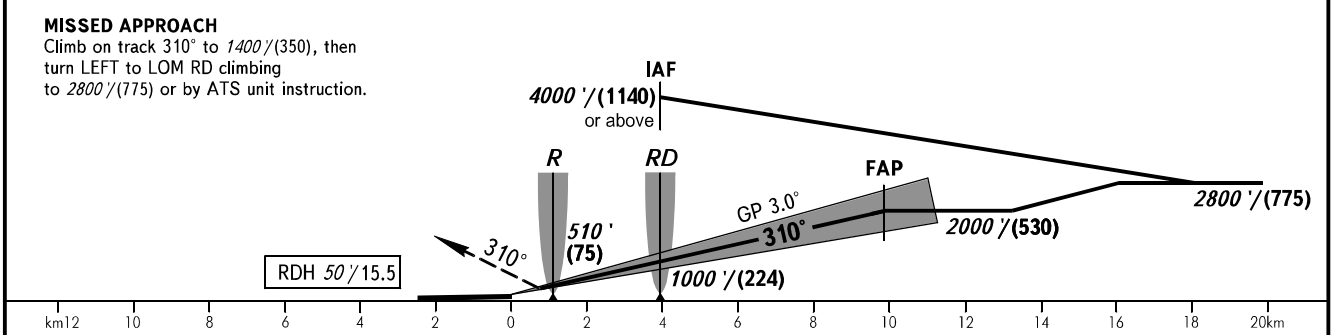
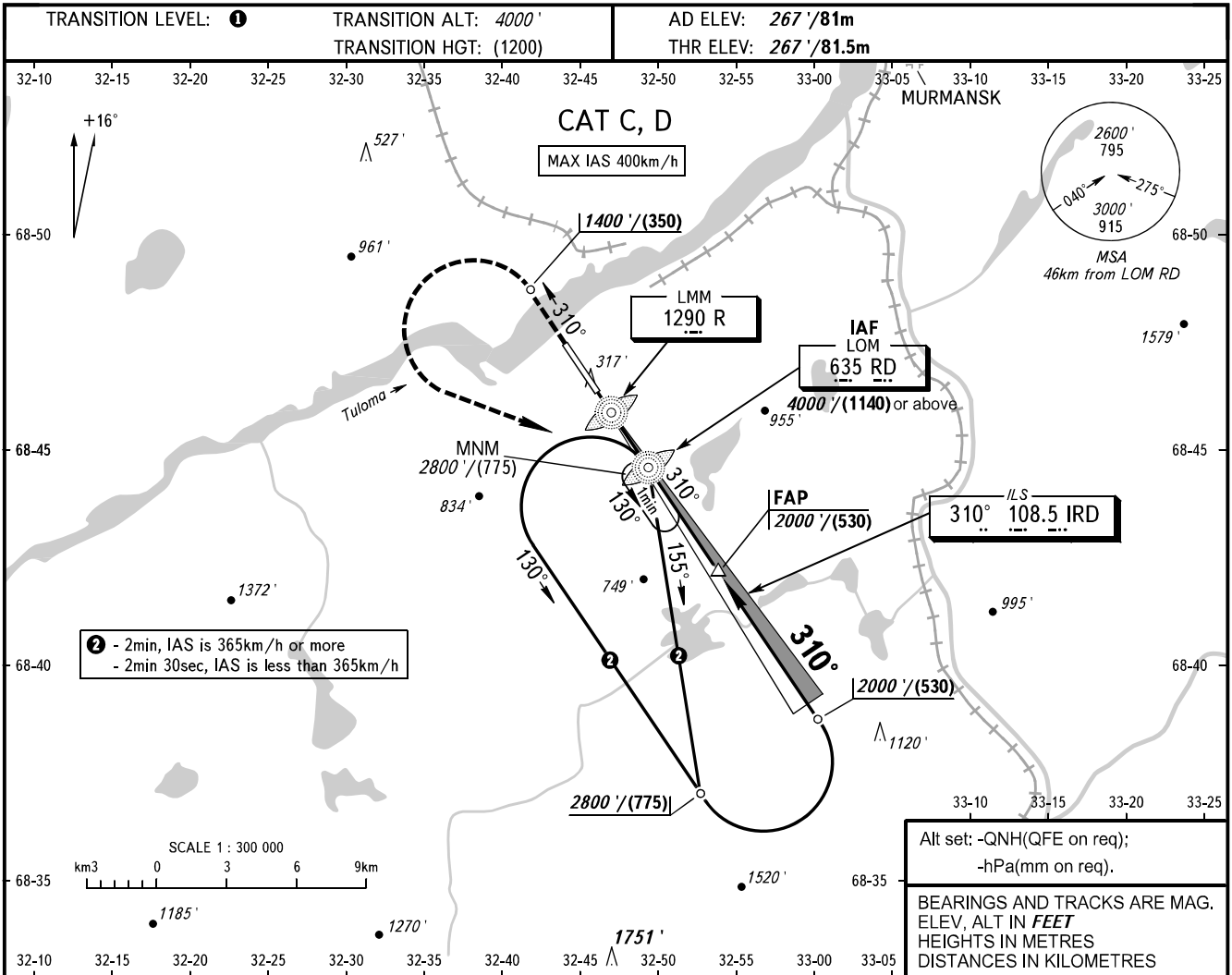


**INSTRUMENT
APPROACH
CHART - ICAO**

**MURMANSK, RUSSIA
MURMANSK
ILS X CAT I RWY 31**

TOWER **120.300**
RADAR **120.700**



OCA(H)		A	B	C	D						
Straight-in Approach	CAT I			467' (200') (61)	478' (211') (65)						
Circling				1360' (1100') (335)	1360' (1100') (335)						
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

1 TRANSITION LEVEL:
- FL050 when QNH is 1013 hPa (760mm mercury column) or above;
- FL060 when QNH is 977 hPa (733mm mercury column) or above,
but less than 1013 hPa (760mm mercury column);
- FL070 when QNH is less than 977 hPa (733mm mercury column).

WARNING
Visual manoeuvring to the north-east of the AD is prohibited.

