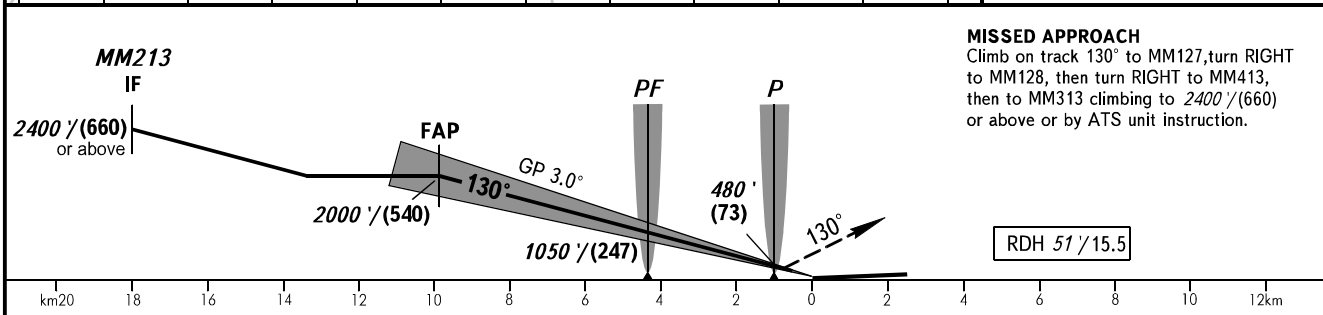
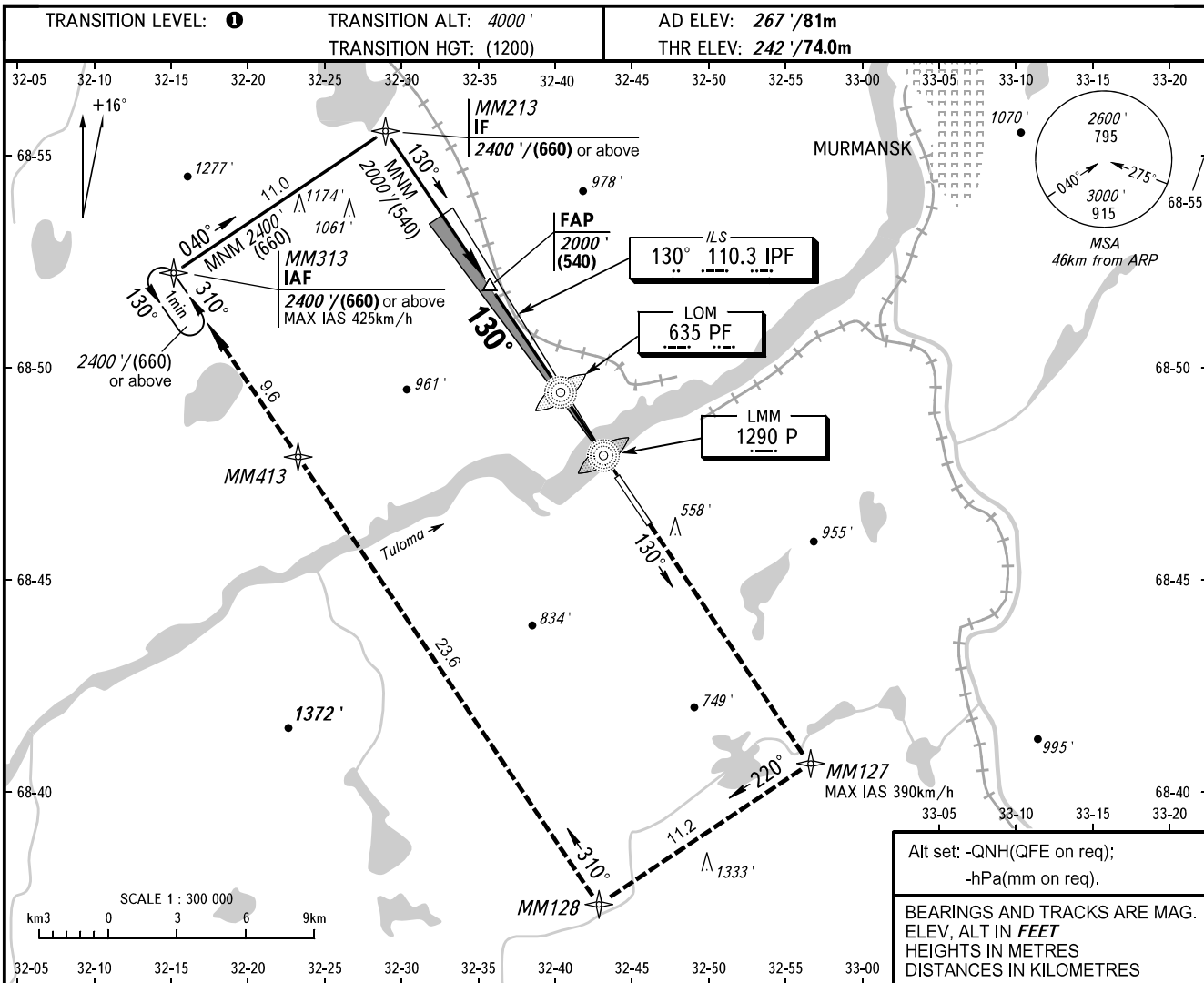


**INSTRUMENT
APPROACH
CHART - ICAO**

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

MURMANSK, RUSSIA
MURMANSK
ILS Y CAT I RWY 13



OCA(H)		A	B	C	D
Straight-in	CAT I	437' (195') (60)	449' (207') (64)	457' (215') (66)	468' (226') (69)
	Approach				
Circling		820' (550') (170)	990' (730') (225)	1360' (1100') (335)	1360' (1100') (335)

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.

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
RATE OF DESCENT	ft/min		427	512	597	682	768	853	938	1109