

**STANDARD DEPARTURE CHART  
RNAV (GNSS) -  
INSTRUMENT (SID)**TWR 118.6 / 118.25  
APP 120.3  
ACC 134.4TRANSITION ALTITUDE  
11 000ftD-ATIS AP ID-WSSS  
128.6**SINGAPORE/Singapore Changi  
RWY 02L/20R  
VENIX DEPARTURES  
VENIX 1E (R02L)  
VENIX 3F (R20R)**ELEV, ALT IN FEET  
BEARINGS, TRACKS AND  
RADIALS ARE MAGNETIC  
VAR 26°E (2015)

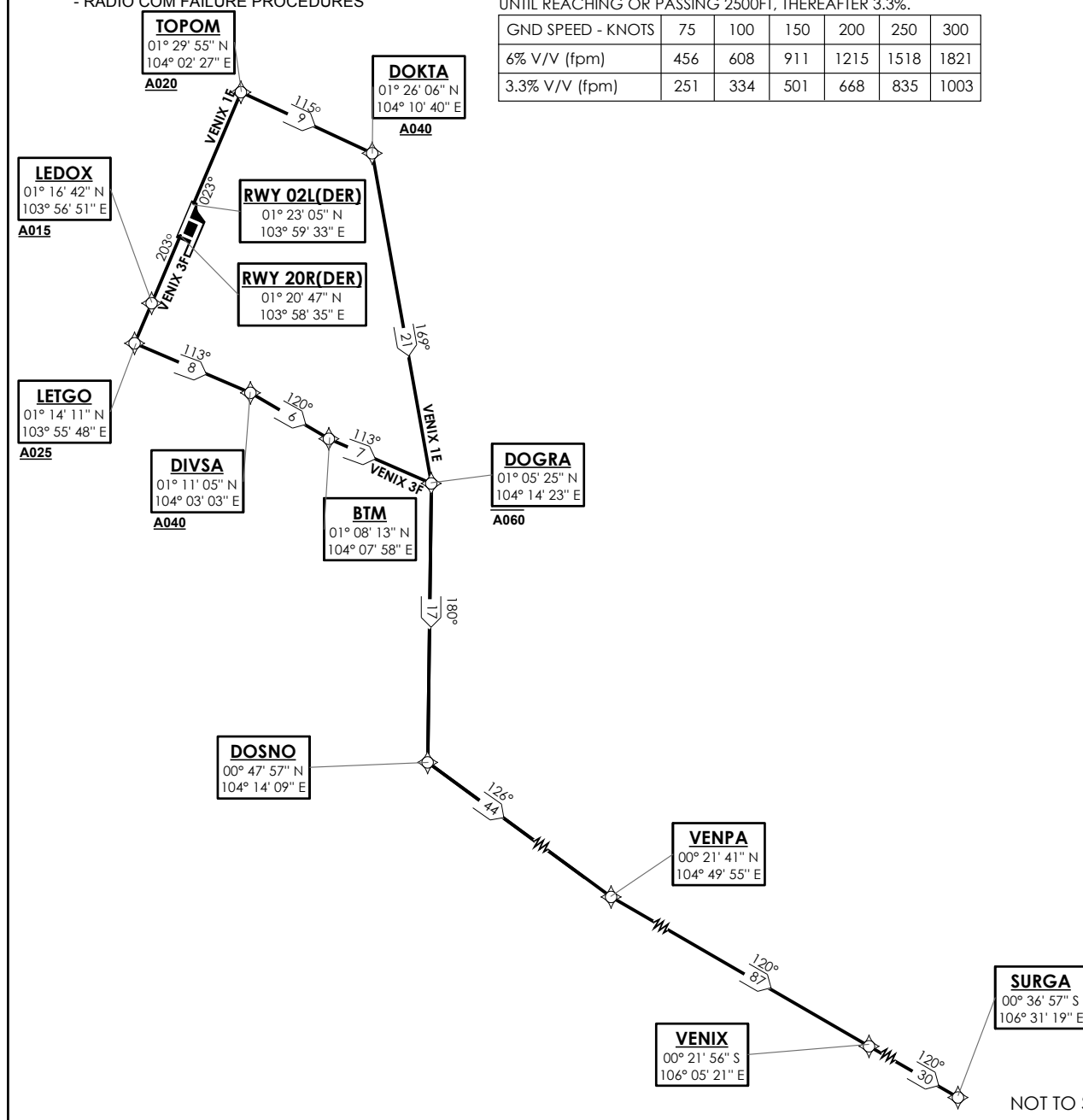
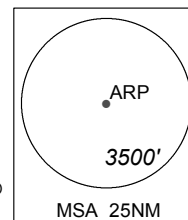
DISTANCES IN NM

**NOTE:** RADAR REQUIRED**NOTE:** ACFT UNABLE TO FLY THE SID  
PROFILE SHALL INFORM ATC  
PRIOR TO DEPARTURE AND TO  
EXPECT RADAR VECTURING,  
IF NECESSARY**NOTE:** RNAV-1 NAVIGATION SPECIFICATION  
GNSS REQUIRED**NOTE:** REFER TO BACK PAGE FOR  
- FORMAL AND TABULAR DESCRIPTIONS  
- RADIO COM FAILURE PROCEDURES**GENERAL INFORMATION****INITIAL CLIMB  
3000FT**

ALL SIDs INCLUDE NOISE PREFERENTIAL ROUTES.

**RWY 02L**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.  
SEE (ENR 1.5-4) FOR MINIMUM CLIMB GRADIENT CRITERIA.**RWY 20R**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.  
DEPARTURES SHALL BE ON A MINIMUM CLIMB GRADIENT OF 6%  
UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%.

| GND SPEED - KNOTS | 75  | 100 | 150 | 200  | 250  | 300  |
|-------------------|-----|-----|-----|------|------|------|
| 6% V/V (fpm)      | 456 | 608 | 911 | 1215 | 1518 | 1821 |
| 3.3% V/V (fpm)    | 251 | 334 | 501 | 668  | 835  | 1003 |



28 FEB 2019

**VENIX 1E (SID) RNAV GNSS RWY 02L - DESCRIPTIONS****Formal & Abbreviated Descriptions**

| Formal Description                                                                                                                                                                                      | Abbreviated Description  | Path Terminator | Fly-Over required |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------|-------------------|
| To TOPOM on course 023° at or above 2000ft, turn right. To DOKTA at or above 4000ft, turn right. To DOGRA at or below 6000ft, turn right. To DOSNO, turn left. To VENPA, turn left. To VENIX. To SURGA. | TOPOM [M023; A020+; R] - | CF              | N                 |
|                                                                                                                                                                                                         | DOKTA [A040+; R] -       | TF              | N                 |
|                                                                                                                                                                                                         | DOGRA [A060-; R] -       | TF              | N                 |
|                                                                                                                                                                                                         | DOSNO [L] -              | TF              | N                 |
|                                                                                                                                                                                                         | VENPA [L] -              | TF              | N                 |
|                                                                                                                                                                                                         | VENIX -                  | TF              | N                 |
|                                                                                                                                                                                                         | SURGA                    | TF              | N                 |

**Tabular Descriptions**

| Path Term | Waypoint Name | Fly-Over | Course<br>M(°T) | Magnetic<br>Variation | Turn<br>Direction | Altitude | Speed<br>Limit | Navigation<br>Spec |
|-----------|---------------|----------|-----------------|-----------------------|-------------------|----------|----------------|--------------------|
| CF        | TOPOM         | -        | 023(022.5)      | -0.5                  | R                 | A020+    | -              | RNAV1              |
| TF        | DOKTA         | -        | 115(114.5)      | -0.5                  | R                 | A040+    | -              | RNAV1              |
| TF        | DOGRA         | -        | 169(168.5)      | -0.5                  | R                 | A060-    | -              | RNAV1              |
| TF        | DOSNO         | -        | 180(179.5)      | -0.5                  | L                 | -        | -              | RNAV1              |
| TF        | VENPA         | -        | 126(125.5)      | -0.5                  | L                 | -        | -              | RNAV1              |
| TF        | VENIX         | -        | 120(199.5)      | -0.5                  | -                 | -        | -              | RNAV1              |
| TF        | SURGA         | -        | 120(199.5)      | -0.5                  | -                 | -        | -              | RNAV1              |

**VENIX 3F (SID) RNAV GNSS RWY 20R - DESCRIPTIONS****Formal & Abbreviated Descriptions**

| Formal Description                                                                                                                                                                                                                                     | Abbreviated Description | Path Terminator | Fly-Over required |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------|-------------------|
| To LEDOX on course 203° at or above 1500ft. To LETGO at or above 2500ft, turn left. To DIVSA at or above 4000ft, turn right. To BTM, turn left. To DOGRA at or below 6000ft, turn right. To DOSNO, turn left. To VENPA, turn left. To VENIX. To SURGA. | LEDOX [M203; A015+] -   | CF              | N                 |
|                                                                                                                                                                                                                                                        | LETGO [A025+; L] -      | TF              | N                 |
|                                                                                                                                                                                                                                                        | DIVSA [A040+; R] -      | TF              | N                 |
|                                                                                                                                                                                                                                                        | BTM [L] -               | TF              | N                 |
|                                                                                                                                                                                                                                                        | DOGRA [A060-; R] -      | TF              | N                 |
|                                                                                                                                                                                                                                                        | DOSNO [L] -             | TF              | N                 |
|                                                                                                                                                                                                                                                        | VENPA [L] -             | TF              | N                 |
|                                                                                                                                                                                                                                                        | VENIX -                 | TF              | N                 |
|                                                                                                                                                                                                                                                        | SURGA                   | TF              | N                 |

**Tabular Descriptions**

| Path Term | Waypoint Name | Fly-Over | Course<br>M(°T) | Magnetic<br>Variation | Turn<br>Direction | Altitude | Speed<br>Limit | Navigation<br>Spec |
|-----------|---------------|----------|-----------------|-----------------------|-------------------|----------|----------------|--------------------|
| CF        | LEDOX         | -        | 203(202.5)      | -0.5                  | -                 | A015+    | -              | RNAV1              |
| TF        | LETGO         | -        | 203(202.5)      | -0.5                  | L                 | A025+    | -              | RNAV1              |
| TF        | DIVSA         | -        | 113(112.5)      | -0.5                  | R                 | A040+    | -              | RNAV1              |
| TF        | BTM           | -        | 120(119.5)      | -0.5                  | L                 | -        | -              | RNAV1              |
| TF        | DOGRA         | -        | 113(112.5)      | -0.5                  | R                 | A060-    | -              | RNAV1              |
| TF        | DOSNO         | -        | 180(179.5)      | -0.5                  | L                 | -        | -              | RNAV1              |
| TF        | VENPA         | -        | 126(125.5)      | -0.5                  | L                 | -        | -              | RNAV1              |
| TF        | VENIX         | -        | 120(199.5)      | -0.5                  | -                 | -        | -              | RNAV1              |
| TF        | SURGA         | -        | 120(199.5)      | -0.5                  | -                 | -        | -              | RNAV1              |

**RADIO COMMUNICATIONS FAILURE PROCEDURE**

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