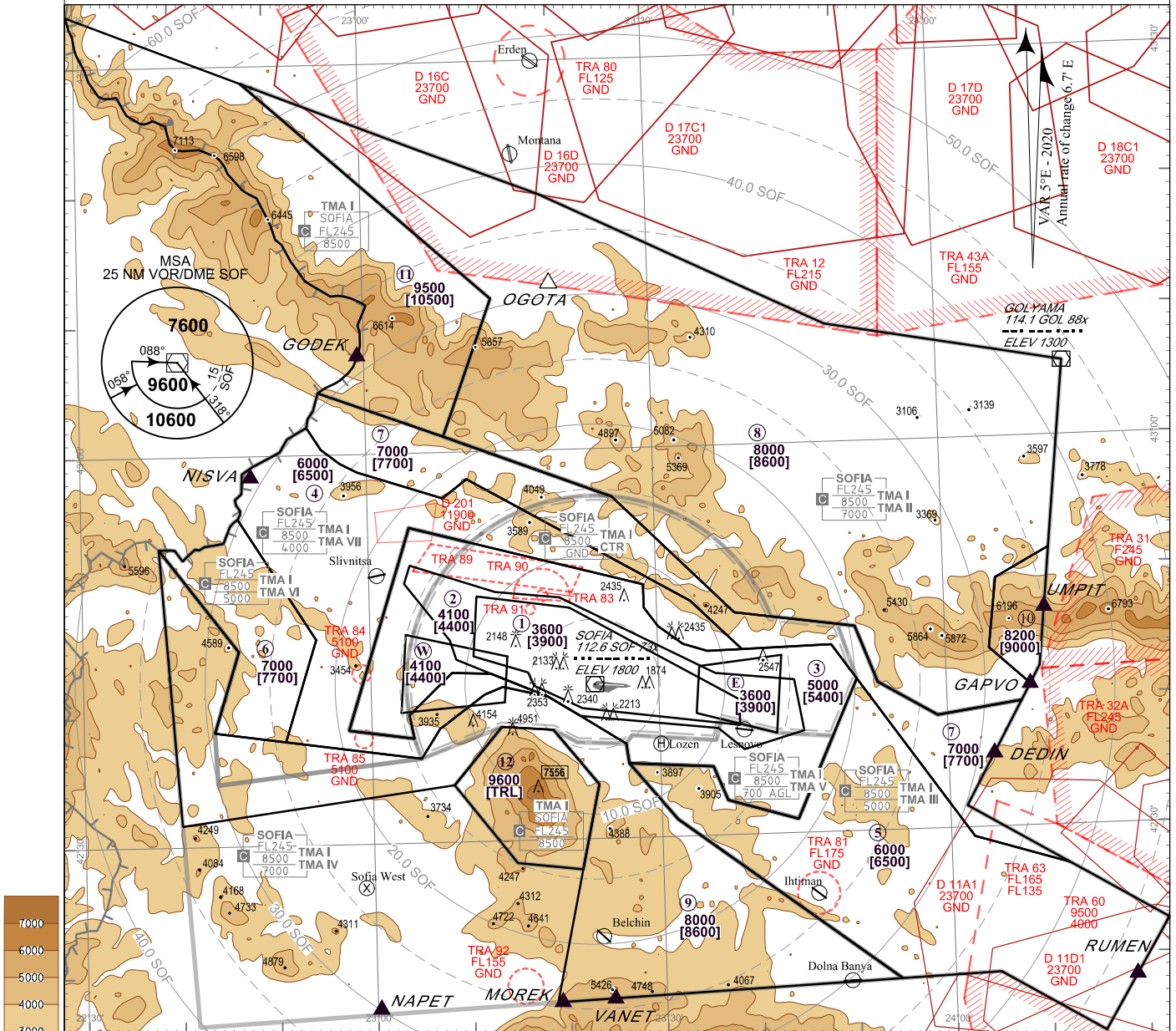


**ATC SURVEILLANCE  
MINIMUM ALTITUDE  
CHART - ICAO**

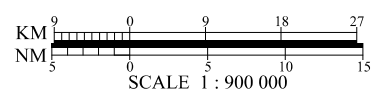
AERODROME ELEV 1745 - 62 hPa  
TRANSITION ALT 10500 FT  
TRANSITION LEVEL BY ATC

APP 123.700 TWR 118.100 ATIS 126.680  
129.900 120.200  
247.575 336.400  
121.500 121.500  
243.000 243.000

**СОФИЯ**



ALTITUDES (HEIGHTS) AND ELEVATIONS IN FEET  
DISTANCES IN NM



**GENERAL INFORMATION**

1. Only the significant obstacles and dominant spot heights are shown.
2. The minimum altitude shown within the Minimum Vectoring Altitude (MVA) areas and Intermediate Approach Areas (IAA) ensure terrain clearance in conformity with Doc 8168 PANS-OPS, Vol II, Part II, Section 2, Chapter 6 in respect to obstacles within the MVA area and IAA and airspace structure (lower limit of controlled airspace plus buffer of 300 m (1000 ft)).
3. Further descent below MVA may be given within the IAA shown when the aircraft is within 40° leg to final approach track or on final approach track. Below the MVA area or IAA, IFR flights will normally be cleared on published IFR procedures only.
4. Values of altitudes in brackets are corrected for low temperatures and apply always in the period between first AIRAC date in NOVEMBER and last AIRAC date in MARCH, unless published otherwise by a NOTAM.
5. This chart may only be used for cross-checking of altitudes assigned while under radar control.

**OUTSIDE THE DESIGNATED  
MVA AREAS**

The minimum altitude to be allocated by radar controller will be either the MSA or 300 m (1000 ft) above any fixed obstacles within 9.3 km (5 NM) of the aircraft.

List of Coordinates of MVA Areas in TMA SOFIA

1 MNM ALT 3600 [3900]

424853N 0231113E - 424749N 0232052E -  
424024N 0233822E - 423826N 0233822E -  
424004N 0232201E - 424152N 0231701E -  
424256N 0231625E - 424417N 0231045E -  
424853N 0231113E

2 MNM ALT 4100 [4400]

425122N 0230419E - 424911N 0231311E -  
424838N 0231953E - 424228N 0233556E -  
424148N 0234408E - 423751N 0234502E -  
423633N 0233847E - 423814N 0233604E -  
423929N 0232145E - 424101N 0231825E -  
424254N 0231233E - 424403N 0230858E -  
424532N 0230820E - 424958N 0230341E -  
425122N 0230419E

3 MNM ALT 5000 [5400]

425416N 0230419E - 424928N 0232839E -  
424740N 0232841E - 424612N 0233006E -  
424448N 0233237E - 424411N 0233511E -  
424424N 0234807E - 424142N 0235040E -  
423104N 0234409E - 423241N 0233653E -  
423517N 0233528E - 423544N 0232642E -  
423715N 0232627E - 423929N 0232145E -  
424101N 0231825E - 424254N 0231233E -  
424302N 0230829E - 423951N 0230355E -  
423803N 0230425E - 423847N 0225736E -  
425416N 0230419E

4 MNM ALT 6000 [6500]

430208N 0225349E - 430025N 0225519E -  
425919N 0225715E - 425838N 0225901E -  
425629N 0230755E - 425754N 0231029E -  
424806N 0233333E - 424415N 0233848E -  
424411N 0233511E - 424448N 0233237E -  
424612N 0233006E - 424740N 0232841E -  
424928N 0232839E - 425416N 0230419E -  
423847N 0225736E - 423803N 0230425E -  
423951N 0230355E - 424302N 0230829E -  
424254N 0231233E - 424101N 0231825E -  
424151N 0231345E - 424118N 0231151E -  
423845N 0230704E - 423630N 0230507E -  
423800N 0225101E - 424549N 0225422E -  
425511N 0224626E - National border with Serbia -  
430208N 0225349E

5 MNM ALT 6000 [6500]

424142N 0235040E - 422917N 0240225E -  
422702N 0241213E - 422233N 0242216E -  
421403N 0241521E - 421849N 0240441E -  
421833N 0235425E - 423119N 0233137E -  
423544N 0232642E - 423517N 0233528E -  
423241N 0233653E - 423104N 0234409E -  
424142N 0235040E

6 MNM ALT 7000 [7700]

425511N 0224626E - 424549N 0225422E -  
423800N 0225101E - 423846N 0224337E -  
424500N 0224617E - 425256N 0223806E -  
National border with Serbia - 425511N 0224626E

7 MNM ALT 7000 [7700]

430448N 0225506E - 430114N 0230809E -  
425618N 0232538E - 424706N 0233806E -  
424546N 0235037E - 424124N 0235250E -  
423842N 0235859E - 423937N 0240746E -  
423140N 0240146E - 422702N 0241213E -  
422917N 0240225E - 424424N 0234807E -  
424415N 0233848E - 424806N 0233333E -  
425754N 0231029E - 425629N 0230755E -  
425838N 0225901E - 425919N 0225715E -  
430025N 0225519E - 430208N 0225349E -  
National border with Serbia - 430448N 0225506E

8 MNM ALT 8000 [8600]

432843N 0224739E - 432332N 0230528E -  
431942N 0231846E - 430904N 0234828E -  
430543N 0241314E - 425122N 0241107E -  
424908N 0240528E - 424346N 0240433E -  
424054N 0240844E - 423937N 0240746E -  
423842N 0235859E - 424124N 0235250E -  
424546N 0235037E - 424706N 0233806E -  
425618N 0232538E - 430114N 0230809E -  
431145N 0231328E - 432843N 0224739E

9 MNM ALT 8000 [8600]

425256N 0223806E - 424500N 0224617E -  
423846N 0224337E - 423630N 0230507E -  
423845N 0230704E - 424118N 0231151E -  
424151N 0231345E - 424101N 0231825E -  
423929N 0232145E - 423715N 0232627E -  
423544N 0232642E - 423119N 0233137E -  
421833N 0235425E - 421730N 0231838E -  
422740N 0232136E - 423411N 0232331E -  
423828N 0231854E - 423848N 0231333E -  
423423N 0230828E - 423140N 0224005E -  
425256N 0223806E

10 MNM ALT 8200 [9000]

425122N 0241107E - 424218N 0240948E -  
424054N 0240844E - 424346N 0240433E -  
424908N 0240528E - 425122N 0241107E

11 MNM ALT 9500 [10500]

433400N 0222918E - 432843N 0224739E -  
431145N 0231328E - 430114N 0230809E -  
430448N 0225506E - National border with Serbia -  
433400N 0222918E

12 MNM ALT 9600 [TRL]

423848N 0231333E - 423828N 0231854E -  
423411N 0232331E - 422740N 0232136E -  
422818N 0231450E - 423423N 0230828E -  
423848N 0231333E

**Intermediate Approach Areas**

**RWY09 IAA W MNM ALT 4100 [4400]**

424603N 0230344E - 424412N 0231418E -  
424040N 0231355E - 424004N 0230307E -  
424603N 0230344E

**RWY 27 IAA E MNM ALT 3600 [3900]**

424300N 0233417E - 424342N 0234252E -  
423743N 0234211E - 423926N 0233353E -  
424300N 0233417E

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