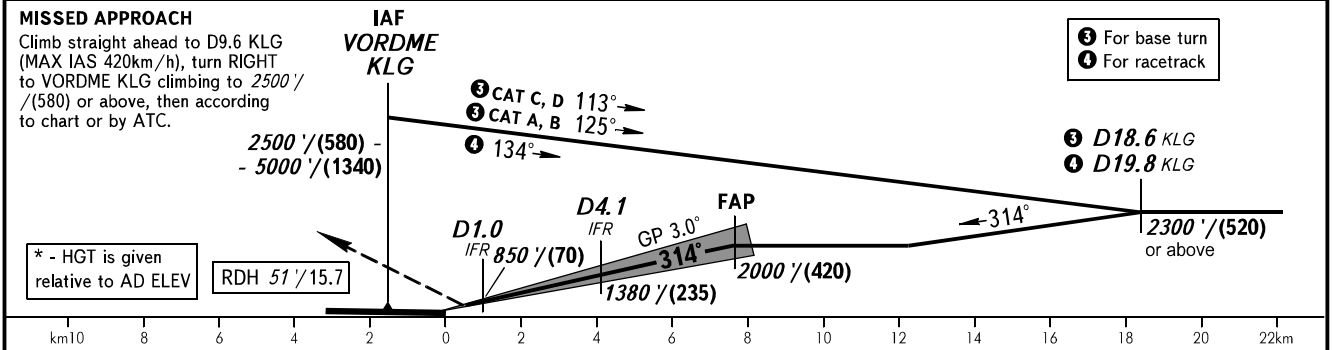
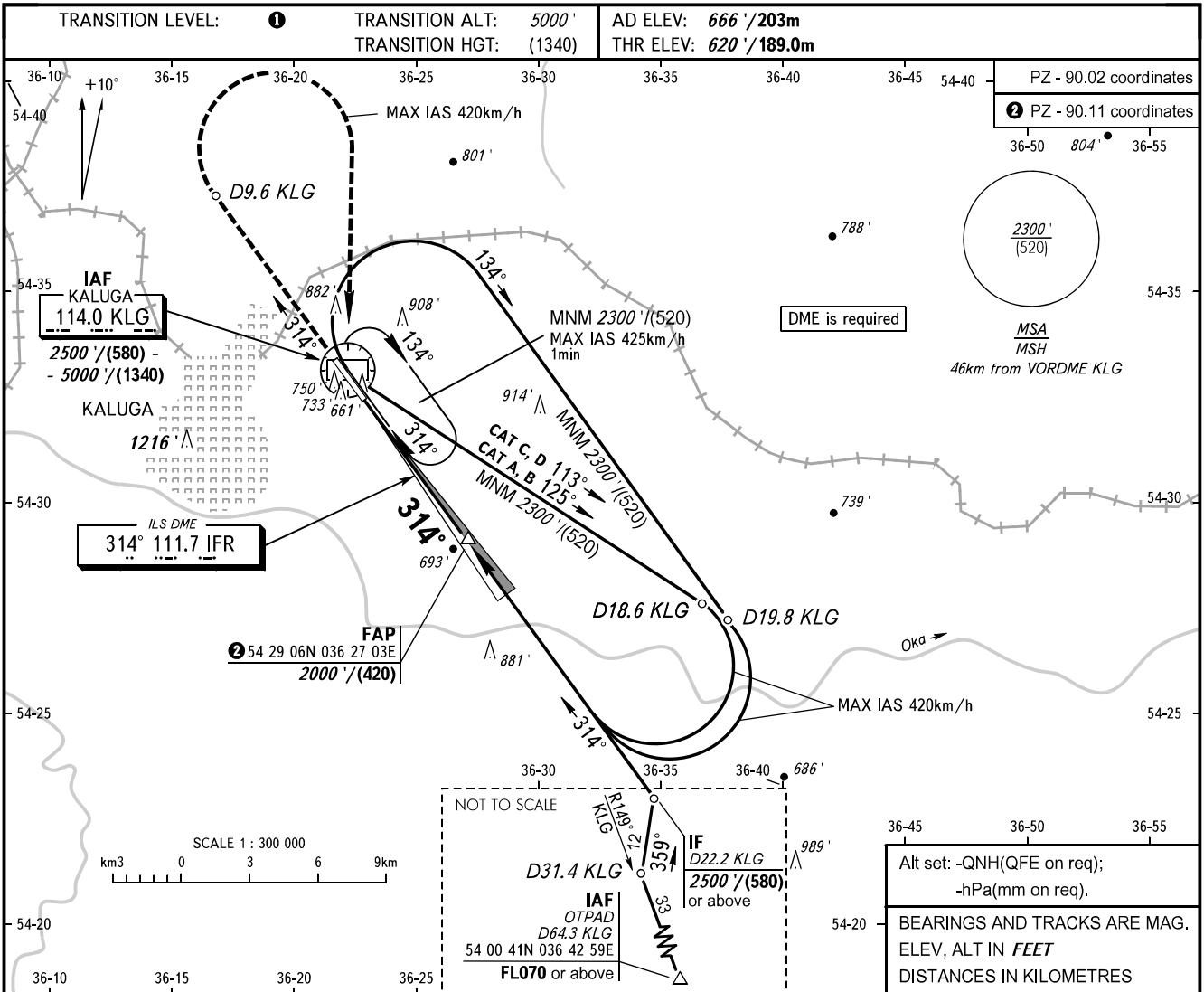


**INSTRUMENT
APPROACH
CHART - ICAO**

KALUGA TOWER 120.300

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



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

CHANGE: HGT