

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

TWR 118.6 / 118.25 APP 120.3 124.05 ACC 134.4	TRANSITION ALTITUDE 11 000ft
	D-ATIS AP ID-WSSS 128.6

**SINGAPORE/Singapore Changi  
RWY 02C  
KIRDA DEPARTURES  
KIRDA 1A**

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

DISTANCES IN NM

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

**DER (RWY 02C)**  
01°21'45.00"N  
103°59'57.00"E

**MOXIB**  
01°29'33"N  
104°03'15"E

A020

**EMRIX**  
01°26'06"N  
104°10'40"E

A040

**HOSBA**  
01°19'48"N  
104°24'18"E

A070

**VANBU**  
01°06'43"N  
104°27'40"E

A090

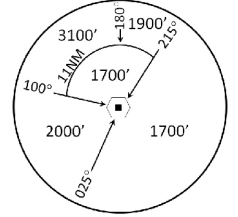
**VIRET**  
00°39'40"N  
104°35'11"E

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 CLOSED UNTIL FURTHER ADVISED**

**NOTE:** RADAR REQUIRED

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

**NOTE:** CLOSE-IN OBSTACLES (AIRCRAFT UP TO 80FT)  
EXIST ON TAXIWAYS WEST OF RUNWAY 02C

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

**NOTE:** WHEN TAKEN OFF THE SID, AS INSTRUCTED BY ATC,  
REFER TO ENR 1.5, SECTION 3, PARAGRAPH 3.3 [A]  
- FOR RWY 02C 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 1A (SID) RNAV GNSS RWY 02C - DESCRIPTIONS

### Formal & Abbreviated Descriptions

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
To MOXIB on course 023° at or above 2000ft, turn right.	MOXIB [M023; A020+; R] -	CF	N
To EMRIX at or above 4000ft.	EMRIX [A040+] -	TF	N
To HOSBA at or above 7000ft, turn right.	HOSBA [A070+; R] -	TF	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
CF	MOXIB	-	023(023.4)	8.0	R	A020+	-	RNAV1
TF	EMRIX	-	114(114.4)	8.0	-	A040+	-	RNAV1
TF	HOSBA	-	114(114.4)	15.0	R	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(163.4)	12.0	-	-	-	RNAV1
TF	IKIRO	-	163(163.4)	20.0	L	-	-	RNAV1
TF	KIRDA	-	119(119.4)	18.0	-	-	-	RNAV1

### Radio Communications Failure Procedure

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