

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

TWR 118.6 / 118.25
APP 120.3 / 124.05
ACC 134.2

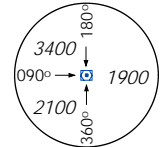
TRANSITION ALTITUDE
11 000ft

D-ATIS AP ID-WSSS
128.6

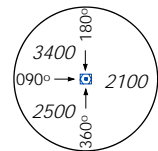
**SINGAPORE/Singapore Changi
RWY 02C/20C
TOMAN DEPARTURES
TOM 1A (R02C), TOM 1B (R20C)
RNAV(GNSS)**

ELEV, ALT IN FEET
BEARINGS, TRACKS AND
RADIALS ARE MAGNETIC
VAR 31°E (2005)

DISTANCES IN NM



MSA 25nm
from **TEKONG DVOR**



MSA 25nm
from **SINJON DVOR**

GENERAL INFORMATION

ALL SIDs INCLUDE NOISE PREFERENTIAL ROUTES.

INITIAL DEPARTURE CLIMB ALTITUDE IS 3000FT OR
AS DIRECTED BY ATC.

CRUISING LEVELS WILL BE ISSUED AFTER TAKE-OFF
BY SINGAPORE RADAR.

RWY 02L/C

FOR MINIMUM CLIMB GRADIENT CRITERIA :
RWY 02L - SEE ENR 1.5-4
RWY 02C - SEE ENR 1.5-4

RWY 20C/R

DEPARTURES SHALL BE ON A MINIMUM NET CLIMB GRADIENT OF 5%
UNTIL REACHING OR PASSING 400FT, 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

THE RESTRICTION TO CROSS SUDPO OR SUNVA AT OR ABOVE
2000FT IS APPLICABLE BETWEEN 2301/1100 UTC.

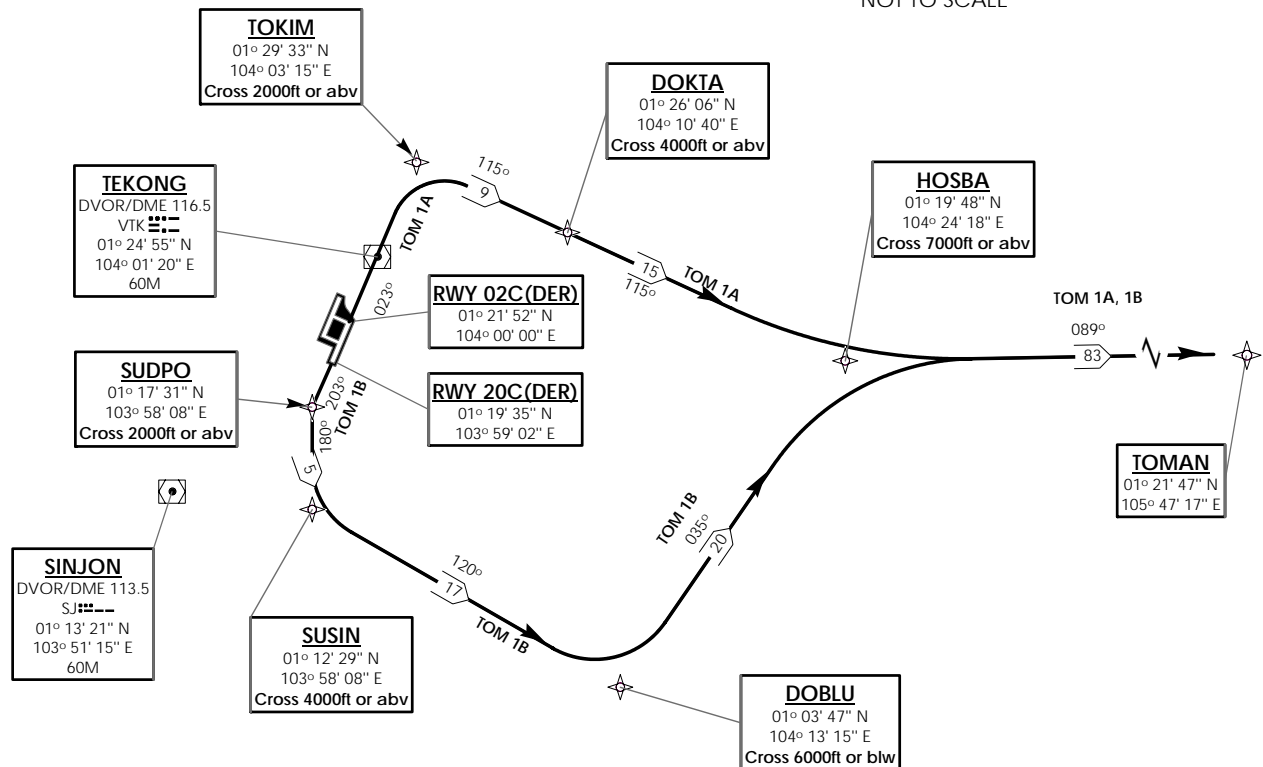
ALL DEPARTURE AIRCRAFT ON RWY 20C/R ISSUED WITH HEADING
INSTRUCTIONS BY ATC SHALL ALSO CROSS 8 DME VTK AT OR
ABOVE 2000FT BTN 2301/1100 UTC.

IF THE HEIGHT RESTRICTION CANNOT BE COMPLIED WITH, THE
PILOT-IN-COMMAND OF AN AIRCRAFT DEPARTURE ON RWY 20C/R
SHALL INFORM ATC DURING THE TIME WHEN THE AIRCRAFT
COMMENCES TAXIING TO THE HOLDING POINT FOR DEPARTURE.

NOTE: RADAR REQUIRED

- NOTE:** REFER TO BACK PAGE FOR
- A) CONVENTIONAL PROCEDURES
 - B) RADIO COM FAILURE PROCEDURES
 - C) CROSS REFERENCE FROM NAVAID

NOT TO SCALE



(A) BASIC RNAV DEPARTURES

For non-RNP1/P-RNAV approved aircraft or whose RNP1/P-RNAV capability have been degraded

TOMAN DEPARTURES

STANDARD DEPARTURE INSTRUMENT (SID)	RUNWAY	TAKE OFF INSTRUCTIONS	DEPARTURE INSTRUCTIONS
TOMAN ONE ALPHA DEPARTURE (TOM 1A)	02C	CLIMB STRAIGHT AHEAD TO TOKIM. CROSS TOKIM AT OR ABOVE 2000FT. AT TOKIM TURN RIGHT AND TRACK 115° TO DOKTA THEN FOLLOW DEPARTURE INSTRUCTIONS.	AT DOKTA TRACK 115° TO HOSBA THEN TURN LEFT AND TRACK 089° TO TOMAN. CROSS DOKTA AT OR ABOVE 4 000FT. CROSS HOSBA AT OR ABOVE 7 000FT.
TOMAN ONE BRAVO DEPARTURE (TOM 1B)	20C	CLIMB STRAIGHT AHEAD TO SUDPO. AT SUDPO TURN LEFT AND TRACK 180° TO SUSIN. CROSS SUDPO AT OR ABOVE 2 000FT. CROSS SUSIN AT OR ABOVE 4 000FT, THEN FOLLOW DEPARTURE INSTRUCTIONS.	AT SUSIN TURN LEFT AND TRACK 120° TO DOBLU. CROSS DOBLU AT OR BELOW 6 000FT OR AS DIRECTED BY ATC. AT DOBLU TURN LEFT AND TRACK 035° TO HOSBA THEN TURN RIGHT AND TRACK 089° TO TOMAN. CROSS HOSBA AT OR ABOVE 7 000FT.

(B) RADIO COMMUNICATIONS FAILURE PROCEDURE

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

(C) RADIAL AND DME FROM VOR/DME

WAY POINTS	VTK VOR/DME	SJ VOR/DME
DOBLU	VTK R-150.4/D24.2	SJ R-113.4/D24.0
DOKTA	VTK R-083/D9.4	SJ R-057/R23.2
HOSBA	VTK R-102.5/D23.6	SJ R-079.0/D33.7
SUDPO	VTK R-203.4/D8.0	SJ R-059.0/D8.0
SUSIN	VTK R-194.5/D12.8	SJ R-097.2/D6.9
TOKIM	VTK R-022.7/D5.0	SJ R-036.7/D20.1
TOMAN	VTK R-091.7/D106.2	SJ R-085.9/D116.5