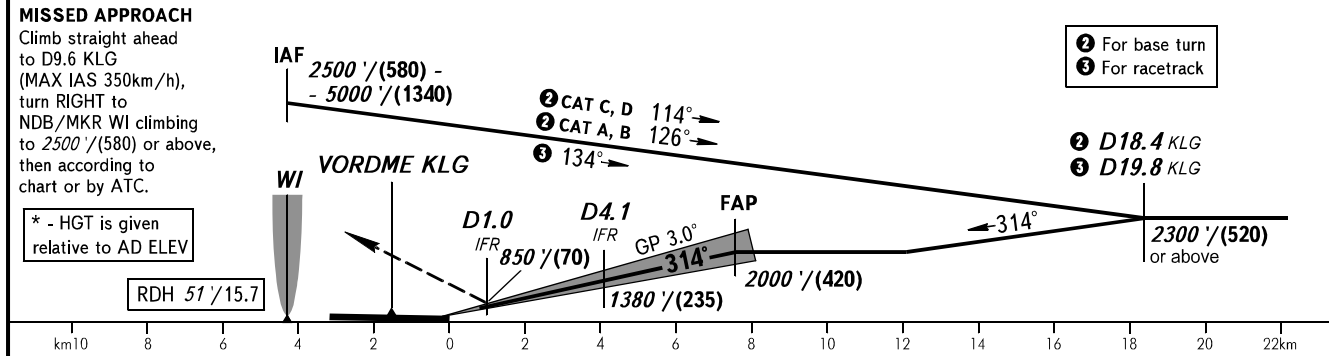
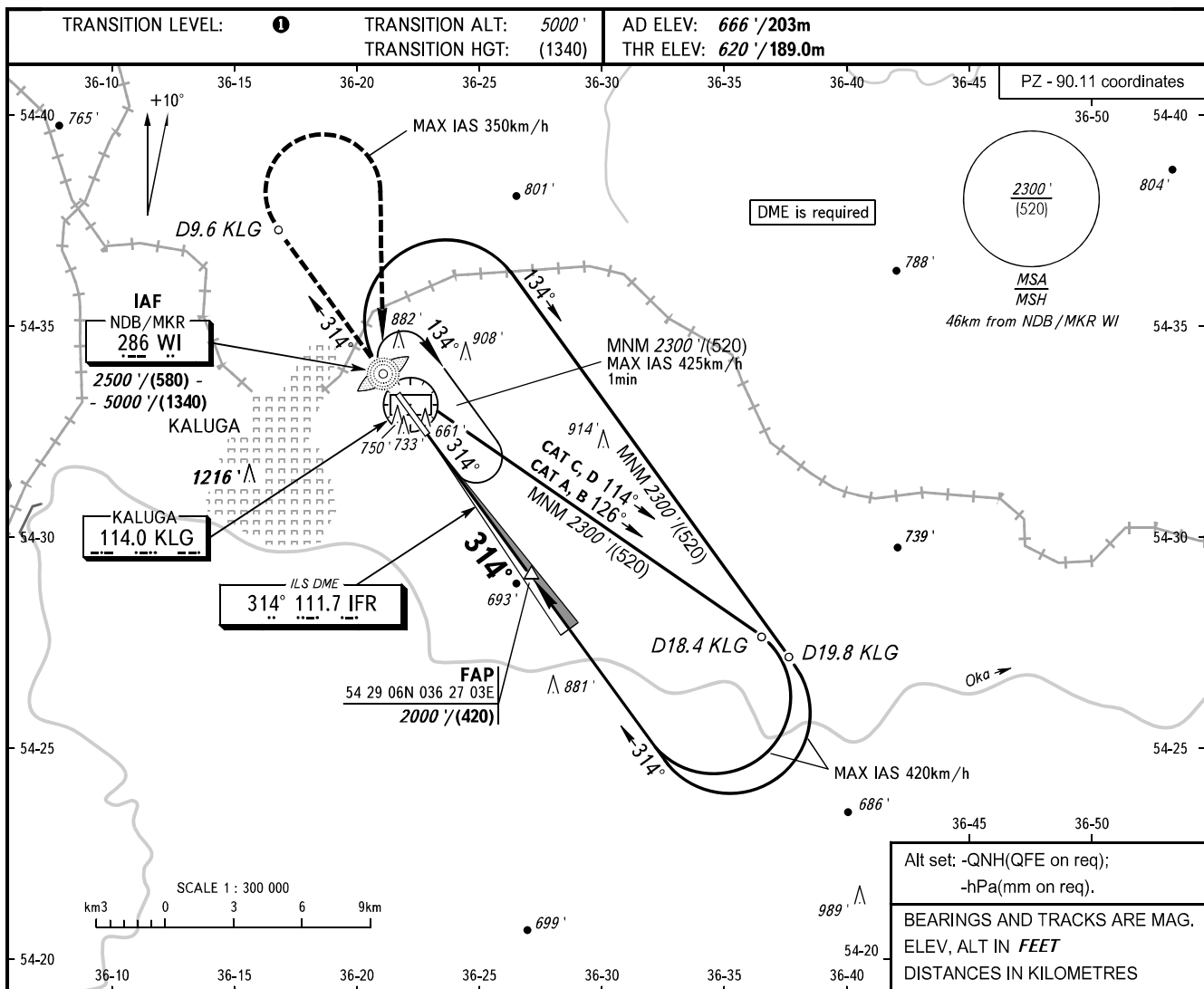


**INSTRUMENT  
APPROACH  
CHART - ICAO**

KALUGA TOWER 120.300

**KALUGA, RUSSIA  
GRABTSEVO  
ILS W CAT I RWY 31**



OCA(H)		A	B	C	D
Straight-in Approach	<b>CAT I</b>	761' (141') / (45)	773' (153') / (50)	783' (163') / (50)	797' (177') / (55)
Circling		1180' (520') / (160)*	1210' (550') / (170)*	1310' (650') / (200)*	1360' (700') / (220)*

**1** TRANSITION LEVEL:  
 - FL060 when QNH is 1013 hPa (760mm mercury column) or above;  
 - FL070 when QNH is 977 hPa (733mm mercury column) or above, but less than 1013 hPa (760mm mercury column);  
 - FL080 when QNH is less than 977 hPa (733mm mercury column).

**WARNING:**  
 1. Visual manoeuvring WEST of AD is PROHIBITED.  
 2. Zero range of DME IFR is indicated at RWY 31 THR.

GROUND SPEED	km/h	150	180	210	240	270	300	330	360	390
RATE OF DESCENT	m/s	2.2	2.6	3.0	3.5	3.9	4.3	4.8	5.2	5.6
RATE OF DESCENT	ft/min	427	512	597	682	768	853	938	1024	1109