STANDARD DEPARTURE CHARI **NSTRUMENT (SID)** RNAV (GNSS) -

TWR 118.6 / 118.25 124.05 ACC 134.2 APP 120.3

TRANSITION ALTITUDE 11 000ft

D-ATIS AP ID-WSSS 128.6

RWY 02R TOMAN DEPARTURES (RADAR) **TOMAN 1C** SINGAPORE/Singapore Changi

PROCEDURE INFORMATION SID SHALL NOT EXCEED IAS 230KTS UNTIL PASSING 4000FT AMSL AND NOT EXCEED IAS 250KTS UNTIL PASSING 10000FT AMSL.

## GENERAL INFORMATION

INITIAL CLIMB

3000FT

CAUTION: RWY 02R/20L NOT AVAILABLE FOR CIVIL USE UNTIL FURTHER ADVISED

ELEV, ALT IN FEET

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

081-081-081-1700, 1700′ 3100 WII 2000, 000

from TEKONG DVOR MSA 25 NM

**DISTANCES IN NM** 

NOTE: RNAV-1 NAVIGATION SPECIFICATION GNSS REQUIRED

1519 1003

1266

1013 200

150 760 501

100 506

**GND SPEED - KNOTS** 

835

899

334

251 380 75

3.3% V/V (fpm)

5% V/V (fpm)

TEKONG

DVOR/DME 116.5

VTK ≅:T

01° 24' 55"N

104° 01' 20" E

60m

NOTE: RADAR REQUIRED

SID SHALL BE ON A MINIMUM CLIMB GRADIENT OF 5% UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%

CRUISING LEVELS WILL BE ISSUED AFTER TAKE-OFF

BY SINGAPORE RADAR.

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

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

VEBMA 01° 20'30"N 104° 53'32"E . 53 . 29 . 29 HOSBA 01°19'48"N 104°24'18"E A070 EXPECT RADAR vectors to waypoint HOSBA

DER(RWY02R)

•

01°21'22"N 104°00'51"E

TOMAN 01°21'47"N 105°47'17"E

.54

NOT TO SCALE

## TOMAN 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 VEBMA.	VEBMA -	TF	N
To TOMAN.	TOMAN	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	-	RNAV1
DF	HOSBA	-	-	-	-	A070+	-	RNAV1
TF	VEBMA	-	088(088.4)	29.0	-	-	-	RNAV1
TF	TOMAN		088(088.4)	54.0	-	-	-	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.			