

**STANDARD INSTRUMENT
DEPARTURES (SID)
CHART**

TWR	131.4
APP	120.3
ACC	133.8/134.4/133.25/ 134.2

TRANSITION ALTITUDE
11 000ft

D-ATIS AP ID-WSSS
128.6

**SINGAPORE/Singapore Changi
RWY 02R/20L
CHANGI DEPARTURE (RADAR)
CHA 1C (R02R)
CHA 1D (R20L)**

ELEV, ALT IN FEET

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

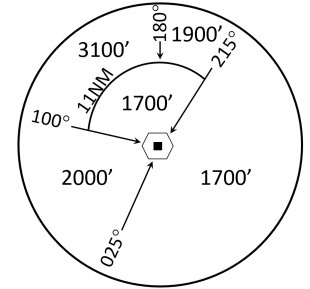
DISTANCES IN NM

CAUTION: RWY 02R/20L CLOSED UNTIL FURTHER ADVISED

NOTE: RADAR REQUIRED

NOTE: ACFT UNABLE TO COMPLY WITH CLIMB GRADIENT
RESTRICTION SHALL INFORM ATC DURING THE TIME
ACFT COMMENCES TAXIING TO HOLDING POINT FOR
DEPARTURE

NOTE: REFER TO BACK PAGE FOR
- FORMAL AND TABULAR DESCRIPTIONS
- RADIO COM FAILURE PROCEDURES



**MSA 25 NM
from TEKONG DVOR**

GENERAL INFORMATION

**INITIAL CLIMB
3000FT**

ACFT ON DEPARTURE 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.

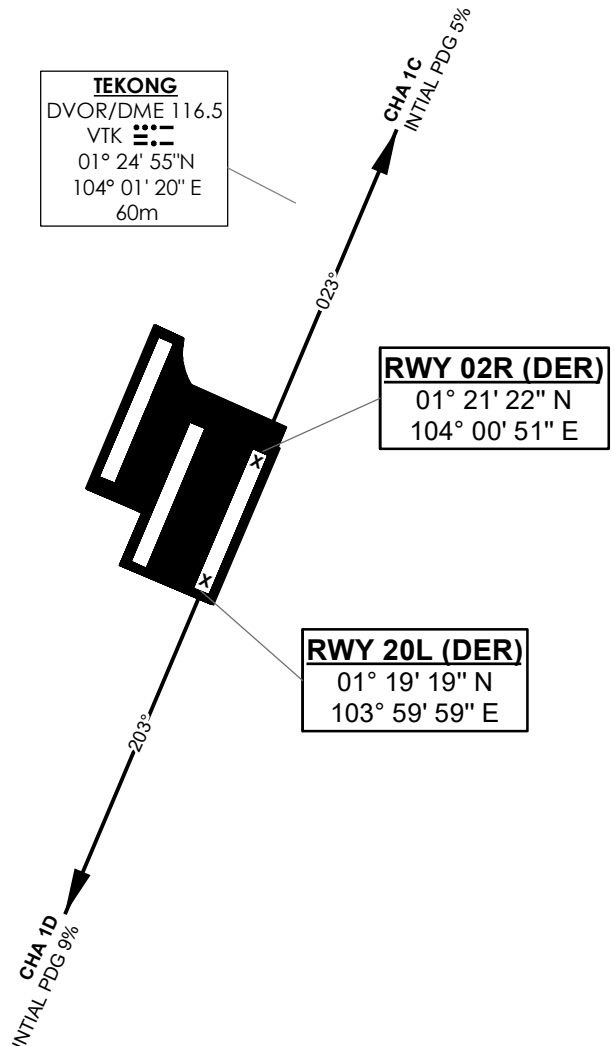
ACFT ON DEPARTURE **02R** SHALL BE ON A MINIMUM CLIMB GRADIENT
OF 5% UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%.

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

ACFT ON DEPARTURE **20L** SHALL BE ON A MINIMUM CLIMB GRADIENT
OF 9% UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%.

GND SPEED - KNOTS	75	100	150	200	250	300
9% V/V (fpm)	684	911	1367	1823	2279	2734
3.3% V/V (fpm)	251	334	501	668	835	1003

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



NOT TO SCALE

CHA 1C SID (RADAR) RWY 02R - DESCRIPTIONS

Formal & Abbreviated Descriptions

Formal Description	Abbreviated Description	Path Terminator
Climb heading 023°, Gradient 5% to 2500ft, thence 3.3%. Expect radar vectors to the planned ATS route or waypoints listed in table A.	-	VA

Tabular Descriptions

Path Terminator	Turn Direction	Course °M (°T)	Altitude	Speed Limit
VA	-	023 (023.4)	A030	-

CHA 1D SID (RADAR) RWY 20L - DESCRIPTIONS

Formal & Abbreviated Descriptions

Formal Description	Abbreviated Description	Path Terminator
Climb heading 203°, Gradient 9% to 2500ft, thence 3.3%. Expect radar vectors to the planned ATS route or waypoints listed in table A.	-	VA

Tabular Descriptions

Path Terminator	Turn Direction	Course °M (°T)	Altitude	Speed Limit
VA	-	203 (203.4)	A030	-

Table A

Planned ATS Routes	Expect Radar Vectors to the waypoints listed below and thereafter to join the respective planned ATS Route
A457	AKOMA DCT SABKA DCT MASBO
B470	VIRET DCT ANITO
G580 / M646 / L625 / T21 - L504 / T21 - M774	VEBMA DCT TOMAN
L762	VIBOG DCT BISOV DCT MIBEL
B469 / M751 / M771 / L642 / M753	AKOMA DCT VMR
T24 - M635	VIRET DCT GURES DCT IDBUD
W26	VIRET DCT GURES DCT IKIRO DCT KIRDA
R469	VIBOG DCT TAROS
Y513	AKOMA DCT AKMET DCT AROSO

RADIO COMMUNICATIONS FAILURE PROCEDURE

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