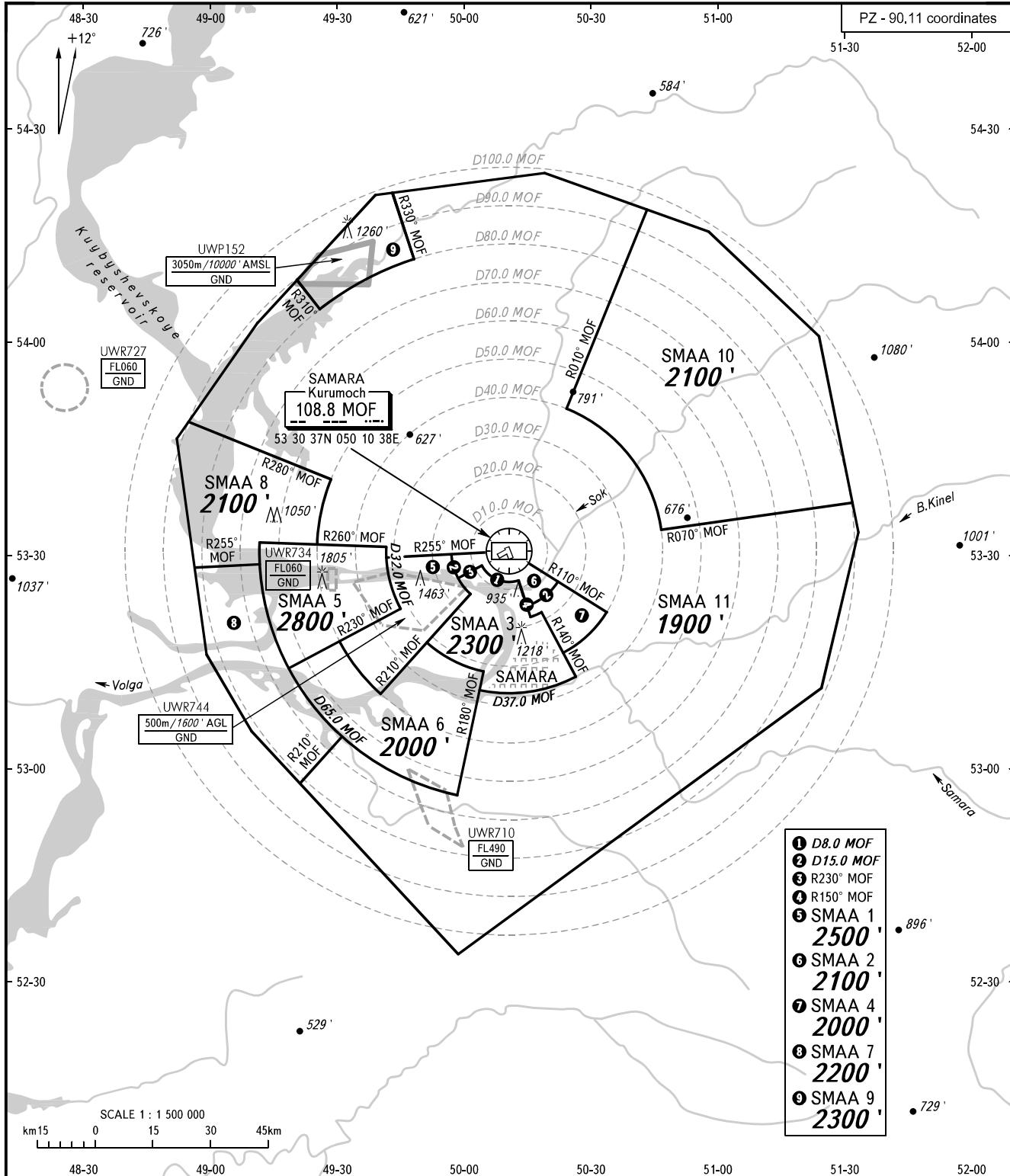


**ATC SURVEILLANCE MINIMUM
ALTITUDE CHART - ICAO**
**ELEV
477'**
**TRANSITION ALT: 4000'
TRANSITION HGT: (1075)**
SAMARA, RUSSIA
KURUMOCH
PZ - 90,11 coordinates


- | |
|----------------|
| ① D8.0 MOF |
| ② D15.0 MOF |
| ③ R230° MOF |
| ④ R150° MOF |
| ⑤ SMAA 1 2500' |
| ⑥ SMAA 2 2100' |
| ⑦ SMAA 4 2000' |
| ⑧ SMAA 7 2200' |
| ⑨ SMAA 9 2300' |

**APPROACH
RADAR**
**130.800
128.000**
WARNING:

- The chart may only be used for cross-checking of altitudes assigned while the aircraft is identified under radar control.
- TEMPERATURE CORRECTION:** The altitude value of SMAA is calculated for ISA conditions (15°C). When ACFT is vectored at temperature 0°C or below, altimeter temperature correction must be applied to the minimum vectoring altitudes.
- COMMUNICATION FAILURE:** In accordance with the procedures described in AIP. SMAA coordinates are on reverse side of this page.

**BEARINGS AND TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS IN FEET
DISTANCES IN KILOMETRES**
**Alt set: -QNH(QFE on req);
-hPa(mm on req).**

SAMARA, RUSSIA
KURUMOCH

SURVEILLANCE MINIMUM ALTITUDE AREAS		
IDENT	MNM ALT	LATERAL LIMITS (PZ-90.11 coordinates)
1	2	3
SMAA 1	2500 ft	533010N 0495705E - 532939N 0494143E, then counterclockwise by arc of a circle radius of 32 KM centred at 533037N 0501038E to 532228N 0494509E - 531750N 0493053E, then counterclockwise by arc of a circle radius of 50 KM centred at 533037N 0501038E to 531030N 0494036E - 532435N 0500134E, then clockwise by arc of a circle radius of 15 KM centred at 533037N 0501038E to 533010N 0495705E.
SMAA 2	2100 ft	532619N 0502207E, then clockwise by arc of a circle radius of 15 KM centred at 533037N 0501038E to 532255N 0501449E - 532630N 0501252E, then clockwise by arc of a circle radius of 8 KM centred at 533037N 0501038E to 532835N 0500415E - 532648N 0495840E, then clockwise by arc of a circle radius of 15 KM centred at 533037N 0501038E to 533010N 0495705E - 533036N 0501038E - 532619N 0502207E.
SMAA 3	2300 ft	532835N 0500415E - 532648N 0495840E, then counterclockwise by arc of a circle radius of 15 KM centred at 533037N 0501038E to 532435N 0500134E - 531745N 0495121E, then counterclockwise by arc of a circle radius of 32 KM centred at 533037N 0501038E to 531343N 0500439E - 531105N 0500343E, then counterclockwise by arc of a circle radius of 37 KM centred at 533037N 0501038E to 531258N 0502614E - 532202N 0501815E, then clockwise by arc of a circle radius of 18 KM centred at 533037N 0501038E to 532122N 0501539E - 532630N 0501252E, then clockwise by arc of a circle radius of 8 KM centred at 533037N 0501038E to 532835N 0500415E.
SMAA 4	2000 ft	532619N 0502207E, then clockwise by arc of a circle radius of 15 KM centred at 533037N 0501038E to 532255N 0501449E - 532122N 0501539E, then counterclockwise by arc of a circle radius of 18 KM centred at 533037N 0501038E to 532202N 0501815E - 531619N 0502318E, then counterclockwise by arc of a circle radius of 30 KM centred at 533037N 0501038E to 532200N 0503334E - 532619N 0502207E.
SMAA 5	2800 ft	533109N 0494141E - 533135N 0491150E, then counterclockwise by arc of a circle radius of 65 KM centred at 533037N 0501038E to 531358N 0491903E - 532228N 0494509E, then clockwise by arc of a circle radius of 32 KM centred at 533037N 0501038E - 533109N 0494141E.
SMAA 6	2000 ft	531750N 0493053E - 531358N 0491903E, then counterclockwise by arc of a circle radius of 65 KM centred at 533037N 0501038E to 525618N 0495834E - 531343N 0500439E, then clockwise by arc of a circle radius of 32 KM centred at 533037N 0501038E to 531745N 0495121E - 531030N 0494036E, then clockwise by arc of a circle radius of 50 KM centred at 533037N 0501038E to 531750N 0493053E.
SMAA 7	2200 ft	532832N 0491157E - 532755N 0485642E, then along Samara/Kurumoch TMA boundary to 525750N 0492200E - 530427N 0493141E, then clockwise by arc of a circle radius of 65 KM centred at 533037N 0501038E to 532832N 0491157E.
SMAA 8	2100 ft	534035N 0492831E - 534823N 0485436E, then along Samara/Kurumoch TMA boundary to 532755N 0485642E - 532832N 0491157E, then clockwise by arc of a circle radius of 65 KM centred at 533037N 0501038E to 533135N 0491150E - 533124N 0492525E, then clockwise by arc of a circle radius of 50 KM centred at 533037N 0501038E - 534035N 0492831E.
SMAA 9	2300 ft	541136N 0494754E - 542053N 0494238E, then along Samara/Kurumoch TMA boundary to 540831N 0491957E - 540428N 0492528E, then clockwise by arc of a circle radius of 80 KM centred at 533037N 0501038E to 541136N 0494754E.
SMAA 10	2100 ft	541829N 0504346E - 535036N 0502418E, then clockwise by arc of a circle radius of 40 KM centred at 533037N 0501038E to 533331N 0504631E - 533656N 0513143E, then along Samara/Kurumoch TMA boundary to 541829N 0504346E.
SMAA 11	1900 ft	534823N 0485436E - 534035N 0492831E, then counterclockwise by arc of a circle radius of 50 KM centred at 533037N 0501038E to 533124N 0492525E - 533109N 0494141E, then counterclockwise by arc of a circle radius of 32 KM centred at 533037N 0501038E to 532939N 0494143E - 533037N 0501038E - 532200N 0503334E, then clockwise by arc of a circle radius of 30 KM centred at 533037N 0501038E to 531619N 0502318E - 531258N 0502614E, then clockwise by arc of a circle radius of 37 KM centred at 533037N 0501038E to 531105N 0500343E - 525618N 0495834E, then clockwise by arc of a circle radius of 65 KM centred at 533037N 0501038E to 530427N 0493141E - 525750N 0492200E, then along Samara/Kurumoch TMA boundary to 533656N 0513143E - 533331N 0504631E, then counterclockwise by arc of a circle radius of 40 KM centred at 533037N 0501038E to 535036N 0502418E - 541829N 0504346E, then along Samara/Kurumoch TMA boundary to 542053N 0494238E - 541136N 0494754E, then counterclockwise by arc of a circle radius of 80 KM centred at 533037N 0501038E to 540428N 0492528E - 540831N 0491957E - 534823N 0485436E.