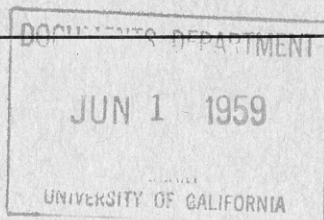


TM 30-548

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

SOVIET TOPOGRAPHIC MAP SYMBOLS



*HEADQUARTERS, DEPARTMENT OF THE ARMY
JUNE 1958*

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) DEPARTMENT OF THE ARMY
 NO. 30-548) Washington 25, D. C., 12 June 1958

SOVIET TOPOGRAPHIC MAP SYMBOLS

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CHAPTER I

INTRODUCTION

SECTION I GENERAL

1. Purpose

The purpose of this manual is to provide information required by the map user when reading modern Soviet military topographic maps.

2. Scope

This manual presents, as a convenient reference guide, symbols and abbreviations which appear on available Soviet maps of various scales.

3. Organization

a. Chapter 1 explains briefly the responsible authorities involved in Soviet mapping. It also contains additional general information concerning symbols and a detailed explanation of the Soviet map numbering system.

b. Chapter 2 is a listing of map symbols generally common to all scales except for size, which varies from scale to scale.

c. Chapter 3 is a list of symbols found only on maps at scale of 1:10,000.

d. Chapters 4 through 6 provide additional symbols found on 1:200,000, 1:500,000 and 1:1,000,000 scale maps.

e. Appendix I provides a transliteration of the Russian alphabet.

f. Appendix II is a list of abbreviations appearing on Soviet maps, arranged according to the Russian alphabet. Symbols which are general in nature (such as mine, factory and tower) are accompanied by abbreviations indicating the specific use or activity of the feature.

g. Appendix III is a list of translated, selected terms primarily appearing in the compilation credit note of Soviet maps.

SECTION II NOTES ON SYMBOLIZATION

1. In a few cases two symbols may be found representing one feature. This is due to a continuing evolution of mapping specifications.

2. A symbol qualified by the words "drawn to scale" means that the size is delineated true to the scale of the map.

3. Many of the symbols presented in Chapters 4 through 6 exceed normal map size; exact specifications are not available.

4. It is possible that symbols other than those listed herein may be discovered.

SECTION III SOVIET MAPPING RESPONSIBILITIES

1. The principal topographic map producing organization of the USSR is the Chief Administration of Geodesy and Cartography (GUGK) under the Ministry of Internal Affairs (MVD). This vast organization, controlling mapping functions throughout the USSR, is responsible for the production of all military-topographic, economic and civil-use mapping.

2. The Military Topographic Administration (VTU) under the General Staff of the Ministry of Defense is also involved in Soviet mapping, operating in close cooperation with GUGK. Its responsibilities are flexible but apparently its authority takes precedence during wartime.

SECTION IV SHEET NUMBERING SYSTEM OF SOVIET TOPOGRAPHIC MAPS

1. 1:1,000,000 Scale

The Soviet topographic 1:1,000,000 sheets follow the International Map of the World (IMW) numbering system. Sheets are designated by a Roman letter and Arabic number. In the Northern Hemisphere the numbering system begins at the Equator and the 180° meridian with sheet number A-1. Sheet numbers progress northward and eastward in letters and numbers respectively. The individual sheets cover 4° of latitude and 6° of longitude. Example: Sheet M-36 is located between 48° and 52° north latitude and 30° to 36° east longitude.

2. 1:500,000 Scale

Each 1:1,000,000 sheet area is divided into four 1:500,000 sheets, each covering 2° of latitude and 3° of longitude.

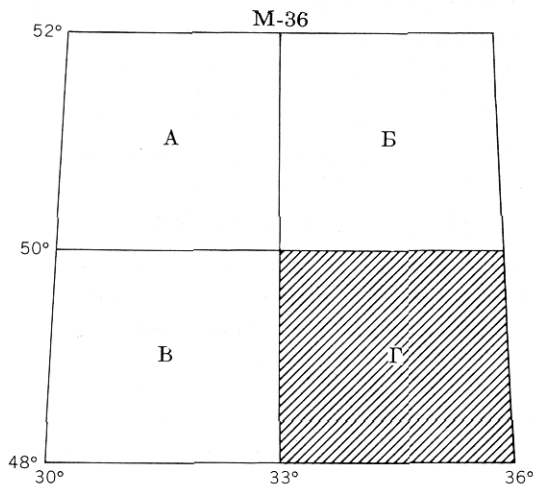


FIGURE 1. 1:500,000 scale division of 1:1,000,000 sheet M-36.

Each sheet is identified by the number of the 1:1,000,000 sheet within which it falls, followed by a Russian letter to designate each quarter: A for NW, B for NE, B for SW and Γ for SE. Example: M-36- Γ.

3. 1:300,000 Scale

Each 1:1,000,000 sheet area is divided into nine 1:300,000 sheets, each covering 1°20' of latitude and 2° of longitude.

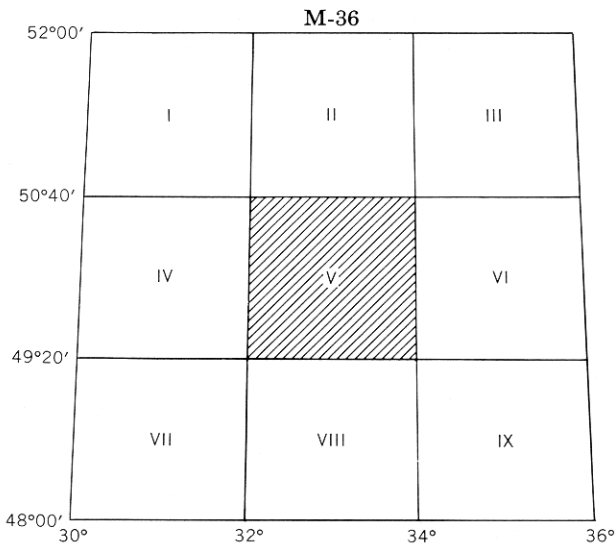


FIGURE 2. 1:300,000 scale division of 1:1,000,000 sheet M-36.

Each sheet is identified by a Roman numeral that precedes the 1:1,000,000 sheet number. Example: V-M-36.

4. 1:200,000 Scale

There have been several variations of the format and numbering systems used during the history of the 1:200,000 scale maps. Three of these, recently and presently used, are described below.

- a. One numbering system divides the 1:1,000,000 sheet area into 36 1:200,000 sheets, each covering 40' of latitude and 1° of longitude.

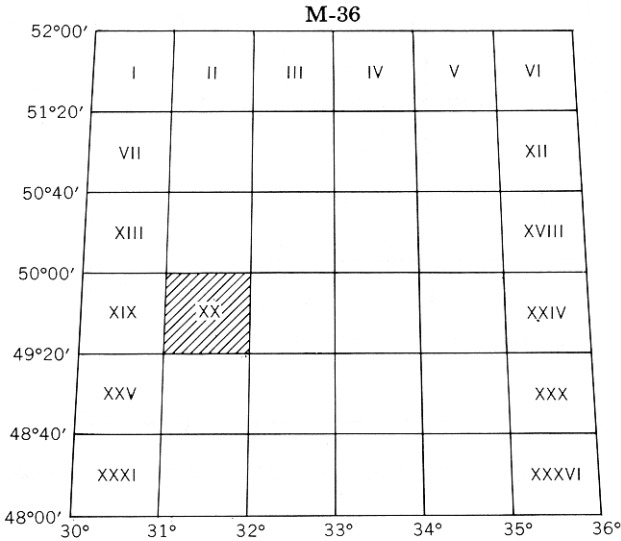


FIGURE 3. Method 1, 1:200,000 scale division of 1:1,000,000 Sheet M-36.

Each sheet is identified by the number of the 1:1,000,000 sheet within which it falls, followed by a Roman numeral. Example: M-36-XX.

b. A second system divides the 1:1,000,000 sheet area into 18 1:200,000 sheets, each covering 40' of latitude and 2° of longitude.

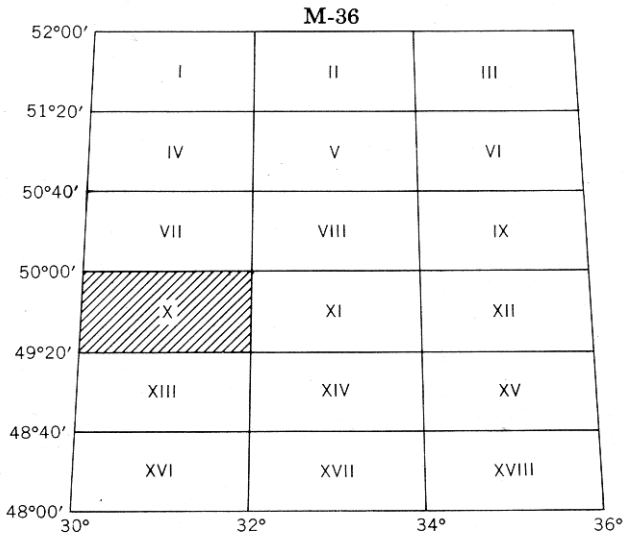


FIGURE 4. Method 2, 1:200,000 scale division of 1:1,000,000 Sheet M-36.

Each sheet is identified by the number of the 1:1,000,000 sheet within which it falls, followed by a Roman numeral. Example: M-36-X.

c. A third system divides the 1:1,000,000 sheet area into nine 1:200,000 sheets, each covering 1°20' of latitude and 2° of longitude. It will be seen in comparing diagrams that in this system each sheet contains the area of four 1:200,000 sheets shown in method No. 1. It is known as the four-in-one method.

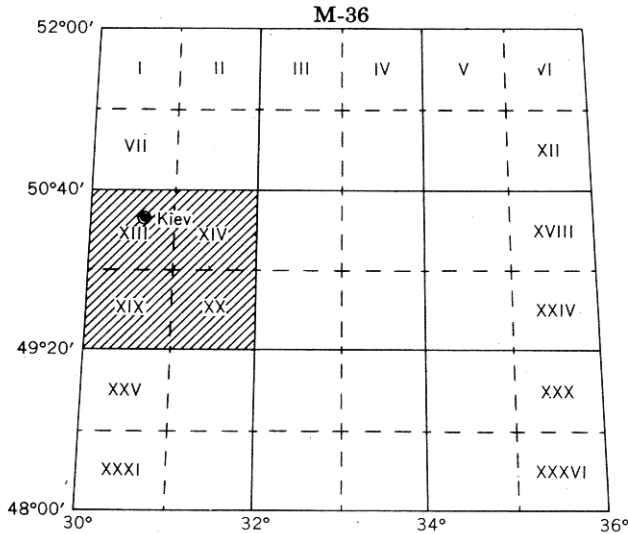


FIGURE 5. Method 3, 1:200,000 Scale division of 1:1,000,000 Sheet M-36.

In this case the 1:200,000 sheet has two identifications. At the top-center of a sheet will be the name of the principal town of the area, followed by a serial number, such as Kiev M-36-(4). The numeral 4 appears in parentheses to prevent confusion with sheet designation of 1:100,000 scale maps. A second sheet identification is found in the upper-right corner, such as, M-36-XIII, XIV, XIX, XX which indicates the numbers of the basic 1:200,000 scale maps involved in the single sheet. Example: Kiev M-36-(4) and M-36-XIII, XIV, XIX, XX.

5. 1:100,000 Scale

Each 1:1,000,000 sheet area is divided into 144 1:100,000 sheets, each covering 20' of latitude and 30' of longitude.

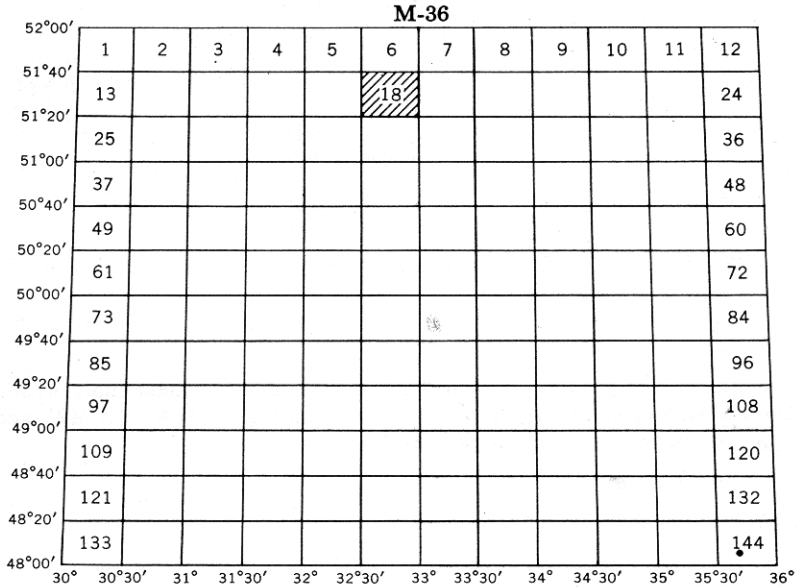


FIGURE 6. 1:100,000 scale division of 1:1,000,000 Sheet M-36.

Each sheet is identified by the number of the 1:1,000,000 sheet within which it falls, followed by an Arabic number. Example: M-36-18.

6. 1:75,000 Scale

The sheet line diagram and numbering system of the 1:75,000 scale maps is not illustrated. The maps were produced by Latvia previous to Soviet domination and were designed to a format and numbering system adjusted to the size and shape of Latvia only. The maps are 15' N-S x 30' E-W. Apparently the 1:75,000 scale is no longer active but the existing maps are still in use. The sheets are identified by an Arabic number followed by the name of the principal town within the map limits. Example: 102-Karsava.

7. 1:50,000 Scale

Each 1:100,000 sheet area is divided into four 1:50,000 sheets, each covering 10' of latitude and 15' of longitude.

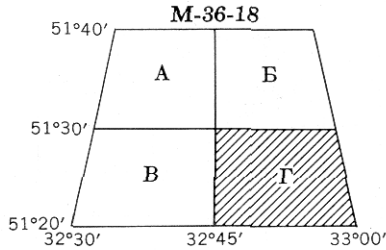


FIGURE 7. 1:50,000 scale division of 1:100,000 sheet M-36-18.

Each sheet is identified by the sheet number of the 1:100,000 sheet within which it falls, followed by A, B, B or Γ, representing the NW, NE, SW, and SE quarters respectively. Example: M-36-18-Γ.

8. 1:25,000 Scale

Each 1:50,000 sheet area is divided into four 1:25,000 sheets, each covering 5' of latitude and 7'30" of longitude.

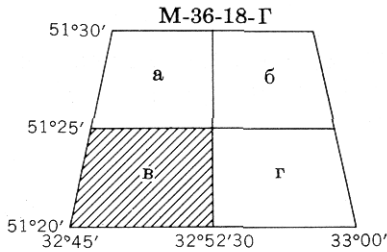


FIGURE 8. 1:25,000 scale division of 1:50,000 sheet M-36-18-Γ.

Each sheet is identified by the number of the 1:50,000 sheet within which it falls, followed by the Russian letter a, б, B or Γ, representing the NW, NE, SW and SE quarters, respectively. Example: M-36-18-Γ-B.

9. 1:10,000 Scale

Each 1:25,000 sheet area is divided into four 1:10,000 sheets, each covering 2'30" of latitude and 3'45" of longitude.

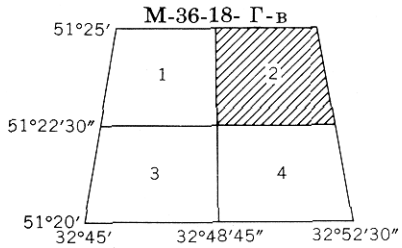


FIGURE 9. 1:10,000 scale division of 1:25,000 sheet M-36-18-Γ-B.

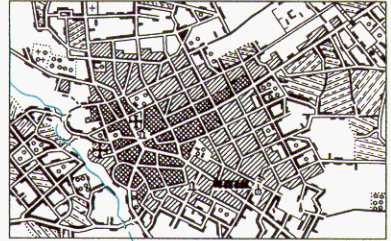
Each sheet is identified by the number of the 1:25,000 sheet in which it falls, followed by an Arabic number - 1, 2, 3 or 4. Example: M-36-18-Γ-B-2.

CHAPTER 2

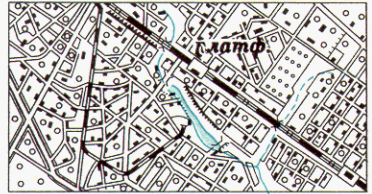
Symbolization for Maps at the Scales of
1:25,000, 1:50,000, 1:75,000, 1:100,000

SECTION I—Inhabited Places

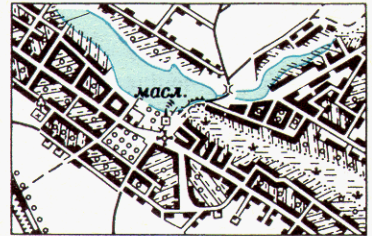
1. Large city _____



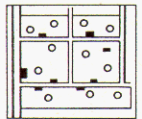
2. Summer settlement _____

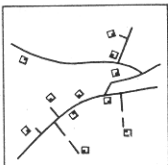


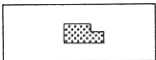
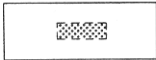
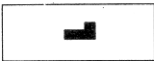


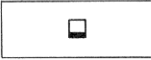
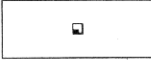
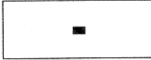
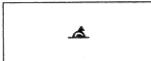


3. Rural settlement _____



4. Camp _____

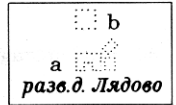


5. Scattered settlement _____ 
6. Built-up area with fireproof buildings predominant _____ 
7. Built-up area with non-fireproof buildings predominant _____ 
8. Partly demolished buildings _____ 
9. Demolished buildings _____ 
10. Prominent industrial building _____ 
11. Individual fireproof building
 a. Drawn to scale _____ 
 b. Not drawn to scale _____ 
12. Individual dwelling, fireproof _____ 
13. Individual farm or dwelling, not drawn to scale _____ 
14. Dwelling or non-dwelling in sparsely settled area; isolated non-dwelling (barn, shed, etc.) _____ 
15. Somon (rayon center) and urto (post-relay station) _____ 

16. Location of tents _____

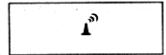


17. Ruins
 a. Lyadovo (farm ruins) _____
 b. Ruins of individual dwelling _____

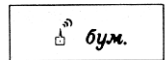


SECTION II—Industrial and Agricultural Features

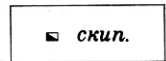
18. Factory or mill chimney _____



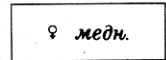
19. Factory or mill with chimney _____



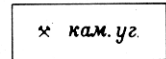
20. Factory or mill without chimney _____



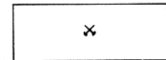
21. Mine or open-pit mine _____



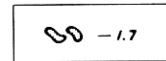
22. Operating shaft, gallery, or mine _____



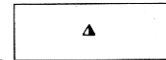
23. Non-operating shaft, gallery or mine _____



24. Pit _____



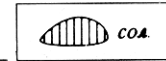
25. Tailings pile _____



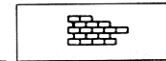
26. Stone quarry _____



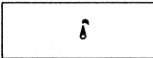
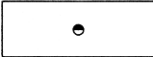

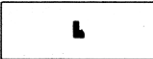
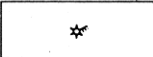
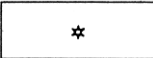
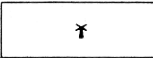

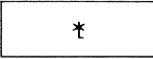
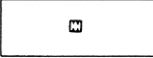
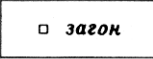
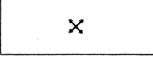
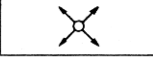
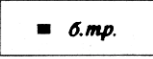
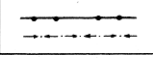
27. Salt mine _____



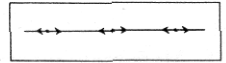
28. Peat cuttings _____



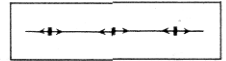
USSR

- | | |
|---|---|
| 29. Oil or natural gas derrick _____ |  |
| 30. Fuel storage or natural gas tank _____ |  |
| 31. Gasoline pump or service station _____ |  |
| 32. Elevator (grain, etc.) _____ |  |
| 33. Water-powered sawmill _____ |  |
| 34. Water-powered flour mill _____ |  |
| 35. Stone windmill _____ |  |
| 36. Wooden windmill _____ |  |
| 37. Wind-driven motor _____ |  |
| 38. Apiary _____ |  |
| 39. Corral _____ |  |
| 40. Power station _____ |  |
| 41. Small hydroelectric power station _____ |  |
| 42. Transformer station _____ |  |
| 43. Overhead line (low tension) _____ |  |

44. Overhead line (high tension) on poles _____

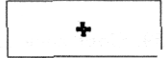


45. Overhead line (high tension) on metal towers _____

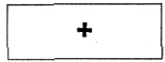


SECTION III—Orientation Points and Local Features

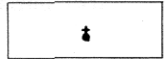
46. Stone church _____



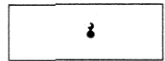
47. Wooden church
(On 1:100,000 scale maps, both stone and wooden churches are shown with this symbol) _____



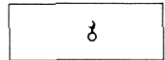
48. Chapel _____



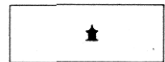
49. Stone mosque
(On 1:100,000 scale maps, both stone and wooden mosques are shown with this symbol) _____



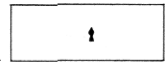
50. Wooden mosque _____



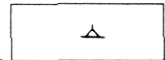
51. Buddhist lamasery, temple, or pagoda _____



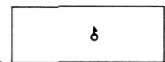
52. Buddhist roadside shrine _____



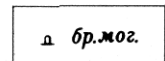
53. Cairn _____

















54. Small Moslem shrine or tomb _____

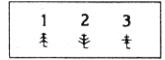


55. Common grave _____

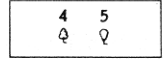


- | | |
|--|---|
| 56. Memorial monument _____ |  |
| 57. Statue or monument _____ |  |
| 58. Cross or religious shrine, individual tomb _____ |  |
| 59. Cemetery _____ |  |
| 60. Cemetery with trees _____ |  |
| 61. Cattle burial site _____ |  |
| 62. Burial mound (height indicated in meters) _____ |  |
| 63. Observation tower _____ |  |
| 64. Tower-like structure or building _____ |  |
| 65. Water tower _____ |  |
| 66. Boundary marker serving as landmark _____ |  |
| 67. Semaphore or signal light used as landmark _____ |  |
| 68. Road signpost _____ |  |
| 69. Kilometer post _____ |  |

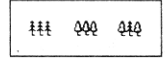
70. Isolated coniferous tree serving as landmark (1. fir, spruce; 2. pine, cedar; 3. larch) _____



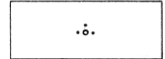
71. Isolated deciduous tree serving as landmark (4. oak, beech, maple, etc.; 5. birch, aspen, etc.) _____



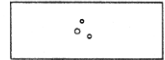
72. Stand of trees serving as landmark _____



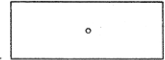
73. Individual bushes _____



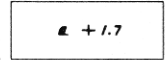
74. Individual bushes in steppe areas _____



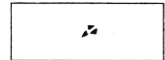
75. Trees in plantations, vegetable gardens, towns, etc. _____



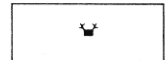
76. Isolated boulder (height indicated in meters) _____



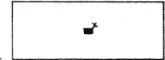
77. Rocks, boulders _____



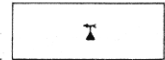
78. Forest service station _____



79. Forest rangers house _____

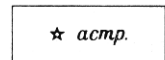


80. Meteorological station _____

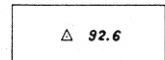


SECTION IV—Geodetic Points

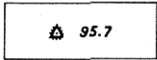
81. Astronomical point _____



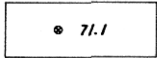
82. Triangulation point _____



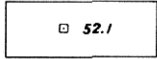
83. Trigonometrical point on burial mound _____



84. Bench mark, monumented _____

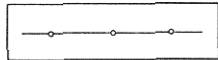


85. Bench mark _____

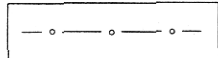


SECTION V—Pipelines

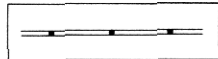
86. Natural gas conduit (surface) _____



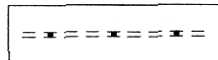
87. Natural gas conduit (underground) _____



88. Oil conduit (surface) _____

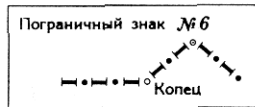


89. Oil conduit (underground) _____

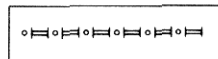


SECTION VI—Boundaries and Barriers

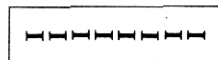
90. International boundary, boundary marker, and boundary post (No. 6) _____



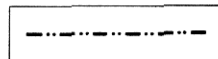
91. U.S.S.R. polar possession boundary _____



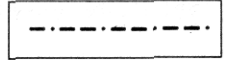
92. Boundary of Soviet Socialist Republic (SSR) _____



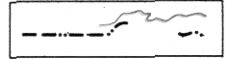
93. A.S.S.R., kray, or oblast boundary _____



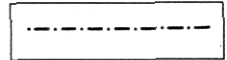
94. Autonomous oblast or kray boundary _____



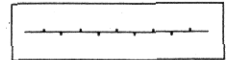
95. National okrug boundary _____



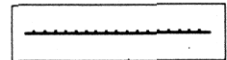
96. Rayon boundary _____



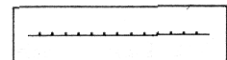
97. State Wild Life Sanctuary boundary _____



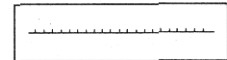
98. Stone or brick wall over 1 meter high _____



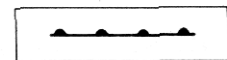
99. Stone, brick, or clay wall, less than 1 meter high _____



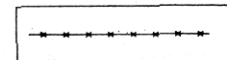
100. Wooden fence _____



101. Metal fence _____



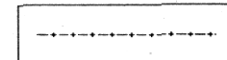
102. Rail or wattle fence _____



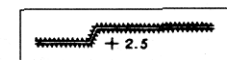
103. Hedge _____



104. Barbed wire fence _____



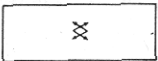
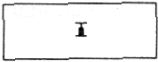
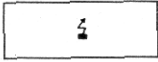
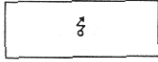
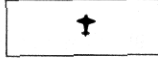
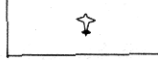
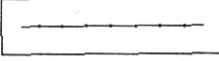
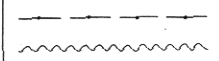
105. Artificial embankment, small fill (height indicated in meters) _____





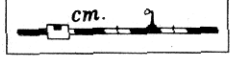
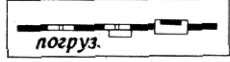
106. Trench, communication trench, and dugout _____



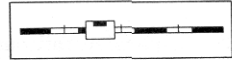
SECTION VII—Communications

107. Telegraph office 
108. Telephone station 
109. Radio station 
110. Radio tower 
111. Airfield or seaplane base 
112. Landing strip (land and water) 
113. Telegraph or telephone line 
114. Submarine cable 

SECTION VIII—Railroads

115. Three-track railroad with first class station, roundhouse, and turntable 
116. Double-track railroad and second class station 
117. Single-track railroad with road bed for second track; third class station 
118. Double-track railroad; second or third class station; loading platform 

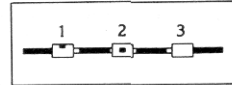
119. Single-track railroad with roadbed for second track; fourth or fifth class station _____



120. Single-track railroad, siding, and platform _____



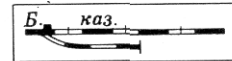
121. Location of main station building:
 1. On one side of the track
 2. Between the tracks
 3. Location unknown _____



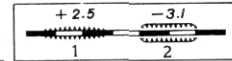
122. Electrified double-track railroad and block signal _____



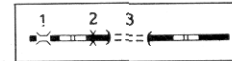
123. Section house, barracks, and dead end _____



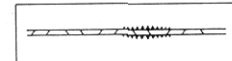
124. 1. Fill (height indicated in meters)
 2. Cut (depth indicated in meters) _____



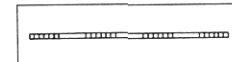
125. 1. Small bridge 2. Pipe (culvert) 3. Tunnel _____



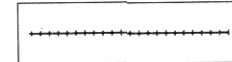
126. Dismantled railroad _____



127. Railroad under construction _____



128. Trolley _____



129. Narrow-gauge railroad and station _____



130. Electrified narrow-gauge railroad _____



131. Railroad, horse-drawn or tractor-drawn _____



132. Suspension railroad _____



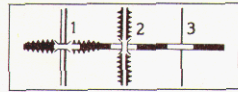
133. Railroad, approximate alignment _____



134. Station and tracks drawn to scale;
pedestrian bridge _____

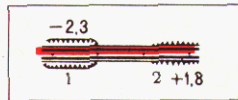


135. Crossing: 1. Under railroad tracks
2. Over railroad tracks 3. Same level _____

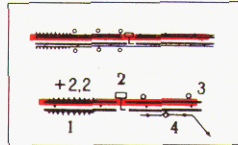


SECTION IX—Roads

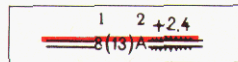
136. Main highway (super highway, arterial highway)
1. Cut (depth indicated in meters)
2. Fill (height indicated in meters) _____



137. Improved highway (asphalt, bitumen, concrete)
1. Fill; 2. kilometer post;
3. Plantings;
4. Telegraph or telephone lines _____



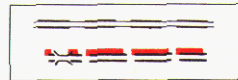
138. Highway
1. Over-all width of paved strip with shoulders
2. Type of pavement:
A. asphalt and others _____



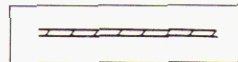
139. 1. Roadside building of light construction, shed
2. Section of road difficult to negotiate _____



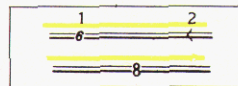
140. Highway under construction _____



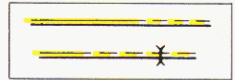
141. Highway, approximate alignment _____



142. Improved dirt road (graded, former post
and truck road)
1. width of road
2. Steep grade, over 7° _____



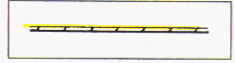
143. Section of road difficult to negotiate _____



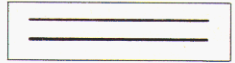
144. Improved dirt road under construction _____



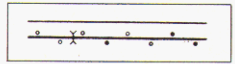
145. Improved dirt road, approximate alignment _____



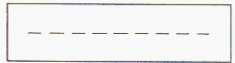
146. Main dirt (country) road _____



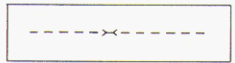
147. Dirt (country) road _____



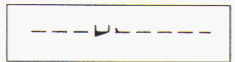
148. Field and forest road, caravan route, pack trail, or section of dirt road difficult to negotiate _____



149. Footpath and pedestrian bridge _____



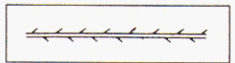
150. Cliff gallery (man made) _____



151. Winter road _____



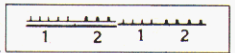
152. Cattle run _____



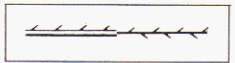
153. Road paved with wood, road for tractor _____



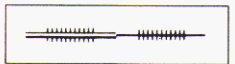
154. Road with fence:
1. Wooden fence
2. Stone wall _____



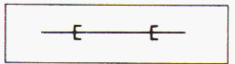
155. Road with fence _____




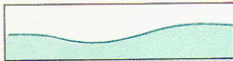




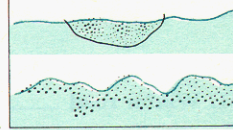



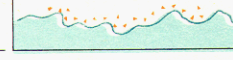

156. Corduroy road, causeway, and fascine _____



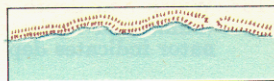
157. Chute for logs and other material _____



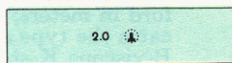
SECTION X—Hydrography

- 158. Permanent shoreline _____ 
- 159. Gradually sloping shore _____ 
- 160. Precipitous shore, 1 to 2 meters high _____ 
- 161. Precipitous shore, over 2 meters high, without beach _____ 
- 162. Precipitous shore, over 2 meters high, with beach, not drawn to scale _____ 
- 163. Shore, approximate alignment _____ 
- 164. Tidal flats _____ 
- 165. Dangerous shore (breakers, rocks, etc.) _____ 
- 166. Shoal; Sandbank _____ 
- 167. Cliffy shore _____ 
- 168. Rocky shore _____ 
- 169. Sandy shore _____ 

170. Shore embankment, not drawn to scale _____



171. Rocks above the water level _____



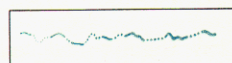
172. Small stream and small river _____



173. Intermittent streams and lake _____



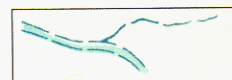
174. Underground and dwindling section of river _____



175. Flood limit _____



176. River and canal, approximate alignment _____



177. Canal _____



178. Canal under construction _____



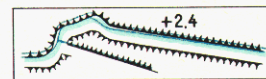
179. Canalized river or canal over 3 meters wide with water distribution installations _____



180. Canalized section of river, canal or ditch, less than 3 meters wide _____



181. River or ditch with embankment _____



182. Trees or bushes along river, canal or ditch _____



183. Width and depth of stream, in meters
(numerator indicates width; denominator indicates depth) _____

184. Ford (numerator indicates depth of the ford in meters; the denominator indicates the type of bottom; T-hard, B-viscous, K-stony, II-sandy) _____

185. Crossing _____

186. Ferry (five-ton capacity) _____

187. Small bridge, less than 10 meters in length _____

188. Bridge over 10 meters long (numerator indicates length; denominator indicates load capacity in tons) _____

189. Bridge on rafts _____

190. Pontoon bridge _____

191. Wooden bridge _____

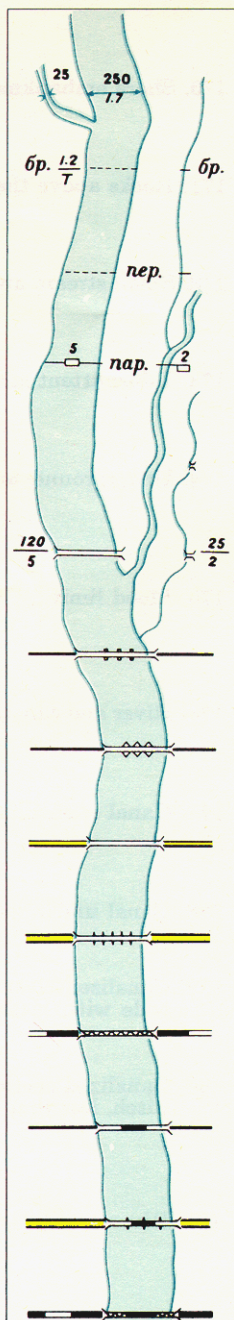
192. Stone or ferro-concrete bridge _____

193. Metal bridge _____

194. Wooden bridge _____

195. Stone or ferro-concrete bridge, draw or swing _____

196. Iron bridge, draw or swing _____



197. Double tier bridge:
 1. Highway under a railroad
 2. Highway over a railroad



198. Aqueduct



199. Dam (earthen, wooden, stone, or ferro-concrete)

200. Submerged dam

201. Lock or sluice (wooden, stone, ferro-concrete, or metal)

202. Log trestle, log dam

203. Jetty controlling the direction of current

204. Waterfall (height shown in meters)

205. Rapids

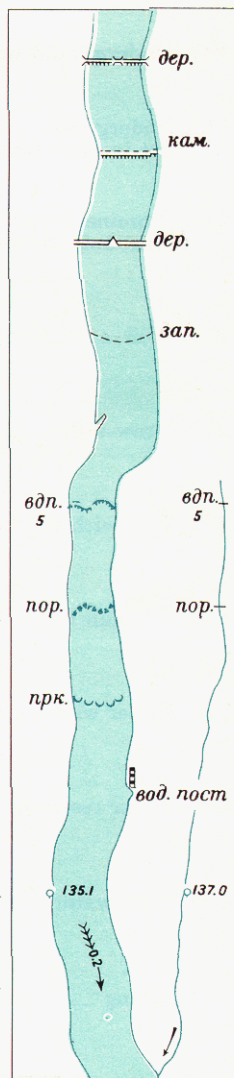
206. Bar





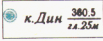
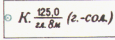





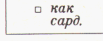
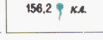

207. Water gauge




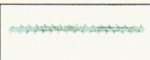
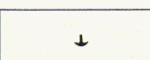

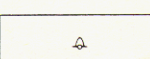

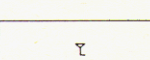

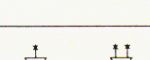
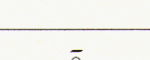


208. Water level mark

209. Direction and velocity of river current














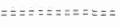
210. Direction of flow

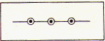
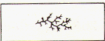

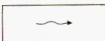
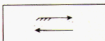
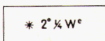
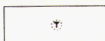
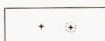

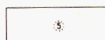


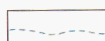



211. Surface water conduit _____ 
212. Underground water conduit _____ 
213. Underground water conduit with wells _____ 
214. Underground water conduit with wells not in operation _____ 
215. Prominent well in steppe and desert area, and characteristics _____ 
216. Well _____ 
217. Draw-well _____ 
218. Well with wind-driven motor _____ 
219. Artesian well _____ 
220. Water wheel _____ 
221. Water reservoir or rain water pit _____ 
222. Rain water pit (in Central Asia) _____ 
223. Spring _____ 
224. Mineral spring _____ 

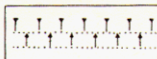
225. Geyser _____	
226. 1. Anchorage for large and small vessels 2. Roadsteads and landings without equipment _____	
227. Wharf with buildings _____	
228. Lumber docks _____	
229. Mole, sea-wall, breakwater _____	
230. Winter harbor _____	
231. Lighthouse _____	
232. Buoy, beacon _____	
233. Channel marker _____	
234. Other marker of the shore-river signal system used as orientation point _____	
235. Driftwood accumulation _____	
236. Lightship with one or two lights _____	
237. Sound and fog station (aerial) _____	
238. Sound and fog station (submerged) _____	

USSR

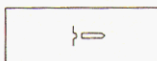
- | | |
|---|---|
| 239. Buoy, beacon buoy with a figure on top _____ |  |
| 240. Light buoy, beacon _____ |  |
| 241. Barrel buoy _____ |  |
| 242. Spar buoy with flag _____ |  |
| 243. Red spar buoy (northern)
without sphere, with sphere _____ |  |
| 244. White spar buoy (southern)
without sphere, with sphere _____ |  |
| 245. White and red spar buoy (western)
without sphere, with sphere _____ |  |
| 246. Black and white spar buoy (eastern)
without sphere, with sphere _____ |  |
| 247. Spar buoy with cross
without sphere, with sphere _____ |  |
| 248. Spar buoy in range _____ |  |
| 249. Beacon in range _____ |  |
| 250. Submerged sound signal connected with
shore _____ |  |
| 251. Submerged sound signal not connected
with shore _____ |  |
| 252. Electric pilot, guide cable _____ |  |

253. Pile 
254. Seaweed 
255. Constant current 
256. Changeable current 
257. Tidal current (the feathered arrow indicates flood tide; plain arrow indicates ebb tide) 
258. Magnetic anomalies 
259. Sunken rock 
260. Rock awash (if outlined, location is known; without outline, location is unknown) 
261. Sea rock 
262. Small bank and spot sounding 
263. Isobath with value 
264. Depth sounding value 
265. Waterway without depth sounding 
266. Restricted zone or training area (on water only) 

267. Marine channel _____



268. Dry dock _____



269. Slipway _____



SECTION XI—Relief

270. Heavy (index) contour line _____



271. Intermediate contour line and value _____



272. Half contour line (supplementary) _____



273. Auxiliary contour line at any altitude _____



274. Indicator of downward slope _____



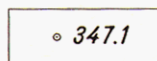
275. Dry river bed _____



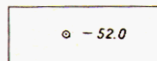
276. Spot elevation value _____

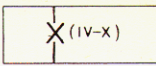


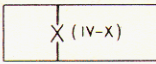
277. Value of prominent spot elevation _____





278. Value of point below sea level _____

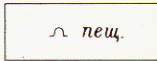



279. Main mountain pass (Roman numerals indicate the months of the year when the passes are open; -IV -X means open April through October) _____ 

280. Mountain pass (Roman numerals indicate the months of the year when the passes are open) _____ 


281. Monadnock, height of rock indicated in meters _____ 

282. Karst funnel, not drawn to scale _____ 

283. Cave or grotto _____ 

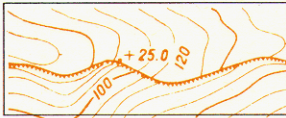
284. Crater of volcano, not drawn to scale _____ 


285. Crater of mud geyser _____ 

286. Volcanic manifestation (underwater volcanic eruptions and seepages of hot gases) _____ 

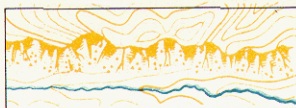
287. Lava stream _____ 

288. Steep slope (grassy) _____ 

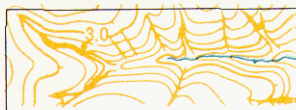
289. Scarps (height indicated in meters) _____ 

290. Sand and earth avalanche _____ 

291. Stone, crushed stone, and gravel avalanche _____



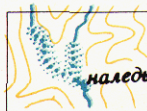
292. Narrow ravine and washout _____



293. 1. Ravine with steep slopes
2. Ravine subject to growth (erosion) _____



294. Secondary ice on frozen river _____



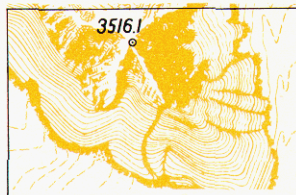
295. Land creep _____



296. Terrace ledge and ravine, with grassy slopes _____



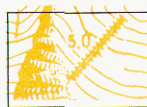
297. Cliffs _____



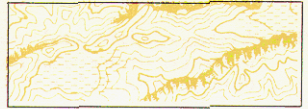
298. Rock debris _____



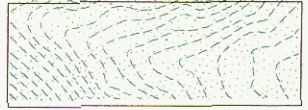
299. Dike _____



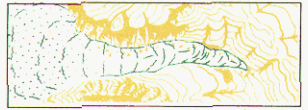
300. Outcroppings of bedrock _____



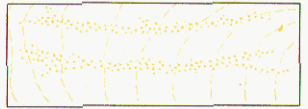
301. Firn (permanent snow) _____



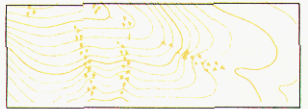
302. Glacier _____



303. Moraine _____



304. Terminal moraine _____



SECTION XII—Soils and Vegetation

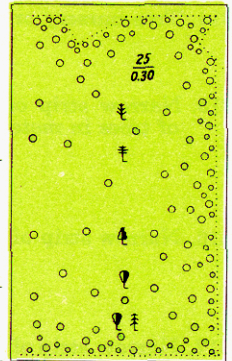
Forest may be shown by a green tint plus the variety symbol or it may also carry the tree-type symbol. Ruled tint indicates immature trees. Solid tint indicates maturity.

305. Forest _____

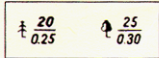
Coniferous _____

Deciduous _____

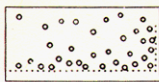
Mixed _____



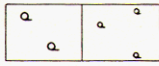
306. Average height and diameter of trees in meters (numerator indicates height, denominator indicates diameter) _____



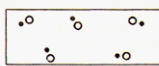
307. Dwarf (low) forest _____



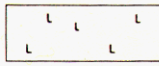
308. 1. Sparse forest 2. Sparse dwarf forest _____



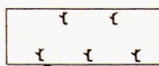
309. Small wooded area not drawn to scale _____



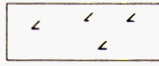
310. Cut-over forest _____



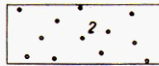
311. Burned-over forest _____



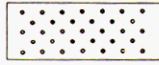
312. Wind-felled forest _____



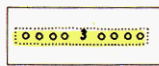
313. Stand of trees up to 4 meters high (the average height—2 meters) _____



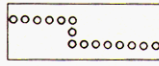
314. Tree nursery or young tree planting _____



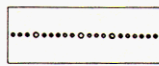
315. Narrow strip of forest (average height of trees in meters) _____



316. Narrow strip of forest _____



317. Narrow strip of plantings up to 4 meters high _____



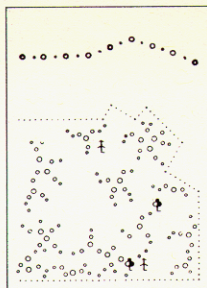
318. a. Narrow strip of scrub (bushes or hedge) _____

b. Types of scrub _____

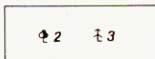
Coniferous _____

Deciduous _____

Mixed _____



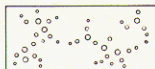
319. The average height of scrub in meters (diameter not indicated) _____



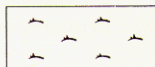
320. Palms; grove of palm trees _____



321. Scrub _____



322. Saksaul (type of low growth in Central Asian desert) _____

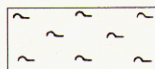


323.

Brush in high mountain and tundra regions _____



Scrub in high mountain and tundra regions _____



324. Thorny scrub _____



325. Firebreak (width indicated in meters) _____

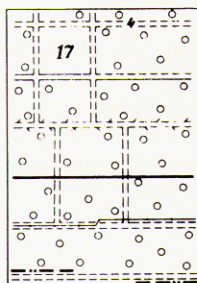
326. Firebreak lined by ditches _____

327. Firebreak with fences _____

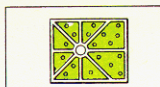
328. Road along the firebreak (the symbol for the firebreak is not shown) _____

329. Telegraph or telephone lines in the center and on the edge of firebreak _____

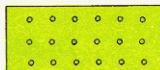
330. Boundary along firebreak _____



331. Park, with roads _____



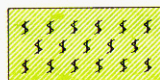
332. Fruit orchard _____



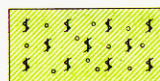
333. Berry plantation (currant, raspberry, and others) _____



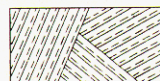
334. Vineyard _____



335. Fruit orchard and vineyard _____



336. Vegetable gardens _____



337. Hot-beds _____



338. Rice plantation _____



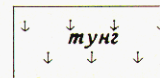
339. Tea plantation _____



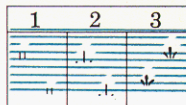
340. Hop plantation _____



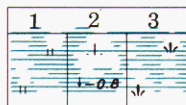
341. Other plantation _____



342. Swamp, impassable 1. grass 2. moss
 3. reed or cane _____



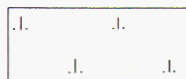
343. Swamp, hard to pass (depth indicated
 in meters)
 1. grass 2. moss 3. reed or cane _____



344. Swamp, passable 1. grass 2. moss 3. reed
 or cane (The degree of passability of
 bogs is determined on the basis of
 their passability in summer for in-
 fantry without any artificial measures
 being taken) _____



345. Moss _____



346. Bamboo _____



347. Reed or cane thicket _____



348. Meadow _____



349. Marshland (some trees) _____



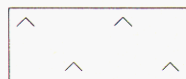
350. Wet ground (not drawn to scale) _____



351. Tall grass (over 1 meter high) _____



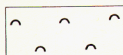
352. Pasture (shown on 1:25,000 maps only) _____



353. Hummocks _____



354. Knolls, not drawn to scale (tundra and taiga regions) _____



355. Tundra _____



356. Plowed field, pasture (small sections in sparsely populated areas, serving as orientation point, to be marked "П" (plowed field) or with the initial letter of the word for plowed field) _____



357. Rocky terrain (outcropping of bedrock) _____



358. Gravel _____



359. Polygonal terrain sections _____



360. Grassy steppes _____



361. Semi-desert type of vegetation (worm-wood & other low scrub) _____



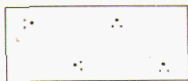
362. Desert area consisting of clay, loose rocks, sparse vegetation _____



363. Type of feather grass, up to 1.5 meters in height, growing on hummocks _____



364. Low scrub (blueberries, huckleberries, heather, etc.)



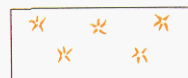
365. Solonchak, impassable



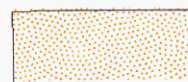
366. Solonchak, passable



367. Takyr (salt clay flats)



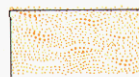
368. Sand



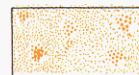
369. Hilly sand



370. Sand knolls (ridges, dunes)



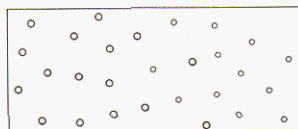
371. Crescent dunes



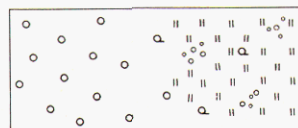
372. Porous sand



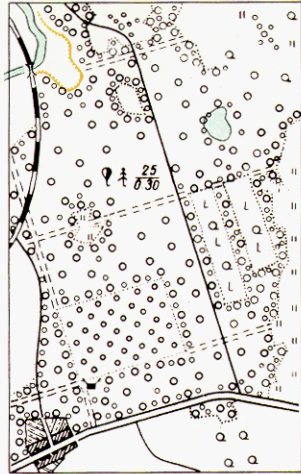
373. Transition from tall to dwarf (low) forest



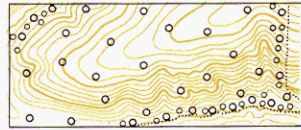
374. Gradual transition from forest to sparse forest, scrub, and meadow



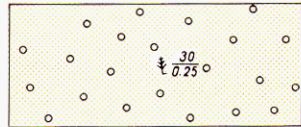
375. Combined symbolization, forest with other features on the map _____



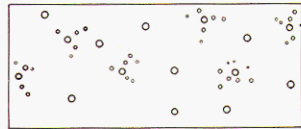
376. Forest on steep slopes (indicated by closely drawn contour lines) _____



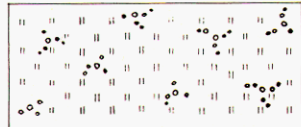
377. Pine forest on sand _____



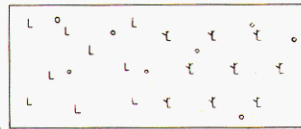
378. Forest and scrub _____



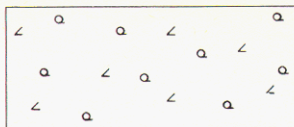
379. Meadow with scrub _____



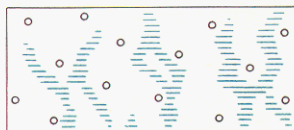
380. New growth on cut-over or burned-over timberland _____



381. Sparse forest with wind-felled trees _____



382. Swampy forest _____



383. Sparse dwarf forest in impassable swamp _____



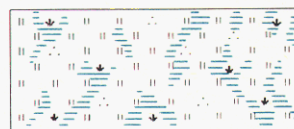
384. Swampy meadow (marsh land) _____



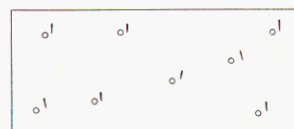
385. Hummocks in meadow _____



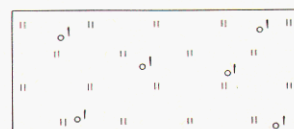
386. Swampy hummocks and reeds _____



387. Brush _____



388. Alpine meadow with brush _____



389. Semi-desert vegetation and solonchak _____



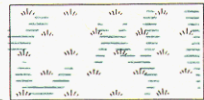
390. Hilly tundra _____



391. Tundra with lichens _____



392. Swampy tundra _____



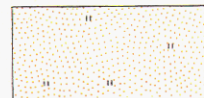
393. Tundra—stony, with scrub _____



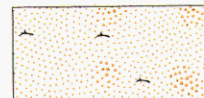
394. Tundra—sandy _____



395. Sand, stabilized by grassy vegetation _____



396. Sand knolls with saksaul and scrub _____



SECTION XIII—Type Specimens

POPULATED PLACES

397. Capitals of Soviet Socialist Republics,
-
- and capitals of non-Soviet countries

1:25,000, 1:50,000 _____ **КИЕВ**1:75,000 _____ **КИЕВ**1:100,000 _____ **КИЕВ**

398. Capitals of ASSR, centers of krays and oblast's

1:25,000, 1:50,000 _____ **ОРЕЛ**1:75,000 _____ **ОРЕЛ**1:100,000 _____ **ОРЕЛ**

399. Centers of autonomous oblast's and
-
- intra-kray oblast's (i.e. oblast' within
-
- a kray); centers of national and ad-
-
- ministrative okrugs; larger cities

1:25,000, 1:50,000 _____ **ХОРОГ**1:75,000 _____ **ХОРОГ**1:100,000 _____ **ХОРОГ**

400. Cities with population under 20,000

1:25,000, 1:50,000 _____ **ОНЕГА**1:75,000 _____ **ОНЕГА**1:100,000 _____ **ОНЕГА**

401. Urban settlements, workers' settle-
-
- ments, and summer settlements

1:25,000, 1:50,000 _____ **РЕУТОВО**1:75,000 _____ **РЕУТОВО**1:100,000 _____ **РЕУТОВО**

402. Market towns and large villages

1:25,000, 1:50,000 _____ м. ЛИОЗНО
 1:75,000 _____ м. ЛИОЗНО
 1:100,000 _____ м. ЛИОЗНО

403. Suburbs

1:25,000, 1:50,000 _____ приг., пос.
 1:75,000 _____ приг., пос.
 1:100,000 _____ приг., пос.

404. Rural settlements, over 400 households

1:25,000, 1:50,000 _____ Рудня

405. Rural settlements, 200 to 400 households

1:25,000, 1:50,000 _____ Боровица

406. Rural settlements, 100 to 200 households (for map scale 1:100,000, over 100 households)

1:25,000, 1:50,000 _____ Лиски
 1:75,000 _____ Лиски
 1:100,000 _____ Лиски

407. Rural settlements, 20 to 100 households

1:25,000, 1:50,000 _____ Ивановка
 1:75,000 _____ Ивановка
 1:100,000 _____ Ивановка

408. Rural settlements, under 20 households

1:25,000, 1:50,000 _____ Петровка
 1:75,000 _____ Петровка
 1:100,000 _____ Петровка

409. Sheet names and large populated places
of geographical importance

1:75,000 _____	} Шатой Химой
1:100,000 _____	
	} Шатой Химой

410. Individual farms, and explanatory notes
for symbols of plants, factories, mills,
motor service stations, etc.

1:25,000, 1:50,000 _____	цирк., бум.
1:75,000 _____	цирк., бум.
1:100,000 _____	цирк., бум.

411. State farms, trading posts, lumber
camps; in non-Soviet territory—es-
tates, farms, farmsteads, castles, etc.

1:25,000, 1:50,000 _____	свх. Красный
1:75,000 _____	свх. Красный
1:100,000 _____	свх. Красный

412. Numerals indicating the number of
households

1:25,000, 1:50,000 _____	26
1:75,000 _____	26
1:100,000 _____	26

MISCELLANEOUS

413. Speed of current, and width of river bed

1:25,000, 1:50,000 _____	0.3
1:75,000 _____	0.3
1:100,000 _____	0.3

414. Road kilometer post numerals and num-
bers of forest sections

1:25,000, 1:50,000 _____	17
1:75,000 _____	17
1:100,000 _____	17

415. Boundary posts and their markings

1:25,000, 1:50,000 _____	№ 6
1:75,000 _____	№ 6
1:100,000 _____	№ 6

416. Length of bridges, depth of fords, bridge and ferry capacities in tons, spot elevation and depth sounding values, contour line and isobath values, height of burial mounds, scarps and fills, and depth of pits and cuts. Width of roads and firebreaks, height and thickness of timber

1:25,000, 1:50,000 _____	10
1:75,000 _____	10
1:100,000 _____	10

HYDROGRAPHY

417. _____

ТИХ. ОКЕАН
ЧЕРНОЕ МОРЕ
БЕЛОЕ МОРЕ
ФИНСКИЙ ЗАЛИВ
ОНЕЖСКАЯ ГУБА
РИЖСКИЙ ЗАЛИВ
БЕЛОЕ ОЗЕРО
ВОСТОЧНЫЙ ЗАЛИВ

418. _____

БЕРИНГОВ ПРОЛИВ
КЕРЧЕНСКИЙ ПРОЛИВ
ПРОЛИВ ЮГОРСКИЙ ШАР
Татарский пролив
пролив Лаперуза

419. _____ { Р. ДНЕПР
Р. ДНЕПР
Р. ДНЕПР
Р. ДНЕПР
Р. ДНЕПР

420. _____ { *р. Лучеса*
р. Лучеса
р. Лучеса

421. _____ { *р. Рица*
р. Рица
р. Рица
р. Рица
р. Рица

HYPSOGRAPHY

422. _____ { О. ВАЙГАЧ
О. ПИОНЕР
П-ОВ ТАЙМЫР
м. Канин Нос
о. Генриетта
о. Моржовец

423. _____ { ПЕСКИ КАРА-КУМ
ГОЛОДНАЯ СТЕПЬ
БАРАБИНСКАЯ СТЕПЬ
ТУРАНСКАЯ НИЗМЕННОСТЬ
БАРСА КЕЛМЕС

424.

ХРЕБЕТ

ХРЕБЕТ

ХРЕБЕТ

ХРЕБЕТ

425.

Шам

Шам

Шам

Шам

CHAPTER 3

Symbolization for Maps at the Scale of 1:10,000

Symbols shown here are additional to those shown in Chapter 2 and are those usually shown only on 1:10,000 scale maps or larger.

SECTION I—Populated Places

SYMBOLIZATION FOR INDIVIDUAL STRUCTURES

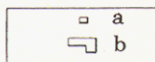
426. Fireproof building
a. Not drawn to scale
b. Drawn to scale _____



427. Non-fireproof building
a. Not drawn to scale
b. Drawn to scale _____



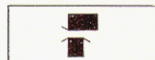
428. Non-fireproof building (non-dwelling)
a. Not drawn to scale
b. Drawn to scale
(Shown only within the built-up area for
a populated place of rural type) _____



429. Prominent fireproof building _____



430. Open entrance to yard _____



431. Archway entrance to yard _____



432. Subway entrance _____



433. Vegetable storage
 a. Not drawn to scale
 b. Drawn to scale _____



434. Shed
 a. Not drawn to scale
 b. Drawn to scale _____



435. Tent (skin, felt, bark) _____

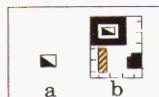


SECTION II—Physical and Cultural Features

436. Factory, mill, and flour mill, with chimneys
 a. Not drawn to scale
 b. Drawn to scale _____



437. Factory, mill, and flour mill, without chimneys
 a. Not drawn to scale
 b. Drawn to scale _____



438. Power station, drawn to scale _____



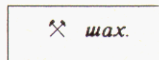
439. Hydroelectric power station, drawn to scale _____



440. Entrance to major operating shaft
 (elevator, ventilator-equipped) or gallery _____



441. Entrance to auxiliary operating shaft _____



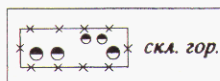
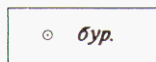
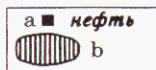
442. Entrance to major non-operating shaft
 (elevator, ventilator-equipped) _____

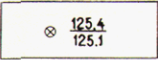
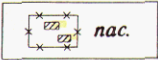
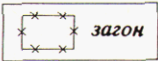

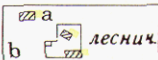
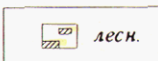



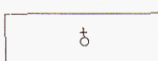






443. Abandoned open-pit mine or quarry _____

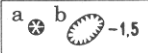



444. Open-pit salt mine
 a. Not drawn to scale _____
 b. Drawn to scale _____
445. Oil seepage
 a. Not drawn to scale _____
 b. Drawn to scale _____
446. Oil deposit or well
 a. Not drawn to scale _____
 b. Drawn to scale _____
447. Oil well without derrick, but with motor pump _____
448. Prospect well _____
449. Drill hole _____
450. Fuel storage tanks, drawn to scale _____
451. Natural gas tank _____
452. Radio station, drawn to scale _____
453. Telephone station, drawn to scale _____
454. Wooden windmill (flour) _____
455. Autobus and trolley bus stop (outside city limits) _____
456. Triangulation point on burial mound _____

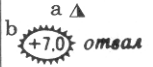



457. Bench mark on the ground or on the side of rock (the numerator shows the value for bench mark center and the denominator the value for ground level) 
458. Apiary, drawn to scale 
459. Corral, drawn to scale 
460. Individual bushes 
461. Forest district office
a. Not drawn to scale
b. Drawn to scale 
462. Forester's lodge, drawn to scale 
463. Stone church, drawn to scale 
464. Wooden church, drawn to scale 
465. Stone chapel 
466. Wooden chapel 
467. Stone mosque, drawn to scale 
468. Wooden mosque, drawn to scale 
469. Buddhist lamasery, temple, or pagoda, drawn to scale 


470. Cattle burial site, drawn to scale _____  *скот. мог.*

471. Pit
 a. Not drawn to scale
 b. Drawn to scale _____ 

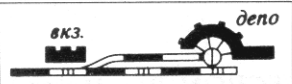
472. Burial mound _____ 

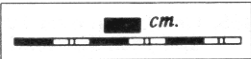
473. Tailings pile
 a. Not drawn to scale
 b. Drawn to scale _____ 

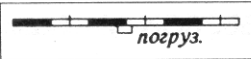
474. Submarine or underground cable _____ 

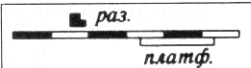
475. Overhead power line (low tension) _____ 

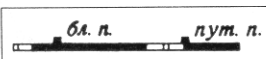
SECTION III—Railroad Line and Installations

476. Triple-track railroad, station building, turntable, and roundhouse _____ 

477. Double-track railroad and station building _____ 

478. Single-track railroad with roadbed for second track, and loading platform _____ 

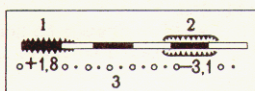
479. Single-track railroad with single roadbed, siding, and platform _____ 

480. Electrified double-track railroad, block-signal tower, and section post _____ 

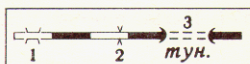
481. Section house, barracks, dead-end, and overhead light signals (structural steel arch) _____



482. 1. Fill 2. Cut 3. Hedge _____



483. 1. Small bridge 2. Pipe (culvert) 3. Tunnel _____



484. Narrow-gauge railroad line and station _____



485. Elevated railroad _____



486. Gallery or balcony on the side of a cliff _____

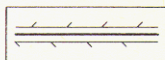


487. Gallery or balcony on the side of a slope _____



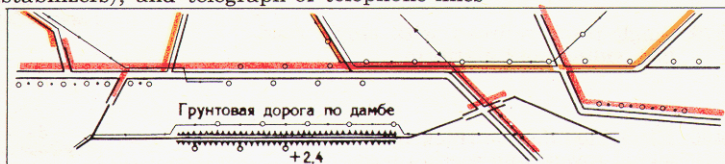
SECTION IV—Motor Truck Roads and Trails

488. Cattle run over 10 meters wide, fenced, and with dirt road running through it. _____

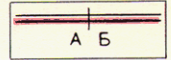


SECTION V—Examples of Highway and Railroad Symbolization

489. Crossings and junctions of truck roads, trees (shoulder stabilizers), and telegraph or telephone lines

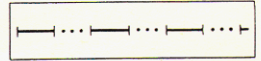


490. Change in type of pavement on the highway
(indicated by the Russian letters A, B) _____

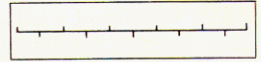


SECTION VI—Boundaries and Fences

491. Boundary of urban community _____



492. Boundary of state wild life sanctuary _____



SECTION VII—Hydrography

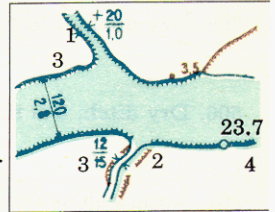
493. Shoal

- 1. Stone
- 2. Gravel



494. Precipitous shore, without beach

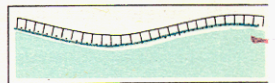
- 1. The width of river on the map, over 1.5mm.
- 2. The width of river on the map, less than 1.5mm.
- 3. Width and depth of stream
- 4. Water level value _____



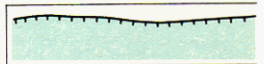
495. Shore with built-up but not reinforced slope _____



496. Shore with built-up reinforced slope _____



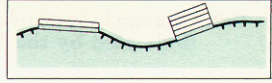
497. Stone quay _____



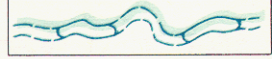
498. Wooden quay _____



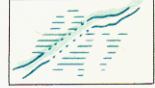
499. Ramp and stairs to quay _____



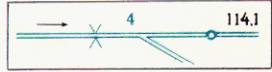
500. Changes of intermittent and perennial sections in stream _____



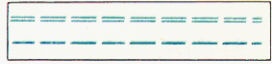
501. Underground or dwindling section of stream _____



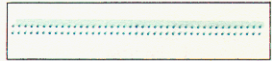
502. Canalized section of river, canal, or ditch, 3-5 meters wide; those over 5 meters wide are drawn to scale; 4 = the width in meters _____



503. Canal under construction; double line, single line _____



504. Subterranean canal _____



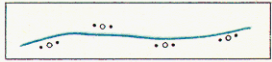
505. Dry ditch, 3 to 5 meters wide _____



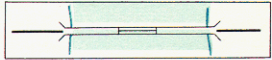
506. Dry ditch, less than 3 meters wide _____



507. Bushes along stream _____



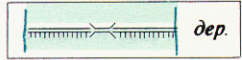
508. Bridge, wooden _____



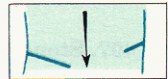
509. Single line canal _____



510. Dam without a road _____



511. Jetties, controlling the direction of current _____



512. Penstock (open) _____



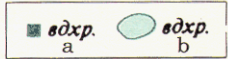
513. Underground water conduit with wells
(not functioning) _____



514. Water pump _____



515. Water reservoir or rain water pit
a. Not drawn to scale
b. Drawn to scale _____



516. Fountain _____



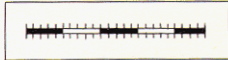
517. Landing: a. Not drawn to scale b. Drawn to scale _____



518. Mole or anchorage _____



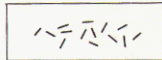
519. Mole, carrying railroad _____



520. Breakwater _____



521. Driftwood accumulation _____



522. Sunken rock (if outlined, location is known; if not outlined, location is unknown) _____



523. Rock above the water level (if outlined, location is known; if not outlined, location is unknown) _____

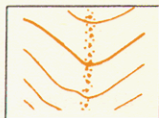


524. Rock awash (if outlined, location is known; without outline, location is unknown) _____

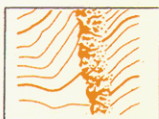


SECTION VIII—Symbolization of Certain Elements of Relief

525. Terminal moraine _____



526. Stone, or gravel avalanche _____



527. Ice barriers and fossil ice _____



528. Steep slope (grassy) _____

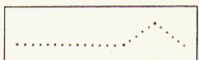


529. Old land creep _____



SECTION IX—Vegetation

530. Vegetation limit outline _____


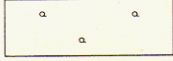
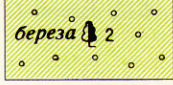

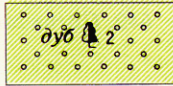
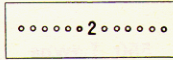
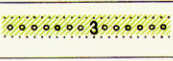
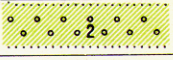
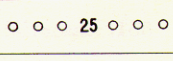
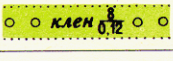
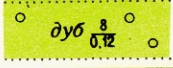
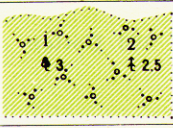
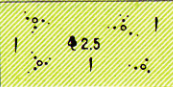


531. Coniferous forest _____

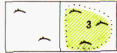
532. Deciduous forest _____

533. Mixed forest _____



534. Dwarf (low) forest _____ 
535. Scattered vegetation (second growth) _____ 
536. Stand of deciduous trees up to 4 meters high (average height indicated in meters) _____ 
537. Coniferous nursery, or stand of young coniferous trees (average height indicated in meters) _____ 
538. Deciduous nursery, or stand of young deciduous trees (average height indicated in meters) _____ 
539. Young tree plantings, up to 20 meters wide (average height indicated in meters) _____ 
540. Young tree plantings, 20 to 50 meters wide, drawn to scale (average height indicated in meters) _____ 
541. Young tree plantings, over 50 meters wide, drawn to scale (average height indicated in meters) _____ 
542. Mature forest, up to 20 meters wide (average height indicated in meters) _____ 
543. Mature forest, 20 to 50 meters wide, drawn to scale _____ 
544. Mature forest, over 50 meters wide, drawn to scale _____ 
545. Scrub 1. Deciduous 2. Coniferous _____ 
546. Thorny scrub (solid growth) _____ 

547. Saksaul 1. Sparse growth 2. Solid thicket _____



548. Brush 1. Sparse growth 2. Solid thicket _____

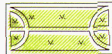


SECTION X—Cultivated lands, Gardens, Vineyards, Parks, and Lawns

549. Citrus orchard _____

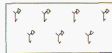


550. Lawns _____

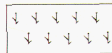


SECTION XI—Sections of Land under Technical Cultures

551. Essential oil plants _____



552. Tobacco _____



553. Cotton _____



SECTION XII—Swamps, Sands, Solonchak(s), Takyr(s)

554. Wet ground with reed or cane (not drawn to scale) _____



SECTION XIII—Examples of Combined Symbolization

555. Sparse forest in mossy swamp



556. Sparse forest on rocky terrain



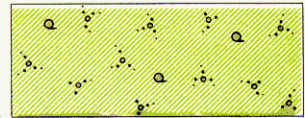
557. Sparse forest and scrub on rocky slopes



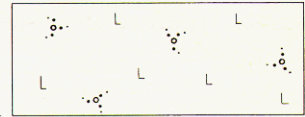
558. Sparse dwarf forest in passable grassy swamp with scrub



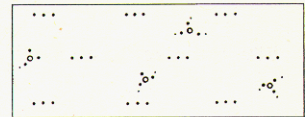
559. Sparse forest with solid scrub



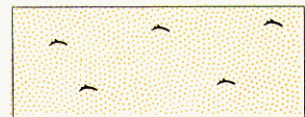
560. Scrub on cut-over area



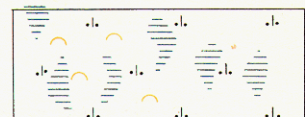
561. Steppe, grass with scrub



562. Sands and saksaul



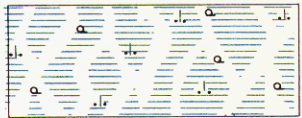
563. Swampy ground with knolls and mossy vegetation



564. Lichens and scrub on rocky terrain _____



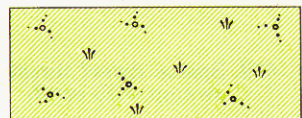
565. Mossy swamp strips and sparse dwarf forest _____



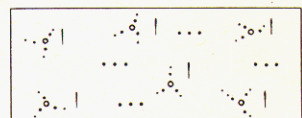
566. Swampy meadow and hummocks _____



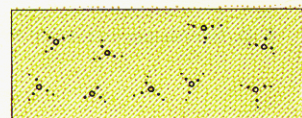
567. Scrub and reed _____



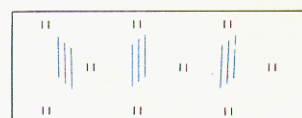
568. Thorny scrub on steppe _____



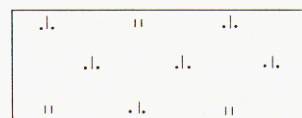
569. Solid scrub on sands _____



570. Meadow vegetation and solonchak in spots _____



571. Moss and grass vegetation on arid land _____



SECTION XIV—Type Specimens

POPULATED PLACES

572. National capitals; cities with population over 500,000 _____ **МОСКВА**
573. Capitals of ASSR, centers of krays and oblast's (interkray) _____ **РОСТОВ**
574. Centers of autonomous oblast's, and intra-kary oblast's (i.e., oblast within a kray), centers of national okrugs. Cities, population ranging from 50,000 to 100,000 _____ **МАЙКОП**
575. Cities, population ranging from 20,000 to 50,000 _____ **ПОДОЛЬСК**
576. Cities, population ranging from 10,000 to 20,000 _____ **ЛИПЕЦК**
577. Cities, population under 10,000 _____ **АНАПА**
578. Urban settlements, workers settlements, resorts
 a. Over 200 households _____ **РЕУТОВО**
 b. 100 to 200 households _____ **РЕУТОВО**
 c. Under 100 households _____ **РЕУТОВО**
579. Settlements within city limits, but located at a distance from the city and bearing their own proper names _____ **ЛИОЗНО**
 _____ **САБУР**

RURAL SETTLEMENTS

580. Rural settlements, over 200 households _____ **Лабинская**
581. Rural settlements, 100 to 200 households _____ **Гончаровна**
582. Rural settlements, 20 to 100 households _____ **Юрьевна**

583. Rural settlements, under 20 households _____ **Петровна**

584. Individual households (houses) _____ *Данково*

585. Descriptive names (usually abbreviations) of mills, factories, railroad stations, wells. Example: kupn—brickyard _____ *кирп.*

586. State farms, trading posts, lumber camps, etc. (over 100 households) _____ **совх. Красный**

587. Settlements, 20 to 100 households _____ **совх. Красный**

588. Settlements, under 20 households _____ **совх. Красный**

589. Designations of type of sovkhos (such as sheep farm) _____ (*овц.*)

590. Soviet rayon (abbreviation) _____ **РС**

591. Soviet village (abbreviation) _____ **СС**

592. Number of households _____ **23**

MISCELLANEOUS

593. Type of road pavement and material _____ **А Б Г**

594. Numbers on kilometer posts, numbers of forest sections and border posts _____ **17**

595. Numbers indicating months when passes are open to traffic _____ **(V-X)**

596. Values for prominent elevations _____ **243,8**
597. Numbers for spot elevations, depth soundings, contour lines, etc. _____ **186.0**
598. Width of highways and firebreaks _____ **8(12)**
599. Ferry capacity, waterfall height, and height of young forest and scrub _____ **5 5**
600. Velocity of the current, width of river bed, depth of river _____ **0,2**
601. Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees _____ **$\frac{180}{12}$ $\frac{180}{12}$**
602. Description of the conditions of river bottom _____ **Т К П В Т К П В**
603. Names of streets, squares, etc. _____ **УЛ. ПУШЕЧНАЯ УЛ. ФУНЗЕ УЛ. ГОГОЛЯ**

HYDROGRAPHY

604. _____ { **ЧЕРНОЕ МОРЕ**
ЧЕРНОЕ МОРЕ
ЧЕРНОЕ МОРЕ
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ЧЕРНОЕ МОРЕ
605. _____ **зал. Глубокий зал. Глубокий зал. Глубокий**

606. { СЕВЕРНЫЙ ПРОЛИВ
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607. _____ Р.ВОЛГА Р.ВОЛГА Р.ВОЛГА

608. _____ р.Вера р.Вера р.Вера р.Вера

609. _____ р.Тура р.Тура р.Тура р.Тура

610. { О.ГУСИНЫЙ
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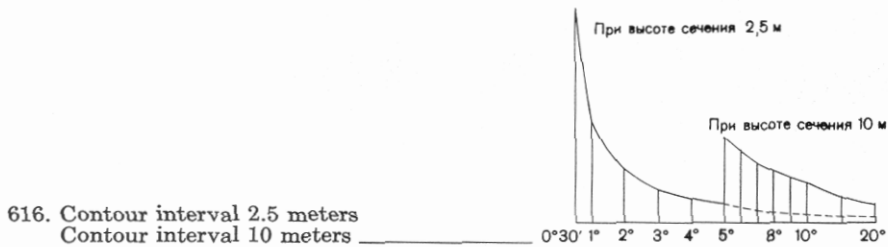
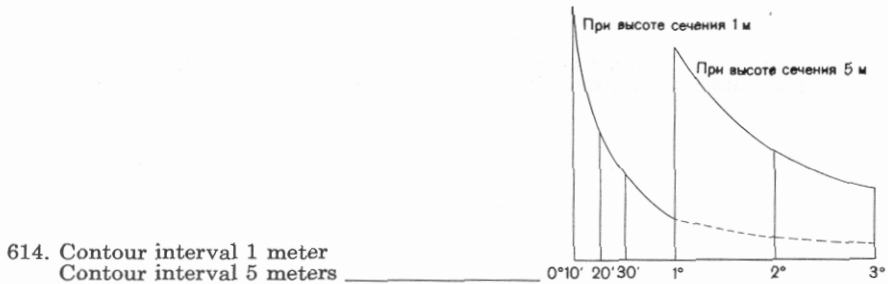
HYPSOGRAPHY

611. { ПЕСКИ
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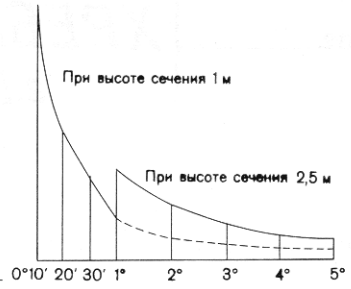
612. { **ХРЕБЕТ ХРЕБЕТ ХРЕБЕТ**
г.Шат г.Шат г.Шат г.Шат

613. { **ЗАПОВЕДНИК**
ЗАПОВЕДНИК
ЗАПОВЕДНИК

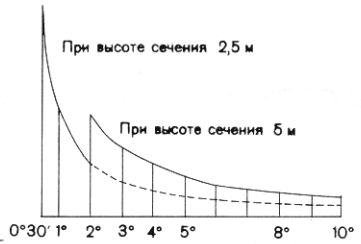
SECTION XV—Graphic Method of Determining Slope Gradients



617. Contour interval 1 meter
 Contour interval 2.5 meters _____



618. Contour interval 2.5 meters
 Contour interval 5 meters _____



CHAPTER 4

Symbolization for Maps at the Scale of 1:200,000

The following symbolization is known to apply to the 1:200,000 scale maps and it is believed that these also apply to the new 1:300,000 scale maps. Lack of clarity of source material does not permit inclusion here of some features found on 1:200,000 scale maps.

SECTION I—Populated Places

NOTE: Type sizes may not be consistent with those appearing on published maps

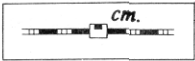
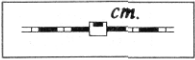




CITIES

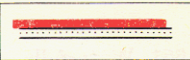
619. National capitals _____ **МОСКВА**
620. Capitals of Soviet Socialist Republics;
cities with population over 500,000 _____ **КИЕВ**
621. Capitals of Autonomous Soviet Socialist
Republics; centers of krays and ob-
last's, cities with population ranging
from 100,000 to 500,000 _____ **ОРЕЛ**
622. Center of autonomous oblast's and intra-
kray oblast's (i.e. oblast' within a
kray); cities with population ranging
from 50,000 to 100,000 _____ **ХОРОГ**
623. Center of national or administrative
okrugs; cities with population ranging
from 20,000 to 50,000 _____ **СЕРПУХОВ**
624. Rayon centers and towns with no ad-
ministrative significance with popu-
lation under 20,000 _____ **ОНЕГА**
625. Urban settlements, workers settlements,
and summer settlements _____ **ПЕУТОВО**

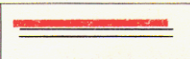
RURAL POPULATED PLACES

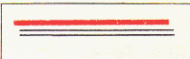
626. Small towns and important settlement junctions, rural type _____ **Ивановка**
627. Large villages and settlements with population over 2,000 (over 400 households) _____ **Ивановка**
628. Rural settlements with population over 500 (over 100 households) _____ **Петровка**
629. Rural settlements with population ranging from 100 to 500 (from 20 to 100 households) _____ **Дуновка**
630. Rural settlements with population under 100 (under 20 households), and individual households _____ **Щелимевка**
631. State farms, trading posts, lumber camps; in non-Soviet territory, estates, farms, farmsteads, castles, etc. _____ **см. Приложение**


SECTION II—Roads and Railroads


632. Multiple-track railroad and junction or large station (station name is shown above symbol) _____ 
633. Single-track railroad and station (station name is shown above symbol) _____ 
634. Electrified double-track railroad _____ 
635. Electrified single-track railroad with siding or platform _____ 
636. Railroad, approximate alignment _____ 
637. Narrow-gauge railroad or street-car line _____ 

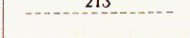
638. Super highway _____ 

639. Arterial highway _____ 

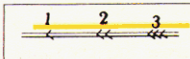
640. Highway _____ 

641. Improved dirt road, regularly maintained, permitting automobile traffic _____ 


642. Caravan route _____ 


643. Steamship lane, with distance indicated in kilometers _____ 

644. Railroad ferry _____ 

645. Road gradient 1. 4°-7° 2. 7°-13° 3. over 12° _____ 

SECTION III—Hydrography

646. River and canal over 20 meters wide _____ 

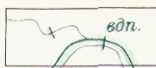
647. River and canal less than 20 meters wide _____ 

648. Head of navigation _____ 

649. Logging starting point _____ 

650. Rain water pit _____ 

651. Waterfalls _____



652. Rapids _____



653. Bars _____



654. Embankments on the shore _____



655. Canal under construction _____



656. Landing _____



657. Seaport or harbor _____



658. Naval base _____



659. Military base _____



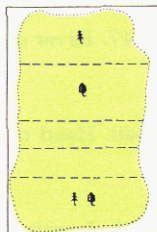
SECTION IV—Soils and Vegetation

660. Coniferous forest _____

661. Deciduous forest _____

662. Firebreak _____

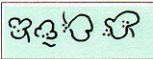



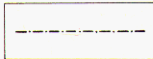
663. Mixed forest _____



664. Moss and lichens _____



SECTION V—Other Map Features

665. Reef 
666. Radio station 
667. Gasoline pump or service station 
668. Inn or service station 
669. Primary administrative division boundary in non-Soviet territories (province, aymak, okrug, etc.) 

CHAPTER 5

Symbolization for Maps at the Scale of 1:500,000

The following symbolization is known to apply to the 1:500,000 scale maps. Lack of clarity of source material does not permit inclusion here of some features found on 1:500,000 scale maps.

SECTION I—Populated Places

NOTE: Type sizes may not be consistent with those appearing on published maps

CITIES

670. National capitals _____ **МОСКВА**
671. Capitals of Soviet Socialist Republics;
cities with population over 500,000 _____ **КИЕВ**
672. Capitals of Autonomous Soviet Socialist
Republics; centers of krays and ob-
last's, cities with population ranging
from 100,000 to 500,000 _____ **ОРЕЛ**
673. Center of autonomous oblast's and intra-
kray oblast's (i.e. oblast' within a
kray); cities with population ranging
from 50,000 to 100,000 _____ **ХОРОГ**
674. Center of national or administrative
okrugs; cities with population ranging
from 20,000 to 50,000 _____ **СЕРПУХОВ**
675. Rayon centers and towns with no ad-
ministrative significance with popu-
lation under 20,000 _____ **ОНЕГА**
676. Urban settlements, workers settlements,
and summer settlements _____ **ПЕУТОВО**

677. Rural settlements that are rayon centers _____ ЛАМСКОЕ


678. Important settlement junctions, rural type _____ МЕДВЕЖИ


679. Other large settlements and settlement junctions, rural _____ Подольск

680. Small rural settlement _____ Шалимовка

681. Large state farms, trading posts, lumber camps; in non-Soviet territory, estates, farms, farmsteads, castles, etc. _____ ст. Кресты

SMALL POPULATED PLACES
INDICATED BY CIRCLES

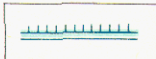
682. Small populated place with church _____ 

683. Small populated place without church _____ 

SECTION II—Hydrography

684. River less than 60 meters wide _____ 

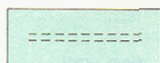
685. River more than 60 meters wide _____ 

686. Navigable canal _____ 

687. Brick or adobe structure over well _____



688. Marine channel _____

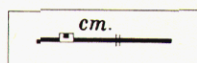


689. Seaport or harbor _____

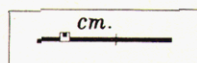


SECTION III—Railroads

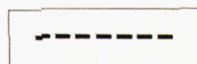
690. Multiple-track railroad and station _____



691. Single-track railroad and siding or platform _____



692. Railroad, approximate alignment _____



693. Narrow-gauge railroad _____



SECTION IV—Soils and Vegetation

694. Sparse forest _____



695. Scrub thicket _____



696. Birch grove _____



697. Brush in high mountain and tundra regions _____



698. Moss and lichens _____



699. Citrus plantation _____



SECTION V—Other map features

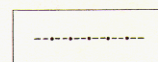
700. Oil field _____



701. Overland oil conduit and pumping station _____



702. Underground oil conduit _____



703. Overland water conduit _____



704. Underground water conduit _____



705. Polar station _____



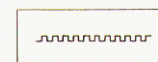
706. Fortification (ancient) _____



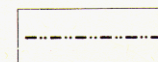
707. Trading post, educational and social community center, fishery, summer camp, sod hut, barn, etc. _____



708. The Great Chinese Wall _____



709. Primary administrative division boundary in non-Soviet territory (province, aymak, okrug, etc.) _____



710. Isogonic line (lines of equal magnetic declination) with value shown _____



711. Points and regions of magnetic anomalies _____



CHAPTER 6

Symbolization for Maps at Scale of 1:1,000,000

The following symbolization is known to apply to the 1:1,000,000 scale maps. Lack of clarity of source material does not permit inclusion here of some features found on 1:1,000,000 scale maps.

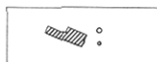
SECTION I—Populated Places

SYMBOLIZATION

712. Urban populated place _____



713. Rural populated place _____



TYPE SPECIMENS FOR URBAN POPULATED PLACES

714. Population over 1,000,000 _____

МОСКВА

715. Population ranging from 250,000 to 1,000,000 _____

ТУЛА

СЕРПУХОВ

716. Population ranging from 50,000 to 250,000 _____

ПЕРОВО

717. Population ranging from 10,000 to 50,000 _____

**КАШИРА
ЗАРАЙСК**

718. Population under 10,000 _____

**ПЛАВСК
РЕУТОВО**

TYPE SPECIMENS FOR RURAL POPULATED PLACES

719. Population over 2,000 _____

**СЫЧЕВКА
УНЕЧА**

720. Population under 2,000 _____

SECTION II—Political and Administrative Importance of
Populated Places

WITHIN THE U.S.S.R.

721. Capital of USSR _____



722. Capital of Soviet Socialist Republic _____



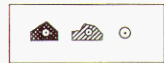
723. Capital of ASSR, center of kray or oblast' _____



724. Center of autonomous oblast', intra-
kray oblast', or national okrug _____



725. Rayon center _____



IN NON-SOVIET TERRITORY

726. Capital in non-Soviet country _____



727. Center of possession in non-Soviet country _____

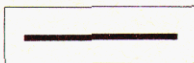


728. Center of first order administrative unit
in non-Soviet territory (province,
aymak, okrug, etc.) _____



SECTION III—Roads and Railroads

729. Arterial railroad _____



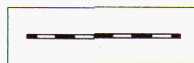
730. Other railroads _____



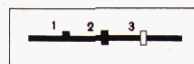
731. Arterial narrow-gauge railroad _____



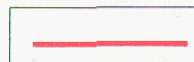
732. Other narrow-gauge railroads _____



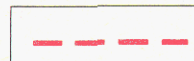
733. Station and siding 1. On one side of the track 2. Between the tracks 3. Location unknown _____



734. Highway _____



735. Highway, approximate alignment _____



736. Improved dirt road _____

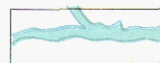
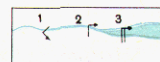


SECTION IV—HYDROGRAPHY

737. River less than 300 meters wide _____



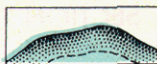
738. River over 300 meters wide _____

739. 1. Head of regular navigation
2. Head of regular steamship lines
3. Point accessible to sea-going vessels _____

740. Shoreline, approximate alignment _____



741. Tidal flat _____



742. Flood area _____



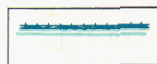
743. 1. Well
2. Dry and intermittent well _____



744. Navigable canal _____



745. Canal for sea-going vessels _____

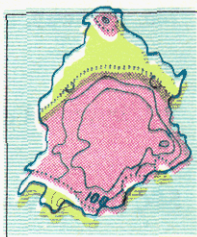


746. Navigable canal under construction _____

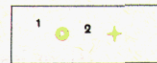


SECTION V—Other Map Features

747. Continental ice sheets _____



748. 1. Volcano 2. Mud geyser _____



749. Land creep _____



750. Zone of cultivated soil _____



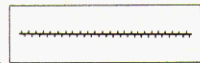
751. Narrow strip of forest _____



752. 1. Mangrove thicket 2. Coral reef _____



753. Dam _____



754. Boundary between colonies of the same state _____



755. Boundary of leased area _____



APPENDIX I

Russian Alphabet Transliteration according to U. S. Board of Geographic Names

RUSSIAN		ENGLISH	
SCRIPT	PRINT		
А а	а _____ А	а _____	a _____ a
Б б	б _____ Б	б _____	b _____ b
В в	в _____ В	в _____	v _____ v
Г г	г _____ Г	г _____	g _____ g
Д д	д _____ Д	д _____	d _____ d
Е е	е _____ Е	е _____	e _____ e(ye) *
Ё ё	ё _____ Ё	ё _____	ë _____ ë(yë) *
Ж ж	ж _____ Ж	ж _____	zh _____ zh
З з	з _____ З	з _____	z _____ z
И и	и _____ И	и _____	i _____ i
Й й	й _____ Й	й _____	y _____ y
К к	к _____ К	к _____	k _____ k
Л л	л _____ Л	л _____	l _____ l
М м	м _____ М	м _____	m _____ m
Н н	н _____ Н	н _____	n _____ n
О о	о _____ О	о _____	o _____ o
П п	п _____ П	п _____	p _____ p
Р р	р _____ Р	р _____	r _____ r
С с	с _____ С	с _____	s _____ s
Т т	т _____ Т	т _____	t _____ t
У у	у _____ У	у _____	u _____ u
Ф ф	ф _____ Ф	ф _____	f _____ f
Х х	х _____ Х	х _____	kh _____ kh
Ц ц	ц _____ Ц	ц _____	ts _____ ts
Ч ч	ч _____ Ч	ч _____	ch _____ ch
Ш ш	ш _____ Ш	ш _____	sh _____ sh
Щ щ	щ _____ Щ	щ _____	shch _____ shch
Ъ ъ	ъ _____ Ъ	ъ _____	" _____ "
Ы ы	ы _____ Ы	ы _____	y _____ y
Ь ь	ь _____ Ь	ь _____	' _____ '
Э э	э _____ Э	э _____	e _____ e
Ю ю	ю _____ Ю	ю _____	yu _____ yu
Я я	я _____ Я	я _____	ya _____ ya

*"ye" used initially, after vowels (а, е, ё, и, о, у, ъ, з, ю, я), and after ъ and ь; elsewhere "e".

APPENDIX II

Topographic abbreviations and their meanings

Автомобильный завод	авт.	automobile factory
Автономная область	АО	autonomous oblast'
Аймачное управление	Айм. упр.	aymak administration
Алебастровый	алб.	alabaster (adjective)
Амбулатория	амб.	dispensary
Анилиновый завод	анил.	aniline plant
Апатитовые разработки	апат.	apatite mines
Артезианский колодец	арт. к.	artesian well
Архипелаг	арх.	archipelago
Арык	ар.	canal, ditch
Асбестовый	асб.	asbestos (adjective)
Астрономическая обсерватория	астр. обсерв.	astronomic observatory
Астрономический	астр.	astronomical (adjective)
Астрономический пункт	астр.	astronomic position
Асфальтовый, Асфальт	А., асф.	asphalt (adjective)
Аэродром	аэрд.	airfield
Аэропорт	аэроп.	airport
Балка	б., бал.	ravine
Банка	б-ка	bank
Барак	бар.	barrack
Бассейн	басс.	basin
Башня водонапорная	вод.	water pressure tower
Береза	бер.	birch
Бетонный	бет.	concrete (adjective)
Биологический	биол.	biological
Ближний	Ближн.	near (part of a proper name)
Блок-пост	бл. п.	block signal station
Болото	бол.	swamp
Больница	больн.	hospital
Большой	Бол., Б.	big (part of a name)
Братская могила	бр. мог.	common grave
Брод	бр.	ford
Брусчатка	Бр.	wooden block pavement
Бугор	буг.	knoll
Будка железнодорожная	Б.	section house
Будка трансформаторная	б. тр.	transformer station
Булыжник	Б.	cobblestone
Бумаго-пряделльная фабрика	бум.-пр.	cotton spinning mill
Бумажной промышленности	бум.	paper industry
Буровой	бур.	bore (adjective)
Бухта	бух.	bay

APPENDIX II (CONTINUED)

Бывший	быв.	former
Вагоностроительный завод	ваг.	railroad car factory
Великий	Вел.	great (part of a name)
Верхний	Верх.	upper (part of a name)
Ветеринарный	ветерин.	veterinary (adjective)
Вечнозеленые лиственные породы леса	вечнозел.	broadleaf evergreen forest
Винодельческий, винокуренный	вин.	viticultural; distillery (adjective)
Водокачка	вдкч.	water pump
Водомерный пост	вод. п.	water gauge station
Водонапорная башня	вод.	water pressure tower
Водопад	вдп.	waterfall
Водопроводная станция	водопр.	waterworks station
Водохранилище	вдхр.	reservoir
Возвышенность	возвыш.	elevation
Вокзал	вкз.	RR station (with all facilities and services)
Воскобойный завод	воск.	wax refinery
Восточный	Вост.	eastern (part of a name)
Впадина	впад.	depression
Второй-ая,-ое,-ые	2-й,2-я,2-е	second (part of a name)
Вулкан	вулк.	volcano
Выселки	выс.	settlement
Вязкий	В	viscous; miry (adjective)
Гавань	гав.	harbor
Газгольдер	газг.	natural gas tank
Газовый	газ.	natural gas (adjective)
Газопровод	газопр.	natural gas pipe
Галантерейный	гал.	haberdashery (adjective)
Галечниковый	галеч.	gravel, pebble (adjective)
Гараж	гар.	garage
Гвоздильный	гвозд.	nail (refers to nail factory)
Гидрологический	гидр.	hydrological
Гидроэлектростанция	ГЭС	hydro power station
малая гидроэлектростанция	гэс	small hydro power station
Главный	Гл.	main, chief
Глиняный, глина	глин	clay (adjective)
Глиноземный	глинов.	clayey earth
Глубина	гл.	depth
Гминное управление (на заграничной территории)	Гмин. упр.	gmina administration office (in non-Soviet, Poland territory)
Гончарный	гонч.	pottery (adjective)
Гора, горы	г.	mountain, mountains
Горный проход	г. пр.	mountain pass
Горько-соленая вода	г.-сол.	bitter-salt water (as applied to lakes, springs and wells)
Горячий	гор.	hot
Госпиталь	гсп.	hospital
Господский двор (на заграничной территории)	г. дв.	manor (in non-Soviet territory)

APPENDIX II (CONTINUED)

Гостиница	гост.	hotel
Гравий	Г	gravel
Грязевой	гряз.	mud (adjective)
Дальний	Дальн.	far (part of a name)
Дальний поселок	д. п.	remote settlement
Двор	дв.	yard, household, homestead, farm
Деревня	д.	village
Дерево-земляная огневая точка	ДЗОТ	wood and earth gun emplacement
Деревообрабатывающей промышленности	древ.	wood processing industry
Деревянный	дер.	wooden (adjective)
Детский дом	дет. д.	childrens home
Джутовый	джут.	hemp (adjective)
Долговременная огневая точка	ДОТ	pillbox permanent gun emplacement
Долина	дол.	valley
Дом лесника	лесн.	foresters cabin
Дом отдыха	Д.О.	rest home
Дробильный	дроб.	crushing (machine)
Дровяная пристань	дров. прист.	fire-wood pier
Дровяной	дров.	fire-wood (adjective)
Дрожжевой	дрож.	yeast (adjective)
Ерик	ер.	braided or split stream or channel
Железнокислый	жел. кисл.	ferrate
Железный, железистый	жел.	ferrous, ferriferous
Железобетонный	жел бет.	ferro-concrete (adjective)
Животноводческий	животн.	animal breeding
Завод	зав.	mill, factory
Займка	займ.	homestead
Залив	зал.	gulf
Западный	Зап.	western (part of a name)
Запань	зап.	log trestle
Заповедник	запов.	wild life sanctuary
Засыпанный	засып.	filled in
Затон	зат.	backwater, tidal basin
Зверосовхоз, звероводческий	звер.	wild animal breeding
Землянка, земляной	земл.	sod hut, earthen
Зеркальный	зерк.	mirror (adjective)
Зерновой	зерн.	grain (adjective)
Зерносушилка	суш.	grain drying barn
Зимник, зимовка, зимовье	зим.	winter camp or quarters
Знак	зн.	conventional sign
Золотой, -ая,-ое,-ые (прииски, россыпи, месторождения)	зол.	golden (placer, open pit (loose rocky grounds), ore deposit)
Золото-платиновые разработки	зол.-пл.	gold and platinum diggings
Игрушечный	игр.	toy (adjective)
Известковый	изв.	limestone (adjective)

APPENDIX II (CONTINUED)

Известковый завод	изв.	limestone processing plant
Изумрудные копи	изумр.	emerald mines
Имени	им.	named after
Имени (при собственном названии)	им.	named after
Институт	инст.	institute
Источник	ист.	spring
Казарма	каз.	barracks
Камвольный	камв.	wool-combing (adjective)
Каменистый	К	stony (refers to ford)
Каменноугольные копи и шахты	кам. уг.	coal mines and shafts
Каменный	кам.	made of stone, stone (adjective)
Камень	кам.	stone
Каменоломни	кам.	stone quarries
Канал	кан.	canal
Канатный	канат.	cable rope (adjective)
Каолиновый	каоил.	kaolin (adjective)
Каракулеводческий	каракул.	karakul sheep breeding (adjective)
Карантин	карант.	quarantine
Каучуконосный	кауч.	rubber (adjective)
Керамический	керам.	ceramic (adjective)
Кинематографической промышленности	кин.	moving picture industry
Кирпичный завод	кирп.	brickyard
Кишлак	кишл.	village (Crimea), winter pasture (Caucasus)
Кладбище	кладб.	cemetery
Клинкер	Кл.	clinker
Ключ	кл.	spring
Кожевенный	кож.	leather (adjective)
Колодец, кудук	К.	well (without proper name)
Колодец, кудук	к.	well (with proper name)
Колония	кол.	colony
Колхоз	клх.	collective farm
Колхозный двор	клх. дв.	collective farm yard
Комбикормовый	комбик.	grain combine (adjective)
Комбинат	комб.	combine
Комендатура	кмд.	commandants headquarters
Кондитерский	конд.	pastry (adjective)
Коневодческий, конный	кон.	horse breeding, stud farm
Коноплеводческий	конопл.	hemp (adjective)
Консервный	конс.	canning (adjective)
Корчма	корч.	inn, roadhouse, tavern
Котловина	котл.	depression
Кочевье	коч.	nomad camp
Кошара	кош.	sheepfold
Краевой центр	кр. ц.	kray center
Красный	Красн., Кр.	red (part of proper name)
Крахмальный	крахм.	starch (adjective)

APPENDIX II (CONTINUED)

Крахмально-паточный	крахм.-пат.	starch and molasses (adjective)
Крепость	креп.	fortress
Крупяной	круп.	meal (adjective)
Кумирня	кум.	shrine
Курган, курганы	кург.	burial mound(s)
Курорт	кур.	resort
Курортный поселок	кур. п.	resort type (urban) settlement
Лагуна	лаг.	lagoon
Лако-красочный завод	лакокр.	laquer-paint factory
Левый	Лев.	left (part of proper name)
Легкой промышленности	л. пром.	light industry
Ледник	ледн.	glacier
Лесничество	леснич.	forestry district
Лесник	лесн.	forester
Лесозащитная станция	ЛЗС	forest shelter belt station
Лесопильный завод	лесп.	sawmill
Лесоучасток	лес.уч.	forest section
Леспромхоз	лесхоз.	lumber camp
Летник, летовка	лет.	summer camp
Лечебница	леч.	hospital
Лиман	лим.	lagoon, shallow lake, estuary
Лиственница	листв.	larch
Льноводческий	льновод.	flax (adjective)
Льняной	льнян.	flaxen
Макаронный	мак.	macaroni (adjective)
Малый	Мал., М.	small, little (part of a proper name)
Марганцовые разработки	марганц.	manganese mining
Маргариновый	маргр.	margarine (adjective)
Маслобойный	масл.	oil and fat processing plant (adj.)
Маслодельный	маслод.	oil and fat processing plant (adj.)
Махорочный	махор.	tobacco roots (adjective)
Машино-тракторная станция	МТС	motor and tractor station
Машино-тракторные мастерские	МТМ	motor and tractor repair shops
Машиностроительной промышленности	маш.	machine tool (mill, factory)
Мебельный	меб.	furniture (adjective)
Медные разработки	медн.	copper mining
Медеплавильный завод	медепл.	copper smelter mill
Мельницы, мукомольни	мук.	flour mills
Местечко	м., мес.	market town
Местной промышленности	местн.	local industries
Металлургической промышленности	мет.	metallurgical industry
Метеорологическая станция	мет. ст.	meteorological station
Меховой	мех.	fur (adjective)
Минеральный	мин.	mineral
Минеральный источник	мин. ист.	mineral spring

APPENDIX II (CONTINUED)

Могила, могилы	мог.	tomb, tombs
Молочно-мясной	мол.-мясн.	dairy and meat (adjective)
Молочно-товарная ферма	МТФ	dairy products farm
Молочный	мол.	dairy (adjective)
Мостовая из колотого камня	К	broken stone pavement
Мраморный	мрам.	marble (adjective)
Музыкальных инструме- нтов	муз. инстр.	musical instruments
Мукомольни, мельницы	мук.	flour mills
Мыза	мз.	farm
Мыловаренный	мыл.	soap making (adjective)
Мыс	м.	point, cape (part of proper name)
Мясной	мясн.	meat (adjective)
Наблюдательный	набл.	observation (adjective)
Национальный	нац.	national
Нефтяной, нефтепера- батывающей промышлен- ности	нефт.	oil, oil refining industry
Нижний	Ниж.	lower (part of proper name)
Низменность	низм.	lowland
Новый	Нов., Н.	new (part of proper name)
Оазис	оаз.	oasis
Областной совет	ОС	oblast' Soviet
Областной центр	обл. ц.	oblast' center
Область	обл.	oblast' (administrative division)
Обсерватория	обсерв.	observatory
Обувной	обув.	shoe (adjective)
Овощной	овощн.	vegetable (adjective)
Овраг	овр.	ravine
Овцеводческий	овц.	sheep breeding
Овцетоварная ферма	ОТФ	sheep products farm
Овчинно-шубный	овч.-шуб.	sheepskin jackets (adjective)
Огнеупорный	огнеуп.	fireproof
Озеро	оз.	lake
Округ	окр.	okrug (administrative division)
Октябрьский	Окт.	October (adjective)
Оранжерея	ор.	conservatory
Остров	о.	island
Острова	о-ва	islands
Отделение	отд.	division
Охотничья (изба)	охотн.	hunting cabin
Памятник	пам.	memorial monument
Паром	пар.	ferry
Парфюмерный	парф.	perfumery (adjective)
Пасека	пас.	apiary
Пасторат (на заграничной территории)	паст.	pastorate (in non-Soviet territory)
Паточный	пат.	molasses (adjective)
Пашня	П	plowed field

APPENDIX II (CONTINUED)

Первый, -ая, -ое, -ые	1-й, 1-я, 1-е	first (part of a name)
Перевал	пер.	mountain pass
Перевоз	пер.	crossing (river)
Пережат	перек.	bar (river)
Песок	пес.	sand
Песчаный	П	sandy
Пещера	пещ.	cave
Пивоваренный	пив.	brewery (adjective)
Пиротехнический завод	пиротехн.	fireworks factory
Писчебумажная фабрика	писч. бум.	paper mill
Пищевой промышленности	пищ.	food industry
Пищевые концентраты	пищ. конц.	food concentrates
Пластических масс	пластмасс	plastics
Платина	плат.	platinum (mining)
Платформа	пл., платформ.	platform
Племенной	плем.	thoroughbred
Плодовиноградный	плодовин.	fruit and grape (adjective)
Плодоовощной	плодоовощ.	fruit and vegetable (adjective)
Плотина	плот.	dam
Поварня	пов.	community kitchen
Погост (на заграничной территории)	пог.	village cemetery; village (North Russia only); administrative division
Пограничная застава	погр. заст.	border roadblock
Пограничная комендатура	погр. кмд.	border military headquarters
Погрузочно-разгрузочные площадки	погруз.	loading and unloading platforms
Подсобное хозяйство	подс. хоз.	auxiliary (truck) farming
Подстанция электрическая	подст. эл.	power sub-station
Пожарный	пож.	fire (adjective)
Полевой стан	пол. ст.	field station
Полиграфический	полигр.	polygraphic
Полумыза (на заграничной территории)	плмз.	small farm (in non-Soviet territory)
Полуостров	п-ов	peninsula
Полустанок	плет.	RR stop
Порог, пороги	пор.	rapids
Посад	пос.	settlement
Посадочная площадка	пос. пл.	landing strip
Поселковый совет	ПС	settlement Soviet
Поселок	п. пос.	settlement
Поселок городского типа	П.Г.Т.	urban settlement
Постоялый двор	пост. дв.	inn
Правый	Прав.	right (part of a name)
Предместье	прдм.	suburb
Пригород	приг.	suburb
Пристань	прист.	landing
Провинция	пров.	province
Проволочный завод	провол.	wire mill
Пролив	прол., пр.	strait
Промысел	пром.	industrial establishment

APPENDIX II (CONTINUED)

Протока	прот.	braided or split stream or channel
Проход	прох.	pass
Пруд	пр.	pond
Прядильный	пряд.	spinning (adjective)
Птицеводческий	птиц.	poultry breeding (adjective)
Птицеферма	ПТФ	poultry farm
Пустыня	пуст.	desert
Путевой пост	пут. п.	section post
Рабочий поселок	Р-П	workers settlement
Радиостанция	радиост.	radio station
Развалины	разв.	ruins
Разрушенный	разр.	destroyed
Разъезд	раз.	siding
Район	р-н	rayon (administrative unit)
Районный Совет	РС	rayon council (Soviet)
Районный центр	Р-Ц	rayon (center)
Река	р.	river
Ремонтный	рем.	repair (adjective)
Рисовый	рис.	rice (adjective)
Родник	род.	spring
Рудник	руд.	mine
Рукав	рук.	braided or split stream or channel
Ручей	руч.	stream, brook
Рыбацкий поселок	рыб. п.	fishing settlement
Рыбачья зимовка	рыб. зим.	winter fishing camp
Рыбный промысел	рыб. пр.	fishery, fishing industry
Рыбный промысел, рыбной промышленности	рыб.	fishery, fishing industry
Салотопенный завод	сал.	fat refinery
Санаторий	сан.	sanatorium
Сарай, сараи	сар.	barn, barns
Сардоба	сард.	summer quarters over a well
Сахарный	сах.	sugar (adjective)
Сахарный тростник	сах. трост.	sugar cane
Свекловичный	свекл.	sugar beet (adjective)
Свиноводческий	свин.	hog breeding (adjective)
Свинотоварная ферма	СТФ	hog products farm
Святой	св.	saint
Северный	Сев.	northern
Северо-Восточный	СВ	northeastern
Северо-Западный	СЗ	northwestern
Селекционный	сел.	selection (adjective)
Сельский Совет	СС	village Soviet
Сельскохозяйственный	с.-х.	agricultural
Семеноводческий	семен.	seed cultivation (adjective)
Сернистый, серный	серн.	sulphate, sulphuric
Силикатный	силик.	silicate (adjective)
Силосная башня	сил.	silo tower
Скала, скалы	ск.	cliff, cliffs
Скипидарный	скип.	turpentine (adjective)

APPENDIX II (CONTINUED)

Склад, склады	скл.	storage(s)
Склады горючего	скл. гор.	fuel storage
Скотоводческий, скотный	скот.	cattle breeding
Сланцевые разработки	сланц.	schist pits
Слобода	сл.	settlement
Смолокуренный, смолокурня	смол.	tarworks
Советский	Сов.	Soviet (adjective)
Совхоз	свх.	state farm
Соевый	соев.	soy bean (adjective)
Соленая вода, солеварни, соледобыча, соляные копи	сол.	salt water, salt works, salt mine
Сопка	соп.	conical hill, volcano
Сортировочная станция	сорт. ст.	RR classification yard
Спасательная станция	спас. ст.	lifesaving station
Спиртоводочный	спирт.	alcohol and vodka (adjective)
Спичечный	спич.	match (adjective)
Спортивный	спорт.	sport (adjective)
Средний	Сред., Ср.	middle, central (part of proper name)
Стадион	стад.	stadium
Сталелитейный завод	стал.	steel mill
Станица	ст-ца	village
Становище, стойбце	стан. ст-ще	camp
Станция	ст.	station
Старый	Стар., Ст.	old (part of proper name)
Стекольный	стекл.	glass (adjective)
Строительных материалов	стр. м.	building materials
Строящийся	стр.	under construction (adjective)
Суконный	сук.	woolen
Сухой	сух.	dry
Сушильный	суш.	drying
Табакководческий, табачный	таб.	tobacco growing (adjective)
Тальковые разработки	тальк.	talcum diggings
Таможня	там.	customhouse
Твердый	Т	firm, hard
Текстильный	текст.	textile
Теплоэлектростанция	ТЭЦ	thermo-electric power station
Террикон	тер.	tailings piles
Техникум	техн.	technical school
Ткацкая фабрика	ткацк.	weaving mill
Товарная станция	тов. ст.	freight station
Толевый	тол.	tar paper (roof) -(adjective)
Торфяные разработки	торф.	peat cuttings
Тракторный завод	тракт.	tractor factory
Третий, -тья, -тье	3-й, 3-я, 3-е	third (part of proper name)
Трикотажный	трик.	knitting (tricot) -(adjective)
Туннель	тун.	tunnel
Углекислый источник	мин.	mineral (carbonate) spring
Угольной промышленности	уг.	coal industry

APPENDIX II (CONTINUED)

Уездный центр	у. Ц.	uyezd center
Укрепление	укр.	fortification
Укусный завод	укс.	vinegar distillery
Улус	ул.	ulus, Tatar name for village and/or administrative unit
Урочище	ур.	tract, area
Участок	уч.	section, subdivision
Ущелье	ущ.	gorge
Фабрика	фабр.	factory, mill
Фактория	факт.	trading post
Фанерный	фан.	veneer
Фанза	ф.	Korean or Chinese farm
Фарфоровый	фарф.	porcelain
Фарфорово-фаянсовый	фарф.-фаянс.	porcelain-faience
Фирновое поле	фирн.	firm field
Фольварк	фл.	farmstead
Фонтан	фт.	spring, fountain
Форт	ф.	fort
Фосфоритный	фосф.	phosphorite
Фруктово-ягодные сады	фр.-яг.	fruit and berry orchards
Химико-фармацевтический	хим.-фарм.	chemical-pharmaceutical
Химический	хим.	chemical
Химической промышленности	хим.	chemical industry
Хлебный, хлебозавод	хлебн.	bread (bakery)
Хлопковый, хлопководческий	хлопк.	cotton, cotton growing
Хлопчатобумажный	хлоп. бум.	cotton (adjective)
Хозяйство	хоз.	economy, a unit of management
Холодильник	холод.	deep-freeze
Хребет	хр.	range
Хромовые разработки	хром.	chrome mining
Хрустальный	хруст.	crystal
Хутор	хут., х.	farm
Центральный	центр.	central
Цветной металлургии	цвет.	non-ferrous metallurgy
Цементный	цем.	cement (adjective)
Цементобетон	Ц	cement - concrete
Цинковый завод	цинк.	galvanized iron works
Цистерна	цист.	tank
Цитрусовый	цитрус.	citrus (adjective)
Чайный	чайн.	tea (adjective)
Черепичный	черепич.	tile (roof)
Черной металлургии	ч. мет.	ferrous metallurgy
Чугунолитейный завод	чуг.	cast iron foundry
Шахта	шах.	shaft
Швейный	швейн.	sewing
Шелководческий, шелкомотальный, шелковый	шелк.	silkworm industry, silk spinning, silk

APPENDIX II (CONTINUED)

Шивера	шив.	rapids
Школа	шк.	school
Шлак	Шл	slag
Шлако-бетонный	шл.-бет.	slag concrete
Шлюз	шл.	sluice, lock
Шпагатный	шпаг.	manila cord
Штольня	шт.	gallery
Щебень	Щ	crushed (blue) stone
Щелочный источник	щел.	alkali spring
Щеточный	щет.	brush (adjective)
Экстрактный	экстр.	extract (adjective)
Элеватор	элев.	elevator
Электропромышленности	эл.	electric industry
Электростанция	эл. ст.	power station
Электротехнический завод	эл.-техн.	electrical appliances plant
Эфиромасличный	эф. масл.	essential oils
Юго-Восточный	ЮВ	southeastern
Юго-Западный	ЮЗ	southwestern
Южный	Южн.	southern
Юрта	юр.	tent (skin, felt, bark)
Ягодный	яг.	berry (adjective)
Яхтклуб	яхтккл.	yacht club

APPENDIX III

Translations of selected map terms

Генеральный Штаб Вооруженных Сил Союза ССР	General Staff of the Armed Forces of Union SSR
Генеральный Штаб, Красная Армия	General Staff, Red Army
Военно-Топографическое Управление	Military-Topographic Administration
Главное Управление Геодезии и Картографии	Chief Administration of Geodesy and Cartography
Аэро-Геодезические Предприятия	Aero-Geodetic Enterprises
Первое издание	first edition
Второе издание	second edition
Третье издание	third edition
Временное издание	provisional edition
Учебная карта	training map
Для служебного пользования	for official use only
Система координат (год)	system of coordinates (date)
Издано в (году)	published in (date)
Сдано в печать	given for publication
Допущено к печати	authorized for printing
Отпечатано в	printed in
Составлено в (году)	compiled in (date)
Карта составлена схематично	map compiled diagrammatically
Составлено	compiled by
Карта получена стереофотограмметрическим методом	map compiled by stereo-photogrammetric method
Карта издана с учетом всех материалов на	map compiled from all the sources available as of (date)
Карта получена путем увеличения (масштаб) карты	map represents an enlargement of (scale) sheet
Исправлено	revised by
Исправлено в (году)	revised in (date)
Маршрутная съемка	route survey (by)
Инструментальная съемка	instrumental survey
Фототеодолитная съемка	photo-theodolite survey by
Межевые съемки, разных масштабов	cadastral surveys, various scales
Крупно масштабные съемки (Масштаб) аэросъемка в (году)	large scale surveys by (scale) aerial survey of (date)
Масштаб 1:100,000, рекогносцировка в (году)	scale 1:100,000 reconnaissance of (date)

APPENDIX III (CONTINUED)

Мензульная топографическая съёмка	planetable topo survey
Горизонтальная съёмка	planimetric survey
Полуинструментальная съёмка	semi-instrumental survey
Маршрутно-инструментальная съёмка	instrument route survey
Рекогносцировка в (году)	reconnaissance of (date)
Частичная рекогносцировка	(date) partial reconnaissance
Дополнено и исправлено по новейшим материалам в (году)	additions and corrections from the latest sources made in (date)
Дорожная сеть дополнена в (году)	additions to road network made in (date)
Частично (в году) исправлена по 1:50,000, съёмка (в году)	partial (date) corrections made from 1:50,000, survey of (date)
Исправлена, дополнена и вычерчена	corrected, supplemented and drafted by
Карта перечерчена с 1:100,000, съёмка (в году)	map redrafted from 1:100,000 survey of (date)
Многогранная проекция Мюффлинга	Mueffling polyhedric projection
Видоизмененная поликоническая проекция	modified polyconic projection
Равноотстоящая коническая проекция	equal-distant conical projection
Административные границы пока- заны приблизительно	administrative boundaries drawn diagrammatically
Административные границы пока- заны по состоянию на (год)	administrative boundaries shown as of (date)

By Order of *Wilber M. Brucker*, Secretary of the Army:

MAXWELL D. TAYLOR,
General, United States Army,
Chief of Staff.

Official:

HERBERT M. JONES,
Major General, United States Army,
The Adjutant General.

Distribution:

Active Army:

OSD (1)	OS Maj Comd (10)	USAWC (5)
ASA (10)	MDW (1)	USACGSC (5)
DCSOPS (2)	Armies (5)	USARIS (2)
DCSLOG (2)	Corps (3)	NWC (2)
ACSI (150)	USALS (2)	USMA (2)
CNGB (1)	AMS (100)	USAARMS (2)
WSEG (1)	Det "O" 8582th DU	USAAMS (5)
CRD (2)	(1)	US ARADSCH (5)
OCSpWar (15)	Det "R" 8582th DU	USAES (30)
Technical Stf. DA	(5)	USAIS (5)
(10)	JUSMAG (Greece)	USASCS (5)
USA Arty Bd (1)	(1)	PMGS (2)
USA Armor Bd (1)	ARMISH (1)	USA QM Sch (2)
USA Inf Bd (1)	USA Corps (Res)	USATSCH (2)
USA Air Def Bd (1)	(3)	USA Ord Sch (2)
USA Abn & Elet Bd	Div (2)	JAMMAT (2)
(1)	Engr Brig (1)	ARMA (Greece) (3)
USA Avn Bn (1)	Engr Gp (1)	ARMA (Turkey) (2)
Arctic Test Bd (2)	MI Gp (3)	ARMA (Iran) (2)
USCONARC (5)	Engr Bn (1)	ARMA (USSR) (5)
US ARACOM (5)	MI Bn (2)	Mil Dist (1)
Rgn HQ US ARAD-	Ft & Cps (2)	Sectors, USA Corps
COM (5)	USAINTC (5)	(Res) (1)

NG: None.

USAR: None.

For explanation of abbreviations used, see AR 320-50.