

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(RWY02C)  
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

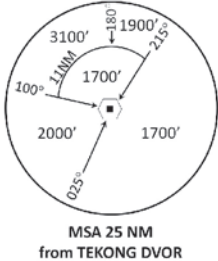
VIRET  
00°39'40"N  
104°35'11"E

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 NOT AVAILABLE FOR CIVIL USE  
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 VECTURING 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

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