

- POPULATED PLACES**
- Over 100,000 **MOSKVA**
  - 50,000-100,000 **KLIMOVSK**
  - 10,000-50,000 **Obukhovo**
  - 2,000-10,000 **Kubinka**
  - Less than 2,000 **Dubrov**
- ROADS**
- Dual highway **4 LANES DUAL**
  - All weather, hard surface:
    - More than two lanes wide **4 LANES**
    - Two lanes wide **3 LANES**
    - One lane wide **2 LANES**
  - All weather, loose or light surface:
    - More than two lanes wide **3 LANES**
    - Two lanes wide **2 LANES**
    - One lane wide **1 LANE**
  - Fair or dry weather, loose surface
  - Cart track
  - Footpath, trail
  - Route marker
- RAILROADS**
- Normal gauge 1.44m (4'8 1/2")
  - Station position
  - Narrow gauge
- VEGETATION**
- Woods, Orchard

- OTHER FEATURES**
- Area name
  - School, Church, Mosque
  - Landmark feature or object
  - Tank, Well, Wall, Fence
  - Hot, Inlet, Pass, Mine or quarry
  - Horizontal control point
- HYDROGRAPHY**
- Land subject to inundation
  - Disappearing stream, Dam
- TERRAIN ELEVATIONS**
- Spot elevation: Normal, Critical
  - HIGHEST KNOWN elevation is **938** feet at the following coordinates: Geographic **55°01'N, 45°30'E**; Grid **NF 3397**

- AERODROMES (Military or Civil)**
- EDNA/Name
  - Runway pattern known
  - EDNA-Name
  - 50- Length of longest runway to nearest hundreds of feet
  - Soft or unimproved surface
  - Unknown surface
  - 725- Elevation
  - Runway pattern unknown
- HELIPORT/HELIPAD**

- RADIO AIDS TO NAVIGATION**
- VHF OMNI RANGE (VOR)
  - VORTAC
  - TACAN
  - VOR with DME
  - Other facilities
- RADIO FACILITIES**
- RADIO RANGE LF/MF
  - MULTIPLE RADIO FACILITIES
- CONTROLLED AIRSPACE**
- ADIZ

- VISUAL AIDS AND OBSTRUCTIONS**
- Obstruction
  - 1100- Elevation of obstruction top, above sea level
  - (258)- Elevation of obstruction top, above ground level
  - Group obstruction
  - Radio facility obstruction
  - Power transmission line
  - Visual ground sign
  - Aero light; Marine light

**CAUTION**  
Vertical obstructions, including powerlines, have been omitted from this chart. Caution is advised. However, there is no assurance that all are shown, or that their locations or heights are exact.

**CAUTION**  
**AIR INFORMATION CURRENT THROUGH 16 JUNE 1997**  
Consult NOTAMS and Flight Information Publications for the latest air information; the NIMA Aeronautical Chart Updating Manual or MOD (U.K.) Aeronautical Chart Amendment document, for other chart revision information.

**CAUTION**  
**THIS CHART CONTAINS MAXIMUM ELEVATION FIGURES (MEF)**  
The Maximum Elevation Figures shown in quadrangles bounded by ticked lines of latitude and longitude are represented in THOUSANDS and HUNDREDS of feet above mean sea level. The MEF is based on information available concerning the highest known feature in each quadrangle, including terrain and obstructions (trees, towers, antennas, etc.).  
EXAMPLE: 12,500 feet **12<sup>5</sup>**

**ATTENTION**  
**THIS CHART CONTAINS MAXIMUM ELEVATION FIGURES (MEF)**  
The Maximum Elevation Figures shown in quadrangles bounded by ticked lines of latitude and longitude are represented in THOUSANDS and HUNDREDS of feet above mean sea level. The MEF is based on information available concerning the highest known feature in each quadrangle, including terrain and obstructions (trees, towers, antennas, etc.).  
EXAMPLE: 12,500 feet **12<sup>5</sup>**

**LOCATION DIAGRAM**  
(IAC INDEX SHOWN IN BLUE)  
(WAC INDEX SHOWN IN RED/BROWN)

NO 37-9	NO 38-1	NO 38-2	NO 38-3	NO 38-4	NO 38-5	NO 38-6	NO 38-7	NO 38-8	NO 38-9
NO 37-12	NO 38-10	NO 38-11	NO 38-12	NO 38-13	NO 38-14	NO 38-15	NO 38-16	NO 38-17	NO 38-18
NO 37-3	NO 38-1	NO 38-2	NO 38-3	NO 38-4	NO 38-5	NO 38-6	NO 38-7	NO 38-8	NO 38-9
NO 37-6	NO 38-4	NO 38-5	NO 38-6	NO 38-7	NO 38-8	NO 38-9	NO 38-10	NO 38-11	NO 38-12
NO 37-9	NO 38-7	NO 38-8	NO 38-9	NO 38-10	NO 38-11	NO 38-12	NO 38-13	NO 38-14	NO 38-15

**CONVERSION OF ELEVATIONS**

FEET	METERS	FEET	METERS
1000	305	10000	3048
900	274	9000	2743
800	244	8000	2438
700	213	7000	2134
600	183	6000	1829
500	152	5000	1524
400	122	4000	1219
300	91	3000	914
200	61	2000	610
150	46	1500	457
100	31	1000	305

SCALE 1:250,000  
SERGACH, RUSSIA



Prepared and published by the National Imagery and Mapping Agency, Compiled October 1996.  
MAP INFORMATION AS OF 1994

COORDINATE CONVERSION FROM WGS 84 TO WGS 72  
Grid: Spheroid 1943, Spheroid Offset  
Geographic: Spheroid 0.6" Long, Spheroid 0.1" Lat.

**CONTOUR INTERVAL APPROXIMATELY 165 FEET**

**BLUE NUMBERED LINES INDICATE THE 10,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 38, WORLD GEODETIC SYSTEM 1984 ELLIPSOID.**

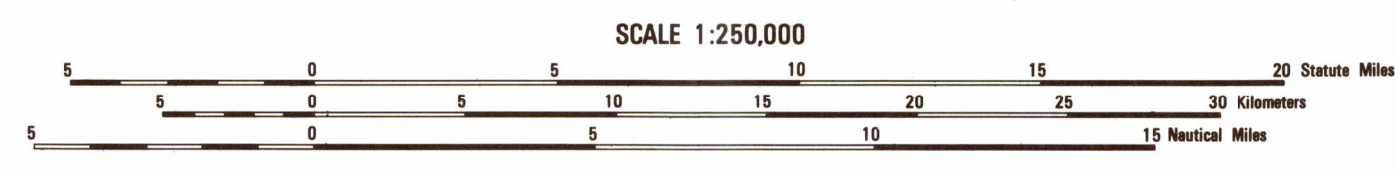
**USERS SHOULD REFER CORRECTIONS, ADDITIONS, AND COMMENTS TO THE NIMA CUSTOMER HELP DESK: 1-800-455-0099; COMMERCIAL: 1-314-260-9032; DSN: 490-5032; OR WRITE TO: ATTN: CDD, MAIL STOP P-37, NATIONAL IMAGERY AND MAPPING AGENCY, 4805 SANGAREE ROAD, FORT BELLEVILLE, MO 20818-5003**

**WHEN REPORTING OUTSIDE THE GRID ZONE DESIGNATION AREA IN WHICH THE POINT LIES, PREFIX THE GRID ZONE DESIGNATION.**

**CONTOUR INTERVAL APPROXIMATELY 165 FEET**

**CONTOUR INTERVAL APPROXIMATELY 165 FEET**

**CONTOUR INTERVAL APPROXIMATELY 165 FEET**



**JOINT OPERATIONS GRAPHIC (AIR)**

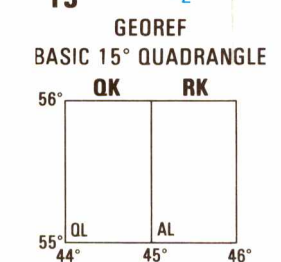
SCALE 1:250,000

CONTOUR INTERVAL APPROXIMATELY 165 FEET

BLUE NUMBERED LINES INDICATE THE 10,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 38, WORLD GEODETIC SYSTEM 1984 ELLIPSOID.

USERS SHOULD REFER CORRECTIONS, ADDITIONS, AND COMMENTS TO THE NIMA CUSTOMER HELP DESK: 1-800-455-0099; COMMERCIAL: 1-314-260-9032; DSN: 490-5032; OR WRITE TO: ATTN: CDD, MAIL STOP P-37, NATIONAL IMAGERY AND MAPPING AGENCY, 4805 SANGAREE ROAD, FORT BELLEVILLE, MO 20818-5003

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**RELIABILITY OF THIS GRAPHIC**  
(as determined by standard practices)

PLOTING ACCURACY	RELIABILITY OF THIS GRAPHIC	
	AREA I	AREA II
Horizontal	within 425	within 425
Contours	85	85
DATE OF INFORMATION	AREA I	AREA II
All other features	1996	1996
	1996	1994

Horizontal Datum: World Geodetic System 1984  
Vertical Datum: Mean Sea Level  
Transverse Mercator Projection

**ELEVATION TINTS**

405
BSL

**GLOSSARY**  
Ostrovnoyehy Punkt ..... island stop  
Stantsiya ..... railroad station  
Vodokhranitel'skiy ..... reservoir

**NOTES**  
Powerlines are shown except within populated place limits. Other obstructions are shown if they are 200 feet or more above ground level. See caution note.  
On this graphic a line is generally considered as being 8 feet (2.5 meters) in width.  
NAMES AND BOUNDARIES OF ADMINISTRATIVE DIVISIONS IN RUSSIA ARE NOT AVAILABLE.  
Road classification should be referred to with caution.

NSN 7641014622301  
NIMA REF. NO. 1501ANN3802



ED. NO. 001