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U.S.--DEPT. OF THE  
ARMY

SOVIET TOPOGRAPHIC  
MAP SYMBOLS.



# TM 30-548

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

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## SOVIET TOPOGRAPHIC MAP SYMBOLS



HEADQUARTERS, DEPARTMENT OF THE ARMY  
JUNE 1958

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DEPARTMENT OF THE ARMY  
Washington 25, D. C., 12 June 1958

TM 30-548

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## **APPENDIX I RUSSIAN ALPHABET TRANSLITERATION ACCORDING TO U. S. BOARD OF GEOGRAPHIC NAMES**

## **APPENDIX II TOPOGRAPHIC ABBREVIATIONS AND THEIR MEANINGS**

## **APPENDIX III TRANSLATIONS OF SELECTED MAP TERMS**

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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.

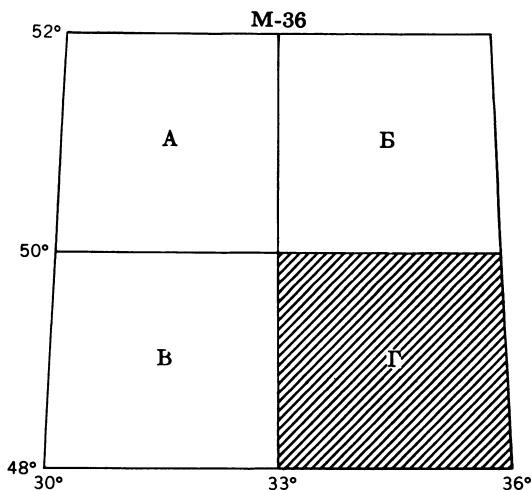
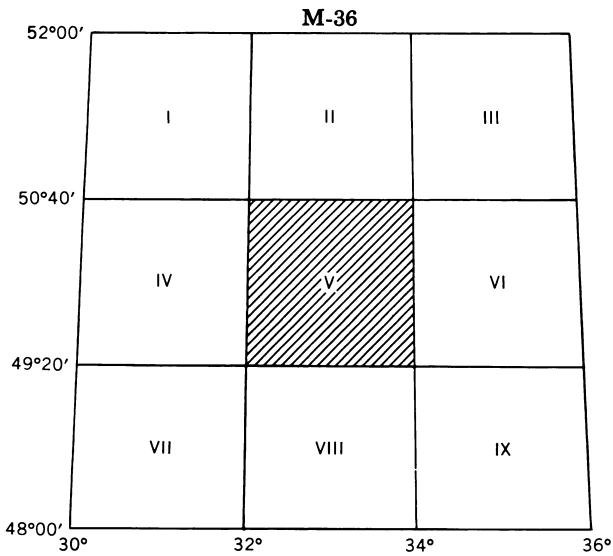


FIGURE 1. 1:500,000 scale division of 1:1,000,000 sheet M-36.

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, Б for NE, В for SW and Г for SE. Example: M-36- Г.

**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.

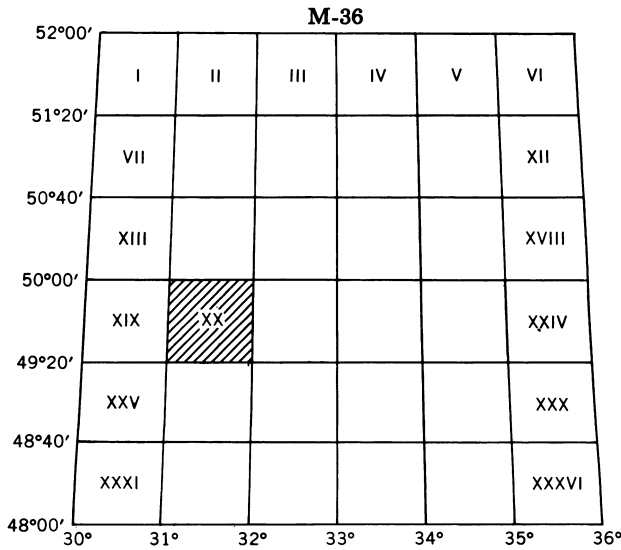


FIGURE 3. Method 1, 1:200,000 scale division of 1:1,000,000 Sheet M-36.

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.

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.

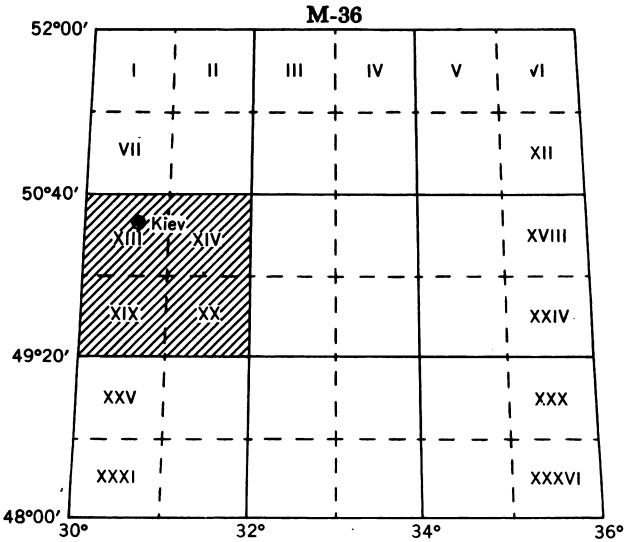


FIGURE 5. Method 3, 1:200,000 Scale division of 1:1,000,000 Sheet M-36.

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.

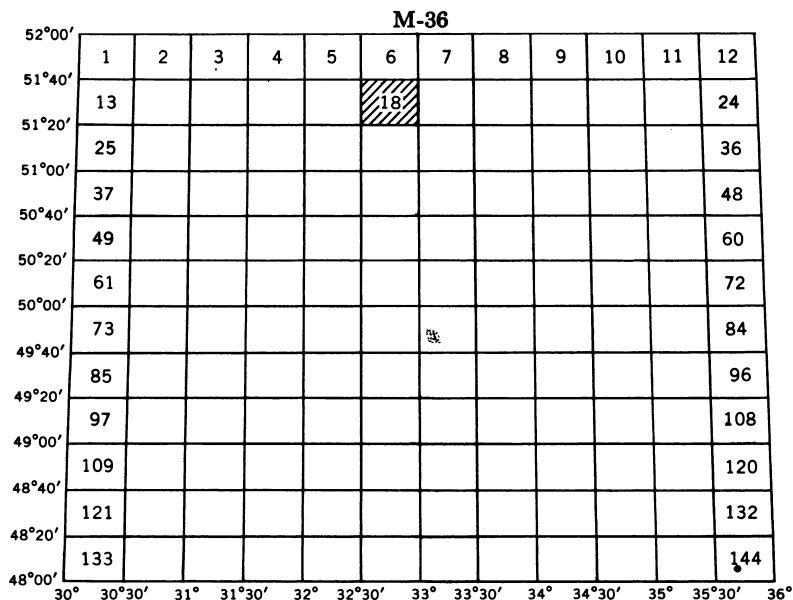


FIGURE 6. 1:100,000 scale division of 1:1,000,000 Sheet M-36.

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.

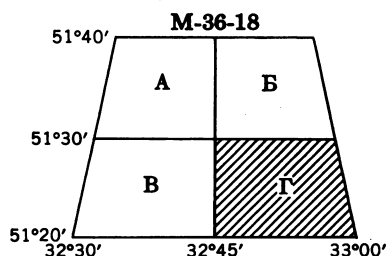


FIGURE 7. 1:50,000 scale division of 1:100,000 sheet M-36-18.

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.

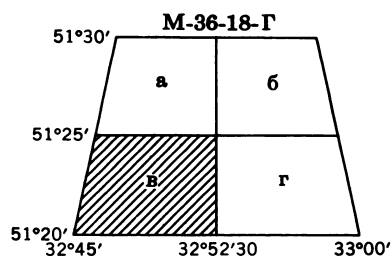


FIGURE 8. 1:25,000 scale division of 1:50,000 sheet M-36-18-Γ.

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 r, 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.

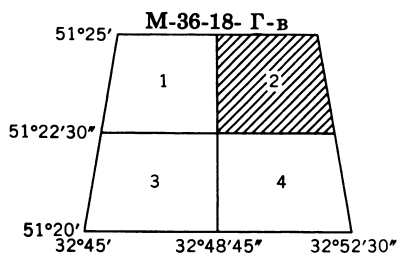


FIGURE 9. 1:10,000 scale division of 1:25,000 sheet M-36-18-Γ-B.

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.





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## 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

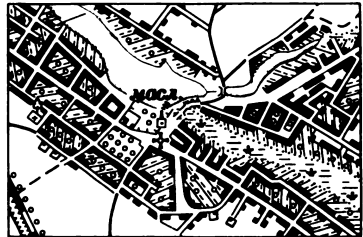
1. Large city \_\_\_\_\_



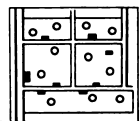
2. Summer settlement \_\_\_\_\_



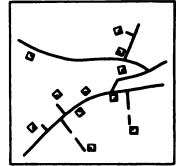
3. Rural settlement \_\_\_\_\_



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 \_\_\_\_\_



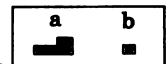
10. Prominent industrial building \_\_\_\_\_



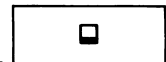
11. Individual fireproof building

a. Drawn to scale

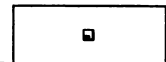
b. Not drawn to scale \_\_\_\_\_



12. Individual dwelling, fireproof \_\_\_\_\_



13. Individual farm or dwelling, not drawn to scale \_\_\_\_\_



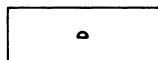
14. Dwelling or non-dwelling in sparsely settled area; isolated non-dwelling (barn, shed, etc.) \_\_\_\_\_



15. Somon (rayon center) and urto (post-relay station) \_\_\_\_\_



16. Location of tents \_\_\_\_\_



17. Ruins

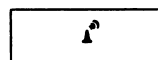
a. Lyadovo (farm ruins)

b. Ruins of individual dwelling \_\_\_\_\_

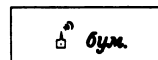


## SECTION II—Industrial and Agricultural Features

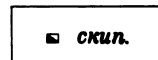
18. Factory or mill chimney \_\_\_\_\_



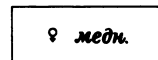
19. Factory or mill with chimney \_\_\_\_\_



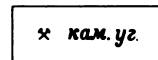
20. Factory or mill without chimney \_\_\_\_\_



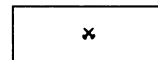
21. Mine or open-pit mine \_\_\_\_\_



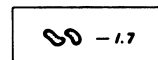
22. Operating shaft, gallery, or mine \_\_\_\_\_



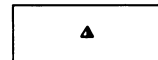
23. Non-operating shaft, gallery or mine \_\_\_\_\_



24. Pit \_\_\_\_\_



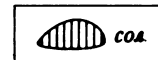
25. Tailings pile \_\_\_\_\_



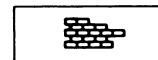
26. Stone quarry \_\_\_\_\_

















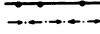
27. Salt mine \_\_\_\_\_



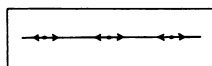
28. Peat cuttings \_\_\_\_\_



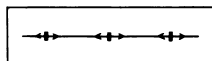
# USSR

- |   |   |
|---|---|
| 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 \_\_\_\_\_

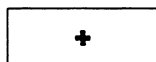


45. Overhead line (high tension) on metal towers \_\_\_\_\_

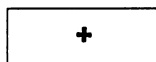


### SECTION III—Orientation Points and Local Features

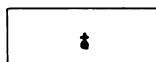
46. Stone church \_\_\_\_\_



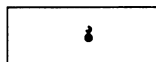
47. Wooden church  
(On 1:100,000 scale maps, both stone and  
wooden churches are shown with this symbol) \_\_\_\_\_



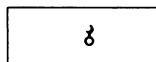
48. Chapel \_\_\_\_\_



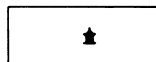
49. Stone mosque  
(On 1:100,000 scale maps, both stone and  
wooden mosques are shown with this symbol) \_\_\_\_\_



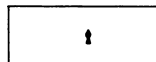
50. Wooden mosque \_\_\_\_\_



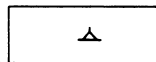
51. Buddhist lamasery, temple, or pagoda \_\_\_\_\_



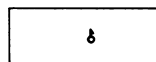
52. Buddhist roadside shrine \_\_\_\_\_



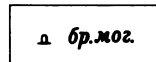
53. Cairn \_\_\_\_\_

















54. Small Moslem shrine or tomb \_\_\_\_\_



55. Common grave \_\_\_\_\_



# USSR

- |  |   |
|--|---|
| 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) \_\_\_\_\_

1 2 3  
  

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

4 5  
 

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) \_\_\_\_\_

 + 1.7

77. Rocks, boulders \_\_\_\_\_



78. Forest service station \_\_\_\_\_



79. Forest rangers house \_\_\_\_\_



80. Meteorological station \_\_\_\_\_



## SECTION IV—Geodetic Points


81. Astronomical point \_\_\_\_\_


★ *acmp.*

82. Triangulation point \_\_\_\_\_

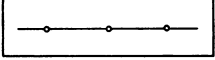
△ 92.6

83. Trigonometrical point on burial mound  55.7

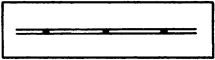
84. Bench mark, monumented  71.1

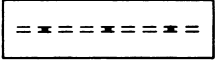
85. Bench mark  52.1

## SECTION V—Pipelines

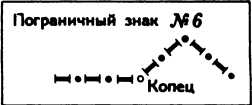
86. Natural gas conduit (surface) 

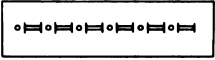
87. Natural gas conduit (underground) 

88. Oil conduit (surface) 

89. Oil conduit (underground) 

## SECTION VI—Boundaries and Barriers

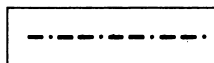
90. International boundary, boundary marker, and boundary post (No. 6) 

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

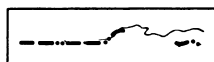
92. Boundary of Soviet Socialist Republic (SSR) 

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

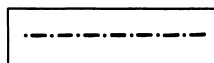
94. Autonomous oblast or kray boundary \_\_\_\_\_



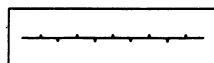
95. National okrug boundary \_\_\_\_\_



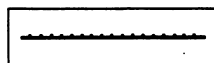
96. Rayon boundary \_\_\_\_\_



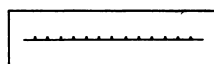
97. State Wild Life Sanctuary boundary \_\_\_\_\_



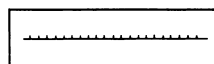
98. Stone or brick wall over 1 meter high \_\_\_\_\_



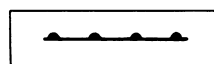
99. Stone, brick, or clay wall, less than 1 meter high \_\_\_\_\_



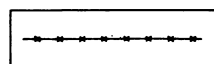
100. Wooden fence \_\_\_\_\_



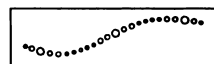
101. Metal fence \_\_\_\_\_



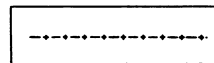
102. Rail or wattle fence \_\_\_\_\_



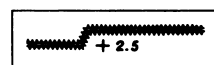
103. Hedge \_\_\_\_\_



104. Barbed wire fence \_\_\_\_\_



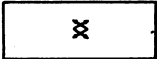

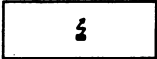
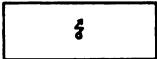


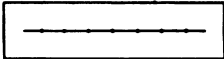
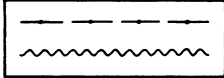
105. Artificial embankment, small fill (height indicated in meters) \_\_\_\_\_




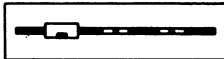
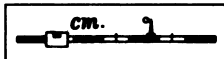
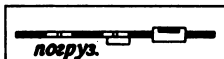
106. Trench, communication trench, and dugout \_\_\_\_\_



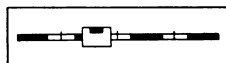
## SECTION VII—Communications

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 \_\_\_\_\_

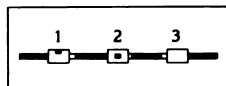


120. Single-track railroad, siding, and platform \_\_\_\_\_

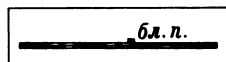


121. Location of main station building:

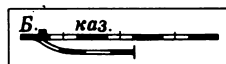
1. On one side of the track
2. Between the tracks
3. Location unknown



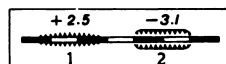
122. Electrified double-track railroad and block signal \_\_\_\_\_



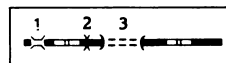
123. Section house, barracks, and dead end \_\_\_\_\_



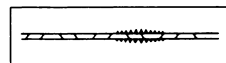
124. 1. Fill (height indicated in meters)  
2. Cut (depth indicated in meters) \_\_\_\_\_



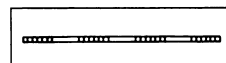
125. 1. Small bridge 2. Pipe (culvert) 3. Tunnel \_\_\_\_\_



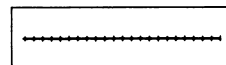
126. Dismantled railroad \_\_\_\_\_



127. Railroad under construction \_\_\_\_\_



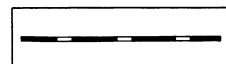
128. Trolley \_\_\_\_\_



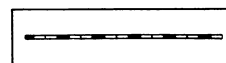
129. Narrow-gauge railroad and station \_\_\_\_\_



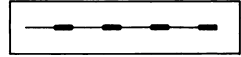
130. Electrified narrow-gauge railroad \_\_\_\_\_



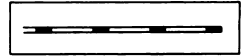
131. Railroad, horse-drawn or tractor-drawn \_\_\_\_\_



132. Suspension railroad \_\_\_\_\_



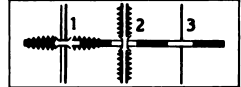
133. Railroad, approximate alignment \_\_\_\_\_



134. Station and tracks drawn to scale;  
pedestrian bridge \_\_\_\_\_

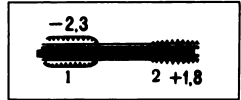


135. Crossing: 1. Under railroad tracks  
2. Over railroad tracks 3. Same level \_\_\_\_\_

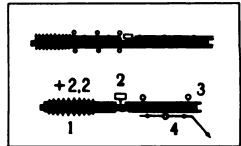


## SECTION IX—Roads

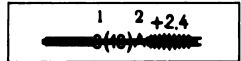
136. Main highway (super highway, arterial highway)  
1. Cut (depth indicated in meters)  
2. Fill (height indicated in meters) \_\_\_\_\_



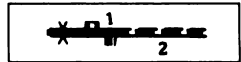
137. Improved highway (asphalt, bitumen, concrete)  
1. Fill; 2. kilometer post;  
3. Plantings;  
4. Telegraph or telephone lines \_\_\_\_\_



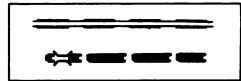
138. Highway  
1. Over-all width of paved strip with shoulders  
2. Type of pavement:  
A. asphalt and others \_\_\_\_\_



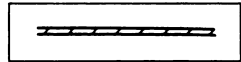
139. 1. Roadside building of light construction, shed  
2. Section of road difficult to negotiate \_\_\_\_\_



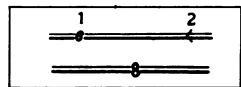
140. Highway under construction \_\_\_\_\_



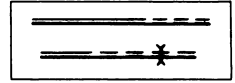
141. Highway, approximate alignment \_\_\_\_\_



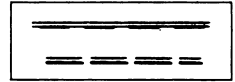
142. Improved dirt road (graded, former post  
and truck road)  
1. width of road  
2. Steep grade, over 7° \_\_\_\_\_



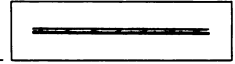
143. Section of road difficult to negotiate \_\_\_\_\_



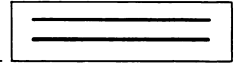
144. Improved dirt road under construction \_\_\_\_\_



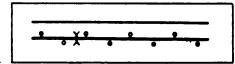
145. Improved dirt road, approximate alignment \_\_\_\_\_



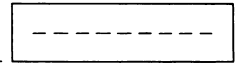
146. Main dirt (country) road \_\_\_\_\_



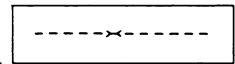
147. Dirt (country) road \_\_\_\_\_



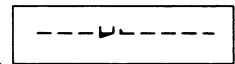
148. Field and forest road, caravan route, pack trail, or section of dirt road difficult to negotiate \_\_\_\_\_



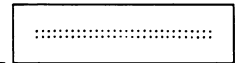
149. Footpath and pedestrian bridge \_\_\_\_\_



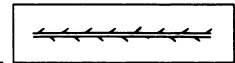
150. Cliff gallery (man made) \_\_\_\_\_



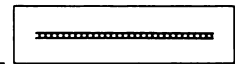
151. Winter road \_\_\_\_\_



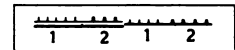
152. Cattle run \_\_\_\_\_



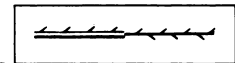
153. Road paved with wood, road for tractor \_\_\_\_\_



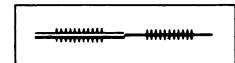
154. Road with fence:  
1. Wooden fence  
2. Stone wall \_\_\_\_\_



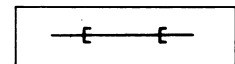
155. Road with fence \_\_\_\_\_



156. Corduroy road, causeway, and fascine \_\_\_\_\_



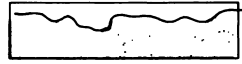
157. Chute for logs and other material \_\_\_\_\_



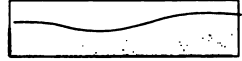


## SECTION X—Hydrography

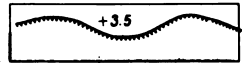
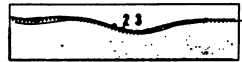
158. Permanent shoreline \_\_\_\_\_



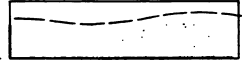
159. Gradually sloping shore \_\_\_\_\_



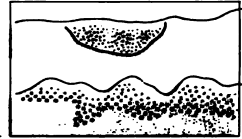
160. Precipitous shore, 1 to 2 meters high \_\_\_\_\_

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 \_\_\_\_\_



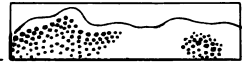
164. Tidal flats \_\_\_\_\_



165. Dangerous shore (breakers, rocks, etc.) \_\_\_\_\_



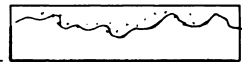
166. Shoal; Sandbank \_\_\_\_\_



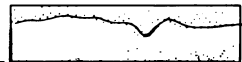
167. Clifty shore \_\_\_\_\_



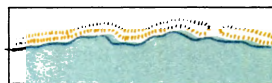
168. Rocky shore \_\_\_\_\_



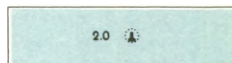
169. Sandy shore \_\_\_\_\_



170. Shore embankment, not drawn to scale \_\_\_\_\_



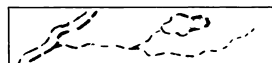
171. Rocks above the water level \_\_\_\_\_



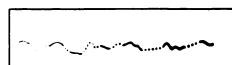
172. Small stream and small river \_\_\_\_\_



173. Intermittent streams and lake \_\_\_\_\_



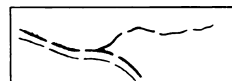
174. Underground and dwindling section of river \_\_\_\_\_



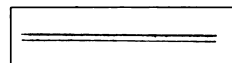
175. Flood limit \_\_\_\_\_



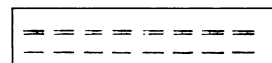
176. River and canal, approximate alignment \_\_\_\_\_



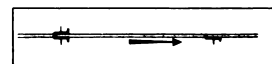
177. Canal \_\_\_\_\_



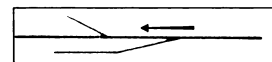
178. Canal under construction \_\_\_\_\_



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



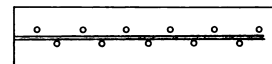
180. Canalized section of river, canal or ditch, less than 3 meters wide \_\_\_\_\_



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 \_\_\_\_\_

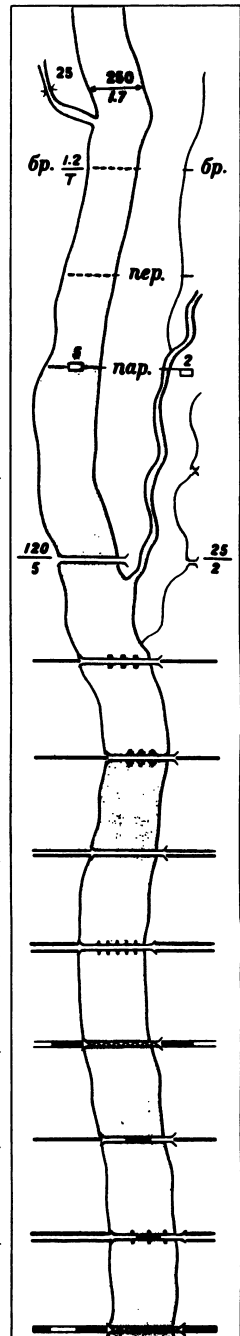
192. Stone or ferro-concrete bridge \_\_\_\_\_

193. Metal bridge \_\_\_\_\_

194. Wooden bridge \_\_\_\_\_

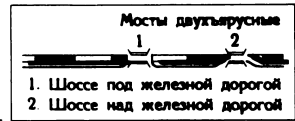
195. Stone or ferro-concrete bridge, draw or swing \_\_\_\_\_

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

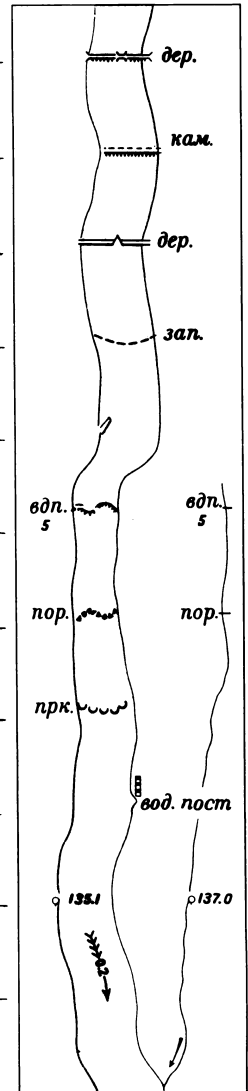
206. Bar

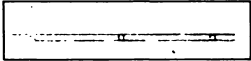
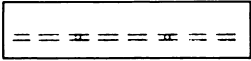
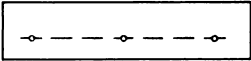
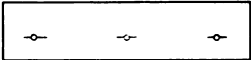
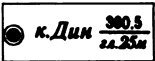
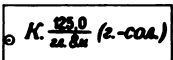
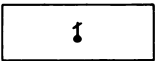
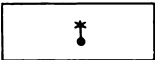
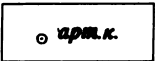
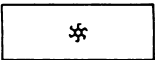
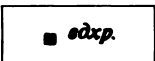

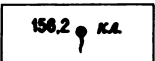

207. Water gauge

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 \_\_\_\_\_

гейзер

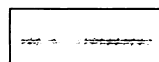
226. 1. Anchorage for large and small vessels  
2. Roadsteads and landings without equipment \_\_\_\_\_

1 2  
↓ ↓

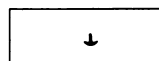
227. Wharf with buildings \_\_\_\_\_



228. Lumber docks \_\_\_\_\_



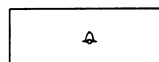
229. Mole, sea-wall, breakwater \_\_\_\_\_



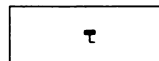
230. Winter harbor \_\_\_\_\_



231. Lighthouse \_\_\_\_\_

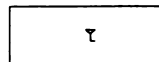


232. Buoy, beacon \_\_\_\_\_



233. Channel marker \_\_\_\_\_

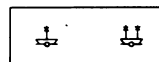
234. Other marker of the shore-river signal system used as orientation point \_\_\_\_\_



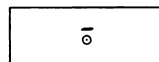
235. Driftwood accumulation \_\_\_\_\_



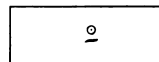
236. Lightship with one or two lights \_\_\_\_\_














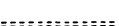


237. Sound and fog station (aerial) \_\_\_\_\_

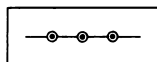


238. Sound and fog station (submerged) \_\_\_\_\_

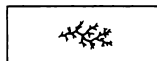


239. Buoy, beacon buoy with a figure on top \_\_\_\_\_ 
240. Light buoy, beacon \_\_\_\_\_ 
241. Barrel buoy \_\_\_\_\_ 
242. Spar buoy with flag \_\_\_\_\_ 
243. Red spar buoy (northern)  
without sphere, with sphere \_\_\_\_\_ 
244. White spar buoy (southern)  
without sphere, with sphere \_\_\_\_\_ 
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 \_\_\_\_\_ 

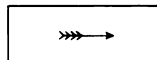
253. Pile \_\_\_\_\_



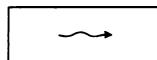
254. Seaweed \_\_\_\_\_



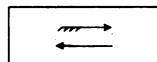
255. Constant current \_\_\_\_\_



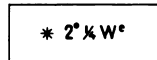
256. Changeable current \_\_\_\_\_



257. Tidal current (the feathered arrow indicates flood tide; plain arrow indicates ebb tide) \_\_\_\_\_



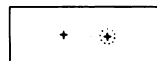
258. Magnetic anomalies \_\_\_\_\_



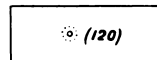
259. Sunken rock \_\_\_\_\_



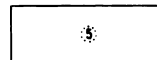
260. Rock awash (if outlined, location is known; without outline, location is unknown) \_\_\_\_\_



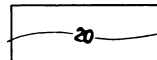
261. Sea rock \_\_\_\_\_



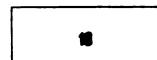
262. Small bank and spot sounding \_\_\_\_\_



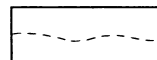
263. Isobath with value \_\_\_\_\_



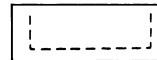
264. Depth sounding value \_\_\_\_\_



265. Waterway without depth sounding \_\_\_\_\_

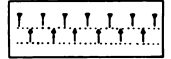


266. Restricted zone or training area (on water only) \_\_\_\_\_





267. Marine channel



268. Dry dock



269. Slipway

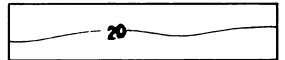


## SECTION XI—Relief

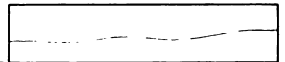
270. Heavy (index) contour line



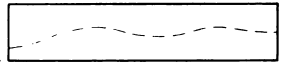
271. Intermediate contour line and value



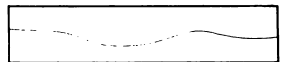
272. Half contour line (supplementary)



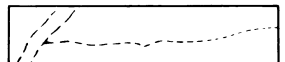
273. Auxiliary contour line at any altitude



274. Indicator of downward slope



275. Dry river bed



276. Spot elevation value

• 191.5

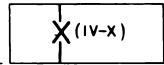
277. Value of prominent spot elevation

• 347.1

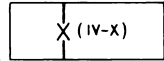
278. Value of point below sea level

• -52.0

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



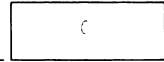
280. Mountain pass (Roman numerals indicate the months of the year when the passes are open) \_\_\_\_\_



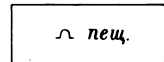
281. Monadnock, height of rock indicated in meters \_\_\_\_\_



282. Karst funnel, not drawn to scale \_\_\_\_\_



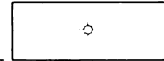
283. Cave or grotto \_\_\_\_\_



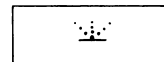
284. Crater of volcano, not drawn to scale \_\_\_\_\_



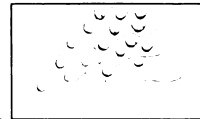
285. Crater of mud geyser \_\_\_\_\_



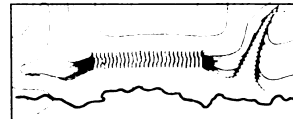
286. Volcanic manifestation (underwater volcanic eruptions and seepages of hot gases) \_\_\_\_\_



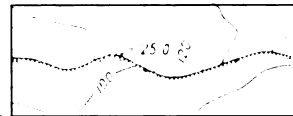
287. Lava stream \_\_\_\_\_



288. Steep slope (grassy) \_\_\_\_\_



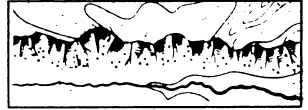
289. Scarps (height indicated in meters) \_\_\_\_\_



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) \_\_\_\_\_



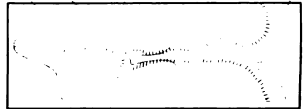
294. Secondary ice on frozen river \_\_\_\_\_



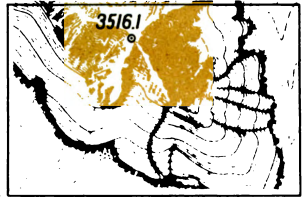
295. Land creep \_\_\_\_\_



296. Terrace ledge and ravine, with grassy slopes \_\_\_\_\_



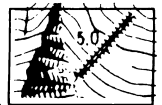
297. Cliffs \_\_\_\_\_



298. Rock debris \_\_\_\_\_



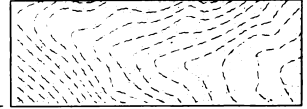
299. Dike \_\_\_\_\_



300. Outcroppings of bedrock \_\_\_\_\_



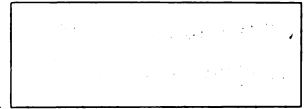
301. Firn (permanent snow) \_\_\_\_\_



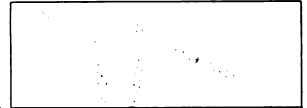
302. Glacier \_\_\_\_\_



303. Moraine \_\_\_\_\_



304. Terminal moraine \_\_\_\_\_



## SECTION XII—Soils and Vegetation

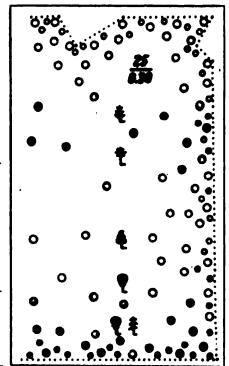
Forest may be shown by a green tint plus the variety symbol or it may also carry the tree-type symbol. Ruled tint indicates immature trees. Solid tint indicates maturity.

305. Forest

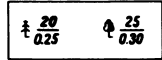
Coniferous \_\_\_\_\_

Deciduous \_\_\_\_\_

Mixed \_\_\_\_\_



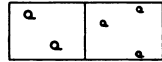
306. Average height and diameter of trees in meters (numerator indicates height, denominator indicates diameter) \_\_\_\_\_



307. Dwarf (low) forest \_\_\_\_\_



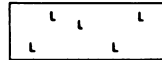
308. 1. Sparse forest 2. Sparse dwarf forest \_\_\_\_\_



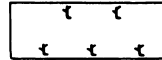
309. Small wooded area not drawn to scale \_\_\_\_\_



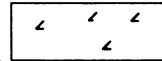
310. Cut-over forest \_\_\_\_\_



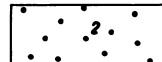
311. Burned-over forest \_\_\_\_\_



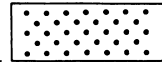
312. Wind-felled forest \_\_\_\_\_



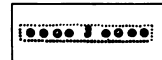
313. Stand of trees up to 4 meters high (the average height—2 meters) \_\_\_\_\_



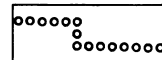
314. Tree nursery or young tree planting \_\_\_\_\_



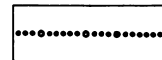
315. Narrow strip of forest (average height of trees in meters) \_\_\_\_\_



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 \_\_\_\_\_

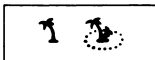
Mixed \_\_\_\_\_



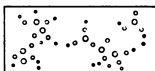
319. The average height of scrub in meters  
(diameter not indicated) \_\_\_\_\_

2 3

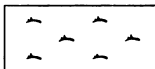
320. Palms; grove of palm trees \_\_\_\_\_



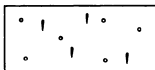
321. Scrub \_\_\_\_\_



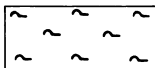
322. Saksaul (type of low growth in Central  
Asian desert) \_\_\_\_\_



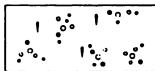
323. Brush in high mountain and tundra regions \_\_\_\_\_



Scrub in high mountain and tundra regions \_\_\_\_\_



324. Thorny scrub \_\_\_\_\_



325. Firebreak (width indicated in meters) \_\_\_\_\_

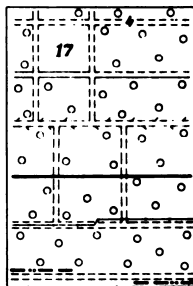
326. Firebreak lined by ditches \_\_\_\_\_

327. Firebreak with fences \_\_\_\_\_

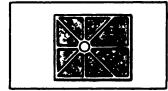
328. Road along the firebreak (the symbol  
for the firebreak is not shown) \_\_\_\_\_

329. Telegraph or telephone lines in the cen-  
ter and on the edge of firebreak \_\_\_\_\_

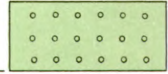
330. Boundary along firebreak \_\_\_\_\_



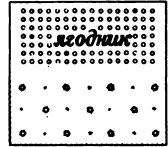
331. Park, with roads \_\_\_\_\_



332. Fruit orchard \_\_\_\_\_



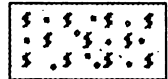
333. Berry plantation (currant, raspberry, and others) \_\_\_\_\_



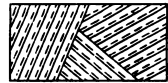
334. Vineyard \_\_\_\_\_



335. Fruit orchard and vineyard \_\_\_\_\_



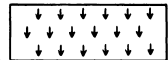
336. Vegetable gardens \_\_\_\_\_



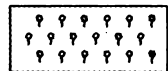
337. Hot-beds \_\_\_\_\_



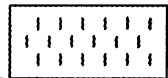
338. Rice plantation \_\_\_\_\_



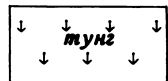
339. Tea plantation \_\_\_\_\_



340. Hop plantation \_\_\_\_\_



341. Other plantation \_\_\_\_\_



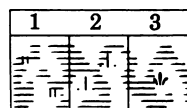
342. Swamp, impassable 1. grass 2. moss  
\_ 3. reed or cane \_\_\_\_\_



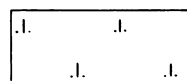
343. Swamp, hard to pass (depth indicated  
in meters)  
1. grass 2. moss 3. reed or cane \_\_\_\_\_



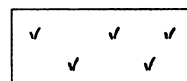
344. Swamp, passable 1. grass 2. moss 3. reed  
or cane (The degree of passability of  
bogs is determined on the basis of  
their passability in summer for in-  
fantry without any artificial measures  
being taken) \_\_\_\_\_



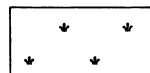
345. Moss \_\_\_\_\_



346. Bamboo \_\_\_\_\_



347. Reed or cane thicket \_\_\_\_\_



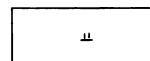
348. Meadow \_\_\_\_\_



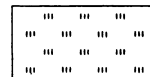
349. Marshland (some trees) \_\_\_\_\_



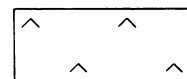
350. Wet ground (not drawn to scale) \_\_\_\_\_



351. Tall grass (over 1 meter high) \_\_\_\_\_




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

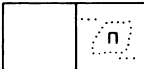




353. Hummocks 

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

355. Tundra 

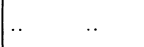
356. Plowed field, pasture (small sections in sparsely populated areas, serving as orientation point, to be marked "П" (plowed field) or with the initial letter of the word for plowed field) 


357. Rocky terrain (outcropping of bedrock) 


358. Gravel 

359. Polygonal terrain sections 

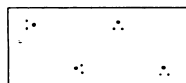
360. Grassy steppes 

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

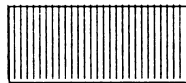
362. Desert area consisting of clay, loose rocks, sparse vegetation 

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

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



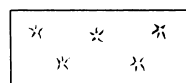
365. Solonchak, impassable \_\_\_\_\_



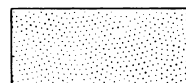
366. Solonchak, passable \_\_\_\_\_



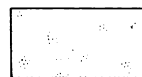
367. Takyr (salt clay flats) \_\_\_\_\_



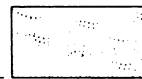
368. Sand \_\_\_\_\_



369. Hilly sand \_\_\_\_\_



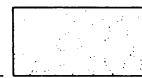
370. Sand knolls (ridges, dunes) \_\_\_\_\_



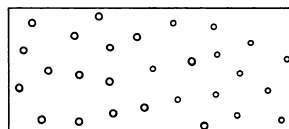
371. Crescent dunes \_\_\_\_\_



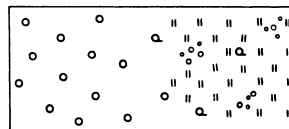
372. Porous sand \_\_\_\_\_

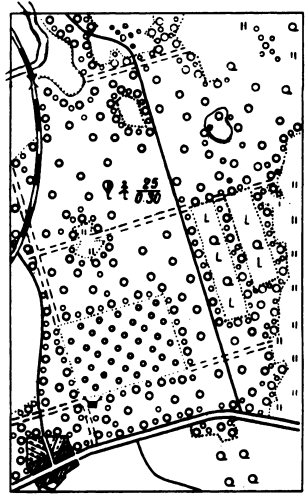


373. Transition from tall to dwarf (low) forest \_\_\_\_\_

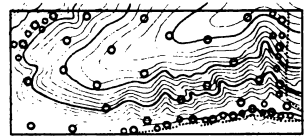


374. Gradual transition from forest to sparse forest, scrub, and meadow \_\_\_\_\_

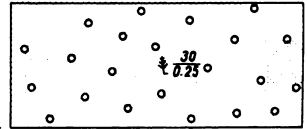




375. Combined symbolization, forest with other features on the map \_\_\_\_\_



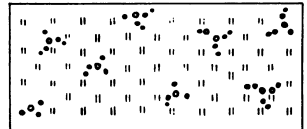
376. Forest on steep slopes (indicated by closely drawn contour lines) \_\_\_\_\_



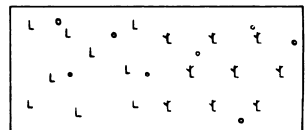
377. Pine forest on sand \_\_\_\_\_



378. Forest and scrub \_\_\_\_\_

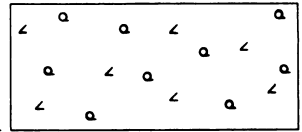


379. Meadow with scrub \_\_\_\_\_

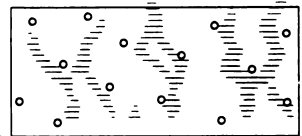


380. New growth on cut-over or burned-over timberland \_\_\_\_\_

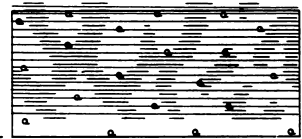
381. Sparse forest with wind-felled trees \_\_\_\_\_



382. Swampy forest \_\_\_\_\_



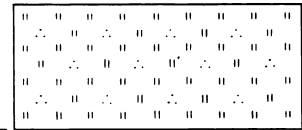
383. Sparse dwarf forest in impassable swamp \_\_\_\_\_



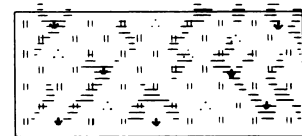
384. Swampy meadow (marsh land) \_\_\_\_\_



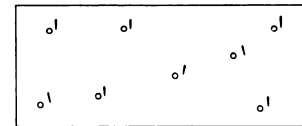
385. Hummocks in meadow \_\_\_\_\_



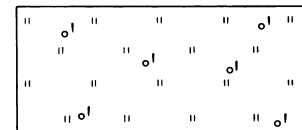
386. Swampy hummocks and reeds \_\_\_\_\_



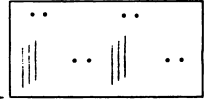
387. Brush \_\_\_\_\_



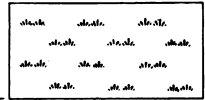
388. Alpine meadow with brush \_\_\_\_\_



389. Semi-desert vegetation and solonchak



390. Hilly tundra



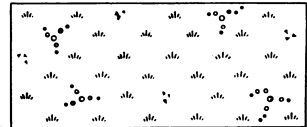
391. Tundra with lichens



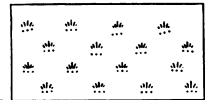
392. Swampy tundra



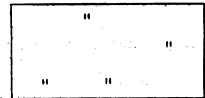
393. Tundra—stony, with scrub



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. ЛЮЗНО

1:75,000 \_\_\_\_\_ м. ЛЮЗНО

1:100,000 \_\_\_\_\_ м. ЛЮЗНО

## 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 _____	сех. Красный
1:75,000 _____	сех. Красный
1:100,000 _____	сех. 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***

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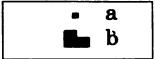

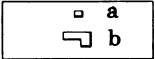
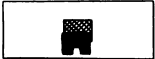

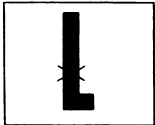
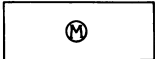
## CHAPTER 3

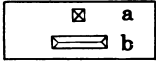
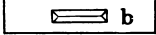
### Symbolization for Maps at the Scale of 1:10,000

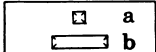
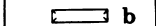
Symbols shown here are additional to those shown in Chapter 2 and are those usually shown only on 1:10,000 scale maps or larger.

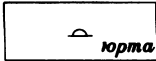
#### SECTION I—Populated Places

##### SYMBOLIZATION FOR INDIVIDUAL STRUCTURES

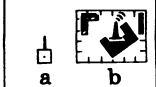
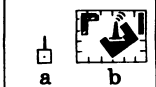
426. Fireproof building  
a. Not drawn to scale  
b. Drawn to scale \_\_\_\_\_
- 
427. Non-fireproof building  
a. Not drawn to scale  
b. Drawn to scale \_\_\_\_\_
- 
428. Non-fireproof building (non-dwelling)  
a. Not drawn to scale  
b. Drawn to scale  
(Shown only within the built-up area for a populated place of rural type) \_\_\_\_\_
- 
429. Prominent fireproof building \_\_\_\_\_
- 
430. Open entrance to yard \_\_\_\_\_
- 
431. Archway entrance to yard \_\_\_\_\_
- 
432. Subway entrance \_\_\_\_\_
- 

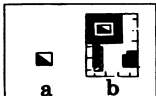
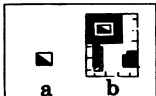
433. Vegetable storage  
 a. Not drawn to scale  a  
 b. Drawn to scale  b

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

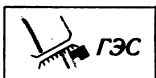
435. Tent (skin, felt, bark)  *юрта*

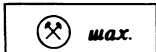
## SECTION II—Physical and Cultural Features

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

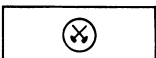
437. Factory, mill, and flour mill, without chimneys  
 a. Not drawn to scale  a  
 b. Drawn to scale  b

438. Power station, drawn to scale  *электр.*

439. Hydroelectric power station, drawn to scale  *гЭС*

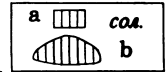
440. Entrance to major operating shaft  
 (elevator, ventilator-equipped) or gallery  *max.*

441. Entrance to auxiliary operating shaft  *max.*

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

443. Abandoned open-pit mine or quarry 

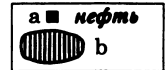
444. Open-pit salt mine  
 a. Not drawn to scale  
 b. Drawn to scale \_\_\_\_\_



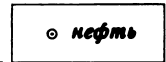
445. Oil seepage  
 a. Not drawn to scale  
 b. Drawn to scale \_\_\_\_\_



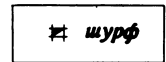
446. Oil deposit or well  
 a. Not drawn to scale  
 b. Drawn to scale \_\_\_\_\_



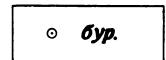
447. Oil well without derrick, but with motor pump \_\_\_\_\_



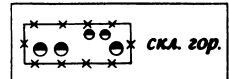
448. Prospect well \_\_\_\_\_



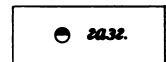
449. Drill hole \_\_\_\_\_



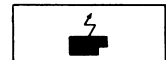
450. Fuel storage tanks, drawn to scale \_\_\_\_\_



451. Natural gas tank \_\_\_\_\_



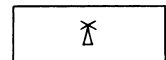
452. Radio station, drawn to scale \_\_\_\_\_



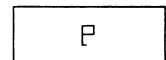
453. Telephone station, drawn to scale \_\_\_\_\_



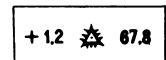
454. Wooden windmill (flour) \_\_\_\_\_

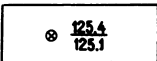
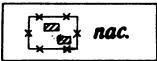
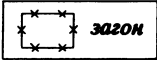


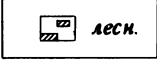


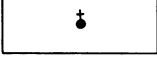
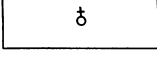





455. Autobus and trolley bus stop (outside city limits) \_\_\_\_\_



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 \_\_\_\_\_ 

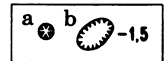
470. Cattle burial site, drawn to scale \_\_\_\_\_



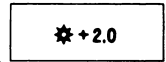
471. Pit

a. Not drawn to scale

b. Drawn to scale \_\_\_\_\_



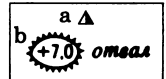
472. Burial mound \_\_\_\_\_



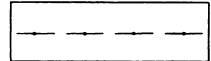
473. Tailings pile

a. Not drawn to scale

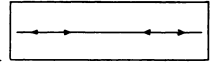
b. Drawn to scale \_\_\_\_\_



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 \_\_\_\_\_



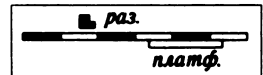
477. Double-track railroad and station building \_\_\_\_\_



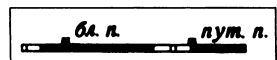
478. Single-track railroad with roadbed for second track, and loading platform \_\_\_\_\_



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



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

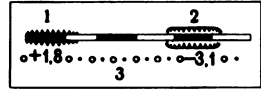




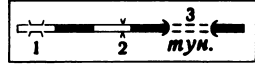
481. Section house, barracks, dead-end, and overhead light signals (structural steel arch) \_\_\_\_\_



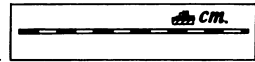
482. 1. Fill 2. Cut 3. Hedge \_\_\_\_\_



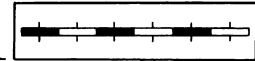
483. 1. Small bridge 2. Pipe (culvert) 3. Tunnel \_\_\_\_\_



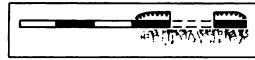
484. Narrow-gauge railroad line and station \_\_\_\_\_



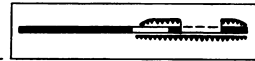
485. Elevated railroad \_\_\_\_\_



486. Gallery or balcony on the side of a cliff \_\_\_\_\_

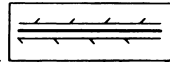


487. Gallery or balcony on the side of a slope \_\_\_\_\_



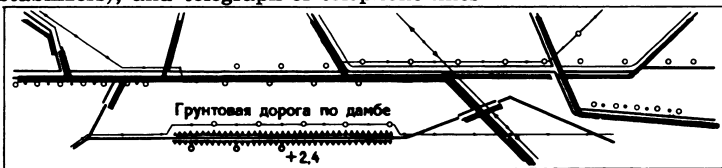
## SECTION IV—Motor Truck Roads and Trails

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

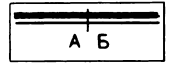


## SECTION V—Examples of Highway and Railroad Symbolization

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

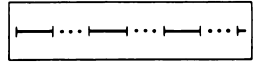


490. Change in type of pavement on the highway  
(indicated by the Russian letters A, B) \_\_\_\_\_

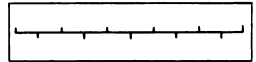


## SECTION VI—Boundaries and Fences

491. Boundary of urban community \_\_\_\_\_



492. Boundary of state wild life sanctuary \_\_\_\_\_



## SECTION VII—Hydrography

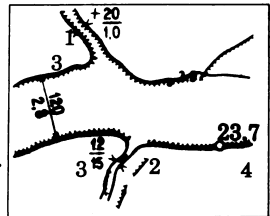
493. Shoal

1. Stone
2. Gravel

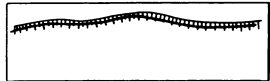


494. Precipitous shore, without beach

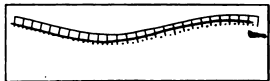
1. The width of river on the map, over 1.5mm.
2. The width of river on the map, less than 1.5mm.
3. Width and depth of stream
4. Water level value \_\_\_\_\_



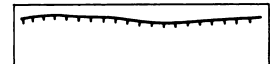
495. Shore with built-up but not reinforced slope \_\_\_\_\_



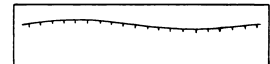
496. Shore with built-up reinforced slope \_\_\_\_\_



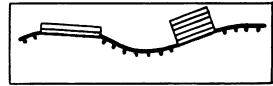
497. Stone quay \_\_\_\_\_



498. Wooden quay \_\_\_\_\_



499. Ramp and stairs to quay \_\_\_\_\_



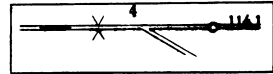
500. Changes of intermittent and perennial sections in stream \_\_\_\_\_



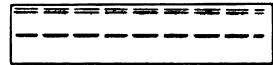
501. Underground or dwindling section of stream \_\_\_\_\_



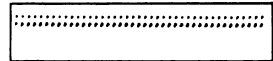
502. Canalized section of river, canal, or ditch, 3-5 meters wide; those over 5 meters wide are drawn to scale; 4 = the width in meters \_\_\_\_\_



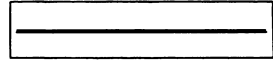
503. Canal under construction; double line, single line \_\_\_\_\_



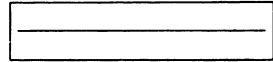
504. Subterranean canal \_\_\_\_\_



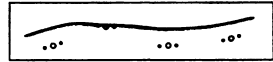
505. Dry ditch, 3 to 5 meters wide \_\_\_\_\_



506. Dry ditch, less than 3 meters wide \_\_\_\_\_



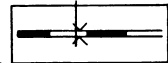
507. Bushes along stream \_\_\_\_\_



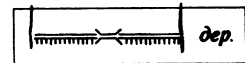
508. Bridge, wooden \_\_\_\_\_



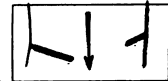
509. Single line canal \_\_\_\_\_



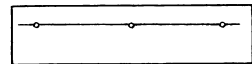
510. Dam without a road \_\_\_\_\_



511. Jetties, controlling the direction of current \_\_\_\_\_



512. Penstock (open) \_\_\_\_\_



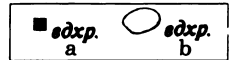
513. Underground water conduit with wells  
(not functioning) \_\_\_\_\_



514. Water pump \_\_\_\_\_



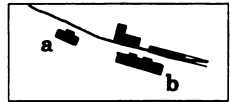
515. Water reservoir or rain water pit  
a. Not drawn to scale  
b. Drawn to scale \_\_\_\_\_



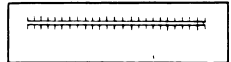
516. Fountain \_\_\_\_\_



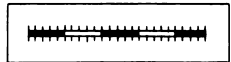
517. Landing: a. Not drawn to scale b. Drawn to scale \_\_\_\_\_



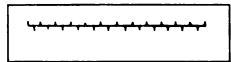
518. Mole or anchorage \_\_\_\_\_



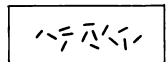
519. Mole, carrying railroad \_\_\_\_\_



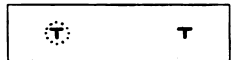
520. Breakwater \_\_\_\_\_



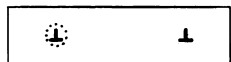
521. Driftwood accumulation \_\_\_\_\_



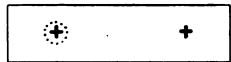
522. Sunken rock (if outlined, location is known; if not outlined, location is unknown) \_\_\_\_\_



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

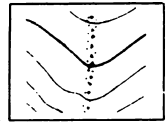


524. Rock awash (if outlined, location is known; without outline, location is unknown) \_\_\_\_\_



## SECTION VIII—Symbolization of Certain Elements of Relief

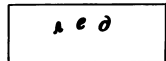
525. Terminal moraine \_\_\_\_\_



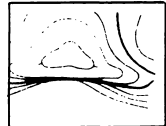
526. Stone, or gravel avalanche \_\_\_\_\_



527. Ice barriers and fossil ice \_\_\_\_\_



528. Steep slope (grassy) \_\_\_\_\_

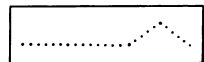


529. Old land creep \_\_\_\_\_

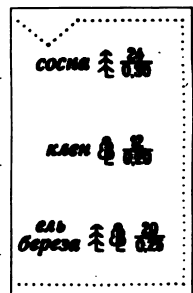


## SECTION IX—Vegetation

530. Vegetation limit outline \_\_\_\_\_



531. Coniferous forest \_\_\_\_\_



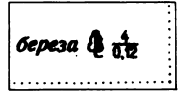
532. Deciduous forest \_\_\_\_\_



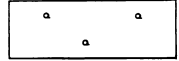
533. Mixed forest \_\_\_\_\_



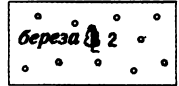
534. Dwarf (low) forest \_\_\_\_\_



535. Scattered vegetation (second growth) \_\_\_\_\_



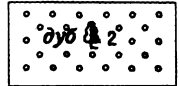
536. Stand of deciduous trees up to 4 meters high (average height indicated in meters) \_\_\_\_\_



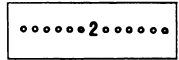
537. Coniferous nursery, or stand of young coniferous trees (average height indicated in meters) \_\_\_\_\_



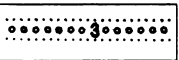
538. Deciduous nursery, or stand of young deciduous trees (average height indicated in meters) \_\_\_\_\_



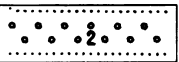
539. Young tree plantings, up to 20 meters wide (average height indicated in meters) \_\_\_\_\_



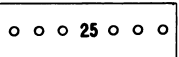
540. Young tree plantings, 20 to 50 meters wide, drawn to scale (average height indicated in meters) \_\_\_\_\_



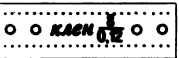
541. Young tree plantings, over 50 meters wide, drawn to scale (average height indicated in meters) \_\_\_\_\_



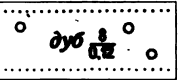
542. Mature forest, up to 20 meters wide (average height indicated in meters) \_\_\_\_\_



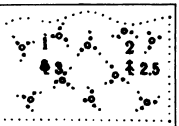
543. Mature forest, 20 to 50 meters wide, drawn to scale \_\_\_\_\_



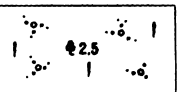
544. Mature forest, over 50 meters wide, drawn to scale \_\_\_\_\_



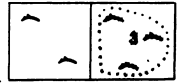
545. Scrub 1. Deciduous 2. Coniferous \_\_\_\_\_



546. Thorny scrub (solid growth) \_\_\_\_\_



547. Saksaul 1. Sparse growth 2. Solid thicket \_\_\_\_\_

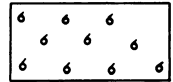


548. Brush 1. Sparse growth 2. Solid thicket \_\_\_\_\_

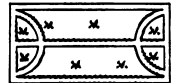


## SECTION X—Cultivated lands, Gardens, Vineyards, Parks, and Lawns

549. Citrus orchard \_\_\_\_\_

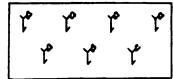


550. Lawns \_\_\_\_\_

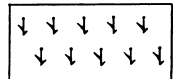


## SECTION XI—Sections of Land under Technical Cultures

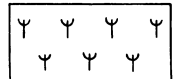
551. Essential oil plants \_\_\_\_\_



552. Tobacco \_\_\_\_\_

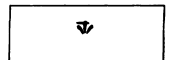


553. Cotton \_\_\_\_\_



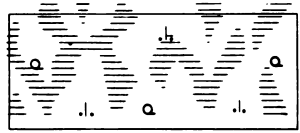
## SECTION XII—Swamps, Sands, Solonchak(s), Takyr(s)

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

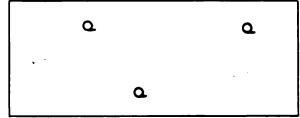


## SECTION XIII—Examples of Combined Symbolization

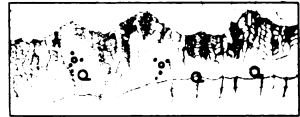
555. Sparse forest in mossy swamp \_\_\_\_\_



556. Sparse forest on rocky terrain \_\_\_\_\_



557. Sparse forest and scrub on rocky slopes \_\_\_\_\_



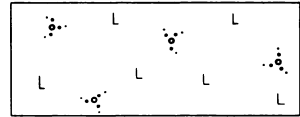
558. Sparse dwarf forest in passable grassy swamp with scrub \_\_\_\_\_



559. Sparse forest with solid scrub \_\_\_\_\_



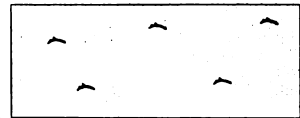
560. Scrub on cut-over area \_\_\_\_\_



561. Steppe, grass with scrub \_\_\_\_\_



562. Sands and saksaul \_\_\_\_\_



563. Swampy ground with knolls and mossy vegetation \_\_\_\_\_





564. Lichens and scrub on rocky terrain \_\_\_\_\_



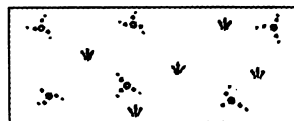
565. Mossy swamp strips and sparse dwarf forest \_\_\_\_\_



566. Swampy meadow and hummocks \_\_\_\_\_



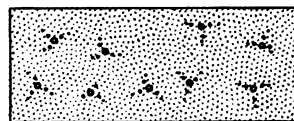
567. Scrub and reed \_\_\_\_\_



568. Thorny scrub on steppe \_\_\_\_\_



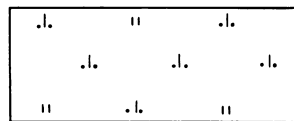
569. Solid scrub on sands \_\_\_\_\_



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 8

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. ОРУЖЬЕ УЛ. ГОГОЛЯ

# HYDROGRAPHY

604. \_\_\_\_\_ { **ЧЕРНОЕ МОРЕ**  
**ЧЕРНОЕ МОРЕ**  
**ЧЕРНОЕ МОРЕ**  
**ЧЕРНОЕ МОРЕ**  
**ЧЕРНОЕ МОРЕ**

605. \_\_\_\_\_ зал.Глубокий зал.Глубокий зал.Глубокий

606. { **СЕВЕРНЫЙ ПРОЛИВ**  
**СЕВЕРНЫЙ ПРОЛИВ**  
**СЕВЕРНЫЙ ПРОЛИВ**  
*Северный пролив*  
*Северный пролив*  
*Северный пролив*  
*Северный пролив*

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**  
**О.ГУСИНЫЙ**  
**О.ГУСИНЫЙ**  
**о.Гусиный о.Гусиный о.Гусиный о.Гусиный**

# HYP SOGRAPHY

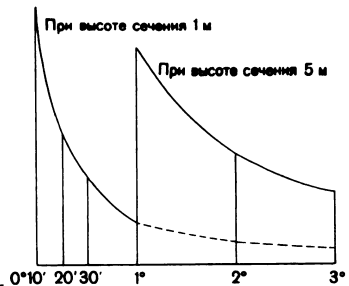
611. { **ПЕСКИ**  
**ПЕСКИ**  
**ПЕСКИ**  
**пески**  
**пески** **пески**

612. \_\_\_\_\_ { **ХРЕБЕТ** **ХРЕБЕТ** **ХРЕБЕТ**  
*г.Шам г.Шам г.Шам г.Шам*

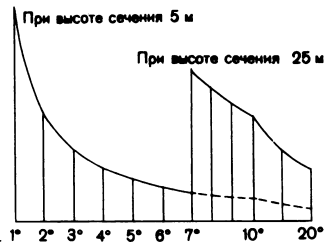
613. \_\_\_\_\_ { **ЗАПОВЕДНИК**  
**ЗАПОВЕДНИК**  
**ЗАПОВЕДНИК**

# SECTION XV—Graphic Method of Determining Slope Gradients

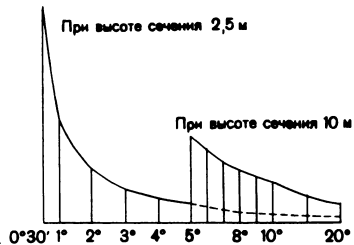
614. Contour interval 1 meter  
 Contour interval 5 meters \_\_\_\_\_



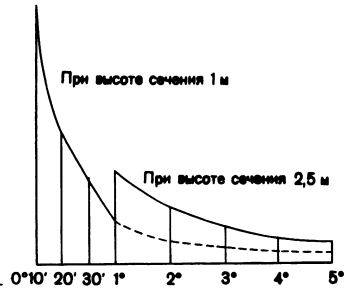
615. Contour interval 5 meters  
 Contour interval 25 meters \_\_\_\_\_



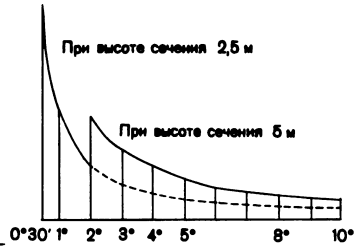
616. Contour interval 2.5 meters  
 Contour interval 10 meters \_\_\_\_\_



617. Contour interval 1 meter  
Contour interval 2.5 meters \_\_\_\_\_



618. Contour interval 2.5 meters  
Contour interval 5 meters \_\_\_\_\_



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## 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**

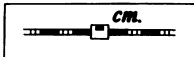
628. Rural settlements with population over 500 (over 100 households) \_\_\_\_\_ **Петровка**

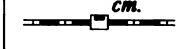
629. Rural settlements with population ranging from 100 to 500 (from 20 to 100 households) \_\_\_\_\_ **Дуновка**

630. Rural settlements with population under 100 (under 20 households), and individual households \_\_\_\_\_ **Жалымова**


631. State farms, trading posts, lumber camps; in non-Soviet territory, estates, farms, farmsteads, castles, etc. \_\_\_\_\_ **с.с. Арсенов**

## 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) \_\_\_\_\_ 

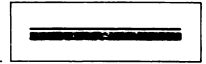
634. Electrified double-track railroad \_\_\_\_\_ 

635. Electrified single-track railroad with siding or platform \_\_\_\_\_ 

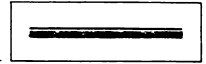
636. Railroad, approximate alignment \_\_\_\_\_ 

637. Narrow-gauge railroad or street-car line \_\_\_\_\_ 

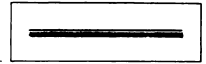
638. Super highway \_\_\_\_\_



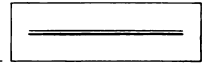
639. Arterial highway \_\_\_\_\_



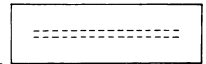
640. Highway \_\_\_\_\_



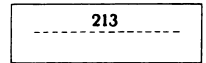
641. Improved dirt road, regularly maintained, permitting automobile traffic \_\_\_\_\_



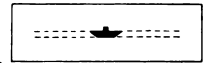
642. Caravan route \_\_\_\_\_



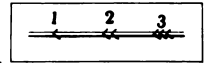
643. Steamship lane, with distance indicated in kilometers \_\_\_\_\_



644. Railroad ferry \_\_\_\_\_

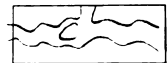


645. Road gradient 1. 4°–7° 2. 7°–13° 3. over 12° \_\_\_\_\_

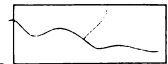


## SECTION III—Hydrography

646. River and canal over 20 meters wide \_\_\_\_\_



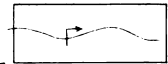
647. River and canal less than 20 meters wide \_\_\_\_\_



648. Head of navigation \_\_\_\_\_



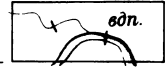
649. Logging starting point \_\_\_\_\_



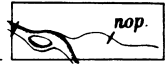
650. Rain water pit \_\_\_\_\_



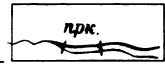
651. Waterfalls \_\_\_\_\_



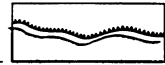
652. Rapids \_\_\_\_\_



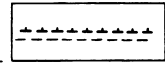
653. Bars \_\_\_\_\_



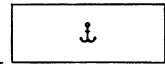
654. Embankments on the shore \_\_\_\_\_



655. Canal under construction \_\_\_\_\_



656. Landing \_\_\_\_\_



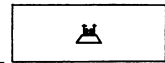
657. Seaport or harbor \_\_\_\_\_



658. Naval base \_\_\_\_\_



659. Military base \_\_\_\_\_



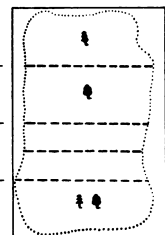
## SECTION IV—Soils and Vegetation

660. Coniferous forest \_\_\_\_\_

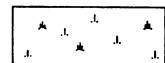
661. Deciduous forest \_\_\_\_\_

662. Firebreak \_\_\_\_\_

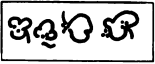
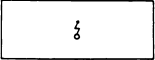
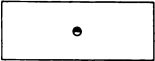

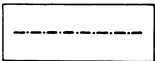
663. Mixed forest \_\_\_\_\_



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.) _____	



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## 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 \_\_\_\_\_ ЛАНСКОЕ

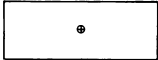
678. Important settlement junctions, rural type \_\_\_\_\_ МЕДВЕДИ

679. Other large settlements and settlement junctions, rural \_\_\_\_\_ ПОДГОРЬЕ

680. Small rural settlement \_\_\_\_\_ ЖЕЛИЗНОКА


681. Large state farms, trading posts, lumber camps; in non-Soviet territory, estates, farms, farmsteads, castles, etc. \_\_\_\_\_ сел. Бранка


# SMALL POPULATED PLACES INDICATED BY CIRCLES

682. Small populated place with church \_\_\_\_\_ 

683. Small populated place without church \_\_\_\_\_ 

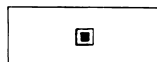
# SECTION II—Hydrography

684. River less than 60 meters wide \_\_\_\_\_ 

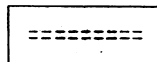
685. River more than 60 meters wide \_\_\_\_\_ 

686. Navigable canal \_\_\_\_\_ 

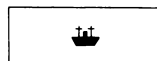
687. Brick or adobe structure over well \_\_\_\_\_



688. Marine channel \_\_\_\_\_

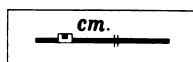


689. Seaport or harbor \_\_\_\_\_



### SECTION III—Railroads

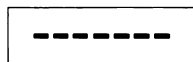
690. Multiple-track railroad and station \_\_\_\_\_



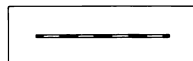
691. Single-track railroad and siding or platform \_\_\_\_\_



692. Railroad, approximate alignment \_\_\_\_\_

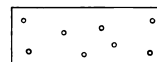


693. Narrow-gauge railroad \_\_\_\_\_

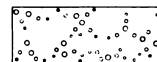


### SECTION IV—Soils and Vegetation

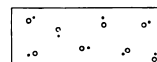
694. Sparse forest \_\_\_\_\_



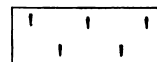
695. Scrub thicket \_\_\_\_\_



696. Birch grove \_\_\_\_\_

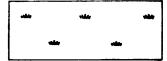


697. Brush in high mountain and tundra regions \_\_\_\_\_





698. Moss and lichens \_\_\_\_\_

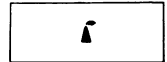


699. Citrus plantation \_\_\_\_\_

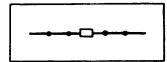


## SECTION V—Other map features

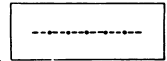
700. Oil field \_\_\_\_\_



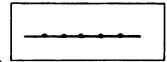
701. Overland oil conduit and pumping station \_\_\_\_\_



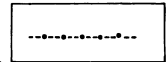
702. Underground oil conduit \_\_\_\_\_



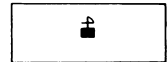
703. Overland water conduit \_\_\_\_\_



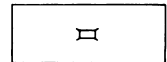
704. Underground water conduit \_\_\_\_\_



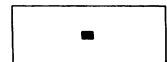
705. Polar station \_\_\_\_\_



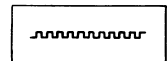
706. Fortification (ancient) \_\_\_\_\_



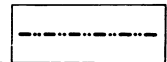
707. Trading post, educational and social  
community center, fishery, summer  
camp, sod hut, barn, etc. \_\_\_\_\_



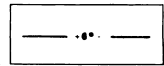
708. The Great Chinese Wall \_\_\_\_\_



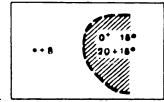
709. Primary administrative division bound-  
ary in non-Soviet territory (province,  
aymak, okrug, etc.) \_\_\_\_\_



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



711. Points and regions of magnetic anomalies \_\_\_\_\_





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## 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**  
**УНЬЧА**

720. Population under 2,000 \_\_\_\_\_

ТОЧНОСТЬ  
ЗНАЧЕНИЯ

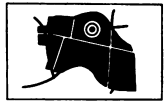
## SECTION II—Political and Administrative Importance of Populated Places

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 \_\_\_\_\_

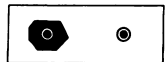


IN NON-SOVIET TERRITORY

726. Capital in non-Soviet country \_\_\_\_\_



727. Center of possession in non-Soviet country \_\_\_\_\_

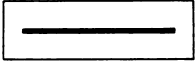


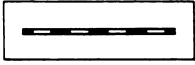
728. Center of first order administrative unit  
in non-Soviet territory (province,  
aymak, okrug, etc.) \_\_\_\_\_

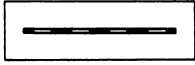


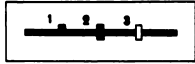
## SECTION III—Roads and Railroads

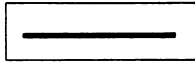
729. Arterial railroad \_\_\_\_\_ 

730. Other railroads \_\_\_\_\_ 

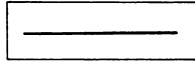
731. Arterial narrow-gauge railroad \_\_\_\_\_ 

732. Other narrow-gauge railroads \_\_\_\_\_ 

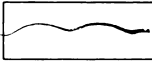
733. Station and siding 1. On one side of the track 2. Between the tracks 3. Location unknown \_\_\_\_\_ 

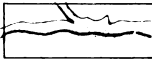
734. Highway \_\_\_\_\_ 

735. Highway, approximate alignment \_\_\_\_\_ 

736. Improved dirt road \_\_\_\_\_ 

## SECTION IV—HYDROGRAPHY

737. River less than 300 meters wide \_\_\_\_\_ 

738. River over 300 meters wide \_\_\_\_\_ 

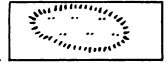
739. 1. Head of regular navigation  
2. Head of regular steamship lines  
3. Point accessible to sea-going vessels \_\_\_\_\_ 

740. Shoreline, approximate alignment \_\_\_\_\_ 

741. Tidal flat \_\_\_\_\_

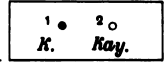


742. Flood area \_\_\_\_\_

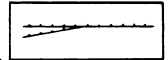


743. 1. Well

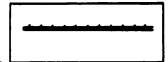
2. Dry and intermittent well \_\_\_\_\_



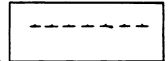
744. Navigable canal \_\_\_\_\_



745. Canal for sea-going vessels \_\_\_\_\_

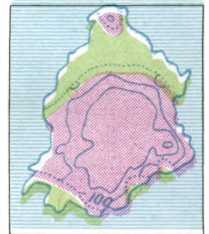


746. Navigable canal under construction \_\_\_\_\_

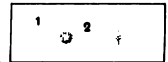


## SECTION V—Other Map Features

747. Continental ice sheets \_\_\_\_\_



748. 1. Volcano 2. Mud geyser \_\_\_\_\_



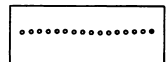
749. Land creep \_\_\_\_\_



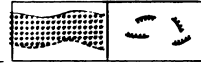
750. Zone of cultivated soil \_\_\_\_\_



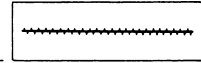
751. Narrow strip of forest \_\_\_\_\_



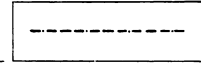
752. 1. Mangrove thicket 2. Coral reef \_\_\_\_\_



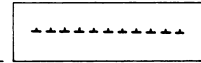
753. Dam \_\_\_\_\_



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

\*"ye" used initially, after vowels (а, е, ё, и, о, у, бл, 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-прядельная 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, винокурный .....	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) .....	гмина администрация Гмин. упр. .... (in non-Soviet, Poland territory)	gmina administration office
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 .....	геп. ....	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. INSTR.	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., платф.	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)
Предмestье	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 .....	ПТО .....	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
Развезд .....	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, саран .....	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)
Свиноготоварная 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
Смолокурный, 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, стойбще	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
Теплоэлектроцентраль	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
Уксусный 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	фг.	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	хов.	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 ironworks
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 .....	яхткл.	yacht club



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## 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	large scale surveys by
(Масштаб) аэросъемка в (году)	(scale) aerial survey of (date)
Масштаб 1:100,000, рекогносцировка в (году)	scale 1:100,000 reconnaissance of (date)



### APPENDIX III (CONTINUED)

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Мензульная топографическая съемка	planetable topo survey
Горизонтальная съемка	planimetric survey
Полуинструментальная съемка	semi-instrumental survey
Маршрутно-инструментальная съемка	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, съемка (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, съемка (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,*  
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COM (5)	USAINTC (5)	(Res) (1)

NG: None.

USAR: None.

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









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