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

ACC 133.25 APP 124.6 119.3 TWR 118.6 / 118.25 TRANSITION ALTITUDE 11 000ft

D-ATIS AP ID-WSSS

128.025

SINGAPORE/Singapore Changi RWY 20R/C/L ARAMA ONE BRAVO ARRIVAL ARAMA 1B

ELEV, ALT IN FEET £1900', BEARINGS, TRACKS AND RADIALS ARE MAGNETIC 3100' 1700′ VAR 0°23'E (2020) DISTANCES IN NM CAUTION: RWY 02R/20L NOT AVAILABLE FOR CIVIL USE UNTIL **FURTHER ADVISED** MSA 25 NM from TEKONG DVOR NOTE: RADAR REQUIRED NOTE: RNAV-1 NAVIGATION SPECIFICATION GNSS REQUIRED NOTE: REFER TO BACK PAGE FOR - FORMAL AND TABULAR DESCRIPTIONS - RADIO COM FAILURE PROCEDURES Δ030 - F140 Max 220kts (IAS) 1 min FOR APPROACH RWY 20 EXPECT RADAR VECTORS **ARAMA NYLON** 01° 36' 54" N 103° 07' 12" E 01° 36' 57" N 104° 06' 24" E IAS 250kts TEKONG DVOR/DME 116.5 VTK <u>BIPOP</u> 01°24'55"N 01° 31' 22" N 104° 10' 18" E 104°01'20"E 3480 Cross 3000ft or abv IAS 190kts CAUTION RWY 02R/20L NOT AVAILABLE FOR **CIVIL USE UNTIL FURTHER ADVISED DOVAN** 8 01° 19' 38" N 104° 12' 49" E **BOBAG** 01° 02' 30" N 103° 29' 54" E Cross 4000ft or abv Cross 10,000ft or abv 0800 IAS 220kts 0820 23 **BITAM** 01° 08' 13" N 104° 07' 57" E Cross 7000ft or abv IAS 220kts **SAMKO** 01° 05' 30" N 103° 52' 55" E A060 - F140 Max 220kts (IAS) F150 - F180 Max 250kts (IAS) 1 min NOT TO SCALE

ARAMA 1B (STAR) RNAV GNSS RWY 20R/20C/20L - DESCRIPTIONS

Formal & Abbreviated Descriptions

| Formal Description | Abbreviated Description | Path Terminator | Fly-Over required |
|--|--------------------------|--------------------|-------------------|
| From ARAMA, speed 250kts. | ARAMA [K250] - | IF | N |
| To BOBAG at or above 10000ft, speed 220kts, turn left. | BOBAG [A100+; K220; L] - | TF | N |
| To SAMKO, turn left. | SAMKO [L] - | TF | N |
| To BITAM at or above 7000ft, speed 220kts, turn left. | BITAM [A070+; K220; L] - | TF | N |
| To DOVAN at or above 4000ft, turn left. | DOVAN [A040+; L] - | TF | N |
| To BIPOP at or above 3000ft, speed 190kts. | BIPOP [A030+; K190] | TF | N |

Tabular Descriptions

| Path Term | Waypoint Name | Fly-Over | Course °M(°T) | Distance (NM) | Turn Direction | Altitude | Speed Limit | Navigation Spec |
|--------------|------------------|----------|------------------|------------------|-------------------|----------|----------------|--------------------|
| IF | ARAMA | ı | - | ı | - | 1 | K250 | RNAV1 |
| TF | BOBAG | - | 147(147.4) | 41.0 | L | A100+ | K220 | RNAV1 |
| TF | SAMKO | - | 082(082.4) | 23.0 | L | - | - | RNAV1 |
| TF | BITAM | - | 080(080.4) | 15.0 | L | A070+ | K220 | RNAV1 |
| TF | DOVAN | - | 023(023.4) | 12.0 | L | A040+ | - | RNAV1 |
| TF | BIPOP | - | 348(348.4) | 12.0 | - | A030+ | K190 | RNAV1 |

Radio Communications Failure Procedure

| 1 | SET TRANSPONDER TO MODE A/C CODE 7600 | | | | | |
|---|---|---|--|--|--|--|
| 2 | When cleared via ARAMA 1B by Singapore ATC | | | | | |
| | (a) | Maintain last assigned flight level or altitude and proceed on ARAMA 1B to BIPOP, | | | | |
| | | then direct to NYLON | | | | |
| | (b) | From NYLON commence descent and carry out appropriate landing procedure for | | | | |
| | | RWY 20 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 | | | | |