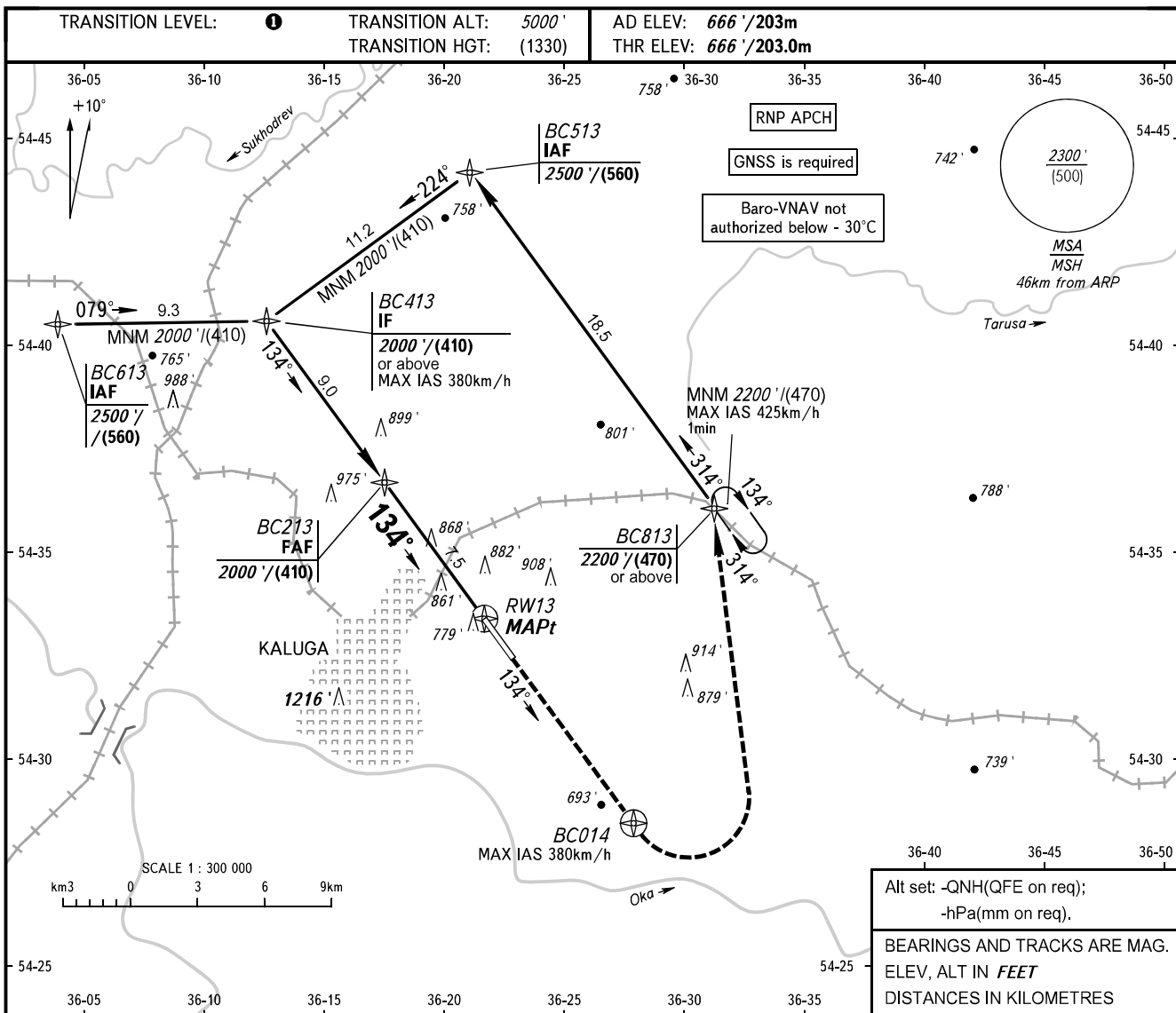


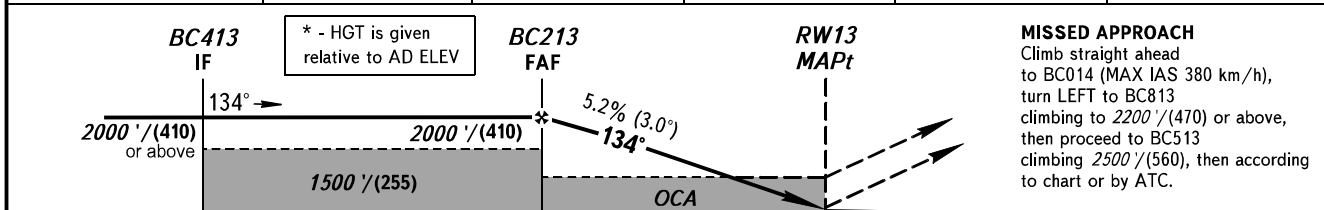
**INSTRUMENT
APPROACH
CHART - ICAO**

KALUGA TOWER 120.300

**KALUGA, RUSSIA
GRABTSEVO
RNAV RWY 13**



DIST to RW13	7.5	7.0	5.0	3.0	2.0
ALTITUDE	2000' / (410)	1910' / (380)	1570' / (275)	1230' / (175)	1060' / (125)



MISSED APPROACH
 Climb straight ahead to BC014 (MAX IAS 380 km/h), turn LEFT to BC813 climbing to 2200' / (470) or above, then proceed to BC513 climbing 2500' / (560), then according to chart or by ATC.

OCA(H)		A	B	C	D
Straight-in Approach	LNAV	1120' (450') / (140)	1120' (450') / (140)	1120' (450') / (140)	1120' (450') / (140)
	LNAV / VNAV	992' (326') / (100)	1002' (336') / (105)	1012' (346') / (110)	1022' (356') / (110)
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
 Visual manoeuvring WEST of AD is PROHIBITED.

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: NIL