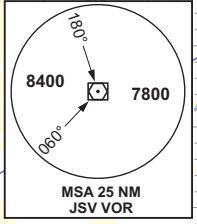
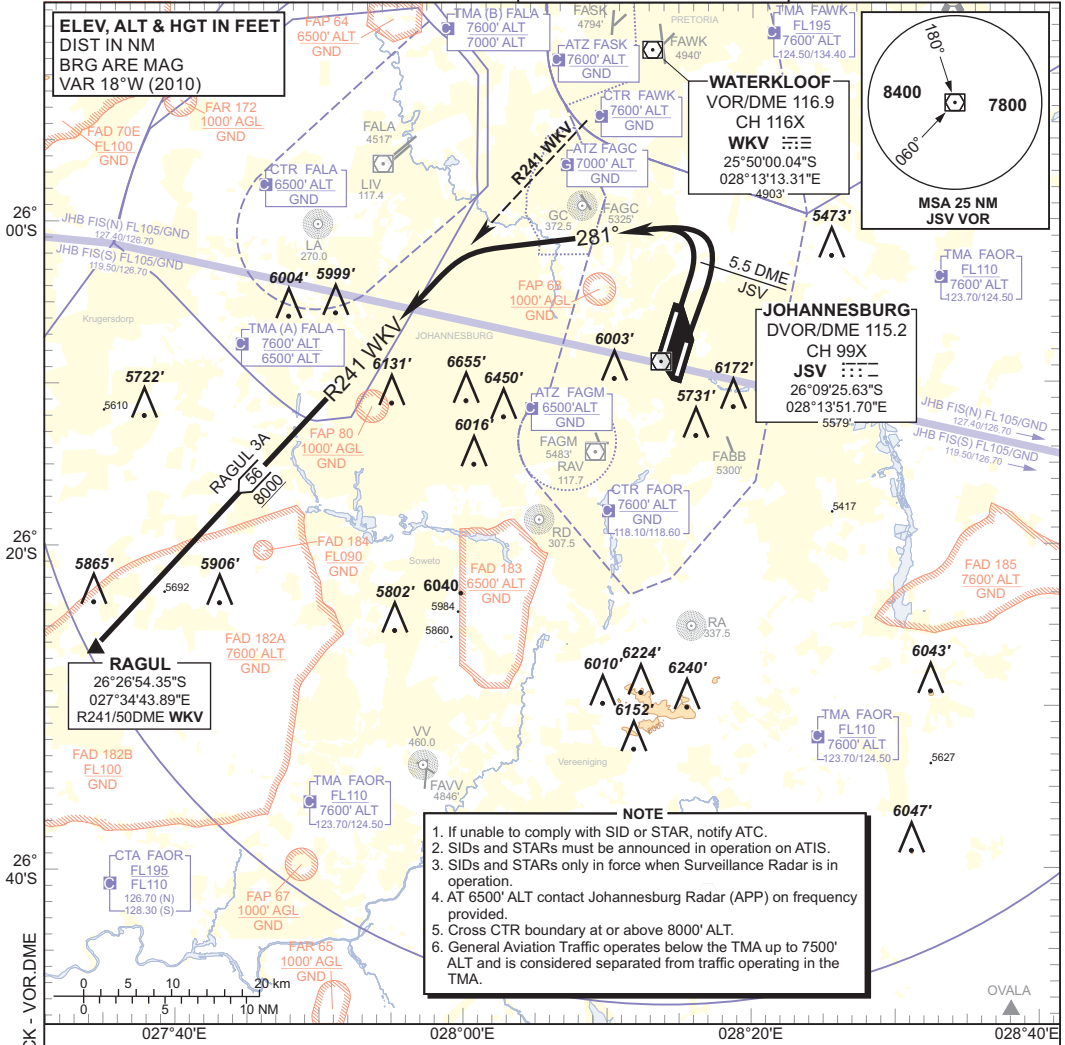


**STANDARD DEPARTURE
CHART -
INSTRUMENT
(SID)**

TRANSITION ALTITUDE
8000'
TRANSITION LEVEL
ATC

RADAR APP S 124.50 TWR E 118.60
E 124.50 W 118.10
W 123.70 ATIS 126.20
DIR 121.40 115.20
ACC N 126.70 SMC 121.90

JOHANNESBURG
(O.R. TAMBO INTERNATIONAL)
RWY 03L/R
RAGUL 3A



WATERKLOOF
VOR/DME 116.9
CH 116X
WKV
25°50'00.04"S
028°13'13.31"E

JOHANNESBURG
DVOR/DME 115.2
CH 99X
JSV
26°09'25.63"S
028°13'51.70"E

- NOTE**
1. If unable to comply with SID or STAR, notify ATC.
 2. SIDs and STARs must be announced in operation on ATIS.
 3. SIDs and STARs only in force when Surveillance Radar is in operation.
 4. AT 6500' ALT contact Johannesburg Radar (APP) on frequency provided.
 5. Cross CTR boundary at or above 8000' ALT.
 6. General Aviation Traffic operates below the TMA up to 7500' ALT and is considered separated from traffic operating in the TMA.

LANSERIA CTR & TMA/
CHANGE: WATERKLOOF NAVID BLOCK - VOR/DME

**RAGUL 3A
RWY 03L/R**

Climb to 8000' ALT, maintain RWY track to 5.5 DME JSV. At 5.5 DME JSV turn left onto track 281° to intercept R241 WKV (OUBD) to RAGUL. Further climb will be under radar control. At RAGUL set course as per flight plan.

Restricted to a minimum climb gradient of 4.4% to CTR boundary.
4.4% @ 140KT IAS = 624 FPM
4.4% @ 180KT IAS = 802 FPM
4.4% @ 220KT IAS = 980 FPM

COMMUNICATION FAILURE PROCEDURE (Squawk 7600)

Comply with RAGUL 3A SID, climbing to 8700' ALT or maintain last assigned level, whichever is the highest. At RAGUL continue as per flight plan.

Aircraft wishing to return must continue to the SID termination point and climb to the last assigned level or MSA if last cleared level is below MSA. At RAGUL proceed to NIBEX and comply with the NIBEX 2A RWY 03R STAR Communication Failure Procedure.