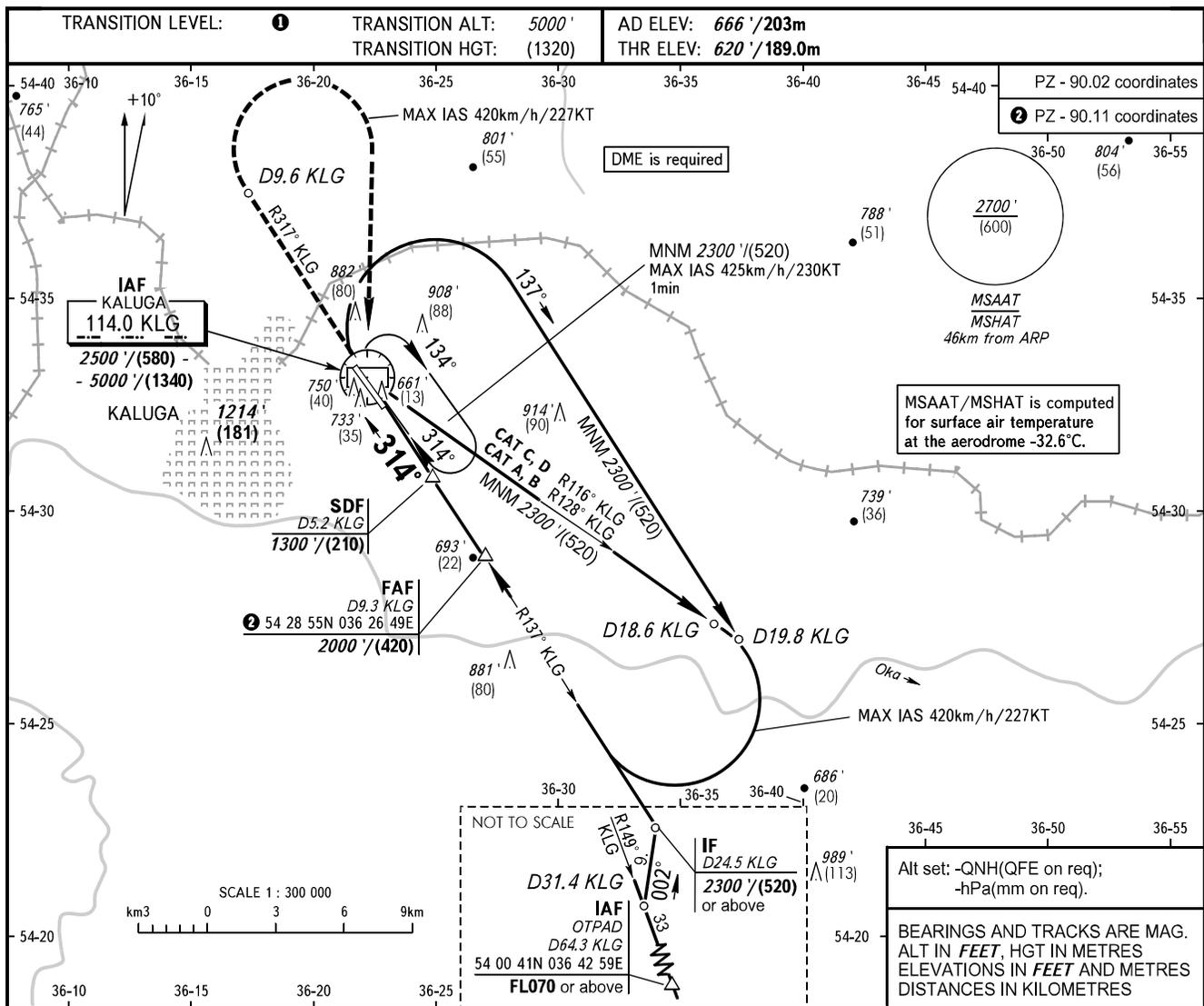


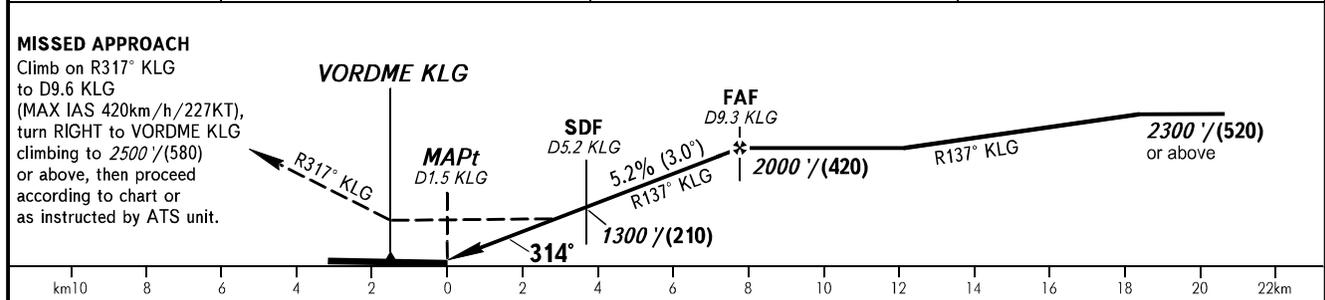
**INSTRUMENT
APPROACH
CHART - ICAO**

KALUGA TOWER 120.300

KALUGA, RUSSIA
GRABTSEVO
VOR RWY 31



DME KLG	5.0	7.0	9.0
ALTITUDE/HEIGHT	1270'/(200)	1610'/(305)	1950'/(405)



OCA(H)		A	B	C	D						
Straight-in Approach	With SDF	980' (360') (110)	980' (360') (110)	980' (360') (110)	980' (360') (110)						
	WO SDF	1080' (460') (145)	1080' (460') (145)	1080' (460') (145)	1080' (460') (145)						
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
		kt	81	97	113	130	146	162	178	194	211
RATE OF DESCENT		m/s	2.2	2.6	3.0	3.5	3.9	4.3	4.8	5.2	5.6
		ft/min	427	512	597	682	768	853	938	1024	1109

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. Final approach track is offset by 3° from RCL.
3. MAPt at D1.5 KLG. Timing not authorized for defining MAPt.