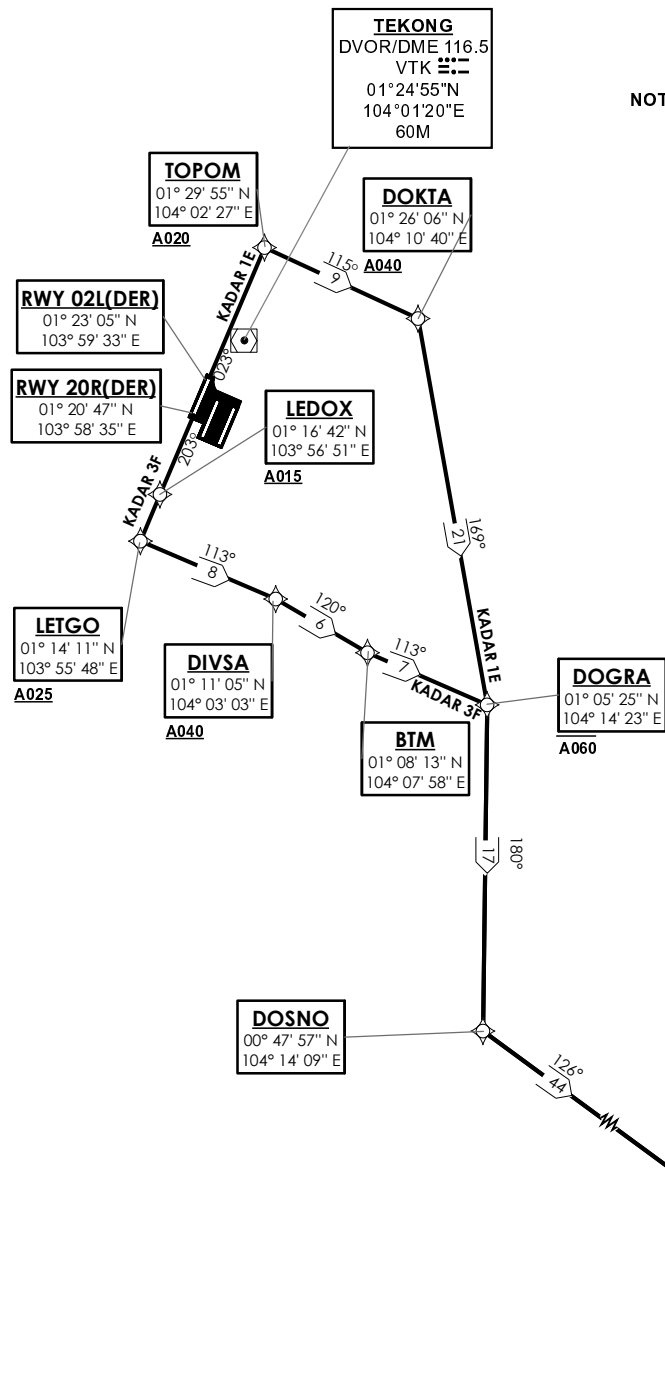
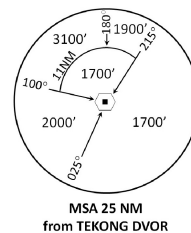
**NOTE:** RADAR REQUIRED

**NOTE:** RNAV-1 NAVIGATION SPECIFICATION  
GNSS REQUIRED

**NOTE:** ACFT UNABLE TO FLY THE SID  
PROFILE SHALL INFORM ATC  
PRIOR TO DEPARTURE AND TO  
EXPECT RADAR VECTURING,  
IF NECESSARY

**NOTE:** WHEN TAKEN OFF THE SID,  
AS INSTRUCTED BY ATC,  
REFER TO ENR 1.5, SECTION 3,  
PARAGRAPH 3.2 (A) - FOR RWY 02L MINIMUM CLIMB GRADIENT AND  
PARAGRAPH 3.4.2 - FOR RWY 20R 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 02L**

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 3.3%.

**RWY 20R**

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 6%  
UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%.

GND SPEED - KNOTS	75	100	150	200	250	300
6% V/V (fpm)	456	608	911	1215	1518	1821
3.3% V/V (fpm)	251	334	501	668	835	1003

NOT TO SCALE

25 JAN 2024

**KADAR 1E (SID) RNAV GNSS RWY 02L - DESCRIPTIONS****Formal & Abbreviated Descriptions**

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
To TOPOM on course 023° at or above 2000ft, turn right. To DOKTA at or above 4000ft, turn right. To DOGRA at or below 6000ft, turn right. To DOSNO, turn left. To VENPA, turn left. To ATKAX, turn right. To KADAR.	TOPOM [M023; A020+; R] -	CF	N
	DOKTA [A040+; R] -	TF	N
	DOGRA [A060-; R] -	TF	N
	DOSNO [L] -	TF	N
	VENPA [L] -	TF	N
	ATKAX [R] -	TF	N
	KADAR	TF	N

**Tabular Descriptions**

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Magnetic Variation	Turn Direction	Altitude	Speed Limit	Navigation Spec
CF	TOPOM	-	023(023.4)	-0.4	R	A020+	-	RNAV1
TF	DOKTA	-	115(115.4)	-0.4	R	A040+	-	RNAV1
TF	DOGRA	-	169(169.4)	-0.4	R	A060-	-	RNAV1
TF	DOSNO	-	180(180.4)	-0.4	L	-	-	RNAV1
TF	VENPA	-	126(126.4)	-0.4	L	-	-	RNAV1
TF	ATKAX	-	097(097.4)	-0.4	R	-	-	RNAV1
TF	KADAR	-	105(105.4)	-0.4	-	-	-	RNAV1

**KADAR 3F (SID) RNAV GNSS RWY 20R - DESCRIPTIONS****Formal & Abbreviated Descriptions**

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
To LEDOX on course 203° at or above 1500ft. To LETGO at or above 2500ft, turn left. To DIVSA at or above 4000ft, turn right. To BTM, turn left. To DOGRA at or below 6000ft, turn right. To DOSNO, turn left. To VENPA, turn left. To ATKAX, turn right. To KADAR.	LEDOX [M203; A015+] -	CF	N
	LETGO [A025+; L] -	TF	N
	DIVSA [A040+; R] -	TF	N
	BTM [L] -	TF	N
	DOGRA [A060-; R] -	TF	N
	DOSNO [L] -	TF	N
	VENPA [L] -	TF	N
	ATKAX [R] -	TF	N
KADAR	TF	N	

**Tabular Descriptions**

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Magnetic Variation	Turn Direction	Altitude	Speed Limit	Navigation Spec
CF	LEDOX	-	203(203.4)	-0.4	-	A015+	-	RNAV1
TF	LETGO	-	203(203.4)	-0.4	L	A025+	-	RNAV1
TF	DIVSA	-	113(113.4)	-0.4	R	A040+	-	RNAV1
TF	BTM	-	120(120.4)	-0.4	L	-	-	RNAV1
TF	DOGRA	-	113(113.4)	-0.4	R	A060-	-	RNAV1
TF	DOSNO	-	180(180.4)	-0.4	L	-	-	RNAV1
TF	VENPA	-	126(126.4)	-0.4	L	-	-	RNAV1
TF	ATKAX	-	097(097.4)	-0.4	R	-	-	RNAV1
TF	KADAR	-	105(105.4)	-0.4	-	-	-	RNAV1

**RADIO COMMUNICATIONS FAILURE PROCEDURE**

1	<b>SET TRANSPONDER TO MODE A/C CODE 7600</b>
2	<b>COMMUNICATIONS FAILURE OCCURS IMMEDIATELY AFTER DEPARTURE ON:</b>  <b>RWY 02L</b> - PROCEED DIRECT TO NYLON HOLDING AREA (NHA) CLIMBING TO THE LAST ASSIGNED ALTITUDE, THEREAFTER REFER TO SINGAPORE AIP ON RADIO COMMUNICATIONS FAILURE PROCEDURE.  <b>RWY 20R</b> - PROCEED DIRECT TO SAMKO HOLDING AREA (SHA) CLIMBING TO THE LAST ASSIGNED ALTITUDE, THEREAFTER REFER TO SINGAPORE AIP ON RADIO COMMUNICATIONS FAILURE PROCEDURE.