# STANDARD DEPARTURE CHART RNAV (GNSS) - INSTRUMENT (SID)

TWR 118.6 / 118.25
APP 120.3
ACC 133.8

TRANSITION ALTITUDE
11 000ft

D-ATIS AP ID-WSSS
128.6

# SINGAPORE/Singapore Changi
## RWY 20L
## TOMAN DEPARTURES
## TOMAN 1D

## GENERAL INFORMATION

**INITIAL CLIMB 3000FT**

**CAUTION: RWY 02R/20L CLOSED UNTIL FURTHER ADVISED**

**NOTE:** RADAR REQUIRED

**NOTE:** RNAV-1 NAVIGATION SPECIFICATION GNSS REQUIRED

**NOTE:** ACFT UNABLE TO FLY THE SID PROFILE SHALL INFORM ATC PRIOR TO DEPARTURE AND EXPECT RADAR VECTORING IF NECESSARY

**NOTE:** WHEN TAKEN OFF THE SID, AS INSTRUCTED BY ATC, REFER TO ENR 1.5, SECTION 3, PARAGRAPH 3.4.3 - FOR RWY 20L MINIMUM CLIMB GRADIENT

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

## PROCEDURE INFORMATION

SID 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.

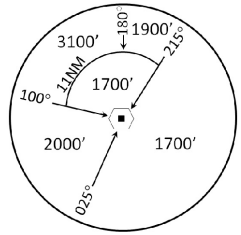
SID SHALL BE ON A MINIMUM CLIMB GRADIENT OF 9% UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%.

| GND SPEED - KNOTS | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 9% V/V (fpm) | 684 | 911 | 1367 | 1823 | 2279 | 2734 |
| 3.3% V/V (fpm) | 251 | 334 | 501 | 668 | 835 | 1003 |

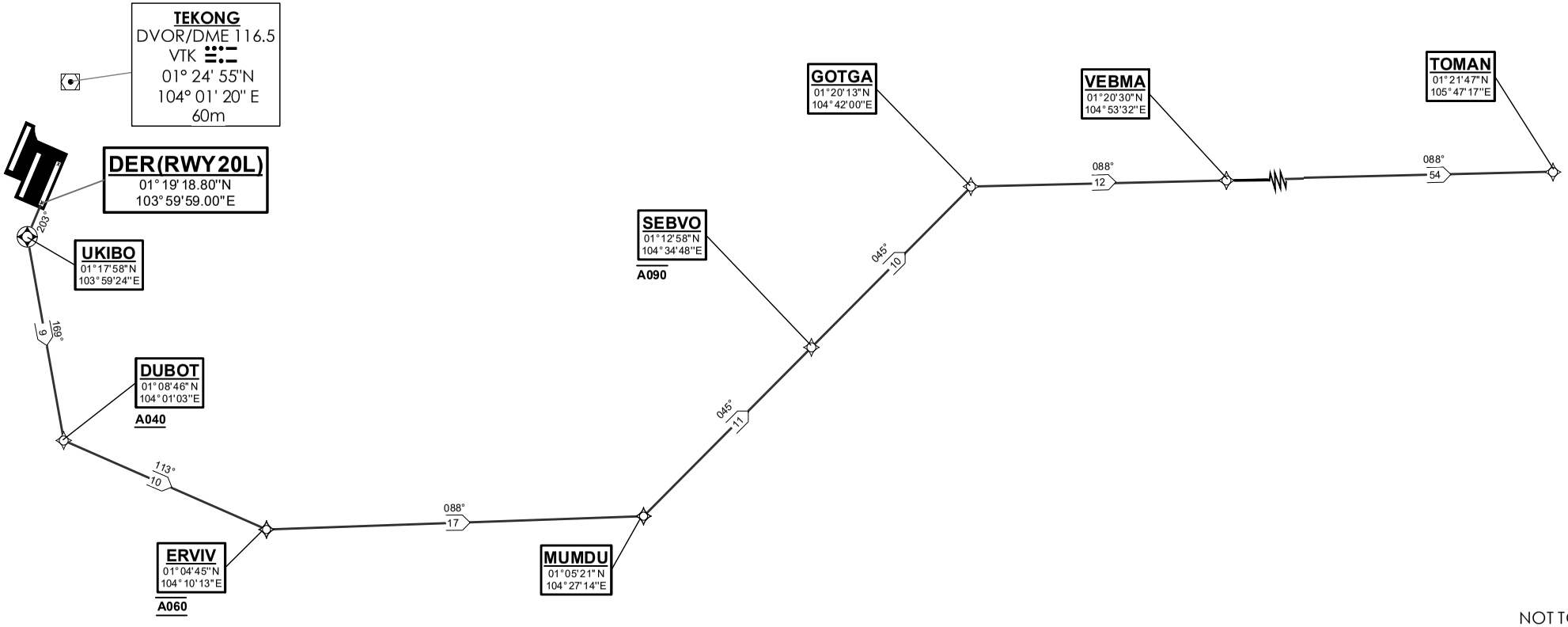
**ELEV, ALT IN FEET**

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

DISTANCES IN NM




**MSA 25 NM from TEKONG DVOR**




NOT TO SCALE