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

ACC 133.8 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 MABAL TWO ALPHA ARRIVAL MABAL 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 MABAL NOTE: RNAV-1 NAVIGATION SPECIFICATION GNSS REQUIRED 105° 12' 36" I Wax 3/2 W.IL. 6780 6.42 W.IL. 6.380 (W.E.) NOTE: REFER TO BACK PAGE FOR - FORMAL AND TABULAR DESCRIPTIONS - RADIO COM FAILURE PROCEDURES 1900 3100' 1700' **KILOT** 2000 1700 03° 02' 104° 40' 23" E F220 - F270 MSA 25 NM Max 250kts (IAS) 1.5 min <u>PIBAP</u> 02° 30' 23" N 104° 06' 18" E Cross FL210 or blw IAS 250kts 8 <u>PASPU</u> 01° 59' 15" N 104° 06' 18" E IAS 220kts NYLON A030 - F140 104° 06' 24" E Max 220kts (IAS) 1800 1 min TEKONG DVOR/DME 116.5 VTK ::: **POSUB** 01° 27' 25" N 104° 07' 48" E 01°24'55"N Cross 6000ft or abv 104°01'20"E IAS 220kts 60M **CAUTION** RWY 02R/20L NOT AVAILABLE FOR **SAMKO** CIVIL USE UNTIL FURTHER ADVISED 01° 05' 30" N 103° 52' 55" E FOR APPROACH RWY 02 EXPECT RADAR VECTORS <u>SANAT</u> 01° 07' 49" N 103° 59' 30" E A040 - F140 Max 220kts (IAS) Cross 4000ft or abv 1 min NOT TO SCALE IAS 190kts

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

Formal & Abbreviated Descriptions

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
From MABAL.	MABAL -	IF	N
To KILOT, turn left.	KILOT [L] -	TF	N
To PIBAP at or below FL210, speed 250kts, turn left.	MABAL -	TF	N
To PASPU, speed 220kts.	PASPU [K220] -	TF	N
To NYLON, turn left.	NYLON [L] -	TF	N
To POSUB at or above 6000ft, speed 220kts, turn right.	POSUB [A060+; K220; 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	Turn Direction	Altitude	Speed Limit	Navigation Spec
IF	MABAL	-	-	1	-	-	•	RNAV1
TF	KILOT	1	231(231.4)	42.0	L	-	-	RNAV1
TF	PIBAP	-	227(227.4)	47.0	L	FL210-	K250	RNAV1
TF	PASPU	-	180(180.4)	31.0	-	-	K220	RNAV1
TF	NYLON	-	180(180.4)	22.0	L	-	-	RNAV1
TF	POSUB	-	172(172.4)	10.0	R	A060+	K220	RNAV1
TF	SANAT	-	203(203.4)	21.0	-	A040+	K190	RNAV1

Radio Communications Failure Procedure

1	SET TRANSPONDER TO MODE A/C CODE 7600				
2	When cleared via MABAL 2A by Singapore ATC				
	(a)	Maintain last assigned flight level or altitude and proceed on MABAL 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			