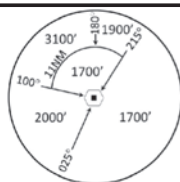
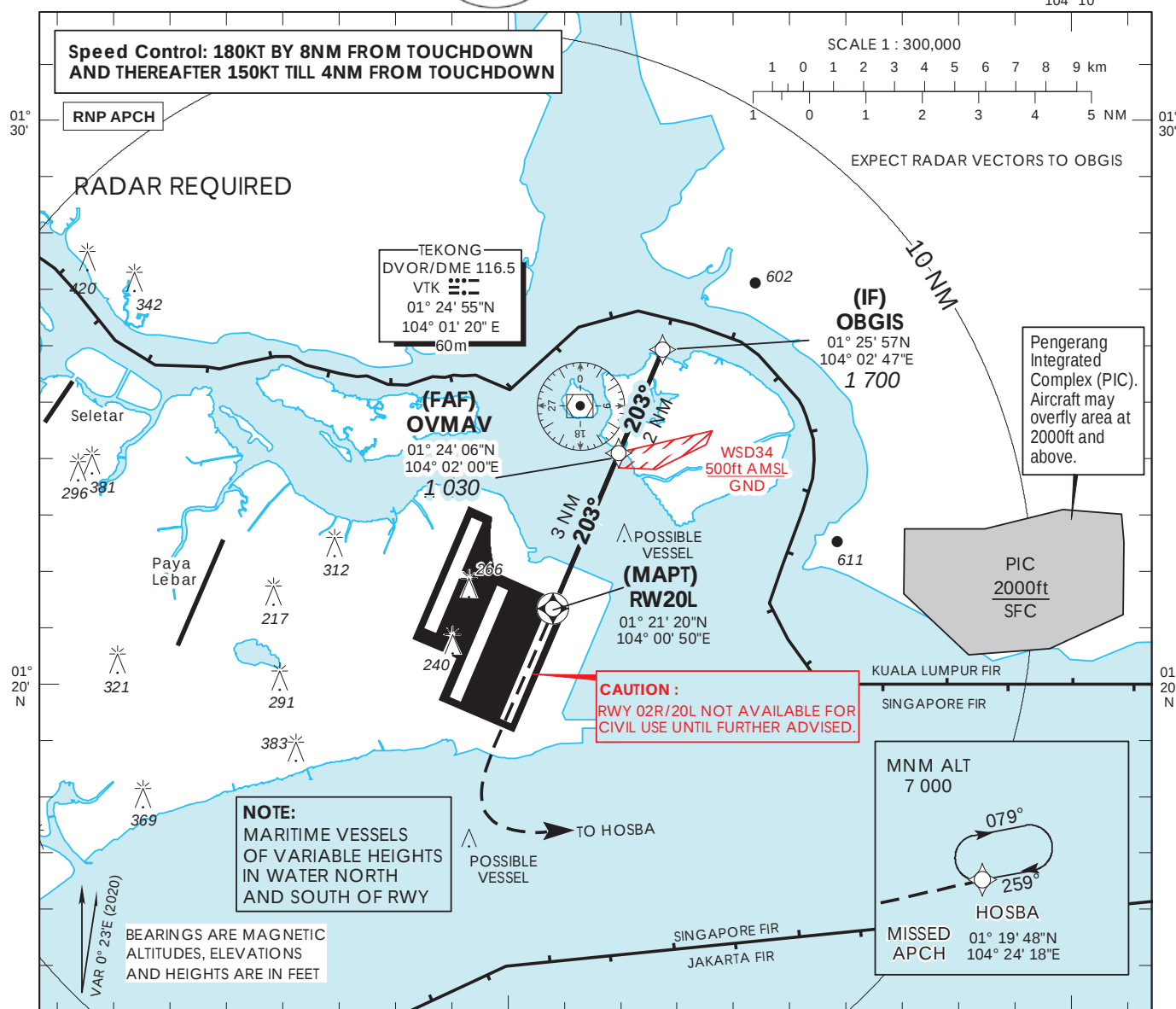


**INSTRUMENT  
APPROACH  
CHART**AERODROME ELEV **22ft**  
HEIGHT RELATED TO  
THR RWY 20L - ELEV **16ft**MSA 25 NM  
from TEKONG DVOR

|        |            |
|--------|------------|
| D-ATIS | AP ID WSSS |
| APP    | 128.6      |
|        | 124.05     |
| TWR    | 119.3      |
|        | 131.4      |

**SINGAPORE/  
SINGAPORE CHANGI****RNP RWY 20L**

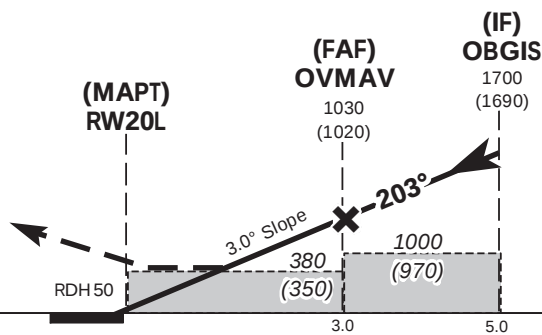
104° 10'



This procedure requires a missed approach climb gradient of 5% (304 ft/NM) until passing 3,000ft.  
For aircraft which can only achieve a 2.5% (152 ft/NM) climb gradient, the OCA (OCH) is 1080ft (1050ft).

**MISSED APPROACH**

Climb straight to 1 500ft, turn left  
climbing to 7 000ft or above to HOSBA.  
Hold at HOSBA or AS DIRECTED  
BY ATC.  
No turn before MAPt.

**CIRCLING NOT AUTHORIZED**

Transition Level : FL 130  
Transition Alt : 11 000

MINIMUM TEMPERATURE  
FOR BARO-VNAV  
APPROACHES: 5°C

ELEV 16

(THR RWY 20L)

|                      |    | OCA (OCH) |   |   |   |
|----------------------|----|-----------|---|---|---|
| Category of Aircraft |    | A         | B | C | D |
| LNAV/VNAV            | 5% | 280 (260) |   |   |   |
| LNAV                 | 5% | 380 (350) |   |   |   |

|                    |           | OBGIS       |        | OVMAV       |        |
|--------------------|-----------|-------------|--------|-------------|--------|
| Distance           |           | 1700 (1690) |        | 1030 (1020) |        |
| Altitude (Height)  |           |             |        |             |        |
| Speed              | knots     | 70          | 120    | 150         | 185    |
| FAF - MAPT 3.0nm   | min : s * | 2 : 34      | 1 : 30 | 1 : 12      | 0 : 58 |
| Rate of descent/GS | ft/min    | 370         | 635    | 795         | 980    |

SINGAPORE CHANGI RNP-APCH RWY 20L – Approach from OBGIS

| Path Terminator | Waypoint | Fly-Over | Course °M (°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed Limit (KT) | VPA/ TCH(FT) | Navigation Specification |
|-----------------|----------|----------|----------------|--------------------|---------------|----------------|---------------|------------------|--------------|--------------------------|
| IF              | OBGIS    | -        | 203 (203.4)    | -0.4               | -             | -              | 1700+         | 180              | -            | RNP APCH                 |
| TF              | OVMAN    | -        | 203 (203.4)    | -0.4               | 2.0           | -              | 1030+         | 150              | -            | RNP APCH                 |
| TF              | RW20L    | Y        | 203 (203.4)    | -0.4               | 3.0           | -              | -             | -                | -3.0° / 50   | RNP APCH                 |
| CA              | -        | -        | 203 (203.4)    | -0.4               | -             | L              | 1500+         | -                | -            | RNP APCH                 |
| DF              | HOSBA    | -        | -              | -                  | -             | -              | 7000+         | -                | -            | RNP APCH                 |

Waypoint Coordinates

| Name        | Latitude      | Longitude      |
|-------------|---------------|----------------|
| OBGIS (IF)  | 01° 25' 57" N | 104° 02' 47" E |
| OVMAN (FAF) | 01° 24' 06" N | 104° 02' 00" E |
| RW20L       | 01° 21' 20" N | 104° 00' 50" E |
| HOSBA       | 01° 19' 48" N | 104° 24' 18" E |