

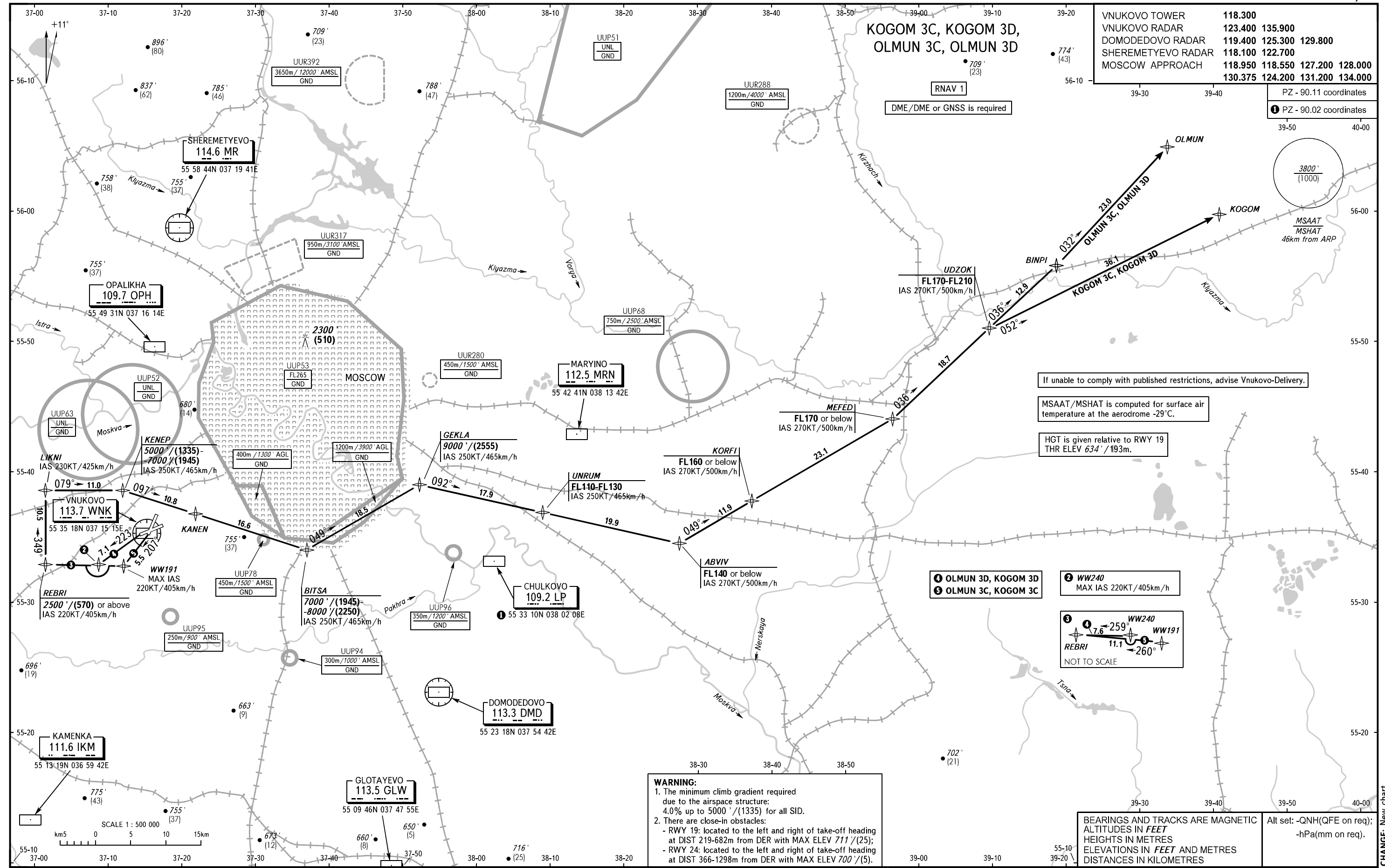
STANDARD DEPARTURE CHART  
INSTRUMENT (SID) - ICAO

TRANSITION ALT: **10000'**  
TRANSITION HGT: **(2900)**

MOSCOW, RUSSIA  
VNUKOVO  
RNAV RWY 19, 24

VNUKOVO TOWER	118.300
VNUKOVO RADAR	123.400 135.900
DOMODEDOVO RADAR	119.400 125.300 129.800
SHEREMETYEVO RADAR	118.100 122.700
MOSCOW APPROACH	118.950 118.550 127.200 128.000
	130.375 124.200 131.200 134.000

PZ - 90.11 coordinates  
① PZ - 90.02 coordinates



If unable to comply with published restrictions, advise Vnukovo-Delivery.

MSAAT/MSHAT is computed for surface air temperature at the aerodrome -29°C.

HGT is given relative to RWY 19  
THR ELEV 634' / 193m.

**WARNING:**  
1. The minimum climb gradient required due to the airspace structure:  
4.0% up to 5000'/(1335) for all SID.  
2. There are close-in obstacles:  
- RWY 19: located to the left and right of take-off heading at DIST 219-682m from DER with MAX ELEV 711'/(25);  
- RWY 24: located to the left and right of take-off heading at DIST 366-1298m from DER with MAX ELEV 700'/(5).

BEARINGS AND TRACKS ARE MAGNETIC  
ALTITUDES IN FEET  
HEIGHTS IN METRES  
ELEVATIONS IN FEET AND METRES  
DISTANCES IN KILOMETRES

Alt set: -QNH(QFE on req);  
-hPa(mm on req).