STANDARD ARRIVAL CHART RNAV (GNSS) - INSTRUMENT (STAR)

ACC 134.2
APP 124.05
119.3
TWR 118.6 / 118.25

TRANSITION ALTITUDE
11 000ft

D-ATIS AP ID-WSSS
128.025

SINGAPORE/Singapore Changi
RWY 02L/C/R
KARTO TWO ALPHA ARRIVAL
KARTO 2A

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

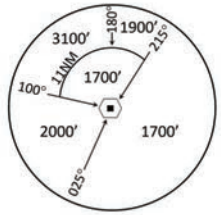
DISTANCES IN NM

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

NOTE: RADAR REQUIRED

NOTE: RNAV-1 NAVIGATION SPECIFICATION GNSS REQUIRED

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



MSA 25 NM from TEKONG DVOR

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

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

FOR APPROACH RWY 02
EXPECT RADAR VECTORS

RADAR ROUTE

SANAT
01° 07' 49" N
103° 59' 30" E
Cross 4000ft or abv
IAS 190kts

266° 14

SAMKO
01° 05' 30" N
103° 52' 55" E

168°

348°

A040 - F140
Max 220kts (IAS)
1 min

265° 11

IGNON
01° 08' 47" N
104° 12' 57" E
Cross 7000ft or abv

VIMAL
01° 09' 42" N
104° 23' 53" E
Cross 10000ft or abv

268° 24

KEXAS
01° 10' 19" N
104° 48' 18" E
Cross F160 or blw
IAS 220kts

268°

088°

A110 - F160
Max 220kts (IAS)
1 min

268° 18

GUNUD
01° 10' 42" N
105° 06' 18" E
IAS 250kts

268° 27

KARTO
01° 11' 24" N
105° 33' 43" E

268°

F170 - F310
Max 250kts (IAS)
1.5 min

088°

232° 17

TOMAN
01° 21' 47" N
105° 47' 17" E

NOT TO SCALE

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CHANGES : 1. Updated caution text
2. Removal of Runway 3 closure crosses "X"

KARTO 2A (STAR) RNAV GNSS RWY 02L/02C/02R - DESCRIPTIONS

Formal & Abbreviated Descriptions

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
From TOMAN.	TOMAN -	IF	N
To KARTO, turn right.	KARTO [R] -	TF	N
To GUNUD, speed 250kts	GUNUD [K250] -	TF	N
To KEXAS at or below FL160, speed 220kts.	KEXAS [FL160-; K220] -	TF	N
To VIMAL at or above 10000ft, turn left.	VIMAL [A100+; L] -	TF	N
To IGNON at or above 7000ft, turn right.	IGNON [A070+; R] -	TF	N
To SANAT at or above 4000ft, speed 190kts.	SANAT [A040+; K190]	TF	N

Tabular Descriptions

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Distance (NM)	Turn Direction	Altitude	Speed Limit	Navigation Spec
IF	TOMAN	-	-	-	-	-	-	RNAV1
TF	KARTO	-	232(232.4)	17.0	R	-	-	RNAV1
TF	GUNUD	-	268(268.4)	27.0	-	-	K250	RNAV1
TF	KEXAS	-	268(268.4)	18.0	-	FL160-	K220	RNAV1
TF	VIMAL	-	268(268.4)	24.0	L	A100+	-	RNAV1
TF	IGNON	-	265(265.4)	11.0	R	A070+	-	RNAV1
TF	SANAT	-	266(266.4)	14.0	-	A040+	K190	RNAV1

Radio Communications Failure Procedure

1	**SET TRANSPONDER TO MODE A/C CODE 7600**
2	**When cleared via KARTO 2A by Singapore ATC** **(a)** Maintain last assigned flight level or altitude and proceed on KARTO 2A to SANAT, then direct to SAMKO **(b)** From SAMKO commence descent and carry out appropriate landing procedure for RWY 02 as close as possible to EAT or ETA **(c)** If unable to effect a landing, refer to Singapore AIP for missed approach procedure
3	**No clearance or instruction received from Singapore ATC** **-** Refer to Singapore AIP for radio communications failure procedure

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