Handbook on USSR Military Forces, Chapter XII: Maps, Conventional Sign, and Symbols

War Department (USA)

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Technical Manual TM 30-430
Handbook on USSR Military Forces
Chapter XII
Maps, Conventional Sign, and Symbols

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Comments

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Abstract

TM 30-340, Handbook on USSR Military Forces, was “published in installments to expedite dissemination to the field.” TM30-430, Chapter XII, 15 October 1946, “Maps, Conventional Signs, and Symbols,” contains a brief description of the mapping system used in the Soviet Union and examples of symbols used on Soviet tactical maps and military topographic maps.

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CHAPTER XII
MAPS, CONVENTIONAL SIGNS, AND SYMBOLS

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CHAPTER XII

MAPS, CONVENTIONAL SIGNS, AND SYMBOLS

Section I. MAP SYSTEMS

1. INTRODUCTION

Soviet tactical signs and symbols have undergone considerable change, particularly since 1942. These changes have consisted largely of the simplification of complex signs by more abundant use of abbreviations and by the introduction of new signs for recently introduced weapons, such as self-propelled guns.

Soviet usage is not always consistent, even in official manuals. Different arms and services frequently use signs which vary from those used by other arms and services. This is particularly applicable to the signs for fortifications used by the engineers and by the infantry.

Tactical symbols representing friendly troops are red. Those for enemy troops are blue, the converse of United States usage. On black and white maps or charts, friendly troops are represented by solid heavy lines and enemy troops are indicated by lighter, double lines.

Soviet military abbreviations and conversion tables of the old Russian and metric systems of weights and measures are published in TM 30-544.

2. COORDINATE SYSTEM

The U. S. S. R. is divided into 28 map sectors, each 6° wide. The map sectors are divided by parallels, 4° apart into rows of coordinate zones. Coordinate zones are numbered consecutively from 1 to 32, starting at Greenwich and continuing east. Numbers for coordinate zones are derived from the numbers of the map sectors in which they fall. The number of a coordinate zone is determined by subtracting 30 from the number of the map sector in which it falls or by adding 30 if the map sector number is less than 30 (fig. 1).

A rectangular grid system is superimposed on each coordinate zone. The center of coordinates is established at the intersection of the equator and the central, or base, meridian of zone, that is, at the third, ninth, fifteenth etc., meridians. At the origin of this coordinate system, the value of the “X” coordinate is zero, and the value of “Y” coordinate is 500 kilometers. In the Soviet system the “X” coordinate is vertical, and the “Y” coordinate is horizontal because a large positive value is assigned to the “Y” coordinate, a value larger than half the width of a coordinate zone at the equator. The “Y” coordinate never becomes a negative value. The “X” coordinate, however, becomes negative in the southern hemisphere.

The length of a side of each grid square is equal to an even number of centimeters and represents an even number of kilometers on the ground. For example, the side of the grid square of a 1: 25,000 map is 4 centimeters and represents 1 kilometer on the ground. The side of the grid square of 1: 100,000 map is 2 centimeters, which represents 2 kilometers on the ground.

The full coordinate is written in the lower left corner of each sheet, the horizontal coordinate preceded by the number of the coordinate zone. The vertical or “X” coordinate indicates the distance in kilometers from the equator. The difference between the value of the horizontal or “Y” coordinate and 500 indicates the distance east of the base meridian of the coordinate zone if “Y” is greater than 500, and the distance in kilometers west of the base meridian if “Y” is less than 500. Thus, the numbers 5748 and 8690 locate the lower left corner of a map 5,748 kilometers north of the equator 190 kilometers east of the base meridian of the 8th zone. The full coordinate is printed only in the lower left corner of the map. Elsewhere only the last two numbers are given. In military communications, the “X” coordinate always is given first.

Although the decision to change from the old Russian system of weights and measures was made in the early 1920’s, military maps employing the old
system still are in use. The old style military maps use the geographic coordinate system. The distances between consecutive vertical and horizontal lines are measured in duims (inches), which represent an even number of verst (0.663 miles) on the ground. For example, the size of a square on a 1:84,000 map is 1 duim, which represents 1 verst on the ground. Prior to the adoption of the new system of coordinates, a metric grid was superimposed on the geographical grid of the old style maps.

3. TYPES AND CLASSIFICATION OF MAPS
Military maps of the U. S. S. R. are classified according to scale as strategic, operational, and tactical maps.

Maps of small scale are intended for general planning and strategic studies. In the Red Army, metric system maps 1:500,000, 1:1,000,000, and 1:500,000,000 and old system maps 1:1,680,000 and 1:4,000,000 are utilized as strategic maps. These maps carry the usual geographic data.

Intermediate scale maps are intended for the planning of operations, for the scheduling of movements of large units and supplies, and for the selection of positions and communications systems. The operational maps generally include communications data classified according to the capacity and condition of roads, ridge lines, defiles, and other major terrain features and economic data. Operational maps of the new system include those of scales 1:200,000 to 1:1,050,000. The standard operational map of the Red Army is the new 1:200,000 map. The collection of data for this map was started in 1925. Relief is shown by tinting and by contour lines. In the compilation of data for this map, particular attention was centered on strict classification of railroad and road nets and on population and population statistical data. In sparsely populated areas, this map also is intended for tactical use.

Three old style operational maps exist. The 1:210,000 (1 duim equals 5 verst) map covers the Caucasus and the Turkmen S. S. R. The data on this map are old, and it is being replaced by the new 1:200,000 map. The 1:420,000 (1 duim equals 10 verst) map covers all the European S. S. R., neighboring western countries, Caucasus, Asia Minor, and parts of Siberia. The 1:1,050,000 (1 duim equals 25 verst) map covers all of the European S. S. R. and extends westward to Berlin, Prague, and the Adriatic. It is one of the oldest Russian military maps.

Maps of scale 1:100,000 and larger are used as tactical maps. The new 1:50,000, supplemented by 1:25,000, is the basic tactical map. These maps include not only general topographic data, but also information regarding inhabitable localities, road nets, stream crossings and their condition, steep descents and ascents, classification of roads in terms of capacity, surface river system including speed of the current, and relief with emphasis on difficult terrain, orientation points, forests, and other vegetation by type.

On the 1:25,000, 1:50,000, and 1:100,000 maps, relief is indicated by 5-, 10-, and 20-meter contour lines respectively. Hachure marks are used where relief cannot be adequately represented by contour lines. Prominent heights and depressions are indicated by a number which represents the difference in altitude between the top and the base, heights indicated by a plus sign and depressions by a minus sign. Supplementary tactical maps, 1:10,000, are prepared as necessary during operations by the Military Topographic Service agencies in the field and by the Artillery Topographic Service.

In the old system the basic tactical map is 1:42,000. Relief is shown by contours. Originally these maps were in black only, but later four colors were added, contours in black, water in blue, forests in green, and other terrain features in brown. The 1:84,000 map of the western area also is used.

4. SPECIAL MAPS AND MAP SUBSTITUTES
Ground and air photomaps are used extensively to familiarize reconnaissance personnel with territory controlled by the enemy, to facilitate centralized fire control and target designation, to study defiles, and to facilitate coordination of infantry and artillery.

The Soviet photo-reconnaissance doctrines closely approximate standard United States practice. Air photographs, both oblique and vertical, are augmented by ground photo panoramas of critical sec-
tors. In preparing photomaps for the use of tank
and mechanized forces, in addition to appropriate
marginal notes and contour lines, steep slopes are
indicated by an arrow whose direction and length
represent the direction and length of the slope. A
fraction is placed near such an arrow, its numerator
indicating degree of slope and denominator indicat­
ing the length of the slope in meters.

Stereoscopes are used extensively to facilitate
tactical and operational terrain map studies.

5. MAP INDEX SYSTEMS
Maps distributed by the Military Topographic Di-
vision of the General Staff of the Red Army are
printed in sheets, the number of sheets for each map
depending on the size of the area represented and
the scale of the map. Index systems are necessary
to catalog the sheets of each map. These systems
consist of small schematic maps, which are divided
by horizontal and vertical lines into rectangles or by
meridians and parallels into trapezoids. Each rec­
tangle or trapezoid represents a separate sheet of the
map. Maps printed in the old measures are indexed
in several systems. Maps printed in the metric sys-
tem are all indexed in the same system.

a. Old Systems. There are two index systems
for maps printed in the old measures. The first sys-
tem used, if there are comparatively few sheets in a
set, consists of numbering the sheets in sequence with
Arabic or Roman numerals. With large-scale maps,
this system becomes cumbersome. The second sys-
tem consists of sheets arranged in horizontal rows,
each row numbered with a Roman numeral. In each
row, sheets are numbered in consecutive series of
Arabic numerals, starting with “1.” Thus, all sheets
in the same vertical column have the same Arabic
number. Each sheet of the map is designated by
the Roman number of its row, and its Arabic number
within that row.

b. Metric System. There is one index for all
metric system maps. The basic map is the
1:1,000,000, which is divided into sectors and hori-
zontal rows. Each row is designated by a Roman
capital letter, starting with “A” at the equator. The
height of each row is 4° of latitude. Thus, each
sheet of the 1:1,000,000 map is 6° of longitude wide
and 4° of latitude high. Each sheet is designated by
naming its sector and its horizontal row. For ex-
ample, the index number of the sheet which contains
Smolensk is N–36 (fig. 1).
Figure 1. Index system for 1:1,000,000 maps.

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Each sheet of the 1:1,000,000 map is divided for indexing larger-scale metric maps. A 1:1,000,000 sheet is divided into four 1:500,000 sheets, lettered A, E, B, Γ, (A, B, V, G). Thus, the sheet of the 1:500,000 map which contains Smolensk is designated by naming the sheet of the 1:1,000,000 map and by the appropriate letter, N–36–A (fig. 2).

Each 1:500,000 sheet is further divided into 18 1:200,000 sheets, each sheet designated by a Roman numeral, I through XVIII. The index number for the sheet of the 1:200,000 map which contains Smolensk is, for example, N–36–V (fig. 3).

Each sheet of the 1:25,000 map is divided into four 1:10,000 sheets, lettered a, b, v, g (a, b, v, g). The index number of the sheet of the 1:25,000 map which contains Smolensk is N–36–41–B–a (fig. 6). Each sheet of the 1:25,000 map is divided into four 1:10,000 sheets, each designated by an Arabic num-
ber 1, 2, 3, or 4. Thus, the index number of the sheet of the 1:10,000 map which contains Gorki is N-36-41-B-g-3 (fig. 6).

Figure 6. Index system for 1:25,000 and 1:10,000 maps.

6. SUPPLY OF MAPS

In peacetime, the Military Topographic Service of the General Staff of the Red Army is responsible for the distribution of regularly expendable maps for training and for general service purposes. Distribution is made on the basis of prescribed allotments.

The Military Topographic Service issues maps directly to the staffs of Military Districts, to independent armies, to the Main Administrations of the Peoples' Commissariat of Defense, to the Red Navy, and to the NKVD and the NKGB.

The Military Topographic Divisions of the staffs of military districts supply the other divisions of the staff and other organizations of the military district, including Red Army field units and formations, training installations, flotillas and training units of the Red Fleet, and NKVD and NKGB organizations.

The Chiefs of Staffs of military units and the Chiefs of Training Sections of military schools are responsible for initiation of requests for maps to Military Topographic Divisions of the staffs of military districts. They also are responsible for the distribution of maps within the units and the schools and for maintenance of topographic supply records.

The requisitions for maps by subordinate organizations are made on the basis of their allotments and on their programs for the year. These requisitions are consolidated annually by the military district and forwarded to the Military Topographic Division of the General Staff. Newly printed maps are distributed to the Peoples' Commissariat of Defense without formal requisition. Reproduction of maps without permission of the Military Topographical Service is prohibited.

The regularly expendable maps of peacetime must be replaced, corrected, or enlarged in time of war. Operational maps are drafted for use by the field army by the Topographic Service in accordance with the needs of constantly changing combat conditions. They are issued to designated units before or simultaneously with the preliminary orders of the Chief of Staff. New maps must be drafted as new terrain is encountered, and existing maps must be modified to meet requirements of varying types of combat.

Each unit maintains a supply of maps of the combat sector covering an area of 3 days' march forward and 2 days' march back from the current combat line.

The width of the sector covered by the map reserve of each unit encompasses its own front and those of its adjacent units. The quantity of each type of map issued for a given combat sector, as determined by army orders, usually is sufficient to supply each officer, each noncommissioned officer executing an independent mission, and each scout, sniper, and observer with a map.

Troops are supplied with maps from either stationary or mobile map depots by agencies of the Military Topographic Service of staffs of formations, or if such agencies are not included in the Tables of Organization, by the chiefs of the Operations Divisions of the staffs. Maps normally are supplied by the higher to the next lower echelon without special request. A regimental staff is supplied from the mobile division reserve. The division reserves are supplied by mobile corps reserves and the corps reserves are supplied by an army stationary map depot, or its mobile branch. Independent formations and units receive maps from the formation to which they are attached.
Section II. Soviet Tactical Symbols

1. SYMBOLS FOR HEADQUARTERS

- Army group (Western Army Group)
- Army (Second Army)
- Corps (II Rifle Corps)
  - CK — Rifle corps
  - TK — Tank corps or
  - KK — Cavalry corps
- Cavalry corps (alternate) (II Cavalry Corps)
- Formation (4th Rifle Division)
  - 4A — Rifle division
  - 6FR — Rifle brigade
  - 7FR — Tank brigade
  - 8FR — Artillery brigade
  - 10FR — Engineer-pioneer brigade
  - 11FR — Heavy tank regiment
  - 21A — Cavalry division
- Cavalry division (alternate) (5th Cavalry Division)
- Unit (10th Rifle Regiment)
  - 10A — Rifle regiment
  - AP — Artillery regiment
  - 10AP — Ground-attack air regiment
  - 10A — Tank battalion
  - 10TD — Heavy tank company
- Cavalry regiment (alternate) (15th Cavalry Regiment)
- Element (3d Battalion, 10th Rifle Regiment)
  - 3B — Rifle battalion
  - 10AD — Artillery battalion
  - 10TP — Tank company
  - 15B — 10TT — Heavy tank platoon
- Command post (Second Army)
  - (Flag and characters designate unit)

2. SYMBOLS FOR OPERATIONS

- Infantry column (with staff)
- Infantry and tank column
- Infantry and artillery column
- Cavalry column
- Tank column
- Horse-drawn artillery column
- Motorized or tractor-drawn artillery column
- Motorized column
- Mechanized infantry column
- Column of other troops (5th Pioneer Battalion)
- Movement of troops by rail
- Infantry reconnaissance patrol
- Cavalry reconnaissance patrol
- Tank reconnaissance patrol
- Tank reconnaissance group
- Position area, infantry (10th Rifle Regiment)
- Position area, cavalry (15th Cavalry Regiment)
- Position area, tank troops (2d Tank Brigade)
Position area, artillery
(1st Artillery Regiment)

Position area, special troops
(6th Signal Battalion)

Position area to be occupied by infantry
(10th Rifle Regiment)

Position area to be occupied by cavalry
(15th Cavalry Regiment)

Position area to be occupied by tank
troops (2d Tank Brigade)

Combat sector occupied until a set time
limit

Planned combat sector

Disposition of troops in defense

Disposition of troops in offense

Direction of attack

Direction of main effort

Combat objectives

Actual offensive

Withdrawal of troops

Withdrawal of troops after unsuccessful
attack

Feint or dummy movement

Boundary between formations

Boundary between units

Boundary between elements

3. INFANTRY SYMBOLS

Company position area

Platoon position area

Antitank rifle company

Antitank rifle platoon

120-mm mortar battery

120-mm mortar platoon

82-mm mortar company

82-mm mortar platoon

50-mm mortar platoon

Four-piece machine gun battery

Rifle company in offense (same for
submachine gunners)

Machine gun platoon in offense

Submachine gun platoon in offense

Rifle platoon deployed in line

Rifle platoon in offense

Rifle squad in offense (same for
submachine gunners)

Rifle squad deployed in line (same for
submachine gunners)

Submachine gun squad in defense

Rifle squad in defense
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Company commander
- Heavy machine gun (7.62-mm)

Platoon commander
- Heavy machine gun (12.7-mm)

Squad commander
- Light machine gun (automatic rifle)

Observer
- 50-mm mortar

Signalman
- 82-mm mortar

Gun layer
- 120-mm mortar

Sniper
- Small-caliber (45- or 57-mm) antitank gun

Submachine gunner
- 76-mm infantry howitzer

Rifleman

4. ARTILLERY SYMBOLS

Ammunition bearer
- Battery in firing position (either 76-mm or unspecified)

Loader
- Planned position for medium gun battery

Pioneer
- Dummy battery

Chemical man
- Artillery battalion position area (group supporting 6th Rifle Regiment)

Horse driver
- Artillery position area (1st Battalion, 5th Artillery Regiment)

Rider
- Meteorological post

Mortar on cart
- Flash ranging or optical reconnaissance post

Machine gun squad on cart
- Sound ranging post

Pack-loaded machine gun
- Observation post (approximate location)

Pack horse
- Observation post (surveyed location)

Antitank rifle

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Reserve observation post
Δ—Auxiliary observation post
Ε—Flank observation post
Π—Forward observation post

Topographic reconnaissance battery
computation post

Survey base or check point

Battery base piece (approximate location)

Battery base piece (surveyed location)

Accurately located target

Base direction of fire

Supplementary direction of fire

Concentration

Antipersonnel defensive barrage

Fire for destruction

Antitank defensive barrage

Accompanying barrage

Heavy gun (152 to 203 mm)

Medium gun (100 to 122 mm)

76-mm gun (or artillery in general)

76-mm mountain gun

Medium or heavy howitzer (152 mm up)

122-mm howitzer

Rocket launcher

5. TANK TROOP SYMBOLS

Light tank (or unspecified type)

Medium tank

Heavy tank

Self-propelled gun

Mine-clearance tank

Full-track personnel carrier

Light armored car

Heavy armored car

Armored half-track

Tanks in combat formation

Light or medium tank platoon in combat formation

Light or medium tank company in combat formation

Medium tank battalion in combat formation

Heavy tank company in combat formation

Heavy tank regiment in combat formation

Assembly area
K—Terminal
3—Reserve
Π—Intermediate

Terrain barrier passable for tanks
6. AIR FORCE SYMBOLS

- - - - Axis of communication (for supply and replacement)

Air reconnaissance regiment

Air transport regiment

Heavy air regiment

Tactical reserve air regiment

Air control post

Permanent airdrome

Airfield

3 - Reserve

J - Dummy

Landing field

Landing field for heavy aircraft

Landing field for fighters

Air photo reconnaissance

Air rendezvous (showing time and elevation)

Unit alerted for airborne flight

Patrol area

Ground-attack target (showing time)

Bomb target (showing time)

Landing site for airborne troops

Airborne landing

Parachuted air cargo

Air passage lanes (showing entrance and exit)
7. ANTIAIRCRAFT DEFENSE SYMBOLS

- Antiaircraft artillery battery
- Antiaircraft artillery battalion in firing position (showing effective zone)
- Antiaircraft artillery battery on the march
- Antiaircraft machine gun
- Antiaircraft machine gun (double or quadruple mount)
- Motorized antiaircraft machine gun
- Small-caliber antiaircraft gun
- Antiaircraft searchlight
- Barrage balloon
- Air observation and warning post
- Air liaison post (for air warning at a ground CP)

8. CHEMICAL DEFENSE SYMBOLS

- Contaminated area
- Gas shelter
- Meteorological station
- Motorized decontaminator
- Horse-drawn decontaminator

9. SIGNAL COMMUNICATIONS SYMBOLS

- Signal battalion, company, or platoon (Right-hand letter indicates type of unit)
- Radio battalion, company, or platoon (left-hand letter indicates size of unit)
- Cavalry signal unit (telegraph squadron)
- Radio direction finder company
- Telegraph operating company
- Telegraph construction company
- Telephone line company
- Telephone construction company
- Cable construction company
- Field post office
- Message center
- Telegraph
- Central telegraph station
- Sound-powered switchboard
- Six-line switchboard (number of dots indicates number of lines)
- Telephone testing station
- Telephone control point (parallel connection)
- Telephone control station (series connection)
- Telephone
Sound-powered telephone
Permanent telegraph line (five channels)
Permanent line
Overhead telegraph line
Cable (two-line)
Motorized radio direction finder station
Motorized radio
Radio receiver
K — Testing
C — Monitoring
D — Auxiliary
Radio beacon
Radio net
Wave length (wave length 1)
Radio communication
Messenger communication
Signal lamp communication
Signal flag communication
Signal rocket

10. ENGINEER SYMBOLS
a. Tactical positions and fortifications
Antitank strongpoint
Fire plan

Engineer reconnaissance
Pioneer reconnaissance patrol
Pioneer (engineer) battalion
Ponton battalion
Engineer dump
Field power station
Field power compressor
Rifle squad trench
Light machine gun trench
(arrow shows direction of fire)
Heavy machine gun trench
Mortar emplacement
Antiaircraft machine gun emplacement
Antitank gun emplacement
Artillery emplacement
Reserve trench
Covered machine gun emplacement
(Special)
Splinter-proof machine gun emplacement
Reinforced earth-and-timber machine gun emplacement
Reinforced concrete machine gun emplacement
Fort
Shelter (general)
Light earthen shelter
Light shelter
Reinforced shelter
Heavy shelter
Reinforced concrete shelter
Armored machine gun turret
Communications trench
Concealed communications trench
Covered communications trench
Subterranean communications trench

b. Obstacles

Barbed wire (one row)
Barbed wire (three rows)
Barbed wire (ten rows)
Low wire
Concertina
Inconspicuous obstacle
Removable obstacle (knife rest, etc.)
Electrified barbed wire fence

Barbed wire fence (reinforced with stumps, bushes, etc.)
Antitank ditch
Antitank escarpment
Artificial ramparts
Rampart of snow
Dragons' teeth
Tank trap
 Barrier of fallen timber
Cut-off timber
Timber antitank barrier
Antipersonnel minefield
Antitank minefield
Controlled demolitions
Explosive charges
Delayed-action mines
Antipersonnel fragmentation mines
Booby trap
Unremovable mine
Antitank barrier (general)
Inundation

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Earthen dam

Mined bridge

Flooding

Defended river bank

Defended river crossing

Booms

c. Camouflage

Dummy trench and dummy communication trench

Dummy gun

Dummy antitank ditch

Dummy bridge

Screening hedge

Road screens

Horizontal screens

d. Roads and bridges

Dirt road (3 meters wide)

Dirt road (8.5 meters wide, ditches at side)

Dirt road (8 meters wide)

Surfaced road (gravel road 6 meters wide, right of way 10 meters wide)

Concrete pipe (1 meter in diameter)

Ford (0.7 meter deep, 40 meters wide)

Fill (1.5 meters high, 100 meters long)

Dip (2 meters deep, 200 meters long)

Prolonged grade (7 percent)

Curve (radius 50 meters)

Wooden bridge (length, 10 meters; width, 5 meters; load capacity, 3 tons)

Serpentine (15 meters radius)

Road crossing

Overpass

Dirt road reinforced with corduroy (5 meters wide, 70 meters long)

Swampy road reinforced with brushwood cover (6 meters wide, 80 meters long, cover 0.40 meter thick)

Cross-country track

Muddy road (width, 6 meters; depth of mud, 0.15 meter; length, 100 meters)

Dirt road (two-way traffic)

Dirt road (one-way traffic)

Plank road

Wooden pipe (triangular, 1.5 meters across)

Wooden pipe (rectangular, 1.5 meters across)

Concrete pipe (1 meter in diameter)

Surfaced road needing repair (width, 6 meters; length, 1 kilometer)
Hard-surfaced road requiring major repair (width, 6 meters; length, 1.5 meters)

3-ton wooden bridge (requiring reinforcement up to 5-ton capacity)

Road in bad repair

Destroyed road

Dug-up and destroyed road

Detour

Mined road

Demolition charges on road

Stone bridge

Destroyed bridge

Bridge constructed from standard (T/E) equipment

Bridge (improvised construction)

Steel bridge

Ferry crossing

Ponton bridge

Ice crossing

Shell hole (7 meters in diameter, 2 meters deep)

Local resources

Sand deposit

Rock quarry

11. SYMBOLS FOR REAR SERVICES

Supply station

Army supply depot (similarly, tank corps supply point)

Hospital for infectious diseases

Field mobile hospital

Railhead field evacuation point

Army field veterinary hospital

Divisional supply point (similarly, tank brigade supply point)
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Divisional decontamination platoon
Divisional portable artillery dump
Portable quartermaster dump
Ammunition transport company (motorized)
Divisional fuel point
Divisional medical point
Collection and first-aid station for lightly wounded
Collection point for damaged motor vehicles
Corps or division veterinary hospital
Evacuation section of a corps or division veterinary hospital
Motorized field bakery
Divisional sanitary battalion
Divisional artillery workshop
Divisional livestock herd

b. Regimental installations
Regimental ammunition point
Ammunition transport platoon of the transport company
Regimental medical station (similarly, tank brigade medical station)
Forward veterinary station
Regimental veterinary hospital

Ammunition platoon of an artillery battalion (horse-drawn)
Forward echelon of regimental rear services (second echelon bears No. 2)

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<td>Battalion ration point</td>
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</table>

12. TRAFFIC SIGNS
Section III. CONVENTIONAL SOVIET SIGNS
(For Military Topographic Maps,
Scale 1:50,000)

1. TOPOGRAPHIC SIGNS

- Cities
- City-type and suburban settlements
- Farmhouse-type settlement (more than 100 households)
- Farmhouse-type settlement (less than 100 households)
- Separate farm households (grouped under a single sign)

- Resort
- Barracks
- State farm

- National boundary
- Union-Republic boundary

- Krai, Oblast, and Autonomous Republic boundaries

- Autonomous Oblast boundary (and boundary of Oblast subordinate to Krai)

- National and administrative district boundary

- County (Rayon) boundary
2. ENGINEER SIGNS

- Double-track railroad
- Triple-track railroad
- Electrified railroad
- Horse-car railroad
- Electric tramway
- Narrow-gauge railroad
- Aerial cable tramway
- Railroad under construction
- Dismantled railroad
- Bridge (steel with triple track)
- Bridge (with single track)
- Small bridge
- Bridge (with two-way traffic)
- Solid line
- Paved highway
- Paved highway (under construction)
- Road (improved, ditched)
- Road (section of improved, ditched road, difficult to negotiate)
- Improved, ditched road (under construction)
- 12.2
- Paved highway (showing usable width)
- Incline (10° or greater)
- Stone wall (by unimproved road)
- Wooden fence (by unimproved road)
- Unimproved road without ditching (section difficult to negotiate)
- Winter road
- Corduroy road
- Wooden road