


4-1-1960

DA Pamphlet 30-50-2, Handbook on the Satellite Armies, 1 April 1960

Robert Bolin, depositor
University of Nebraska - Lincoln, rbolin2@unl.edu

Follow this and additional works at: <http://digitalcommons.unl.edu/dodmilintel>

 Part of the [Defense and Security Studies Commons](#), [Military and Veterans Studies Commons](#), [Other Engineering Commons](#), [Peace and Conflict Studies Commons](#), and the [Soviet and Post-Soviet Studies Commons](#)

Bolin, Robert, depositor, "DA Pamphlet 30-50-2, Handbook on the Satellite Armies, 1 April 1960" (1960). *DOD Military Intelligence*. 77.

<http://digitalcommons.unl.edu/dodmilintel/77>

This Article is brought to you for free and open access by the U.S. Department of Defense at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in DOD Military Intelligence by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

DEPARTMENT OF THE ARMY PAMPHLET NO. 30-50-2

HANDBOOK ON

THE SATELLITE ARMIES



ALFRED M. GRAY MARINE CORPS
RESEARCH CENTER
ATTN COLLECTION MANAGEMENT
(C40RCL)
2040 BROADWAY ST
QUANTICO VA 22134-5107

HEADQUARTERS, DEPARTMENT OF THE ARMY,
WASHINGTON 25, D. C.



MARINE CORPS HISTORICAL LIBRARY
Headquarters, U.S. Marine Corps
Room 3127 (Code A03E)
Arlington Annex
Stop 62
OXford (11) 41491

DEPARTMENT OF THE ARMY PAMPHLET NO. 30-50-2

HANDBOOK ON

THE SATELLITE ARMIES

HEADQUARTERS, DEPARTMENT OF THE ARMY,
WASHINGTON 25, D. C.

FOREWORD

This publication, a complete revision of DA Pam 30-50-2, 15 May 1954, deals with the armies of the seven Satellite nations of eastern Europe. While each is treated in a separate chapter, extensive material applicable to most or all of them is contained in Chapter 1, Introduction. For a full understanding of any one army, therefore, the reader is advised to consult Chapter 1 as well as the country chapter. Further details on Soviet tactical doctrine, organization, training, and equipment—all of which have been adopted in varying degrees by the Satellites—are presented in DA Pam 30-50-1, *Handbook on the Soviet Army*, 31 July 1958.

The term "army" as used in this pamphlet refers to the ground forces of the regular military establishment. (Actually, the army in all the countries concerned includes the air forces, and in several countries the naval forces as well.) The militarized security forces are also discussed.

PAMPHLET }
 No. 30-50-2 }

HEADQUARTERS,
 DEPARTMENT OF THE ARMY
 WASHINGTON 25, D.C., 1 April 1960

HANDBOOK ON THE SATELLITE ARMIES

	Paragraphs	Page
CHAPTER 1. INTRODUCTION		
SECTION I. Eastern European Satellites	1-3	1
II. Military Geographic Factors	4-5	1
III. Military Development	6-7	2
IV. Soviet Control	8-12	3
V. Military Manpower	13-16	5
VI. Organization	17-20	8
VII. Weapons and Equipment	21-22	13
VIII. Training	23-28	20
IX. Tactics	29-32	22
CHAPTER 2. ALBANIA		
SECTION I. The Military System	33-36	25
II. Organization of the Field Forces	37-41	27
III. Militarized Security Forces	42-44	28
IV. Weapons	45-48	28
V. Equipment	49-53	32
VI. Uniforms, Insignia, and Decorations	54-56	32
VII. Glossary of Military Terms		36
CHAPTER 3. BULGARIA		
SECTION I. The Military System	57-60	41
II. Organization of the Field Forces	61-64	44
III. Militarized Security Forces	65-67	45
IV. Weapons	68-71	46
V. Equipment	72-76	50
VI. Uniforms, Insignia, and Decorations	77-79	51
VII. Glossary of Military Terms		58
CHAPTER 4. CZECHOSLOVAKIA		
SECTION I. The Military System	80-83	63
II. Organization of the Field Forces	84-87	65
III. Militarized Security Forces	88-90	66
IV. Weapons	91-94	67
V. Equipment	95-99	73
VI. Uniforms, Insignia, and Decorations	100-102	75
VII. Glossary of Military Terms		81
CHAPTER 5. EAST GERMANY		
SECTION I. The Military System	103-105	89
II. Organization of the Field Forces	106-109	91
III. Militarized Security Forces	110-112	92
IV. Weapons	113-116	93
V. Equipment	117-121	97
VI. Uniforms, Insignia, and Decorations	122-124	101
VII. Glossary of Military Terms		108
CHAPTER 6. HUNGARY		
SECTION I. The Military System	125-128	113
II. Organization of the Field Forces	129-132	116
III. Militarized Security Forces	133-135	116
IV. Weapons	136-139	117
V. Equipment	140-144	120
VI. Uniforms, Insignia, and Decorations	145-147	122
VII. Glossary of Military Terms		128

*This pamphlet supersedes DA Pam 30-50-2, 15 May 1954.

	Paragraphs	Page
CHAPTER 7. POLAND		
SECTION I. The Military System	148-151	133
II. Organization of the Field Forces	152-155	136
III. Militarized Security Forces	156-158	137
IV. Weapons	159-162	138
V. Equipment	163-167	142
VI. Uniforms, Insignia, and Decorations	168-170	144
VII. Glossary of Military Terms		152
CHAPTER 8. RUMANIA		
SECTION I. The Military System	171-174	157
II. Organization of the Field Forces	175-178	159
III. Militarized Security Forces	179-181	160
IV. Weapons	182-185	160
V. Equipment	186-190	163
VI. Uniforms, Insignia, and Decorations	191-193	165
VII. Glossary of Military Terms		170

List of Figures

Figure 1. Eastern European Satellite Countries	x
2. Typical Satellite High Command	9
3. Typical Satellite Rifle Division	10
4. Typical Satellite Mechanized Division	11
5. Typical Satellite Tank Division	12
6. 7.62-mm PPSH-41 Submachinegun (being replaced by AK, fig. 31, p. 47)	14
7. 7.62-mm Carbine M44 (being replaced by SKS, fig. 79, p. 117)	14
8. 7.62-mm Goryunov Heavy Machinegun SG-43	15
9. 120-mm Regimental Mortar M38	15
10. 85-mm Field Gun D-44	16
11. 122-mm Howitzer M38	16
12. 57-mm Antitank Gun M43	17
13. 85-mm Antiaircraft Gun M39	17
14. T-54 Medium Tank (100-mm Gun)	18
15. JSU-122 (A19S) Heavy Assault Gun	18
16. BTR-152 Armored Personnel Carrier	19
17. ZIS-151 (ZIL-151) 5-ton Truck, 6x6	19
18. M-2 Light Tracked Prime Mover	19
19. Albania	24
20. Soviet 7.62-mm DP Light Machinegun	29
21. Soviet 82-mm Battalion Mortar M37	29
22. Soviet 76-mm Howitzer M43	30
23. Soviet 100-mm Field Gun M44	30
24. Soviet 45-mm Antitank Gun M42	31
25. Soviet 37-mm Antiaircraft Gun M39 (here shown in a Polish parade)	31
26. Albanian Army Uniforms	33
27. Albanian Insignia of Grade	35
28. Bulgaria	40
29. Bulgarian Troops Training on Soviet T-34 Tanks	43
30. Soviet 7.62-mm PPS-43 Submachinegun (being replaced by AK, fig. 31)	47
31. Soviet 7.62-mm AK Submachinegun	47
32. Soviet 7.62-mm RPD Light Machinegun	48
33. Soviet 203-mm Howitzer M31	49
34. Soviet 130-mm Antiaircraft Gun M55 with AT-T Heavy Tracked Prime Mover in a Sofia Parade	49
35. Bulgarian Army Uniforms	52
36. Bulgarian Insignia of Grade and Branch	54
37. Bulgarian Collar Tabs and Other Insignia	55
38. Bulgarian Military Decorations and Awards	57
39. Czechoslovakia	62
40. Czechoslovak Troops Parading Through Prague	64
41. Political Indoctrination Session in the Field	65

	Page
Figure 42. Czechoslovak 7.62-mm Submachinegun Model 50.....	68
43. Czechoslovak 7.62 mm Semiautomatic Rifle Model 52.....	69
44. Czechoslovak 7.62-mm Light Machinegun Model 52.....	69
45. Czechoslovak Quad 12.7-mm Antiaircraft Machinegun.....	69
46. Czechoslovak Antitank Grenade Launcher "Pancéřovka," P-27.....	70
47. Czechoslovak 82-mm Recoilless Gun "Tarašnice," T-21.....	70
48. Czechoslovak 85-mm Field Gun M52.....	71
49. Czechoslovak 100-mm Field Gun M53.....	71
50. Czechoslovak 85-mm Antiaircraft Gun.....	72
51. Czechoslovak Twin 30-mm Antiaircraft Gun M53.....	72
52. Czechoslovak 130-mm Rocket Launcher RM-130 (32-round).....	72
53. Czechoslovak T-34 Medium Tank (85-mm Gun).....	73
54. Czechoslovak SU-100 Medium Assault Gun.....	73
55. Czechoslovak Praga V3S 5½-ton Truck, 6x6.....	73
56. Czechoslovak Tatra-111 11-ton Truck, 6x6.....	74
57. Czechoslovak Army Uniforms and Insignia.....	76
58. Czechoslovak Insignia of Grade.....	78
59. Czechoslovak Insignia of Branch.....	79
60. East Germany.....	88
61. East German Troops in New Uniforms of World War II Type.....	90
62. Soviet 9-mm Makarov Pistol.....	93
63. Soviet 7.62-mm Rifle Squad Weapons:	
(Left) SKS Semiautomatic Carbine.....	
(Center) AK Submachinegun.....	
(Right) RPD Light Machinegun.....	94
64. Soviet 57-mm Antiaircraft Gun S-60.....	96
65. Soviet PT-76 Amphibious Tank.....	96
66. Soviet SU-85 Assault Gun.....	97
67. East German Garant-30K 2-ton Truck, 4x4.....	98
68. East German H3A 4-ton Truck.....	98
69. East German G-5 5½-ton Truck, 6x6.....	99
70. East German P2M Command/Reconnaissance Car.....	100
71. East German P2S Amphibious Jeep.....	100
72. East German Army Uniforms.....	102
73. East German Insignia of Grade.....	104
74. East German Collar, Cuff, and Sleeve Insignia.....	106
75. East German Decorations and Awards.....	107
76. Hungary.....	112
77. Damage in Budapest after 1956 Revolt.....	114
78. Hungarian Army Barracks.....	115
79. Soviet SKS Semiautomatic Carbine.....	117
80. Soviet 160-mm Mortar M43 (here shown in a Polish parade).....	118
81. Soviet 76-mm Field Gun M42.....	118
82. Soviet 122-mm Field Gun M31/37 (A19) (here shown in a Czechoslovak parade).....	119
83. Soviet 132-mm Rocket Launcher BM-13 (16-round).....	119
84. Soviet JS-2 Heavy Tank (122-mm Gun).....	120
85. Hungarian Csepel 130 1½-ton Truck.....	120
86. Hungarian Csepel K-800 Light Tracked Prime Mover.....	121
87. Hungarian Csepel 350 4-ton Truck.....	121
88. Hungarian Army Uniforms.....	123
89. Hungarian Insignia of Grade.....	125
90. Hungarian Insignia of Branch.....	127
91. Poland.....	132
92. Polish Paratroops with Full Equipment.....	134
93. Polish Army Engineers Ferrying a Camouflaged Tank.....	135
94. Soviet Antitank Grenade Launcher RPG-2.....	139
95. Soviet 107-mm Recoilless Gun B-11.....	139
96. Soviet 152-mm Gun-Howitzer M37.....	139
97. Soviet 85-mm Auxiliary-Propelled Gun.....	140

	Page
Figure 98. Soviet 14.5-mm Quad-Mount Antiaircraft Machinegun ZPU-4 with GAZ-63 Light Truck.....	140
99. Soviet 100-mm Antiaircraft Gun KS-19.....	140
100. Soviet 140-mm Rocket Launcher BM-14 (16-round).....	140
101. Soviet BTR-40 Armored Personnel Carrier.....	141
102. T-34 Medium Tank (85-mm Gun) in a Polish Field Exercise.....	141
103. Soviet JS-3 Heavy Tank (122-mm Gun).....	141
104. Soviet JSU-152 Heavy Assault Gun.....	142
105. Polish Lublin FSC-51 2½-ton Truck.....	142
106. Polish Star 20 4-ton Truck.....	143
107. Polish Star 21 4½-ton Truck.....	143
108. Soviet K-61 Tracked Amphibian.....	143
109. Soviet AT-S Medium Tracked Prime Mover.....	143
110. Polish Army Uniforms.....	146
111. Polish Insignia of Grade.....	148
112. Polish Branch Devices, Specialist Insignia, and Collar Tabs.....	149
113. Polish Military Decorations and Awards.....	151
114. Rumania.....	156
115. Rumanian Troops on Training Maneuvers.....	158
116. Soviet 12.7-mm DShK Heavy Machinegun M38.....	161
117. Soviet 14.5-mm Twin-Mount Antiaircraft Machinegun ZPU-2 with GAZ-69 Light Truck.....	161
118. Soviet 82-mm Recoilless Gun B-10.....	162
119. Soviet 240-mm Mortar with AT-L Light Tracked Prime Mover.....	162
120. Soviet 100-mm Field Gun M55.....	162
121. Soviet 152-mm Howitzer M43.....	163
122. Soviet SU-76 Support Gun.....	163
123. Soviet GAZ-46 Amphibious Jeep MAV.....	164
124. Soviet Amphibious Truck BAV, 6x6.....	164
125. Rumanian Army Uniforms.....	166
126. Rumanian Grade, Branch, and Other Insignia.....	168



Figure 1. Eastern European Satellite Countries.

INTRODUCTION

CHAPTER 1

Section I. EASTERN EUROPEAN SATELLITES

1. GENERAL

There are seven Soviet Satellite countries in Eastern Europe: Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, and Rumania. Four of these have common borders with the U.S.S.R., and only one, Albania, is entirely isolated from the group. The Satellite area as a whole represents a physical buffer, extending across Europe from the Baltic to the Black Sea. It also constitutes a fixed penetration of Russian influence and power not exceeded even in Czarist times.

2. RELATIONSHIP TO U.S.S.R.

Soviet influence in Satellite Europe has been established and maintained largely through the use or threatened use of force. Most of the people in the Satellite area oppose Soviet domination and the local Communist regimes that are subservient to the Kremlin. The effort to establish a "national Communist" regime in Hungary was put down by Soviet armored troops, and Gomulka in Poland has found it necessary to yield more and more to the powerful Soviet political and economic forces. Satellite Eastern Europe as a whole re-

mains firmly—if somewhat uneasily—within the Soviet grasp.

3. THE SATELLITE ARMIES

Each of the Satellite states has developed a sizable national armed force, of which the army ground forces are by far the largest and most significant part. These forces have been developed under the direction and with the support of the U.S.S.R. In most respects, they are patterned after the Soviet Army: the Satellite high commands and tactical units are organized in accordance with Soviet concepts and use modified Soviet TOE's; Soviet training methods and procedures are followed; Soviet tactical doctrine is used; and, for the most part, Soviet-type weapons and equipment are employed. Because of this close relationship, the coordinated use or integration of Bloc forces in wartime would be relatively easy.

The status of the respective Satellite armies varies in terms of combat readiness. In general, however, they can be favorably compared with other European forces in countries of similar size, and taken together, the armies constitute a fairly effective force in being.

Section II. MILITARY GEOGRAPHIC FACTORS

4. IMPORTANCE TO THE U.S.S.R.

The 200- to 450-mile-wide Satellite belt across Europe has special geographical significance. East Germany and Poland lie astride the historic east-west military communications zone of the North European Plain. Rumania and Hungary also constitute important east-west communications zones connecting Soviet territory with southern and south-central Europe. Bulgaria covers the military ground approaches to the Turkish Straits and to Greece. Czechoslovakia does not permit easy east-west military movement, but the historic "Moravian Corridor" across the center of the country provides ready communication between the Danube Basin and the Polish

part of the northern plain. Albania is physically isolated from the Bloc and ringed by high mountains. It is significant geographically in that it is the only Satellite state fronting on the Adriatic Sea and is only about 45 miles across the Straits of Otranto from Italy.

5. TERRAIN

The terrain of the Satellite zone varies from the rugged but not insurmountable mountains of Bulgaria, Rumania, and Czechoslovakia to the flat or rolling plains of East Germany, Poland, and Hungary. High mountain ranges inclose, or nearly inclose, many fairly level basins. The largest of these are the Danubian Basin (Hungary,

Transylvania, and northeastern Yugoslavia), the Bohemian Plateau, and the Moldavian-Wallachian crescent plain.

The effect of the high mountain ranges in the central part of the zone would be to deflect military operations into lowland areas to the north and south for greater ease of movement. The great expanse of lowland in the north is crossed by numerous wide, sluggish streams and contains extensive poorly drained areas and many large forests. The Moldavian-Wallachian lowland is approximately 500 miles in total extent and some 80 to 120 miles in width. It is drained by the Siret and Danube Rivers, both of which are serious military obstacles. The Wallachian plain is bounded on the north and west by the Transylvanian Alps and on the south by the Danube River, although the lowlands extend south of the river to the 6,000- to 9,000-foot

ranges of the Balkan and Rhodope Mountains. This lowland is bounded on the east by the rolling upland of the Dobrudja, paralleling the Black Sea coast. The Moldavian area is bounded on the west by the Carpathians, on the south by the Dobrudja, and on the east and northeast by the rugged hills of Bessarabia and the western Ukraine.

The Baltic shore of the northern plain is flat and sandy; only a few hills reach the sea. The coast is backed by a narrow zone of lakes and low, gravelly hills. Along the Black Sea, on the other hand, steep, 300- to 400-foot-high terraces overlook a narrow coastal plain broken only by the low, marshy delta of the Danube River.

Except for an extensive inclosed coastal plain, Albania is a region of high, nearly inaccessible mountains. Its northern coast is low and marshy and contains numerous lagoons; in the south, the coast is rocky and rises steeply from the sea.

Section III. MILITARY DEVELOPMENT

6. WORLD WAR II

The armies of Eastern Europe had varied experiences and suffered different fates in World War II. All countries had developed sizable armies before or during the war. The Czechoslovak and Rumanian armies, and to some extent also the Polish, had received extensive support from France. Other armies were relatively independent of foreign influence. None was supported or significantly influenced by the U.S.S.R.

Rumania and Hungary provided direct military support to the Axis in World War II until their territories were invaded by the Soviets in 1944. Bulgaria was a German ally but did little to help the Nazi cause and readily supported the Soviets in actions against Axis troops in the last 8 months of combat. Albania was occupied by Axis forces until late in the war. Czechoslovakia and western Poland were occupied by the Germans by 1939, the former after only a threat of resistance, the latter after valiant but futile and shortlived opposition.

The Soviets dominated all of Eastern Europe after VE-day and were in a position to dictate military as well as political and economic policies. Soviet troops had not been in Albania, however, and the large force which was deployed in Czechoslovakia at the end of the fighting was soon withdrawn. In accordance with the Bulgarian peace

treaty, Soviet troops were removed from Bulgaria at the end of 1947. They were finally withdrawn from Rumania in the summer of 1958, but they remained in East Germany, Poland, and Hungary.

7. POSTWAR STRENGTH TRENDS

The military programs of the various Satellite countries were kept at a low pitch in the early postwar period. Strengths generally were well below those of the present, particularly in those states whose armed forces were limited by treaty because of their former status as Axis allies: Bulgaria, Hungary, and Rumania. East Germany, of course, was completely demilitarized. Army strengths in the region in 1946 totaled about one-half as much as at present.

By 1950, only a moderate overall increase had occurred. Although the Albanian and Czechoslovak had decreased slightly, the Polish, Bulgarian, Hungarian, and Rumanian armies had all been increased, the latter three well beyond the peace treaty limitations. Furthermore, a new force had been established in East Germany.

Between 1950 and 1953, an extensive military program was undertaken that ultimately raised army strengths to a peak of over 1,000,000 men. This was made possible by the attainment of a semblance of political and economic stability. The program also was stimulated by changes in

the strategic situation favoring the arming of the Satellites as a buffer for the U.S.S.R. These changes included the Yugoslav estrangement from the Bloc in 1948, the rehabilitation of western European nations and their resistance to Communism, the formation of NATO, and the international tension resulting from the war in Korea.

There has been a general contraction of ground force personnel strengths since 1953 in all the Satellite countries. This retrenchment has been occasioned by conditions unique to each army: in Albania, there was a lowering of the number of men available for conscription each year and an increase in the conscript requirements for naval and air services; in Bulgaria, the term of Army ground force conscript service was reduced from 3 to 2 years, bringing it into conformity with the other Satellite armies; in Czechoslovakia, there was a marked drop in the number of males reaching conscript age annually between 1953 and 1959; in East Germany, the system of "voluntary" enlistment failed to maintain Army strength despite continuous recruiting drives and a lowering of the required enlistment period from 3 to 2 years; in Hungary, Army strength was slightly reduced between 1953 and 1956 because of changed conscription factors and then fell precipitously during and after the 1956 revolt (as a result of desertions and the uncompensated release of an entire conscript class); in Rumania, Army strength was reduced by perhaps one-fourth between 1953 and 1955, and a further slight reduction occurred between 1955 and 1958, all largely for economic reasons.

It is noteworthy that only in post-Gomulka Poland has there been a strength reduction that may be related, at least in part, to the official Bloc reduction claims. Between August 1955 and May 1958, the Satellite governments made a total of 17 announcements that they were reducing their forces. Each country made at least 2, Poland 4. The aggregate of the announced cuts would have been nearly half a million men. These various announcements were so timed as to have the greatest possible effect on Western political developments. There is no direct evidence, except in Poland, of any serious intention to carry them out. In Poland, since Gomulka's establishment of "national" Communism, there has been a reduction in the strength of all the security and armed forces that has coincided to some extent with some of the announced Polish reductions.

Despite the various strength adjustments discussed above, the Satellite army ground forces still have an impressive present aggregate strength of nearly 1,000,000 men with a total of approximately 60 line divisions and numerous smaller units of both combat and support type. There are, in addition, more than 250,000 men in the militarized security forces (Frontier and Interior Troops) subordinate to the respective Interior Ministries. These are, in effect, auxiliary ground troops that could be used in wartime for various specialized functions, such as maintaining the security of rear areas, that are performed by army troops in most Western countries.

Section IV. SOVIET CONTROL

8. GENERAL

The Soviets maintain effective control over the Satellite armies by both direct and indirect means. These include Party and government ties, military missions, a unified military command, and, to a limited extent, staffing with former Soviet Army officers.

9. POLITICAL MECHANISMS

In general, the authority of the Communist parties and governments within the Satellite states is dependent upon continued support from Moscow. As a result, these regimes have usually been completely subservient to the Soviet Party

and governmental leaders. Locally, the Satellite leaders have placed only the most loyal and reliable Party members in positions of responsibility. This applies to the military forces as well as all other fields. Nearly all senior Army officers are active in Party affairs. A large proportion of the field-grade and junior officers are also Party members, and the rest have given evidence of their reliability to the existing Communist regimes. Similarly, the regular noncommissioned-officer cadre is specially selected for its reliability and contains large numbers of members of the Party or of Communist youth organizations. The conscripts reflect the attitudes of the general

populace, but the most unreliable males are not inducted or are relegated to labor troops.

The Satellite armies maintain an extensive apparatus for providing political indoctrination for the troops and for counterintelligence. There are, in addition, regular Party organizations within the Army itself.

10. MILITARY MISSIONS

The primary Soviet agency for building up and controlling the Satellite armies has been the military mission. A mission originally existed in every country except Poland, which did not need a mission because of the large number of former Soviet Army officers integrated into the Polish Army at least until 1956.

During the period of most rapid buildup of Army strengths—between about 1950 and 1953—the missions were relatively large and were represented at all levels within the respective Satellite armies. The Soviet chief of mission conducted liaison directly with the local defense minister, with whom he usually held equivalent rank. Members of his staff participated in the reorganization and development of the high command and of the Army as a whole. Soviet officers supervised the establishment of military schools and academies and in many cases served as instructors. Advisors also served in all headquarters and installations and with every tactical unit, sometimes down to company level.

As the local Army developed stability and experience and became familiar with Soviet organization, tactics, and equipment, the extent of mission activity was reduced. Advisors were withdrawn from the smaller tactical units and are now believed assigned no lower than division level in most cases. Similarly, Soviet instructors have been replaced in the military schools by Satellite officers, many of whom have attended special courses in Soviet military schools and academies. The missions still exercise a significant and often direct influence over Satellite military affairs, but there is growing evidence that they may soon be withdrawn.

11. UNIFIED MILITARY COMMAND

A unified command of the Soviet and Satellite armed forces was established by a Treaty of Friendship, Collaboration, and Mutual Assistance signed in Warsaw in May 1955—the so-called

“Warsaw Pact.” This treaty apparently was occasioned by the final Western decision to arm West Germany and admit her to NATO. It replaced a system of bilateral treaty arrangements which the Soviets had with all other Bloc countries except Albania. The published provisions of the Warsaw Pact are deliberately phrased to parrot those of the North Atlantic Treaty.

The establishment of a “unified” military command was a thinly disguised effort to create the fiction of cooperative action in the military sphere. Actually, it amounted only to a new means of effecting continued Soviet control of Bloc military activities. The command headquarters was established in Moscow. The commander in chief is Marshal of the Soviet Union Ivan S. Konev, a First Deputy Minister of Defense in the U.S.S.R. The various Satellite Defense Ministers are termed Deputy Commanders in Chief, but there is no evidence that they take any responsible part in the routine functions of the command.

The Soviets have made extravagant claims as to the importance of the Pact command and the scope of its authority. The armed intervention in Hungary in October and November 1956 was said to have been made at the request of the Hungarian Government under the Warsaw Pact. The Soviets retained troops in Hungary and Rumania, after the signing of the Austrian State Treaty in 1955 had left them without the former legal basis for doing so, on the pretext that their presence was in accord with provisions of the Pact. (Soviet troops were subsequently withdrawn from Rumania in the summer of 1958.) Similarly, combined training or other Bloc military activity involving more than one country is consistently referred to as occurring under the auspices of the Pact unified command.

12. STAFFING WITH FORMER SOVIET OFFICERS

This direct and obvious means of control actually has been used somewhat sparingly by the Soviets, but where employed, it has had significant effect. Soviet staffing occurred in several countries, but was carried out on a large scale only in Poland, although both the Bulgarian and Hungarian armies received a significant number of former Soviet officers in key positions. Most, if not all, of the Soviet officers assigned to these countries were of Polish, Bulgarian, or Hungarian

ethnic origin but had served for many years in the Soviet Army.

In Poland, the Soviets were favored by the shifting of national boundaries. Until the end of World War I, millions of Poles lived within the borders of Imperial Russia which reached well to the west of Warsaw. A significant number of Poles fought with the Russian Army in World War I, acquired commissioned-officer rank, and entered the Bolshevik Red Army after the 1917 October Revolution. Several of these rose to high rank before the end of World War II. One of them, Konstantin K. Rokossovskiy, became one of the top Soviet soldiers, commanding a *front* (army group) in the last months of the war with the rank of Marshal of the Soviet Union.

As with most other Satellite forces, little was done to develop the Polish Army until about 1949-50. In November 1949, Marshal Rokossovskiy arrived in Poland to supervise the expansion and reorganization of the force. He became a Marshal of Poland, Minister of National Defense, and ultimately also a member of the Politburo of the Central Committee of the Polish Communist Party.

The use of former Soviet Army officers in Poland was especially desirable because of the lack of experienced politically reliable military men in the country. The bulk of the prewar officer corps had been destroyed, some in combat, others at the Katyn massacre. At the end of the war, the new Polish Army, which had been formed in the U.S.S.R. in 1943, was led mainly by ethnic Poles transferred from the Soviet Army. More ex-Soviet officers were brought in under Rokossovskiy, and by the early 1950's nearly

every top post in the Polish high command was held by a former Soviet officer. The military district and corps commanders also were Soviets, as were at least half the division commanders.

The number of former Soviet officers in the Polish Army has been greatly reduced since the coming to power of Wladislaw Gomulka in October 1956. Rokossovskiy is gone and his replacement, Lieutenant General Marian Spychalski, is an architect by profession who served in the Polish Communist underground during the war. The most influential former Soviet officer remaining is Lieutenant General Jerzy Bordzylowski, Chief of the Polish General Staff and briefly the acting Minister of National Defense after Rokossovskiy's departure in October 1956.

Former Soviet officers of Bulgarian and Hungarian ethnic origin also were given positions of importance in their respective national armies, although the number was much smaller than in Poland. In both Bulgaria and Hungary, the top military post of Defense Minister has been held by former Soviet officers for many years: successively, by Generals Petur Panchevski and Ivan Mikhailov in Bulgaria and by Istvan Bata and Geza Revesz in Hungary.

Most of the Bulgarian and Hungarian "Soviet" officers had fled to the U.S.S.R. in the early years following World War I after participating in unsuccessful efforts to establish Communist regimes in their homelands. (In Hungary, the Communist regime of Bela Kun actually rose to power, but lasted only from March to July 1919). Some others fled to the Soviet Union after joining the ill-fated "Loyalist" forces in the Spanish Civil War.

Section V. MILITARY MANPOWER

13. QUALITY AND RELIABILITY

The Satellite states include peoples of several nations that historically have been among the best fighters in all Europe: the Germans, Poles, Hungarians, and Bulgars. The Albanians, though few in number, are noted for their warlike tendencies. The military qualities of the Czechoslovaks and Rumanians, although their histories do contain some proud pages, are generally below average among European peoples. Conclusions drawn from these generalizations might be far wide of

the mark, however; all nations are capable of producing both cowards and heroes, and virtually any people will fight hard for what it holds dear.

The problem of assessing future wartime performance is particularly complex in Eastern Europe. Some peoples, such as the Germans and Hungarians, might fight without spirit, or refuse to fight at all, because of opposition to continued Soviet domination. Others, including the Bulgarians and Poles, might fight well despite dislike of Soviet influence and Communist policies be-

cause they believe only the U.S.S.R. will support certain long-standing territorial or other basic national objectives of theirs. The performance of any Satellite people will be at its highest point if they are convinced that their own basic national interests and objectives are at stake in a conflict with their traditional enemies. It will be lowest if they believe they are merely pawns in a power struggle between the Soviet Union and the Western Allies. The Poles, for example, might fight with great zeal and courage against a NATO force, particularly one which included large West German contingents, if they feared loss of the extensive and productive former German territories which they now control. The Rumanians, on the other hand, have little reason to fear Western designs and have no claims on Yugoslav territory; their chief past enemies (in addition to the Turks) have been their Bloc neighbors—the Russians, Bulgars, and Hungarians.

From several practical standpoints Satellite military manpower can be rated as good. The people are generally healthy and fairly well educated. Under the Communists, military, technical, and physical training is given to millions of youths prior to their conscription for active-duty training. The area has a restless, militant past, and military service is more acceptable as part of the normal course of events than in some other parts of the world. Finally, from long years of tyranny and oppression, many of the peoples have developed a passivity and amenability to discipline which have a military utility, although at some cost in terms of initiative and individual resourcefulness.

14. AVAILABLE MANPOWER AND MOBILIZATION

The Satellite states contain more than 95,000,000 people. Males of military age, fit for active service, exceed 15,000,000. A growing proportion of the latter, already exceeding one-fourth, can be considered ready reserves. These are the men who have served on active duty, or have been given extended refresher training in the armies since their Sovietization. They are, for the most part, under 32 years of age. The familiarity of these men with the Soviet organizational and tactical concepts and the equipment now employed would enable them to be almost immediately effective upon mobilization.

All Bloc countries have detailed plans for rapid mobilization in time of emergency. These plans are frequently checked and tested, sometimes including the physical mustering of reserves for brief periods. A reasonably conservative estimate of Satellite ground force mobilization potential, based on available trained manpower and administrative machinery, is that some 4,000,000 to 5,000,000 men could be raised and a force of nearly 200 line divisions organized from them within 6 months. Expansion on any such scale would, of course, require substantial Soviet logistic support. Moreover, it is probable that an overall Satellite force of this size will not be required in wartime.

15. PERSONNEL PROCUREMENT

East Germany is the only Satellite state without a form of compulsory military service. Largely for propaganda reasons, East Germany depends upon a system of "voluntary" enlistment. In practice, various forms of duress are employed to recruit specially desirable individuals. The term of service is 2 years.

The general pattern of Satellite conscription conforms to that of the U.S.S.R. A major difference is that the Satellite states have standardized on a basic 2-year term of service. The Soviet term is 3 years.

The typical Satellite conscript is called up in the year of his 19th or 20th birthday, although a few recruits are accepted through voluntary enlistment after their 17th birthday. Inductions normally occur in October and November; in some cases, a relatively small part of the eligible age class may be brought in during April or May. The legal 2-year term may be extended, usually by 1 year, for persons with specialized skills or training. Upon release, the individual passes into the reserve. His obligation for military service continues to about the age of 50. During this time he will be recalled periodically for refresher training, but with decreasing frequency as he grows older.

The conscription system serves all the armed forces, militarized security forces, and, in some cases, labor forces. As a result, in most Satellite countries virtually all fit males in each age class perform some kind of service. In the two most populous states, Poland and Rumania, a number of men are not required to serve. They are not relieved of their military obligation, however,

and often receive extensive military training while in a reserve status. Except for these groups in Poland and Rumania, which are known as "surplus to the contingent," exemption from service is normally given only for exceptional physical or compassionate reasons.

Temporary deferments are granted for a variety of reasons, such as to provide the opportunity to complete a course of study in a school or college or because the individual is the sole support of a family. Deferment is also given in cases of nonpermanent medical or physical impairment. In all such cases, the individual concerned is required to justify his deferment annually. As soon as the cause has been removed he is inducted. If the individual is repeatedly deferred for a specified number of years he is relieved of the requirement for peacetime conscript service.

Noncommissioned officers are obtained through NCO schools conducted by regiments and larger units, and from high school graduates who have displayed an aptitude for military service. Many conscripts are urged to become career NCO's after completion of their regular compulsory service. Noncommissioned officers can serve continuously for indefinite periods but must go through the formality of signing up again every few years.

Officers are supplied by various service schools located throughout the area. Officer candidates are chosen primarily from politically reliable university graduates who have received military training. If they undertake an additional 3 months of military study, these men can be commissioned as sub-lieutenants. Other candidates for officer training are selected from graduates of high schools, from military preparatory schools, and from the noncommissioned-officer ranks of the army. A few direct political appointments are made each year, but this is more the exception than the rule. Officers of the regular army serve for an indefinite period.

Officer promotions are regulated by the respective ministries of national defense. Officers normally must spend a stipulated minimum period in each grade before becoming eligible for promotion, except in the case of a few outstanding individuals. Position vacancies usually must also exist before an officer can be considered for a promotion.

16. PAY, ALLOWANCES, AND LEAVE

Career personnel are well paid by local standards, although conscripts receive little more than token pay. Base pay for all ranks is low, the bulk of the income for officers and noncommissioned officers coming from the pay received for the position held. In this way, persons of superior quality or specialized competence who are given more responsible positions can receive a greater income than others of the same rank. Additional pay is also received for longevity, and there are numerous special allowances. Some of the latter include those for quarters, dependents, rations, leave travel, and per diem pay during absence from permanent station. There are also various indirect benefits for service personnel, such as access to certain categories of consumer goods and services, which are unavailable or available in limited quantities to civilians, and favorable price reductions.

Retirement pay is provided for long-term officers and noncommissioned officers. The rate is based on a proportion of the base and position pay received while on active duty and is relative to the total time spent in service.

Officers and career NCO's are authorized 30 days of leave per year. Unused leave is compensated by extra pay. Conscripts do not receive regular leave but may be granted special furloughs for outstanding service. All ranks may be given leave for compassionate reasons.

Section VI. ORGANIZATION

17. GENERAL

The administrative, territorial, and tactical organization of Satellite armies is very similar to that of the Soviet Army. There are minor discrepancies reflecting peculiar local circumstances or traditions, but it is clear that Soviet influence has determined organizational developments.

18. DEFENSE MINISTRY STAFF

a. Structure. The top control structure of the Satellite armies bears a close relationship to that of the Soviet Army. The defense ministry is considered a key cabinet post. The minister is invariably a confirmed Communist and frequently a member or candidate-member of the national Communist Party Central Committee. As in the U.S.S.R., the minister is a career ground officer, normally holding the highest military rank, and exercises direct administrative and operational control over all the armed forces.

The minister is assisted by several first deputy and deputy ministers, each of whom may also occupy one of the key posts in the high command. The latter is composed basically of a general staff, functional directorates (*i.e.*, for political affairs and rear services), and troop directorates for the naval and air forces and ground branches. Other agencies may also exist such as an inspectorate and directorates for training and personnel.

The ground branch troop directorates include all the ground arms and services except infantry. Troop directorates for such services as supply, medical, veterinarian, transportation, ordnance, and administration are usually grouped under the rear-services apparatus. Those branches considered to be combat arms under the Soviet concept, *i.e.*, artillery, armor, engineers, signal, and chemical, have separate directorates. So also do some remaining specialized service branches, such as finance, justice, and military music.

A notable feature of the typical Bloc high command is the predominance of ground-force influence and control. The minister, deputy ministers, and heads of all agencies of the high command, except the naval and air directorates, are ranking ground officers. The chiefs of those agencies serving more than one arm, such as the general staff and the rear-services directorate, are invariably drawn from the basic infantry (or cavalry) branch.

b. Functions. The Satellite general staffs serve all the armed forces and even support to some extent the militarized security forces. The staffs plan the overall development and employment of the forces and prepare operational orders to be issued in the name of the ministers. The following staff sections normally appear: operations, intelligence, communications, organization and mobilization, military transportation, military topographic, cryptographic, and military history.

The political affairs and rear-services agencies in the high command are represented at every echelon down to battalion or even lower. The political affairs apparatus maintains close liaison with Party agencies and is responsible for troop indoctrination in Communist policies and ideology. The apparatus controlled by the rear-services directorate is responsible for the procurement, storage, distribution, and maintenance of all common items of supply and equipment used in the armed and militarized security forces. This directorate also coordinates with the respective arms and services directorates the procurement and handling of items of supply and equipment unique to those branches. In combat situations, the unit rear-services officers have a generalized responsibility for all matters pertaining to the rear area: troop moves, supply and evacuation, storage and maintenance depots, hospitals, and so forth.

The troop directorates are concerned with matters related to the tactical organization, doctrine, training, military schooling, and certain personnel-administrative and specialized logistics functions for the troops and units of their branch. They exercise no operational command function, except possibly over small tactical units of their branch held at GHQ level. In the U.S.S.R., the activities of the ground combat arms are coordinated by a Ground Forces Main Directorate under a so-called Commander in Chief of Ground Forces. No such agency is known to exist in any of the Satellite high commands. This is probably because the small size of the armies and the relatively much smaller size of the Satellite naval and air forces make top-level coordination of branch responsibilities a much simpler problem than in the U.S.S.R. The absence of a troop directorate for infantry

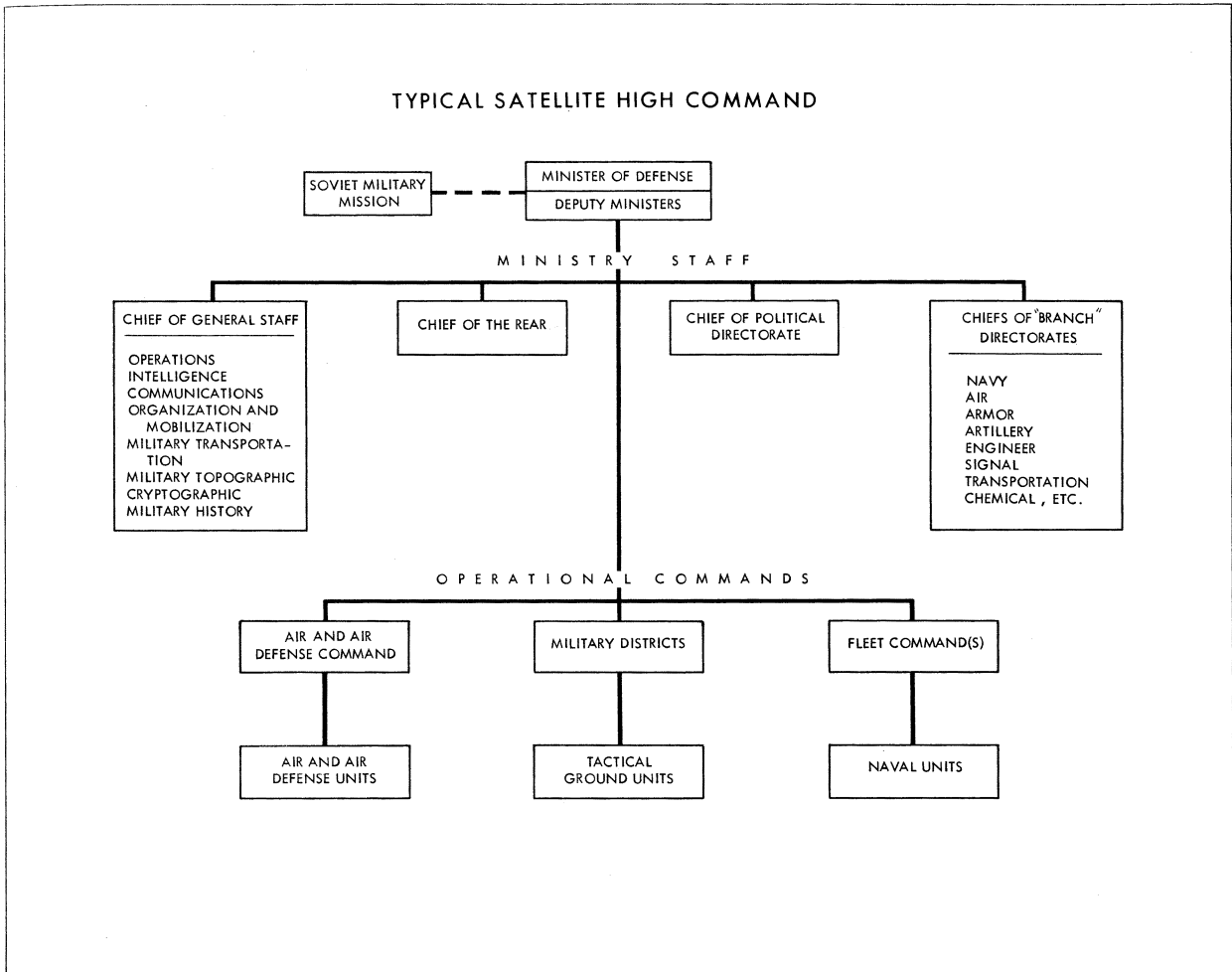


Figure 2. Typical Satellite High Command.

is due to the fact that in the Bloc concept little distinction is made between infantry and combined-arms matters.

The naval and air directorates are comparable in function and in the scope of their responsibilities to the various ground branch directorates. Hungary and Czechoslovakia, of course, have no navies, although Hungary has a very small militarized River Guard. Operational control over Satellite naval units is exercised by a separate headquarters which, in some cases, also directs all coastal defense activities including coast artillery and, in the latter case, may even be headed by a ground-force commander. Operational control of air units is exercised by a combined air and air defense headquarters. This headquarters may also be commanded by a ground officer. It controls both the air units

and those ground antiaircraft artillery units assigned to static, territorial air defense.

19. TERRITORIAL ADMINISTRATION

Each country is divided into two or more military districts; these are sometimes called regions or, in the case of Bulgaria and Albania, army or corps commands. The district headquarters are responsible for military-administrative matters within their respective areas. These include conscription, mobilization, military construction, housekeeping, supply, storage, and movement. The district headquarters are not, strictly speaking, tactical headquarters. They serve, however, as an operational control echelon between the ministry and the tactical ground units and are generally responsible for the quality of training and level of preparedness of

those units within their area. For training purposes, or in wartime, they could provide cadres for field headquarters of large tactical units.

20. TACTICAL UNITS

a. Corps. No tactical corps headquarters exist in the Satellite armies at present. There are "corps" headquarters in both Albania and Bulgaria, but their primary function is territorial administration, fulfilling the responsibilities of district headquarters in other countries. Tactical corps headquarters existed in virtually all the armies until a few years ago when there was a Bloc-wide trend toward their abolition.

b. Types of Divisions. Divisional units throughout the Satellite area are organized generally in accordance with Soviet concepts. There are devia-

tions from the Soviet pattern, of course, representing local adaptations and differing stages of organizational development. The basic types of line divisions are rifle, motorized rifle, mechanized, and tank. It is expected that in most cases, these will ultimately be reduced to two types—motorized rifle and tank. There are also mountain rifle divisions in Rumania and Bulgaria. The only other types of divisions are artillery and antiaircraft artillery; one or two countries may eventually organize airborne divisions out of the small units of paratroops now in being.

c. Rifle Division. Rifle division organization varies somewhat from country to country and, largely because of current reorganizations, among different units within individual armies as well. Bulgarian and Rumanian rifle divisions are organized much the same as the typical Soviet rifle division

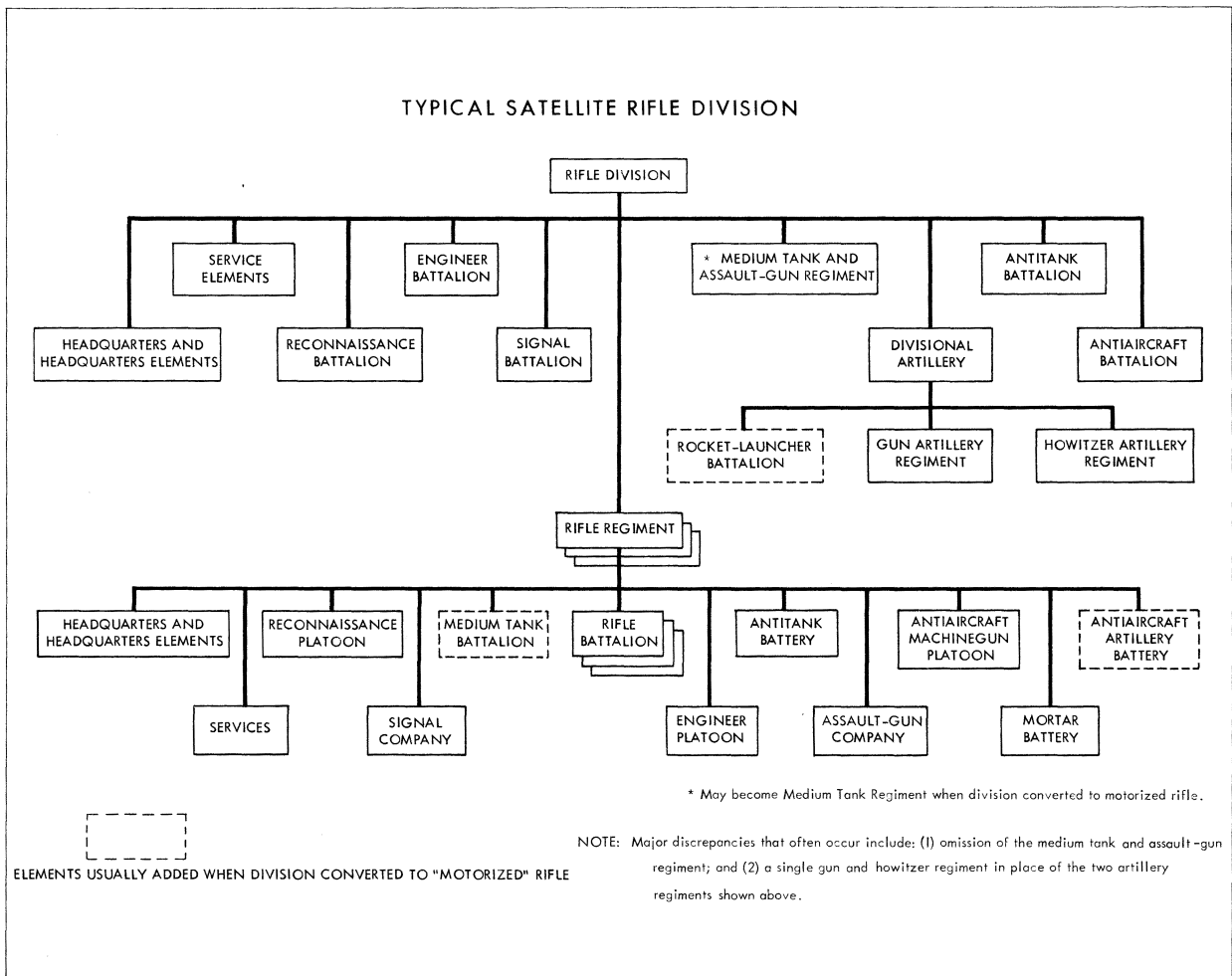


Figure 3. Typical Satellite Rifle Division.

of 1947-54. In Czechoslovakia, East Germany, and Poland there has been a definite trend toward converting rifle divisions into the more modern "motorized rifle" divisions, or reasonably close approximations of them. In Hungary, only a few division-size units have been identified since the autumn 1956 rebellion; these also are believed to be of the motorized rifle type.

The rifle division is a well-balanced force of combined arms, but with especially strong infantry elements. It is designed for all conventional combat actions and for operating in a specified sector of the line in either offensive or defensive actions. The trend toward "motorization" is characterized by increases in the division's armored strength, motor transportation, and firepower and in the types and quantities of specialized equipment. The newer type of unit,

without a significant increase in personnel strength, thus possesses greater strength, flexibility, and mobility and is far better adapted for the probable conditions of atomic warfare. Both the old and new types of rifle divisions have a versatile artillery component including several calibers of direct-fire pieces, as well as howitzers and mortars.

d. Mechanized Division. The mechanized division has been a standard Soviet Army line unit since 1945 and has since been copied, with minor modifications, by most of the Satellites. The mechanized division contains substantially more armor and less infantry than does the old type of rifle division; artillery strength is about the same in both types of divisions. The mechanized division is relatively mobile and capable of heavy firepower. It is limited tactically, however, and is not normally used to hold a sector

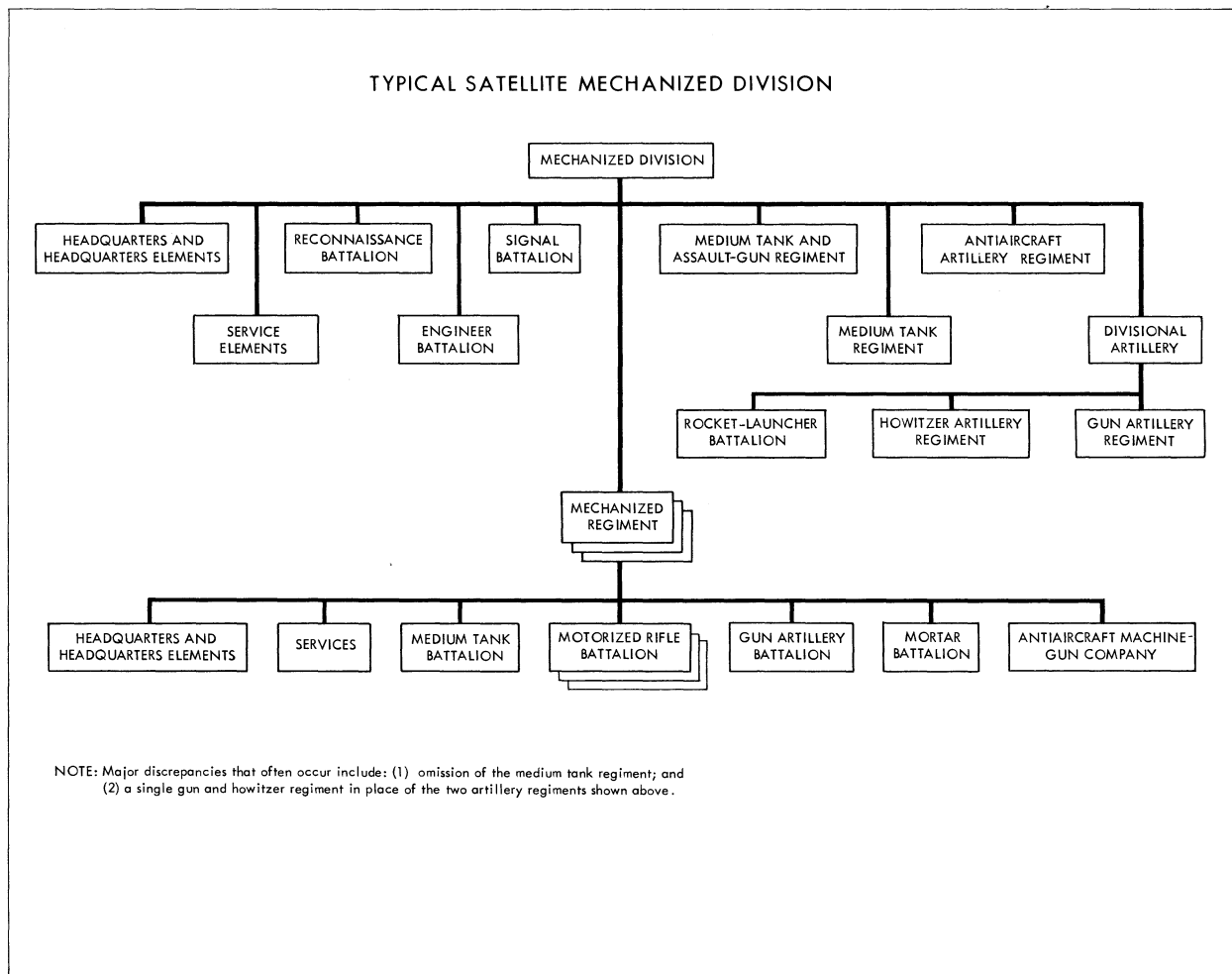


Figure 4. Typical Satellite Mechanized Division.

of the line. The division is used in offensive operations to assist in widening a gap opened in the enemy line during a breakthrough operation and for pursuit of a disorganized enemy. On the defense, the division is used primarily for counteroffensive actions.

e. Tank Division. At full TOE strength, the tank division is heavily armored and capable of powerful shock action. It has only a relatively small, but highly mobile and well-equipped, infantry element. Artillery strength is less than in either the rifle or mechanized division. The division employs its tanks to spearhead breakthrough operations after the enemy lines have been softened up by artillery fire and probing attacks by the rifle divisions. Tank division elements can also be used for rapid cross-country moves, as in exploiting a deep penetration or completing a

double envelopment operation. On defense, major weapons of the tank division might be employed in fixed, concealed positions along enemy approach routes or the unit could be employed as a whole to cut off or blunt an enemy spearhead.

As with the rifle division, the Soviets have increased the amount of firepower in the tank division TOE within the past 4 to 5 years, but there is little evidence that any Satellite divisions have yet made these changes. The number of Satellite tank divisions is increasing, however, particularly by the conversion of mechanized divisions to tank units.

f. Artillery Divisions. Only Czechoslovakia, Poland, and Rumania have artillery divisions. (The Hungarian Army had a single artillery division prior to the 1956 revolt, but it has not since been re-established.) These units are comparable

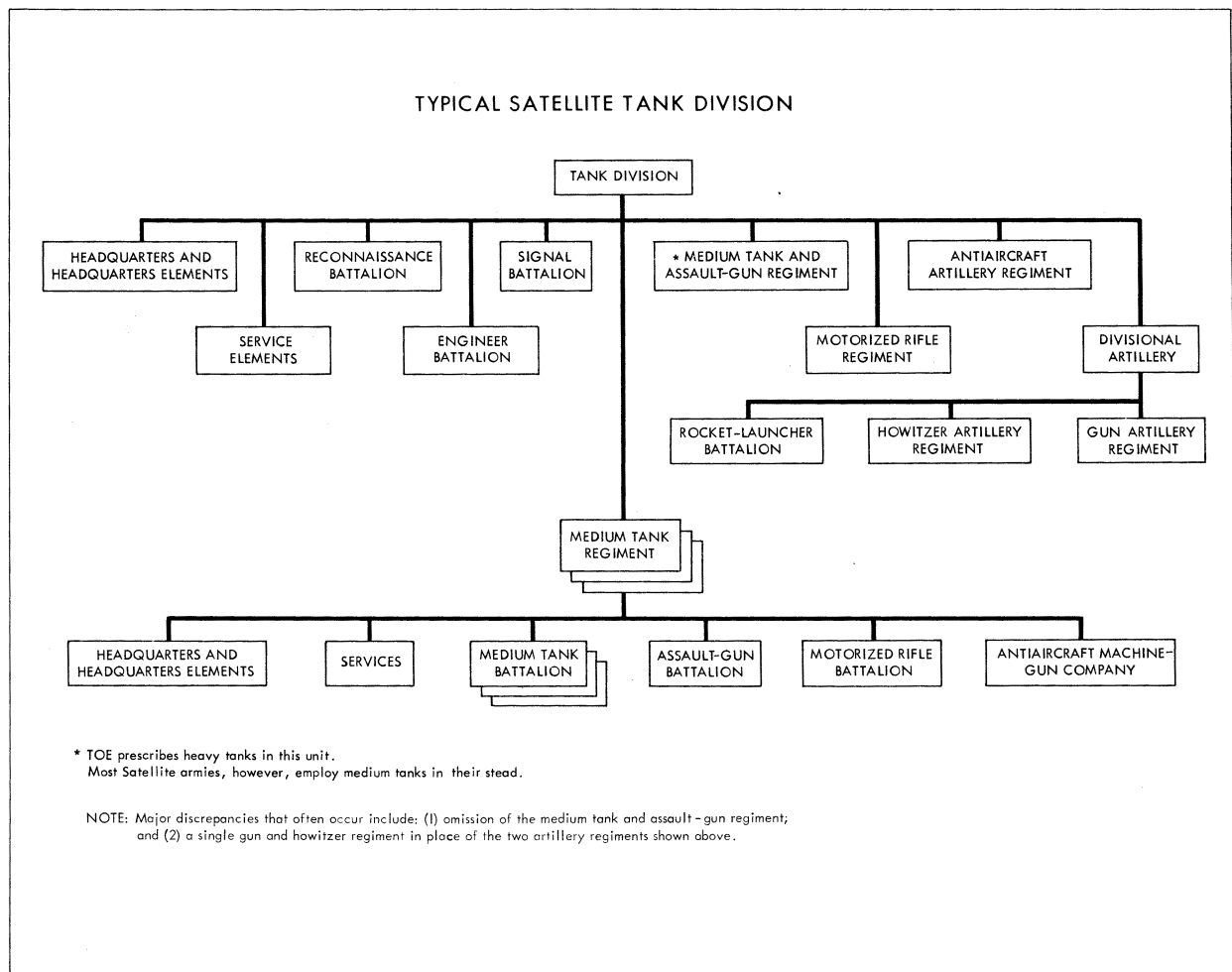


Figure 5. Typical Satellite Tank Division.

to the Soviet artillery divisions of the "breakthrough" type. They consist essentially of a holding headquarters with an indefinite number of brigades—usually four to six—subordinate to it. The brigades are of various types, including gun, howitzer, mortar, and rocket. Each brigade is prepared for allotment, in whole or in part, to large combined-arms units for heavy artillery fire support. They are particularly useful in fire preparations for major offensive operations, hence the name "breakthrough" division.

g. Antiaircraft Artillery Division. Each of the Satellites, with the exception of Albania, has one or more antiaircraft artillery divisions. These are of either field or static-defense type, the greater part being of the latter type.

Field AAA divisions at full strength would normally contain four regiments. Two of these have 24 medium guns (85- or 100-mm) each, and the other two each have 24 light automatic guns (37- or 57-mm). Personnel strength is probably 2,000 men or more.

Static-defense divisions usually have three firing regiments, each with as many as 48 medium guns. Light AA guns are also sometimes found in these divisions.

h. Nondivisional Units. Each Satellite army contains a number of nondivisional units, including brigades, regiments, and battalions of both combat and service type. The organization of these units varies somewhat but generally follows basic Soviet lines.

Section VII. WEAPONS AND EQUIPMENT

21. GENERAL

After VE-day, most Satellite armies possessed heterogeneous supplies of weapons and equipment. These included materiel of French, German, British, Italian, Soviet, and American manufacture, as well as Rumanian, Polish, Hungarian, and Czechoslovak.

The maintenance of this equipment and the acquisition of replacements and spare parts posed an impossible problem in most cases. The production of many standard items—including those from Italy and Germany—stopped with the end of the war. Western sources also were cut off because of the Soviet domination of Eastern Europe.

The status of Satellite army equipment generally was little changed during the period up to 1950. Starting about that time, however, relatively large quantities of standard Soviet military equipment have been continuously shipped into Eastern Europe.

22. STANDARDIZATION

The extensive Soviet shipments have resulted in a high degree of Bloc-wide standardization on weapons and equipment of Soviet design and the attainment of a reasonably high level of effectiveness from the materiel standpoint. Standardization of equipment will make the wartime integration or coordinated employment of Bloc forces of

several nationalities much more practicable. It also provides for simplification of production, supply, and other logistic problems in the Bloc as a whole. Perhaps equally important, however, is that the U.S.S.R. is the source of the bulk of this equipment, and no other Bloc country has been permitted to establish an adequate war reserve. Thus, the Satellite armies are dependent in whole or in part on Soviet logistical support in both peace and war. This dependence greatly restricts the freedom of military action available to any Satellite force. None of the armies can be used with effect unless the Soviets approve and are willing to support their proposed course of action.

Some countries have relieved themselves of a part of this dependence through local production. Major equipment items, however, such as tanks, medium to heavy artillery, and combat aircraft, are produced only in Czechoslovakia and Poland, and neither of these countries produces a complete range of military equipment and supplies.

Czechoslovakia, alone among the Satellites, produces several types of weapons of local design. These include small arms, recoilless guns, and artillery. Some other produced items are local modifications of basic Soviet designs; these include both tanks and artillery. In most but not all cases, weapons calibers are identical with those of comparable Soviet weapons, and ammunition is usually interchangeable or will be so when a current rechambering program is completed.

SOVIET WEAPONS IN COMMON SATELLITE USE

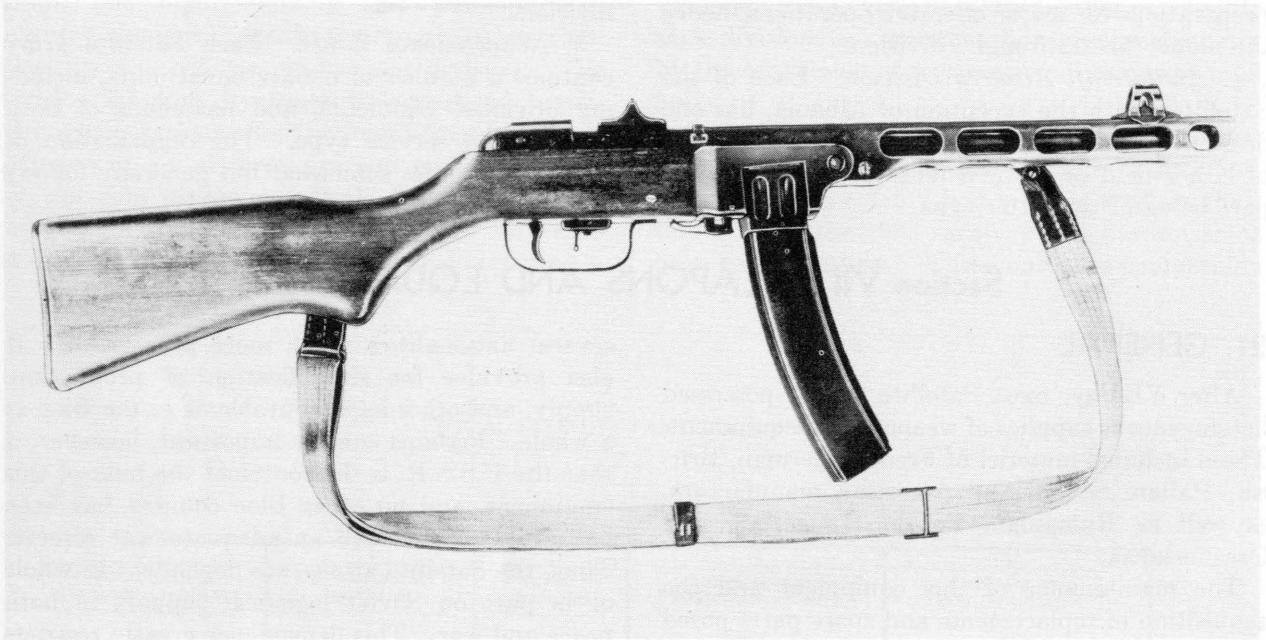


Figure 6. 7.62-mm PPSH-41 Submachinegun (being replaced by AK, fig. 31, p. 47).

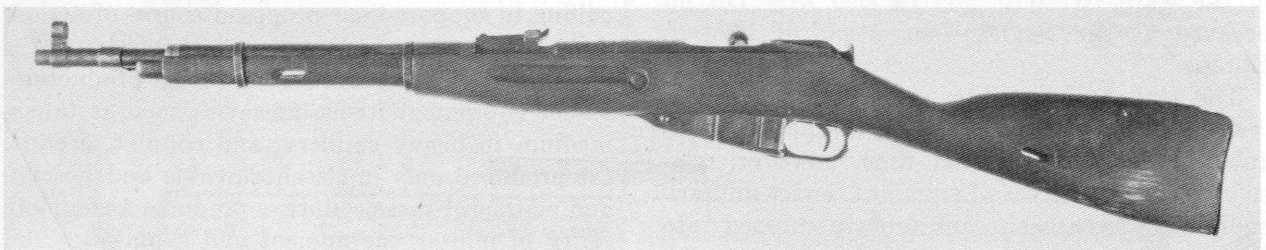


Figure 7. 7.62-mm Carbine M44 (being replaced by SKS, fig. 79, p. 117).

SOVIET WEAPONS IN COMMON SATELLITE USE—Continued

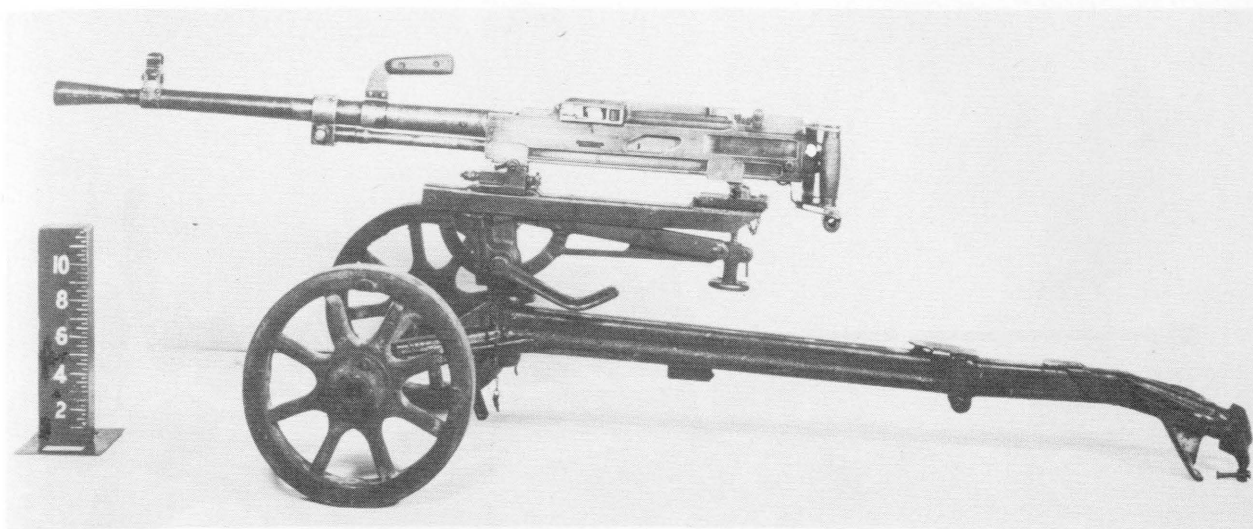


Figure 8. 7.62-mm Goryunov Heavy Machinegun SG-43.



Figure 9. 120-mm Regimental Mortar M38.

SOVIET WEAPONS IN COMMON SATELLITE USE—Continued

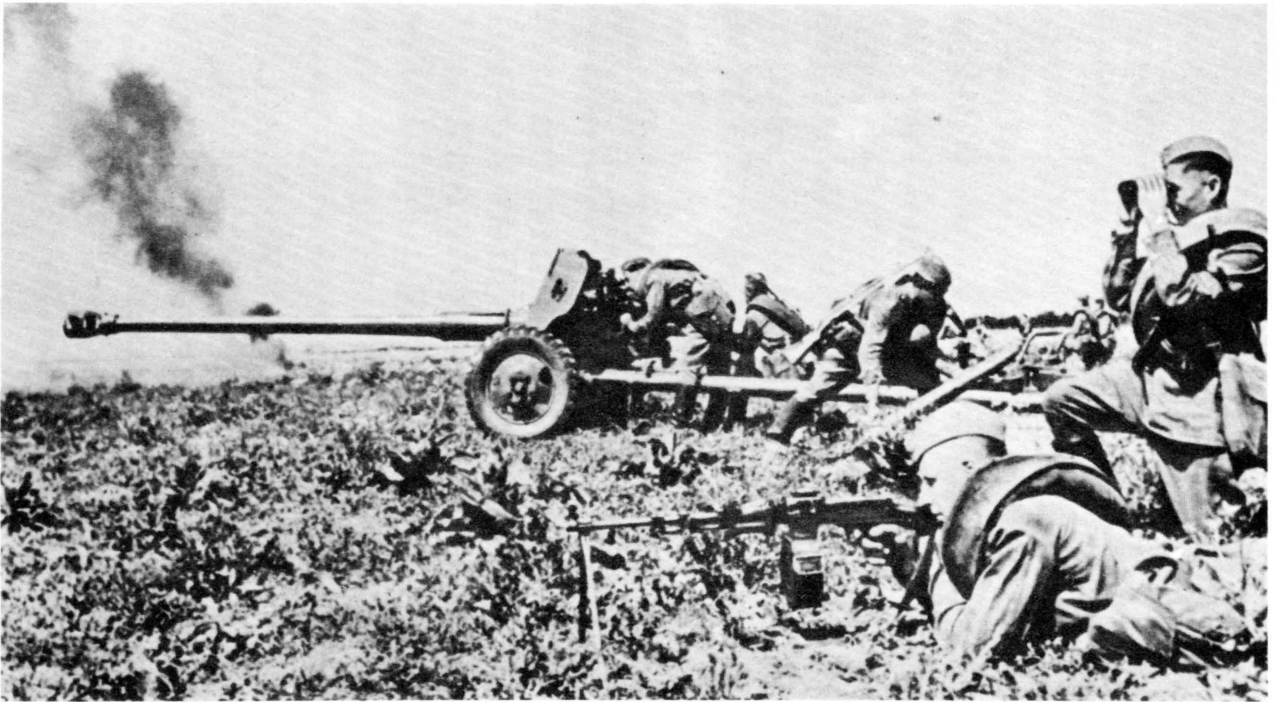


Figure 10. 85-mm Field Gun D-44.



Figure 11. 122-mm Howitzer M38.

SOVIET WEAPONS IN COMMON SATELLITE USE—Continued

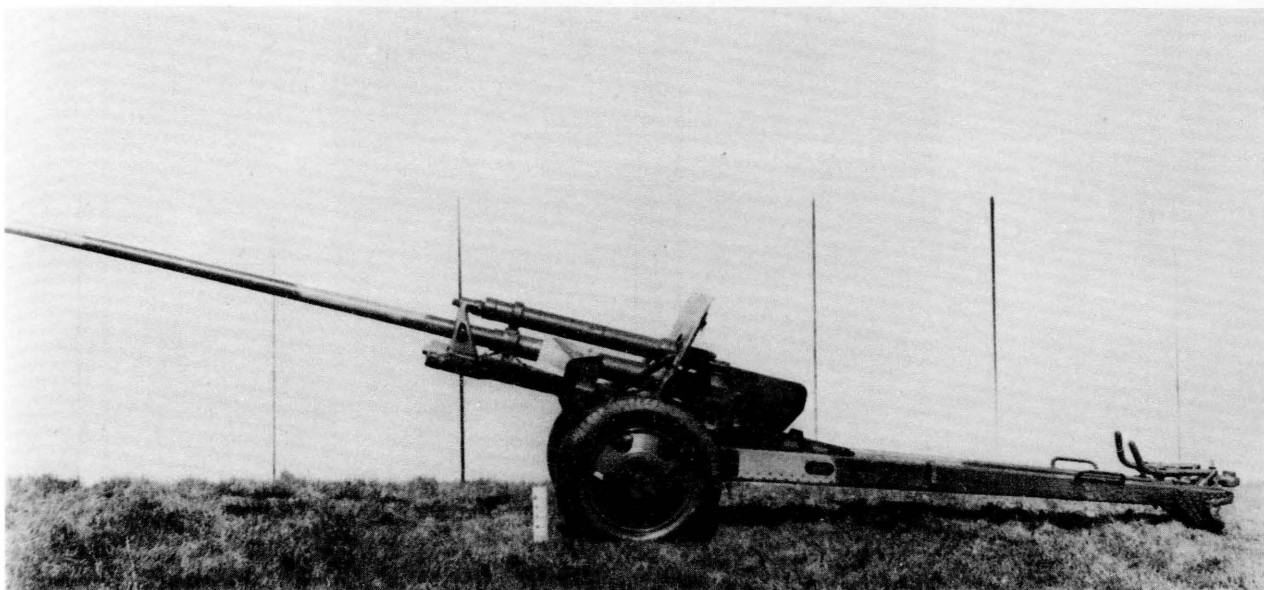


Figure 12. 57-mm Antitank Gun M43.



Figure 13. 85-mm Antiaircraft Gun M39.

SOVIET VEHICLES IN COMMON SATELLITE USE



Figure 14. T-54 Medium Tank (100-mm Gun).



Figure 15. JSU-122 (A19S) Heavy Assault Gun.

SOVIET VEHICLES IN COMMON SATELLITE USE—Continued



Figure 16. BTR-152 Armored Personnel Carrier.

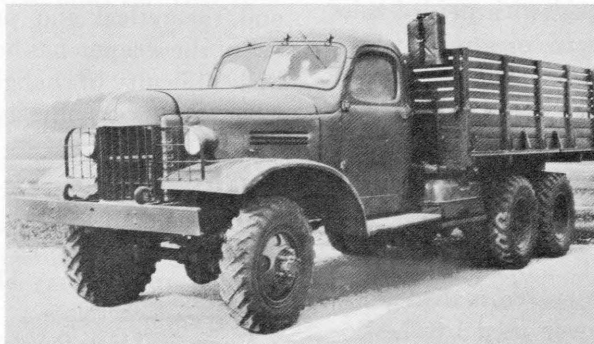


Figure 17. ZIS-151 (ZIL-151) 5-ton Truck, 6x6.

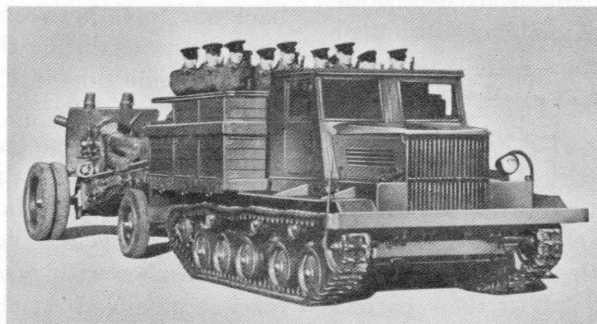


Figure 18. M-2 Light Tracked Prime Mover.

There are two special features of the overall status of Satellite equipment. One is that some armies are substantially better equipped than others; the second, that the Soviets generally do not provide Satellite armies with all of the very latest types of military equipment.

a. Relative Equipment Status. In respect to equipment, the Satellite armies can be rated in order roughly as follows, starting with the better equipped: Czechoslovakia, Poland, East Germany, Rumania, Bulgaria, and finally Albania. In proportion to numerical strength, however, East Germany probably ranks as high as Czechoslovakia. The Hungarian Army, before the 1956 rebellion, was relatively well equipped and would have ranked just after East Germany. The equipment status of this Army is indeterminate now, however, because of the unsettled, though improving, military situation in the country.

b. Absence of Latest Equipment. The Satellite armies have not been equipped with guided missiles, even of ground-to-air type, or atomic weapons. Several types of the latest conventional Soviet ground equipment also have not been pro-

vided: the T-10 heavy tank, large rockets, and a fairly wide range of new artillery weapons.

This deficiency results in large part from the lower priority given to equipping Satellite units as opposed to those of the Soviet Army. In addition, there is no indication that the Soviets intend to turn over long-range missiles or atomic weapons even in the future. Antiaircraft missiles, however, probably will be in the hands of some Satellite troops by the early 1960's.

The Satellite armies sometimes adopt organizational and tactical doctrines providing for new equipment items before the items themselves are received in quantity. This results in the substitution of older or smaller caliber weapons in unit organizations and in field training. If small numbers of the new piece of equipment are available, they are used in schools and special training areas for indoctrination of crews in methods of employment and operation. Thus, since the necessary organizational changes have already been made and theoretical and practical instruction in the use of the weapon has been given, there is relatively little difficulty in changing over to the new weapon when it does become available in quantity.

Section VIII. TRAINING

23. GENERAL

Satellite army training is intensive, realistic, and well-rounded. The annual cycle used by the Soviet Army is followed. Training is conducted in accordance with Soviet doctrine and, for the most part, under the scrutiny of the Soviet advisors. Translated copies of Soviet manuals are used both in military schools and for the guidance of tactical exercises.

24. TRAINING CYCLE

According to the annual cycle, the training year starts in the late autumn or early winter after the induction of a new conscript class and the release of men who have completed their compulsory tour of duty. Recruits are assigned to their parent units without extensive preliminary instruction. During the winter months, while in garrison, they receive indoctrination and rudimentary military training and participate in field problems and firing drills with small units. A few tactical exercises, including winter-warfare training, may also be

held. In the spring this activity is gradually stepped up and may also include large-unit command-post exercises.

Early in May, the tactical units generally move from their garrisons to field-training areas, where the bulk of the troops usually camp for 5 or 6 months. Sometimes units or parts of units rotate back and forth between the field and their permanent garrisons during the summer. This has been true for some time in East Germany, and the system has been followed by Poland since 1957; it may be adopted by other countries as well.

While in the field, the units undertake tactical exercises on an ever larger scale. This phase of the training cycle is completed in September or early October with maneuvers on as high a unit level as possible. At this time Bloc armies are at their peak of combat readiness.

Following the field maneuvers, the units return to garrison to prepare for the release of conscripts whose tour of duty is completed, the induction of recruits, and the beginning of the winter phase of the next training cycle.

25. LEVEL AND STANDARD

a. Level. The level of training varies from army to army. All have held at least a few division-level maneuvers, however, except the Albanian and post-revolt Hungarian. The Bulgarian Army has held corps- or higher-level training each year since 1951. Poland, Rumania, and Czechoslovakia are also believed to have attempted a few higher-unit maneuvers in recent years, and East Germany at least one.

The Hungarian Army is believed to have undertaken one or more division-level maneuvers each year between 1950 and 1956. Several corps-level maneuvers were also held, the first of these possibly occurring in 1953. As a result of the 1956 revolt, however, only small-unit garrison drill and firing exercises were held in 1957 and little more in 1958.

b. Standard. The quality of Satellite training cannot be compared to that of the world's more modern armies. It is believed, however, that it is at least as good as that of most of the smaller European armies.

Satellite training is hampered somewhat—especially in countries such as Albania and Bulgaria—by the relative lack of communications equipment and modern transportation. This limits in some degree the complexity of operational plans and the capacity to coordinate large forces of combined arms.

Combat training under special conditions is stressed. Much training is conducted at night, and field exercises and maneuvers usually include a river crossing. At present, combat under the simulated conditions of atomic warfare is frequently practiced.

26. PREINDUCTION

The Satellite countries maintain an extensive program of preinduction training, which provides the armies with a large number of recruits already versed in military skills. The program also advances the physical fitness and technical know-how of a large body of Satellite youth. Such training is given primarily by Satellite agencies corresponding to the Soviet DOSAAF (Voluntary Society for Cooperation with the Army, Aviation, and Fleet). Instruction is given in the operation, maintenance, and tactical employment of tanks, aircraft, artillery and rocket weapons, communications equipment, radar, and all types of motor

vehicles. There is much practice with all types of infantry weapons and in defense procedures against air, chemical, and atomic attacks.

Training in these organizations is supervised by military personnel (commissioned and noncommissioned officers), including reserves. Regular standard types of military equipment are used, some of postwar design.

Preinduction training is also given to most male youths attending secondary schools and universities. In many cases, this includes drill and classroom work in military theory and doctrine during the school year, and field training at regular military camps in summer.

27. RESERVE

In the Satellite states, all persons up to about 50 years of age are eligible for reserve training whether they have served on active duty or not. Few women are ever called, but many males are. The frequency with which reserve training may be given is greater for the younger men, and men in their forties seldom are required to serve on active duty.

A single period of reserve training may last anywhere from 1 to 3 months. The reservist is assigned directly to a permanent unit. He may attend a course at a military school or serve in a headquarters, although the great bulk are assigned to tactical units. Reserve training is given throughout the year, but a greater number of men are called during the summer or early autumn to participate in the regular field exercises and maneuvers of the line units.

Reserves may also be called up for brief periods for special purposes, as to test mobilization procedures. There are known instances of a Satellite state mustering and equipping whole divisions composed entirely of reserves.

28. SCHOOLS

Each Satellite Army maintains an extensive military school system. The various branches of service operate noncommissioned officer, officer-candidate, refresher, specialist, and advanced courses. There are also interbranch and joint services schools of the command-and-staff type, and selected Satellite officers attend high-level schools in the U.S.S.R.

Satellite military schools are based largely on Soviet models. The instructional materials and methods are those used by the Soviet Army.

Section IX. TACTICS

29. GENERAL

The tactical doctrine followed by the respective Satellite armies prior to and during World War II was based on French, German, and British, as well as a variety of local concepts. Since the war, Soviet doctrine has been made the basis of tactical training and classroom instruction; many tactical and technical manuals are verbatim translations from the Russian. Adoption of Soviet doctrine was facilitated in the early days of the Communist regimes by the fact that some Satellite army cadres and units had originally been activated and trained in the U.S.S.R. during the war.

The basic doctrine employed by the armies emphasizes the offense with the maximum use of maneuver, shock action, and firepower. The coordinated employment of combined arms, including air, is considered the key to successful action in combat. Infantry is the basic arm, however, and territory is not regarded as taken until occupied by infantry. Actions by other arms are designed to support the advance of infantry and exploit its gains. The objective of offensive operations is to envelop and destroy the enemy, although deep penetrations which bypass sizable forces, at least temporarily, are also permitted. Employment of mass is recommended whenever and wherever practicable.

With the advent of nuclear warfare, the former Soviet reliance on mass and rigidity is being modified by emphasis on the use of small, self-contained, highly mobile units with heavy striking power. The Soviets stress achievement and maintenance of tactical momentum. Deception in all its possible forms is considered essential to the success of any combat action.

Following Soviet doctrine, defensive operations are considered only as a necessary preliminary to resuming the offensive. Two basic types of defense are recognized, positional and mobile. Of the two, the latter is much preferred. It involves extending the battle as far as practicable in width and depth and relying on rapid movement and the establishment of heavy concentrations of fire on selected targets.

30. THE ATTACK

The attack is preceded by a concentration of superior forces and by extensive reconnaissance,

both air and ground. Raids and reconnaissance in force are conducted to confuse the enemy as to the intended objective and the time and location of the main effort. False buildups in secondary sectors and numerous other measures are effected to mislead enemy intelligence. Meanwhile precautions are taken to conceal the real direction of the attack and the preparations for it. Camouflage is used extensively. Marches to assembly areas are usually made at night, and strict measures are enforced to conceal men and equipment. Great secrecy is attached to the preparation of operational orders, and often only one handwritten copy is made.

The artillery preparation may be brief or prolonged. Tactical air support is extensively used both before and during the assault. It is closely coordinated with the ground action and controlled ultimately by ground commanders. The assault, normally launched at dawn by infantry with armor in support, occurs under cover of massed artillery fire. The first wave seeks to gain and sustain as great a momentum as possible, even bypassing strongly held defense positions in order not to slow the pace of its advance. The second wave may be employed to reduce bypassed enemy strong points, but it tries to follow the first wave as closely as possible. Should the first wave be stopped or destroyed by enemy action, the second wave may pass through the first wave in an effort to resume the pace of the attack.

31. DEFENSE

Although regarded as a secondary means of combat, the defense is not overlooked in planning or in training. The Soviet doctrine employed in the Satellite countries emphasizes the need for careful and extensive planning when the combat situation requires defensive action. Limited only by available time and physical resources, an extensive defense system of trenches is prepared. This can include pillboxes, concealed gun positions, minefields, and obstacles of all sorts. Such preparations, carried out in great depth to frustrate enemy efforts at penetration and envelopment, are carefully designed not to impede the movement of the counteroffensive force. Defensive actions are accompanied by independent efforts to build up a powerful counteroffensive force which can be committed at a critical point in the

defensive fighting to seize the initiative again and resume the offensive.

Mobile defense features a series of delaying actions and minor offensive thrusts to disrupt enemy movements and communications. The object of mobile defensive tactics is to delay and wear down enemy forces until a fixed defense, or a counteroffensive, can be undertaken.

32. SPECIAL OPERATIONS

Armies employing Soviet tactics emphasize the conduct of special operations. These do not in all instances involve or require the extensive training of highly specialized troops and equipment, but rather envisage the preparation of regular forces

and equipment under special conditions to as great an extent as practicable. A limited number of troops, for example, receive special training in mountain or ski warfare, and their function in wartime would be to assist the regular troops in exceptional circumstances.

Night warfare is frequently practiced by the regular line units. Training exercises and maneuvers regularly include river crossings, sometimes on a large scale. Satellite troops are trained to fight in cities and in forests. Nearly all the armies have specially trained paratroop units, but, according to Soviet doctrine, the use of regular troops in air-landing or, if necessary, parachute operations is also contemplated.



Figure 19. Albania.

ALBANIA

CHAPTER 2

Section I. THE MILITARY SYSTEM

33. NATURE OF THE ARMED FORCES

a. Composition. The Albanian Armed Forces include ground, naval, and air elements which are known collectively as the Albanian People's Army, plus the militarized security forces consisting of the Frontier Troops and the Interior Troops. The Army is under the Ministry of National Defense and is designed exclusively as a military force. The militarized security forces are subordinate to the Ministry of Interior and have as their respective primary missions prevention of illegal border crossing and maintenance of the security of the regime against the possibility of internal subversion, acts of resistance, or open revolt.

Although the ground, naval, and air elements of the Army constitute, in effect, a single armed force, there are three basic force components: Army ground forces, air and air defense forces, and coastal defense forces. The Army ground forces are much the largest of the three components. The air and air defense forces include ground antiaircraft artillery units for static defense as well as the few existing Albanian air units, which are almost exclusively of fighter-interceptor type. The Albanian anti-air defense system is tied in directly with the strategic anti-air defense systems of the U.S.S.R. and other Bloc states.

The Coastal Defense Command directs all naval units (consisting exclusively of small craft and lacking significant capabilities), as well as coastal artillery units, a few antiaircraft artillery units, and some ground infantry troops.

The militarized security forces are organized into military-type units, wear military uniforms, employ basic infantry weapons, and are trained in small-unit ground combat tactics as well as for more specialized security duties. In time of war, Interior and Frontier Troop units would be assigned to Army field commands and would

be particularly useful in the performance of rear-area security duties, such as military government, counterintelligence, traffic control, and guarding installations and lines of communication. They can thus be considered auxiliary ground troops.

b. Development. The present military forces are directly descended from the partisan forces raised during World War II to combat the Italian and German occupation forces within Albania. The armed forces still reflect the somewhat primitive nature of these irregular forces. Albania, moreover, is a poor and backward country by Western standards and has been unable to develop a truly modern force, even with extensive Soviet material and human assistance. The traditional tribal independence and resistance to central authority, particularly in the north, have also contributed to making development of a well-ordered and viable force difficult.

Albanian guerrilla forces were divided into various factions during World War II, and their effectiveness was limited by this lack of coordination. Partly because they were organized and advised by Yugoslav Communists, the Communist Partisans in Albania became strong out of proportion to their numbers, and ultimately dominated or eliminated all the non-Communist groups. They thus became the basis for the Army as well as the Government which emerged at the end of the war. Yugoslavia, herself then a Soviet Satellite, was given the assignment of assisting Albania and of developing the armed forces in accordance with the general pattern being adopted throughout the Bloc.

Only limited progress was made by the Yugoslavs in improving Albania's military forces prior to Yugoslavia's break with the Kremlin-dominated Cominform in 1948. The Soviets subsequently installed their own military mission and took a direct hand in Albanian military development, but even their efforts have not met with great success. Physical communication with the

U.S.S.R. is maintained by regular air flights and by sea.

c. Status. The Army ground forces constitute a small and relatively ineffective force. They have not kept pace with organizational changes effected elsewhere in the Soviet Bloc. Although Soviet equipment is now in general use, it is primarily of World War II standard. Very few of the numerous Soviet postwar weapons have been received in Albania, and no significant weapons are produced locally. Army training is intensive but rudimentary. Small-unit actions are stressed and maneuvers by large forces of combined arms are unknown. Similarly, the Albanian Army is the only Satellite force that is not known to have conducted sizable combined exercises or maneuvers with Soviet units. Wartime tactics might include efforts at conducting conventional ground operations, but the Army probably would quickly resort to guerrilla-type actions. In the more inaccessible regions of Albania these could be carried out with considerable success and might be continued for a significant period.

34. THE HIGH COMMAND

Top control of the Albanian People's Army is exercised in much the same manner as in other Bloc states. The Party and executive organs of government—responsive to their counterparts in Moscow—lay down the broad guidelines for military development. The Minister of National Defense, a career ground officer, implements directives from above and exercises full and direct administrative and operational control over all parts of the military organization. His authority is limited somewhat by the presence of the Soviet military mission and its corps of "advisors" assigned to key spots throughout the Army.

The Minister is assisted in the performance of his duties by a single general staff for all the military forces and by directorates for the various arms and services, including navy and air, as well as separate directorates for political affairs and rear services.

A unique institution in Albania, prescribed by her Constitution, is the title of "Commander in Chief of the Armed Forces." This title was first conferred upon Albania's Communist strong man, Enver Hoxha, wartime leader of the Communist-controlled guerrilla forces. Hoxha remains a powerful figure as the First Secretary of the Communist

Party, although he relinquished the prime ministership in July 1953. It is believed that Hoxha still is Commander in Chief, although the title carries little actual authority, of and by itself.

35. TERRITORIAL ORGANIZATION

Prior to 1953, Albania was divided into three military districts. During the general reorganization of that year, the district headquarters were abolished. Two corps headquarters were simultaneously established, however, one in the northern part of the country, one in the southern. These headquarters took over the administrative and logistical responsibilities of the former districts. They also serve in the operational line of command between the Ministry and the tactical units, supervise the training program, and are generally responsible for the combat readiness of the units within their territory. They are not, strictly speaking, tactical headquarters, although in time of war they would provide cadres for field headquarters.

The present division into a northern and a southern region is suited to the geographic, economic, and social conditions within Albania. It also offers certain advantages for the tactical coordination of units. For example, those in the north would be used against an attack from Yugoslavia and those in the south against Greece. It is natural, therefore, that the units in these two areas should be separately controlled.

36. ORGANIZATION OF THE ARMY FOR WAR

The highest level of tactical command in the Army ground forces is the infantry brigade. There are several such units in each of the corps areas. In wartime, these units will be operated more or less independently, each to guard a clearly defined attack route through the mountainous terrain that surrounds Albania. If time permitted, the brigades would be raised to division size.

The standing Army ground force is small, not exceeding 25,000 men. Wartime mobilization capability is also limited because of Albania's small population, the problem of political reliability, and the fact that only about 100,000 reserves have received training with the Soviet-type weapons, organization, and tactical doctrine now employed by the Army. A combat force

equivalent to about six rifle divisions of the most basic sort could be raised in a relatively few months, however. Moreover, if the war were protracted, Albania probably could make some use of the pool of about a quarter of a million

fit males. Some of these have had prior military (including guerrilla) experience. Mobilization, even on a modest scale, would require Soviet logistic support for many basic weapons and heavy equipment, replacement parts, and other supplies.

Section II. ORGANIZATION OF THE FIELD FORCES

37. ARMS AND SERVICES

The basic ground arms include infantry, artillery, armor, engineer, chemical, and signal. As in other Bloc states, the Albanian Armed Forces are considered a single, highly centralized entity and the naval and air forces are in many respects treated merely as separate arms. Infantry generally is considered as the basic branch, in support of which the other arms and services perform their specialized missions.

The services include medical, veterinary, supply, and motor transportation.

38. PRINCIPLES OF TACTICAL ORGANIZATION

The Albanian Army adheres, for the most part, to Soviet principles of tactical organization. These are adapted, however, to account for the special social, economic, and geographic conditions in Albania. A truly modern, well-equipped force is infeasible because of such factors as the educational and technical backwardness of the people, the absence of significant industrial development, the extremely limited road and rail net, and the mountainous terrain along the borders where military action most likely would occur.

The present Army is predominantly an infantry force with virtually no heavy artillery and relatively little armored equipment. The organizational principles that apply are not those of the postwar Soviet Army. Rather, they relate more closely to the improvisations imposed on the Soviet Red Army in the early months of World War II by shortages of equipment and trained officers and by a seriously disrupted communications system. The basic Albanian line unit is not a balanced division of combined arms, but an infantry brigade, essentially composed of riflemen. There is, moreover, a very limited amount of supporting armor or artillery held at higher levels, a weakness from which the Soviet Army in World War II did not suffer. Considerable reliance is placed on mortars for fire support. This arises from the

simplicity and inexpensiveness of these weapons as well as their ease of movement, a particularly important feature in mountainous terrain.

There is little chance that the Albanian Army organization will be extensively revamped along modern lines in the future. Although some development will go on, the force will not improve its low relative position among Bloc armies.

39. HIGHER HEADQUARTERS

There are no tactical headquarters, as such, above brigade level. The two corps headquarters now in being are confined almost entirely to territorial-administrative functions. They could provide cadres for tactical corps-level headquarters, however, should these be needed in wartime or for peacetime training purposes.

40. BRIGADES

The infantry brigade comprises a headquarters, three infantry battalions, and a small artillery regiment. There also are a number of smaller units such as an NCO training battalion and signal, reconnaissance, chemical, and engineer companies. Total strength of the brigade is about 2,000 to 2,500 men. The infantry battalions do not hold more than 350 men each at their present strength. Support weapons of the battalion include a light mortar company and a heavy machinegun company. The artillery regiment probably does not exceed 500 men. It is usually made up of small battalions of 76-mm divisional guns, medium howitzers, light mortars, and light antiaircraft guns. Virtually all equipment is of Soviet type, much of it obsolete by present-day standards.

41. OTHER UNITS

a. Infantry Regiments. There are two separate infantry regiments subordinate to the Coastal Defense Command. These regiments are small, each probably not containing as many as 1,000 men. Each has three small infantry battalions

and support batteries of guns, mortars, and small infantry antitank rocket launchers.

b. Mechanized Regiment. There is a single mechanized regiment with a strength of about 1,200 men. It is organized much as are the infantry brigades and regiments, except that it contains a tank element and more motor transportation.

c. Tank Regiment. The tank regiment is organized into three tank battalions armed with T-34 medium tanks, SU-76 self-propelled support guns, and BA-64 armored cars.

d. Mortar Regiment. This small support unit is equipped almost entirely with 107-mm mountain-pack mortars. It is believed to contain four mortar battalions.

e. Antiaircraft Artillery Regiment. The AAA regiment is subordinate to the Air and Air Defense Command. Its elements are dispersed to provide for static defense of the capital and other key centers throughout Albania. Its effectiveness against modern aircraft is considered negligible. Major equipment consists of 37-mm and 85-mm AA guns.

Section III. MILITARIZED SECURITY FORCES

42. GENERAL

The Frontier Troops (*Mbrojtje I Proia Kufirit*) and Interior Troops (*Mbrojtje Populit*) were organized in 1951 when the preexisting security agency, the Division for Protection of the People, was disbanded. This organization had been established when the Communist regime in Albania was founded. Personnel for the present forces are carefully selected for their political reliability.

43. FRONTIER TROOPS

The Frontier Troops are organized into small brigade units, each containing three battalions.

The smaller units patrol sectors along the entire border of Albania. Foot patrols are maintained, particularly at night, and include the use of dogs.

44. INTERIOR TROOPS

The Interior Troops are organized into a single brigade of five small battalions. Units are dispersed throughout the country in or near major population, industrial, or other sensitive centers. They are mobile and thus can reach any trouble spot in a short time in case of need.

Section IV. WEAPONS

45. INTRODUCTION

Albania has virtually no munitions-producing capability. At the end of World War II, the Army was equipped with a heterogeneous variety of weapons including French, German, Italian, Czechoslovak, and British types. Virtually all of this equipment has been scrapped, turned over to the security forces, or placed in reserve. Army holdings now consist almost entirely of World War II Soviet equipment and of some Soviet and Czechoslovak items of recent manufacture. The Albanian Army is by far the worst-equipped Satellite force. Standard weapons are generally older and of smaller caliber than in the other armies, and the quantities held are small.

46. INFANTRY

a. General. Albanian infantry weapons consist almost entirely of Soviet types but do not include many of the postwar models. Significant quantities of German and Italian weapons are in use by the militarized security forces, although they are being gradually phased out.

b. Pistols. Army units are equipped chiefly with the Soviet 7.62-mm TT-33 pistol and M1895 Nagant revolver. Some German Luger and Walther pistols and Italian Berettas may also be used.

c. Submachineguns. Basic Army submachineguns are the Soviet 7.62-mm PPD-40 and PPSH-41 (fig. 6, p. 14). These same weapons also are replacing Italian Berettas and German Schmeissers in the militarized security forces.

d. Rifles. The Soviet 7.62-mm M1891/30 rifle and its counterpart the M44 carbine are the standard shoulder weapons. The M44 (fig. 7, p. 14) is simply a shortened and lighter version of the M1891/30; it would be classified as a rifle by U.S. standards. Some of the modern Soviet 7.62-mm SKS carbines (fig. 79, p. 117) are now on issue.

e. Machineguns. The Albanian Army employs virtually all the familiar older types of Soviet machineguns, including the 7.62-mm DP light, (fig. 20) the 7.62-mm DT tank M6, the 7.62-mm Goryunov SG-43 (fig. 8, p. 15), the M10 Maxim heavy, and the 12.7-mm M38 DShK heavy (fig. 116, p. 161).

f. Infantry Antitank Weapons. The obsolete Soviet 14.5-mm PTRD-41 and PTRS-41 anti-tank rifles are in use. They are of limited effectiveness against modern armor, but at close range they could be effective against such targets as pillboxes or lightly armored vehicles. Small numbers of the Czechoslovak 82-mm recoilless gun T-21 ("Tarašnice") (fig. 47, p. 70) are also available.

g. Grenades. Various Soviet grenades are available in varying quantities. These include the RDG-33 offensive/defensive stick, RG-42 offensive hand, F-1 defensive hand, RPG-40 antitank hand, RPG-43 HEAT hand, and RPG-6 HEAT hand grenades.

h. Mortars. Basic Army mortars in use include the Soviet 82-mm M37 and M41 (fig. 21)

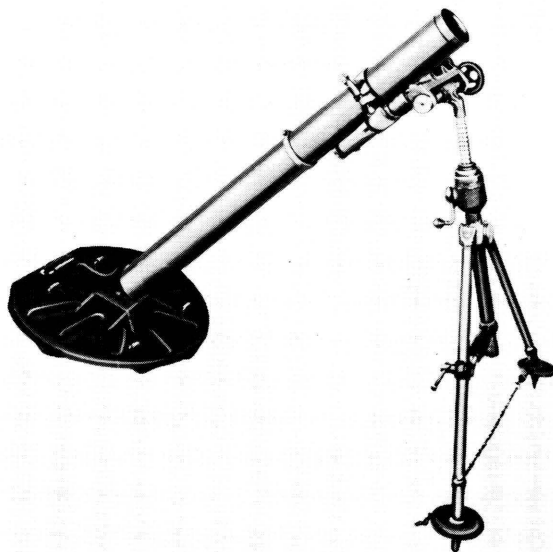


Figure 21. Soviet 82-mm Battalion Mortar M37.

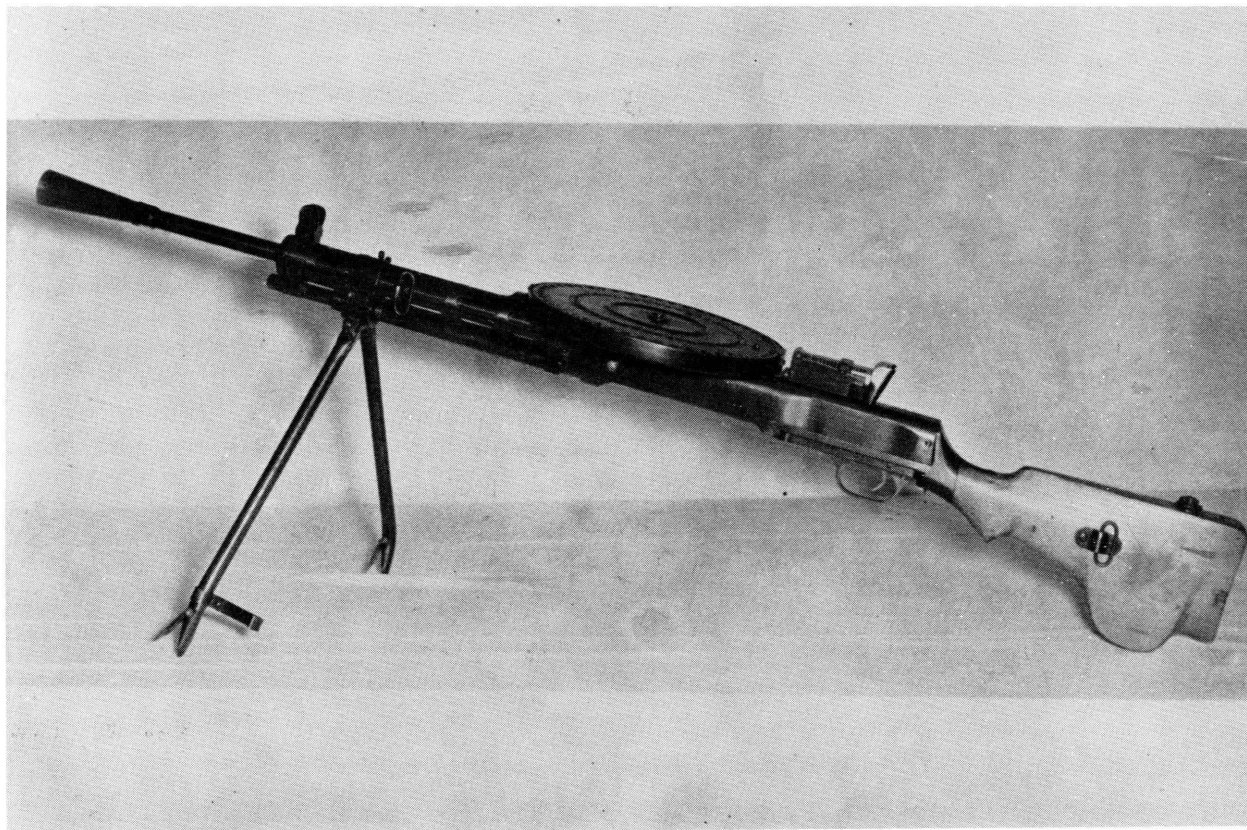


Figure 20. Soviet 7.62-mm DP Light Machinegun.

and 107-mm M38 mountain-pack. There are also some Italian, French, and German 81-mm mortars that fire the Soviet 82-mm ammunition. A small but significant number of Soviet 120-mm mortars (fig. 9, p. 15) are also available.

47. ARTILLERY

a. General. The variety of obsolete and obsolescent artillery materiel available to the Army has been replaced by Soviet weapons which are

now standard. Most, but not all, Soviet artillery pieces of World War II are available. No heavy artillery weapons or postwar types are on hand.

b. Field. The Soviet 76-mm M42 gun (fig. 81, p. 118) and M43 howitzer (fig. 22) are the primary Army artillery pieces. The Soviet 122-mm howitzer M38 (fig. 11, p. 16) and the 152-mm gun-howitzer M37 (fig. 96, p. 139) are used as medium field artillery. A number of Soviet 100-mm field guns M44 (fig. 23) are available. These

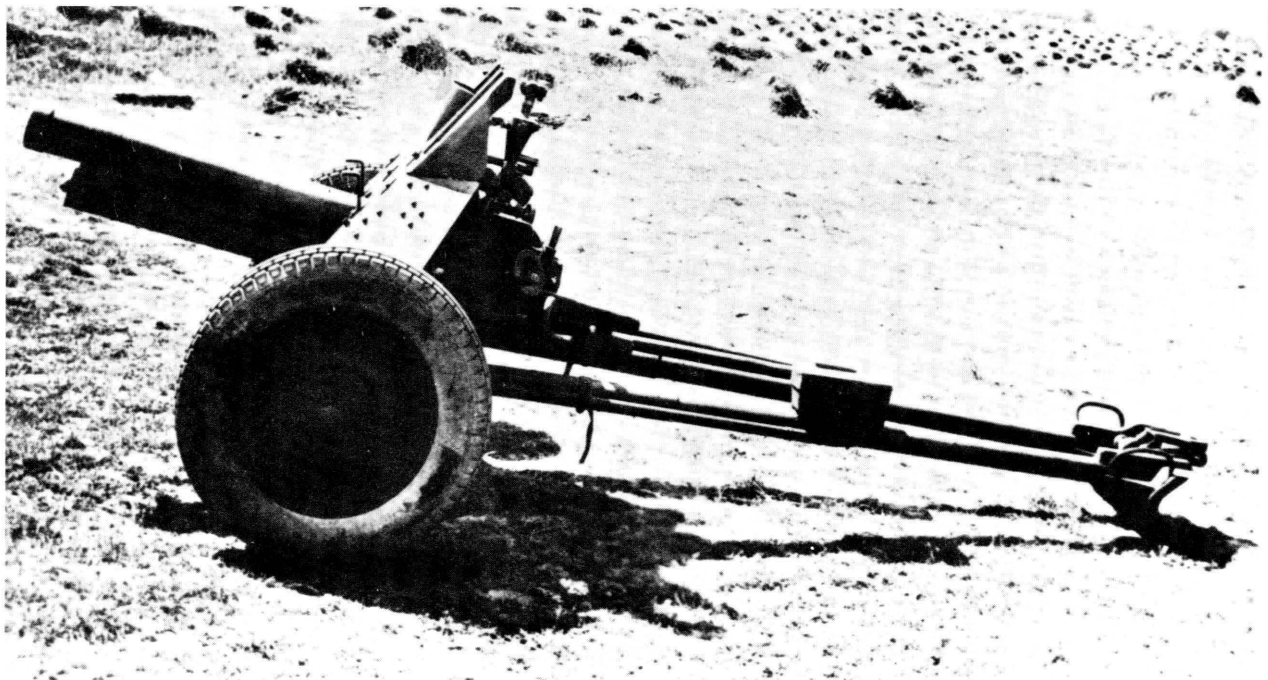


Figure 22. Soviet 76-mm Howitzer M43.



Figure 23. Soviet 100-mm Field Gun M44.

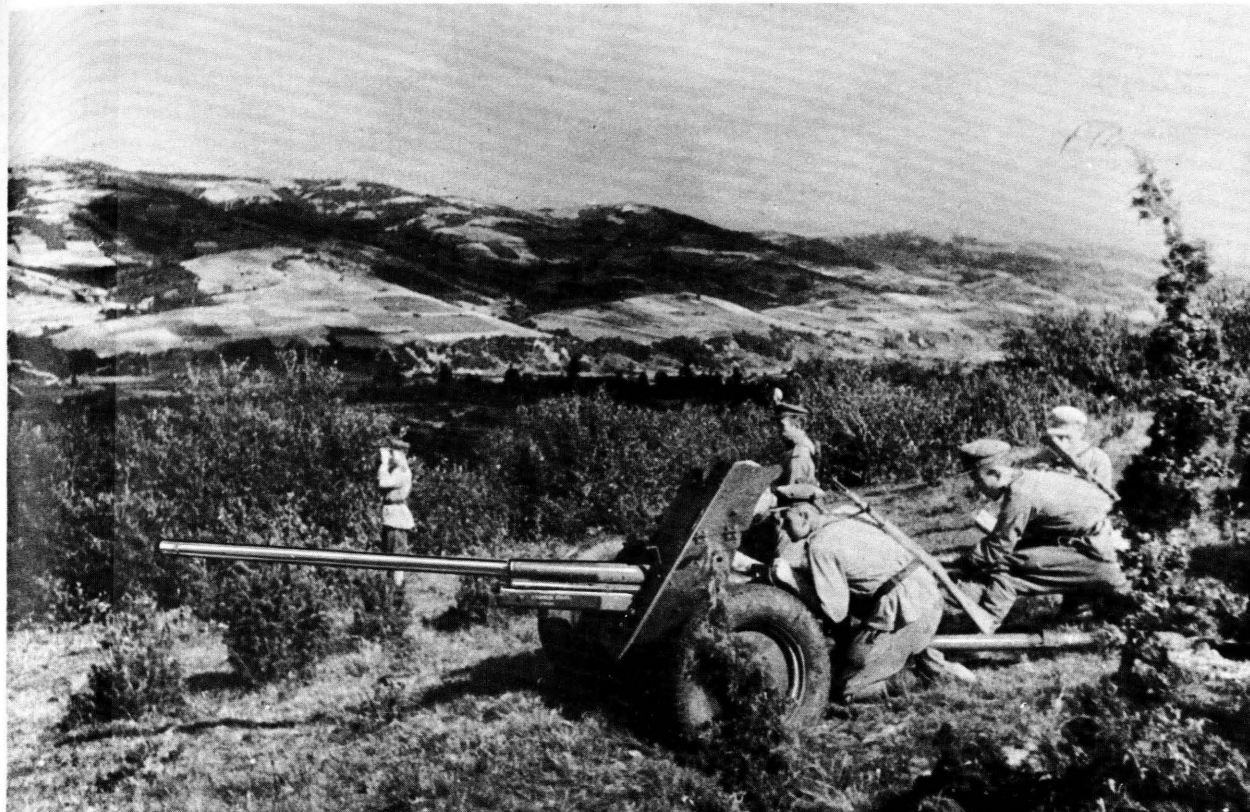


Figure 24. Soviet 45-mm Antitank Gun M42.

are believed to be used exclusively for coastal defense.

c. Antitank. The standard antitank weapon is the Soviet 45-mm M37 and M42 (fig. 24). The Soviet 100-mm M44 guns noted above can also be used in this role.

d. Antiaircraft. The standard AAA weapons are the Soviet 37-mm M39 (fig. 25) and 85-mm M39 (fig. 13, p. 17). A few German 37-mm and 88-mm guns are possibly still in use. These weapons are all of World War II vintage and possess outmoded fire control. They are of little value against modern high-speed and high-altitude aircraft.

48. ARMOR

The Albanian Army is extremely weak in armor. This condition is related to the small size and limited development of the force and the rugged mountainous terrain in which it would be em-

ployed in wartime. The total available equipment consists of modest numbers of Soviet T-34 (76) and T-34 (85) (fig. 102, p. 141) medium tanks and SU-76 support guns (fig. 122, p. 163).

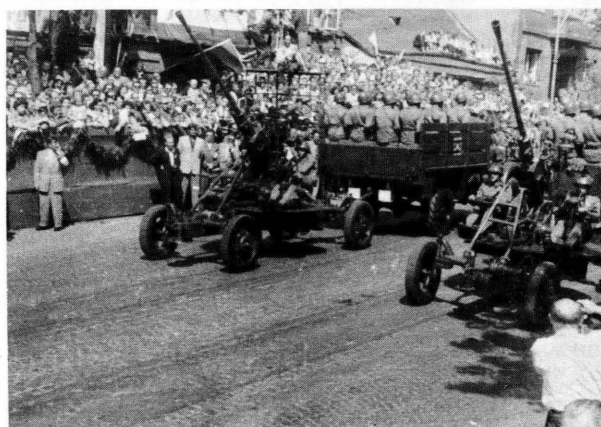


Figure 25. Soviet 37-mm Antiaircraft Gun M39 (here shown in a Polish parade).

Section V. EQUIPMENT

49. TRANSPORTATION

Albania has a variety of transport vehicles of various foreign makes. Soviet and Czechoslovak vehicles, most of them medium trucks, are replacing the others and becoming standard. Vehicles remain in short supply, however, and the Army still relies on horse-drawn equipment.

Most transport vehicles are in relatively poor condition because of inferior maintenance practices. Equipment is subject to breakdown, and repairs are frequent. Virtually all spare parts must be imported.

50. SIGNAL

The Albanian Army has only a limited amount of signal equipment. The field radio and wire equipment that is available is largely of a relatively primitive type and does not meet modern standards. Much of this equipment is left over from World War II and is of various foreign makes. A significant amount of Soviet and other Bloc equipment has been received, however, and communications capabilities may be slowly improving.

51. ENGINEER

The available supplies of engineer equipment are small. The quality of this equipment is

generally not high, and there is relatively little heavy bridging or construction materiel. The U.S.S.R. is probably the chief source of Albanian engineer equipment but does not provide the most modern types.

52. CHEMICAL

The bulk of Albanian chemical equipment has been provided by the Soviets. This equipment includes a number of protective items including protective masks, antigas capes, and protective suits. The Army is substantially better prepared for defensive actions than offensive, except that a modest capability exists for smoke and flame warfare.

53. MEDICAL

Albania is in an extremely poor position from a medical standpoint. The Army is inadequately provided with medical personnel, supplies, and equipment. The medical supplies and equipment available are outdated, and hospital facilities are not adequate to meet the requirements for peacetime. Most of the medical materiel is imported from nations of the Soviet bloc, although it is possible that small amounts of noncritical materiel are received from the West. Facilities for indigenous production of medical materiel are extremely limited.

Section VI. UNIFORMS, INSIGNIA, AND DECORATIONS

54. UNIFORMS

a. General. Personnel in the Albanian Army wear uniforms which are predominantly of Soviet design. In general, uniforms for all ranks are made of dark olive-drab wool material for winter and of olive-drab or khaki-cotton material for summer. Officers wear a dress uniform which is similar in design to the old-style Soviet dress uniform. These uniforms are discussed below and are illustrated in figure 26.

b. Winter.

- (1) *Officers.* The winter uniform worn by officers consists of the following: service cap or Soviet-style fur cap; coat; breeches or trousers; black boots or shoes; Sam Browne belt; and a gray overcoat.

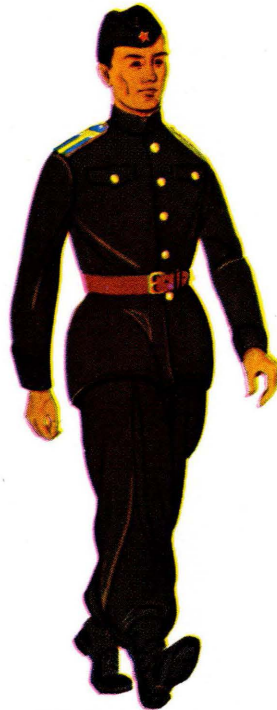
- (2) *Enlisted men.* The uniform worn by enlisted men is similar to that worn by officers, with the following exceptions: the garrison cap is worn in lieu of the service cap; the coat has only the two upper pockets instead of four; a plain leather belt is worn; and trousers are worn with leggings and shoes. In addition, an olive-drab padded jacket similar to the Soviet item may be worn in lieu of the overcoat.

c. Summer.

- (1) *Officers.* This uniform consists of the following: service cap; Soviet-style tunic; breeches or trousers; Sam Browne belt; and black boots or shoes.



WINTER UNIFORM,
OFFICERS
Captain, Infantry Shown



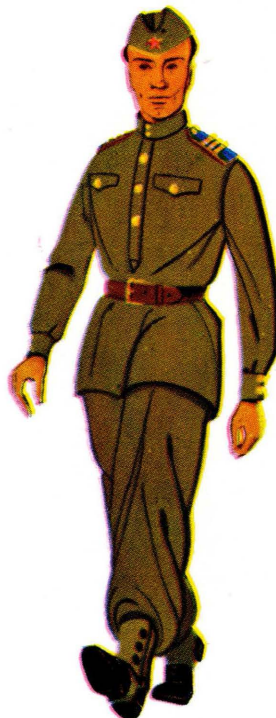
WINTER UNIFORM,
ENLISTED MEN
Master Sergeant, Artillery Shown



WINTER OVERCOAT,
ENLISTED MEN
Private, Artillery Shown



SUMMER UNIFORM,
OFFICERS
Major, Artillery Shown



SUMMER UNIFORM,
ENLISTED MEN
Sergeant, Artillery Shown



DRESS UNIFORM,
OFFICERS
Junior Lieutenant, Infantry Shown

Figure 26. Albanian Army Uniforms.

- (2) *Enlisted men.* This uniform is similar to that worn by officers, except that a garrison cap or Soviet-style steel helmet is worn, trousers and leggings are worn with shoes, and a plain leather waist belt is worn in lieu of the Sam Browne belt.

d. Officers' Dress Uniform. For parades and other special occasions, officers generally wear a uniform consisting of a service cap, coat, breeches, belt, boots, and white gloves.

e. Militarized Security Forces.

- (1) *Frontier Troops.* Members of the Frontier Troops wear the regular Army uniform but are distinguished by red shoulderboards and a brassard.
- (2) *Interior Troops.* Members of the Interior Troops wear the regular Army uniform but are identified by red shoulderboards and a brassard.

55. INSIGNIA

a. Grade.

- (1) *General.* Grades of all ranks are indicated by stars, stripes, and chevrons on shoulderboards. Grade insignia are illustrated in figure 27.
- (2) *Officers.* Gold-colored stars are used to denote grade for all officers. Company and field-grade officers also display one or two longitudinal stripes in branch color on their shoulderboards. Shoulderboards of all officers have a background of gold color.
- (3) *Enlisted men.* Insignia for enlisted grades consist of gold- or white-colored stripes on shoulderboards.

b. Branch.

- (1) *General.* Branch of service is indicated by metallic devices and by the use of color.
- (2) *Metallic devices.* All commissioned personnel, except general officers, wear metallic devices on their shoulderboards. Enlisted personnel may wear such devices but often do not. Devices are gold-colored for officers and brass-colored for enlisted men. The following devices have been reported:

Infantry.....	Laurel wreath.
Artillery.....	Two crossed cannon barrels.
Armored.....	Tank.
Engineers.....	Two crossed spades.
Signal.....	Rhomboid-shaped radio antenna.
Medical.....	Serpent and staff.
Transportation..	Car.

- (3) *Color.* Color indicative of branch of service is displayed by all officers on the band and crown of service caps, on the collar tabs and outer seams of the breeches of the dress uniform, and on the stripes and piping of the shoulderboards of company and field-grade officers. Enlisted men display a two-color combination on their shoulderboards: the background is in the branch color, but the significance of the colored piping is not known. Colors for branch of service are as follows:

Infantry.....	Red
Artillery.....	Blue
Armored.....	Black
Engineers.....	Brown
Signal.....	Brown
Medical.....	Light Blue
Transportation..	Green
Frontier Troops.....	Red
Interior Troops.....	Red

56. DECORATIONS AND AWARDS

Current information is incomplete on Albanian decorations and awards. Medals are worn on both the left and the right side of the chest. The highest medals reportedly are worn on the right. Decorations and awards are discussed below in what is reported to be their accepted order of precedence.

a. Order of "Hero of the People." The medal is awarded to national heroes. It consists of a gold disc with a half-red and half-black ribbon and is worn suspended from the neck. The medal has also been reported worn with a blue, white, and red ribbon.

b. Order of Bravery. The medal is conferred on military personnel for acts of valor. It is worn on the right chest, consists of a gold star with red rays, and has a red, yellow, and white ribbon.

OFFICERS



COLONEL GENERAL
(Arms)



LIEUTENANT GENERAL
(Arms)



MAJOR GENERAL
(Arms)



COLONEL
(Infantry)



LIEUTENANT COLONEL
(Artillery)



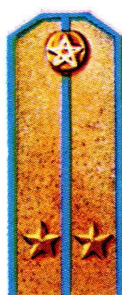
MAJOR
(Armored)



CAPTAIN 1st CLASS
(Engineers)



CAPTAIN
(Signal)



LIEUTENANT
(Medical)



JUNIOR LIEUTENANT
(Transportation)

ENLISTED MEN



MASTER
SERGEANT
(Artillery)



SERGEANT
1st CLASS
(Artillery)



SERGEANT
(Artillery)



CORPORAL
(Artillery)



PRIVATE
1st CLASS
(Artillery)



PRIVATE
(Artillery)

NOTE: Branch devices, except Artillery, are omitted because precise designs are not known. Also, enlisted men frequently do not wear branch devices. The branch color for piping on enlisted men's shoulderboards is identified for Artillery only.

Figure 27. Albanian Insignia of Grade.

c. Liberation Medal. The medal has been awarded to personnel who were in military service on the date of Liberation, 29 November 1944. It consists of a metal disc with two crossed weapons and a five-pointed star. It is worn with a yellow ribbon on the left chest.

d. Order of Skanderbeg. The medal consists of a gold disc representing the red star with Skanderbeg's head. It is worn on the right chest and is awarded to senior officers.

e. Order of the Partisan Star. This order consists of two classes: the medal for both classes is worn suspended by a green, white, and red ribbon. The First Class is awarded to brigade commanders and above. It consists of a gold disc with a red star embossed with crossed heads of grain tied with a red ribbon and is worn on the right chest. The Second Class is awarded to officers below brigade commanders. It is similar

to the First Class except that it is made of copper.

f. Order of the Flag. This medal is awarded to civilians who have distinguished themselves in the Partisan Army. It is worn on the right chest, suspended by a red ribbon.

g. Order of Military Service. This medal is awarded to all personnel who have served more than 10 years in the Army. It is a metal disc and is worn on the left chest.

h. Remembrance Medal. This medal has been awarded to those who were actively engaged in the organization of the Communist Army. It is a metal disc depicting a partisan carrying a hand grenade and the Albanian flag and is worn on the left chest.

i. People's Army Ten Years Anniversary Medal. This consists of a metal disc and was awarded on 10 June 1953 to all those serving in the Army.

Section VII. GLOSSARY OF MILITARY TERMS

Albanian is spoken by over two million people living in Albania, Yugoslavia, Greece, and Italy. It is an independent member of the Indo-European language group, distinct from the Germanic, Romance, and Slavic language families. Modern Albanian retains its peculiar grammatical structure, although the vocabulary has been heavily penetrated by Latin, Italian, Slavic, Turkish, and Greek words.

The Albanian alphabet, adopted as recently as 1908, consists of 36 letters, some of them using two Latin characters but each of them representing one sound. Stress most commonly falls on the penultimate or second-from-last syllable. However, stress is affected by Albanian use of post-positive articles (definite articles suffixed to nouns—also used in Bulgarian and Rumanian). As in French, an adjective usually follows the noun it modifies.

The following letters and letter combinations require special attention:

a.....	a in father
c.....	ts in bats
ç.....	ch in church
dh.....	th in they
e.....	e in set
ë.....	a in sofa (unstressed neutral vowel)
g.....	g in go
gj.....	gy in eggyolk (palatalized)
i.....	i in machine
j.....	y in yam

l.....	li in alien (soft)
ll.....	l in lord (hard)
nj.....	ni in union
o.....	o in long
q.....	ky in stockyard
th.....	th in think
u.....	oo in loom
x.....	dz in adze
xh.....	j in jam
y.....	ü in German <i>Führer</i> (umlaut) or French <i>du</i>
zh.....	z in azure

The following list includes many of the military terms commonly used in Albanian:

A	
aerodrom.....	airfield
aeroplan reaktivë.....	jet aircraft
ajrorë.....	aerial, air
anie.....	ship
armatosur.....	armed
armë.....	arm (branch), arms
arm'e aviacion.....	air force (branch)
armë të bardhë.....	sidearms
armë të zjarrë.....	firearms
armik.....	enemy
artilieri.....	artillery
autoblindë.....	armored car
autokollonë.....	convoy
automjet.....	motor vehicle
B	
bajonetë.....	bayonet
bataljon.....	battalion
bateri.....	battery

betajë.....	battle
bombardim.....	bombardment
bregdetarë.....	coast, coastal
brënda.....	inside
brëndëshme.....	interior
brigadë.....	brigade
bukë.....	bread
burg.....	prison
C	
copë artilerie.....	artillery piece
Ç	
çadër.....	tent
çallatë.....	helmet
çelik.....	steel
çizmet.....	boots
D	
debojë.....	depot
det.....	sea
detar.....	seaman
dekorim.....	decoration
divizion.....	division
djathë.....	to the right
dorëzohu!.....	surrender!
dragoman.....	interpreter
drejt përpara.....	straight ahead
drejtësi.....	justice
drejtori.....	directorate
dyfek.....	rifle
Dh	
dhe.....	dirt, dust
dhomë.....	room, chamber
dhomëz.....	chamber, cell
E	
eja pas meje.....	follow me
ekuipazh.....	equipment
emër.....	name
Ë	
është.....	is
F	
fishëk.....	cartridge
flamur.....	flag, banner
flotë.....	fleet
Forcat e armatosura.....	Armed Forces
forcim.....	fortification, reinforcement
fshat.....	village
ftohtë.....	cold
fuqi.....	power, force
fushatë.....	campaign
fushë.....	field
fush'e luftës.....	battlefield
G	
garnizon.....	garrison
gatuës.....	cook
gazi!.....	gas!
Geg.....	North Albanian
gomar.....	donkey
gracka për ushtar.....	booby traps

gremisje.....	demolitions
grenadë.....	grenade
grup.....	group, battalion
Gj	
gjeneral-kolonel.....	colonel general
gjeneral-leitenant.....	lieutenant general
gjeneral-major.....	major general
gjeneral i ushtrisë.....	army general
gjëmi.....	boat
gjyle topi.....	shell
gjyq ushtarak.....	court-martial
H	
hamje.....	food, provisions
hekur.....	iron
hekurudhë.....	railroad
hovicër.....	howitzer
I	
ingjiner-teknik.....	technical engineer
intendancë.....	quartermaster
ishullë.....	island
J	
janë, jeni.....	(they) are, (you) are
jashtë.....	outside
jugë.....	south
K	
kalë.....	horse
kalorësi.....	cavalry
kamsori.....	infantry
kamion.....	truck
kamp.....	camp
kapellë.....	cap
kapiten.....	captain
kapiten i parë.....	captain 1st class
kapter.....	master sergeant
kapter i parë.....	master sergeant 1st class
karabinë.....	carbine
katund.....	town
kazermë.....	barracks
kemik.....	chemical
keg.....	bad
këmbë.....	foot
këm(bë)sori.....	infantry
këpucë.....	shoes
këtu!.....	here!
klëf.....	holster
koburë.....	revolver
kollonë.....	column
kolonel.....	colonel
komandant.....	commander
komandë.....	command
kompani.....	company
korpus.....	corps
kryengritje.....	revolt
ktheu.....	detour
kuadër.....	cadre, personnel
kufi.....	frontier, border
kufitar.....	frontier trooper
kumtim.....	communicate
kundër-kemik.....	antichemical

kundërshënojt	countersign	nën-kolonel	lieutenant colonel
kundërsulm	counterattack	nënoficer	noncommissioned officer
kundër-tankës	antitank	nënrepart	subunit, small unit
kuptoj	understand	nën-rreshter	junior sergeant
kursant	student	nën-toger	junior lieutenant
		ngarkim	load, charge, mission
		ngreu me këmbë!	stand up!
		ngri duart!	raise your hands!
		ngujoj	besiege
		nxehtë	hot
			Nj
		njerës	men, persons
		njoftohu!	identify yourself!
			O
		odë	room
		oficer	officer
		ollog	camp
			P
		pakë	few, little
		pallto e madhë	overcoat
		pallto e vogël	coat
		pantallona	trousers, breeches
		paraushtarak	preliminary
		paravija	front line
		pengim	obstruction
		perëndim	west
		petkë	clothes
		përkthenjës	translator, interpreter
		përparim	advance
		përshkim	penetration
		pistolet	pistol
		plagë	wound
		plagosur	wounded
		plumb	bullet
		policija popullore	people's police
		poligon	firing range
		poshtë	down
		prapavija	rear services, supply line
		prit këtu!	wait here!
		pushkë	rifle, firearm
		pushkëtar	rifleman
		pushoj zjarrin!	cease fire!
		pyll	forest
			Q
		qafë	mountain pass
		qark	region
		qeveri	government
		qëndrë	headquarters, center
		qitës	sharpshooter
		qitje	aiming
		qytet	city
			R
		radjo lokator	radar
		radha	ranks
		re, ri	new
		regjiment	regiment
		repart	troop unit
		rezervë	reserve
kundërshënojt	countersign		
kundërsulm	counterattack		
kundër-tankës	antitank		
kuptoj	understand		
kursant	student		
		L	
lagët	wet		
lagje	zone, suburb		
lajmë	information		
lajmëtar	messenger		
largësi	distance, range		
lartë	high		
lehtë	light, easy		
letrë njoftim	identification		
lindje	east		
ligen	lake		
lokalitet	locality		
luftarak	war-, battle-		
luftë	war, battle		
luftim	action, combat		
		Ll	
lloj	type, kind		
llogari	log, record		
		M	
madhë	large		
magazinë	warehouse, store		
male	mountains		
mal(ë)sore	mountain		
manevër	maneuver		
marinar	sailor		
Marinë ushtarak	Navy		
marshim	march		
mask kundërgas	gas mask		
mbrojtje	defense		
mbrojtjes kundërajrore	antiair defense		
mbulesë	blanket		
mbulohu!	take cover		
mekanik	mechanic		
me kujdes!	caution!		
mengjër	to the left		
mësim	instruction, training		
minë	mine		
mirë	good		
mitroloz	machinegun		
mjeksore	medical		
mobilizim	mobilization		
mortajë	mortar		
motoçikletë	motorcycle		
muskë	mule		
municione	ammunition		
		N	
naftë	petroleum		
ndalu!	halt!		
ndërlidhje	signal communications		
ndërtesë	building		
ndërtim	construction		
ndjekje	pursuit		
nëndetës	submarine		
nënmitroloz	submachinegun		

rëndë	heavy
riparim	repair
rob(ër)	prisoner(s)
rojë	guard, sentry
ruaj	guard, watch
ruajtës	guard, sentry

Rr

rrang	line, rank
rreshter	sergeant
rreshtim	order of battle
rreth	district
rrëzik!	danger!
rip	belt
rrjetë mushkonjash	mosquito netting
rroket	missile
rrotë	wheel
rrugë	street, way

S

salla e hamjës	mess hall
sekcion	section
sigurimi	security
skelë	pier, port
skuadër	squadron, squad
snaiper	sniper
spital	hospital
spiun	spy
spiunazh	espionage
stërvitje	training
sulmë	offensive

Sh

shartim	vaccination
sheshe minash	minefields
shëndetësi	medical, health
shënjë	insignia, gun sight
shërbesë	service branch
shërbim ushtarak	military service
shkronjës	clerk
shofer	driver
shpejtësi	speed
Shqipëria	Albania
Shqiptar	Albanian
Shtab përgjithëshëm	General Staff
shtëpi	house
shumë	many, much

T

tankë	tank
tankist	tankman
tela me thumba	barbed wire
tetar	corporal
tetshe	squad
tirq	leggings
tog	platoon
toger	lieutenant
tokë	ground, land
top	gun, cannon
top fushore	field gun
topa të rëndë	heavy artillery (guns)

topar	gunner
topografi	topography
Tosk	Southern Albanian
transportim	transportation
trastë	knapsack
trup(e)	troop(s), corps (branch)
tytë	gun barrel

Th

thatë	dry
thikë	knife

U

udhë	road, route
udhër	order, command
ujë	water
uniformë	uniform
urë	bridge
ushqim	food, ration
ushqime	provisions, supplies
ushtar	soldier, private
ushtarak	military
Ushtri popullorë	People's Army
ushtrim	drill, training

V

vaj	oil
vajguri	gasoline
vargosu!	line up!
vdekur	dead
veri	north
vezhgues	observer
vtjetër	old
vogël	small

X

xixë	spark
------	-------

Xh

xham	windshield, window glass
xhami	mosque
xhenjer	engineer
xhenjo	engineers
xhep	pocket

Y

yll	star
-----	------

Z

zaptoj	capture
zatitës	attacking
zboj	rout
zbras	discharge (gun), evacuate
zbulim	intelligence, reconnais- sance
zinxhira	chains
zjarr	fire
zyrtare	official

Zh

zhurmë	noise
zhurr	gravel

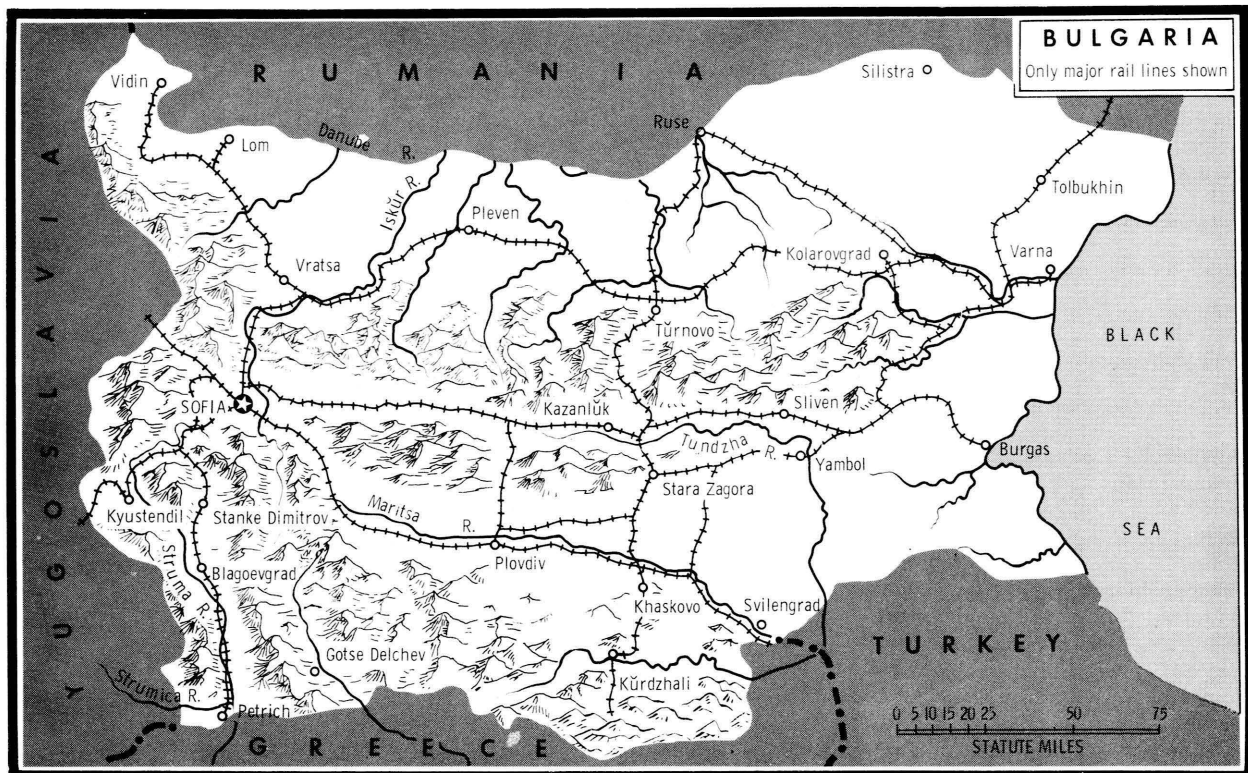


Figure 28. Bulgaria.

BULGARIA

CHAPTER 3

Section I. THE MILITARY SYSTEM

57. NATURE OF THE ARMED FORCES

a. Composition. The Armed Forces in Bulgaria include ground, naval, and air elements known collectively as the Bulgarian People's Army, plus the militarized security forces (Frontier and Interior Troops). The military services are subordinate to the Ministry of National Defense. The Frontier and Interior Troops are controlled by the Ministry of Internal Affairs and are primarily responsible for preventing illegal border crossing and for maintaining the stability of the present regime against internal subversion or revolt. Because of their military-type equipment, organization, and training, however, these forces could perform many useful tasks in war-time, including security duties in rear areas. For this purpose, units of the militarized security forces would be attached to Army field commands although they would remain technically subordinate to the Ministry of Internal Affairs. Thus, the militarized security forces can be considered auxiliary ground troops, and conscripts who complete their tour of duty with the Frontier or Interior Troops can be counted as Army ground-force reserves.

As in other Bloc states, the military forces constitute a single, highly unified armed force. The Army ground troops are by far the largest element of this force. The naval forces are small and are largely intended for coastal patrol, mine-laying and sweeping, and other limited operations. Naval units are believed subordinate to a land-based headquarters (called a corps) which apparently coordinates ground, naval, and air elements near the Black Sea for the purpose of coastal defense. There is no "Air Force" as such and the air units, made up largely of jet fighter-interceptors, are controlled by the Air and Air Defense Command, which also controls those ground antiaircraft artillery units that are assigned to territorial defense. The air defense system is closely tied in with those of the other Bloc states

and constitutes a part of the overall protective net for the industrial and population centers of the U.S.S.R.

The general Bloc-wide tendency toward control of the military by ground officers is particularly evident in Bulgaria. The present Minister of National Defense, like his predecessor, is a four-star ground-forces officer who rose to general rank while serving as a career officer in the Soviet Army in World War II. Both are Bulgarian, but they fled to the U.S.S.R. as young men to seek political asylum. In addition, the men holding virtually all of the top high command posts are ground officers, as is the commander of the coastal defense "corps."

b. Development. The history of Bulgaria is violent and strife-torn. It includes a period of national ascendancy ("Greater Bulgaria") in the Middle Ages and a series of struggles for independence from Turkish rule in more recent times. Modern Bulgarians look back on this record with pride and revere their militant traditions. They are sometimes called the "Prussians of the Balkans."

The first modern Bulgarian Army was created and equipped by Czarist Russia after the Russo-Turkish War of 1877-78. This Army first took the field in 1885-86 and was successful against that of the neighboring Serbs who, though fellow Slavs and Orthodox Christians, have been traditional enemies of the Bulgarians. A form of universal conscription, introduced during this war, has become a fixed practice continued by the present Communist regime. In the early Twentieth Century, German influence became predominant in Bulgaria (having replaced the Russian). Bulgaria fought on the side of the Central Powers in World War I and German influence remained strong even after that conflict.

The Bulgarian Army fought well in World War I, occupying much former Serbian territory and successfully preventing, until late in the war, an

advance northward by a large, multinational Allied expeditionary force based on Salonika. Bulgaria finally was forced to surrender and her fate was determined by the Treaty of Neuilly. By this treaty, a severe limitation was placed upon the size of her armed forces. For this reason, as well as for the frustration of various territorial aspirations, Bulgaria was consistently on the side of the revisionist powers between World Wars I and II.

Bulgaria undertook measures to circumvent the treaty limitations. For example, a force of Bulgarian labor troops, known as *Trudovaki*, was established in the early 1920's—a model which Hitler copied later. This was, in effect, a highly militarized force armed with shovels instead of guns. The *Trudovak* organization still exists and because of its militarized nature, as well as the fact that it is now under Army control, is included in estimates of total Army ground force strength.

Bulgaria entered World War II on the side of the Axis in 1941. Her territory served as a major staging area for the German attack on Yugoslavia and Greece. The Bulgarian Army did not participate directly in the Balkan campaigns, but was used to occupy areas of Greece and Yugoslavia that long have been coveted by Bulgaria.

Public opinion was aroused by the German attack on the U.S.S.R. The Sofia government refused to provide troops for that campaign or to declare war on the Russians, with whom the Bulgarians feel a strong kinship. This stems from racial and religious ties and a general tradition of Russian support for Bulgarian national interests.

Bulgaria capitulated in September 1944 (when Soviet troops, attacking through Rumania, reached Bulgaria's northern border). The country then provided a force of some 200,000 men to participate with the Soviet Red Army in the liberation of Yugoslavia. In early 1945, the Bulgarian First Army, with about 100,000 troops, was attached to the Soviet Third Ukrainian Front for a push into Hungary and Austria.

September 1944 marked an end to the extended period of German influence in Bulgarian military affairs and its replacement by Soviet. Little was done by the Soviet-dominated Communist regime in the years immediately after the war to develop or sustain an effective military force, and the Army was permitted to deteriorate. During this period the Army purged itself of German influence and

of those officers and enlisted men who could not be relied upon to serve Communist policies as set down by the Kremlin.

"Sovietization" began in earnest in 1948. This involved careful political screening and indoctrination for all personnel as well as the wholesale adoption of Soviet organization and tactical concepts and Soviet-type equipment. By 1950, the Army had undergone a revolution. It was the first Satellite force to be "Sovietized" and to reach and sustain a significant standard of combat readiness.

c. Status. In the last several years at least two Satellite armies—the Czechoslovak and Polish—have come to exceed the Bulgarian in overall combat effectiveness. Both of these have received substantially larger numbers of more modern weapons and equipment and have adopted more advanced Soviet organizational concepts. It appears that the falling behind of Bulgaria results from relatively lower educational and technical standards and consideration of the more rugged terrain over which much of the Bulgarian military effort in a future war would be expended. A further possible explanation is that the armies against which Bulgaria might fight—the Turkish, Greek, or Yugoslav—are themselves less highly developed than are the NATO forces concentrated in West Germany which Polish and Czechoslovak troops might oppose. Nonetheless, from the standpoint of the scope and intensity of Army training and the fighting capacity and reliability of the respective individual soldiers, Bulgaria still constitutes perhaps the staunchest Soviet ally in the entire Bloc.

The Army ground forces constitute a compact, well-trained force of slightly more than 100,000 men. Their size is determined largely by the country's small population and the compulsory 2-year term of conscript service. The number of fit male youths available for induction into the Army ground forces each year is well below 50,000, after allowance is made for those taken into the naval, air, and militarized security forces. The size of the age class available for conscription each year should begin to increase in the near future, thus permitting a gradual, but modest, increase in Army strength.

The basic line units are the rifle divisions, comparable in organization to those in the Soviet Army some years ago. There is as yet no evi-

dence that Bulgaria is reorganizing these units into the more modern motorized rifle divisions as have several other Satellite armies. There are no mechanized or tank divisions in Bulgaria, although the Army possesses a number of tank brigades which could be converted into units of division size with little difficulty.

The Army is well equipped with standard Soviet weapons, but these do not include some of the more modern conventional ground weapons issued to Soviet and some other Satellite troops. Maneuvers have been conducted by combined-arms forces of corps or army size every year since 1951.

In wartime, Bulgarian forces could attack Greek and Turkish Thrace. They might also attempt to conduct limited penetrations of other Greek territory and of southern Yugoslavia. The Army could not effectively withstand an attack by modern forces, but it is well equipped and trained for warfare against the existing forces of neighboring countries. Sustained combat would require extensive logistic support in



Figure 29. Bulgarian Troops Training on Soviet T-34 Tanks.

almost all major categories of equipment and supply from the Soviet Union.

58. THE HIGH COMMAND

Top control of the Bulgarian Armed Forces follows the familiar Bloc pattern (ch. 1).

59. TERRITORIAL ORGANIZATION

Bulgaria is divided into a western, central, and eastern area for the purposes of military administration. The western area is administered by a corps headquarters at Sofia, the central area by an army headquarters in Plovdiv, and the eastern third of the country by another army headquarters at Sliven. Although called corps and armies, these various area headquarters are not considered tactical headquarters. Their function is that performed by military district headquarters in other Bloc states. They are responsible primarily for the logistic and administrative support and control of the units within their territory. In addition, they serve as a superior echelon in the operational control line passing from the Defense Minister to the field units. As such, they exercise supervision over training and other activities and are generally responsible for the state of combat readiness achieved by the units within their territorial jurisdictions. In time of war, or for peacetime maneuvers, the respective corps and army headquarters can provide cadres for large-unit field headquarters.

The division of the country reflects possible wartime operational requirements. Each of the three administrative regions includes along its borders an area of primary strategic importance. The Sofia corps, for example, controls the Bulgarian portion of the Kyustendil gap, historic attack route into Serbia or Yugoslavia. The Plovdiv army area, previously considered intended as a logistics base to be used to raise new troop units in wartime, now includes the southwestern corner of Bulgaria with the major access routes into Yugoslav Macedonia and northern Greece. The army headquarters at Sliven has the critical border with European Turkey within its area of competence.

60. ORGANIZATION OF THE ARMY FOR WAR

In wartime, the several rifle divisions within each territorial command would quickly be brought

up to full strength and subordinated to a field headquarters, probably a rifle corps. If given time, additional units might be raised and army headquarters established. Some or all of the standing divisions would probably be used to help form additional units of the same size by providing cadres. In case of extensive mobilization, some divisions consisting entirely of reserves could be raised. In addition, the tank brigades probably would be raised to division level by inducting reserves. It is believed that while the size of the respective forces would vary with differing wartime circumstances, separate field headquarters would operate in each of the three main strategic areas described above.

Section II. ORGANIZATION OF THE FIELD FORCES

61. ARMS AND SERVICES

The Bulgarian Army ground forces are divided into combat and service branches. Combat branches include Infantry, Armor, Artillery, Signal, Engineer, and Chemical troops. Each of these, except the main arm, Infantry, is administered by a special-staff directorate. The Infantry is administered directly by the various functional agencies of the Defense Ministry. The service branches include Motor Transport, Medical, Veterinary, Finance, Intendance (Supply), Administration, and Legal. The service branches also are represented on the high command by separate staff directorates, but their activities are controlled and administered to varying extents by the rear-services system.

62. PRINCIPLES OF TACTICAL ORGANIZATION

The Bulgarian Army follows Soviet organizational principles rather closely. It is well behind most of the other Satellite armies, however, in adopting the most modern changes and modifications developed by the Soviets. There is no evidence, for example, that the present rifle divisions will be reorganized into motorized rifle divisions in the near future. Such a development will require a considerable increase in equipment holdings especially of armor, transportation, and communications.

Most of the standing units are at only about 50 to 60 percent of the wartime strength prescribed by the now-outmoded Soviet TOE's

The present force of just over 100,000 men could be rapidly expanded by mobilization to several times its present size, although extensive Soviet logistic support would be needed. A force of up to 30 divisions could be organized and readied for combat within 6 months. The bulk of the mobilized force would be composed of reserves who have served in the Army since its Sovietization. The number of such reserves exceeds half a million men. The total number of fit males of military age is near one and a half million, and many of these have had military experience during or before World War II.

which they follow. In some instances, moreover, older or smaller caliber weapons are used than are called for. Such discrepancies could be overcome in wartime, however.

63. HIGHER HEADQUARTERS

The Bulgarian Army has corps and army headquarters. These are not at present tactical commands, although the corps headquarters located on the east coast may exist to coordinate coastal defense actions by ground, sea, and air forces. The existing headquarters could be used in wartime to raise cadres for tactical field commands. At present they often provide higher staffs to control large-unit training activity. Each headquarters has a substantial number of support troops assigned to it, even in peacetime.

64. TACTICAL UNITS

a. Line divisions. Bulgaria has only one type of line division, the rifle division, including a minor variant, the mountain rifle division. The rifle division is organized as were those in the Soviet Army until about 1954. It is basically an infantry unit although it contains a tank and assault-gun element and well-diversified artillery support as well.

b. Other Units. The Army has a relatively high proportion of nondivisional units of both line and support type. These include a number of brigades and regiments maintained since the inactivation of their parent line divisions in recent years. These could provide the nuclei for

the rapid reestablishment of several divisions upon mobilization. All the nondivisional units are organized along Soviet lines. They include independent rifle, mountain rifle, and tank brigades

and numerous separate regiments, chiefly of artillery and AAA type. The battalions include several parachute units that may, in fact, constitute a single airborne brigade organization.

Section III. MILITARIZED SECURITY FORCES

65. GENERAL

The militarized security forces are the Frontier Troops (*Granichni Voyski*, GV) and Interior Troops (*Vutreshni Voyski*, VV). These forces are controlled by a main directorate of the Ministry of Internal Affairs.

The GV and VV each number between 15,000 and 20,000 men. They are well-trained, disciplined, and reliable. They wear military-type uniforms and are armed with infantry weapons. They are trained in small-unit infantry tactics in addition to their specialized security duties.

The peacetime missions of the GV and VV are, respectively, maintaining border security and defending the regime against internal disorder. They are also auxiliary ground forces, and in time of war GV and VV units could be attached to Army field commands for special purposes; in emergencies they could be employed in the line for combat.

66. FRONTIER TROOPS

a. General. The Frontier Troops are designed to defend the borders of Bulgaria against small-scale penetrations by hostile neighbors, to prevent illegal entry into or egress from Bulgaria, to cooperate with other security organizations in maintaining internal security in border areas, and to assist the civil police in the event of local disasters. In addition, Frontier Troops conduct limited tactical intelligence and espionage operations across the Bulgarian borders.

The Frontier Troops are subordinate to the Main Directorate of Frontier and Interior Troops. Personnel are selected from the men called up each autumn for compulsory military service and serve 2 years. Political reliability is a prime consideration in the selection of recruits; the district boards of the Dimitrov Union of People's Youth (DSNM) submit the names of those young men who are considered particularly reliable to the conscription boards. Many of the conscripts chosen for the Frontier Troops are DSNM members.

b. Unit Organization and Operation. The organization of Frontier Troop units is similar to that of army infantry units, permitting ready incorporation into the army structure in the event of war. The *otryad* (plural, *otryadi*), equivalent to an understrength regiment, is the basic tactical unit of the Frontier Troops. It is responsible for guarding a designated area of the frontier. Each *otryad* is composed basically of three to five subordinate units of approximately company strength, called *komandaturi* (singular, *komandatura*) and each *komandatura* is further organized into three or more *zastavi* (singular, *zastava*) which approximate a platoon. The total size of each *otryad* varies, depending on the nature of the terrain and the degree of activity within the segment of the frontier for which an *otryad* is responsible. Most of the Frontier Troop units and personnel are concentrated along the Turkish, Greek, and Yugoslav borders.

The armament of the *komandatura* normally consists of the standard Soviet rifles, carbines, submachineguns, and grenades. Heavier weapons, such as mortars and antitank guns, are maintained at depots.

The control of the border is maintained by the *zastavi*, each comprising about 3 officers and 50 to 60 men. The tactics of border patrolling are based on a translated Soviet manual.

In accord with its mission, each *zastava* maintains roving, semiroving, and static guards. Roving guards include groups which patrol the border, identity-card check patrols operating on the roads and paths, standby groups of 5 or more men and a dog to reinforce patrols and ambushes as needed, border messengers carrying documents and mail, scout groups of 10 or more men to detect and intercept border-crossers, and guard escorts for persons under arrest.

Semiroving guards include the *zastava's* sentries, passport-check guards, and port guards, all of which patrol within a limited radius.

The static guards maintain posts or ambushes at designated points where evidence indicates border

violations occur, or where constant observation of the border or of neighboring territory is considered necessary.

In cases of emergency, provisions are made for reinforcement of the Frontier Troops by armed civilian groups from border villages. Villagers who have completed military service and are considered reliable are trained by the frontier units and issued weapons.

c. Training. Conscripts normally receive basic training in the *otryadi* to which they are assigned. They are instructed in party affairs, border control, battle tactics and drill, the use of weapons, disciplinary and garrison regulations, and physical training, in accordance with programs established by the *Otryad* training office and general requirements of the training office of the Frontier Troop command. After this course is completed, training is continued within the *zastavi* to which the troops are assigned.

Candidates for noncommissioned officer training are selected by *otryad* commanders from among those recruits who are superior in education and efficiency. They are trained at a special school which is directly subordinate to the Frontier Troop command. This training extends over a 9-month period. Graduates receive various noncommissioned ranks depending on their performance and political reliability.

Other schools for the training of noncommissioned officer technicians and specialists also exist.

Officer candidates are selected from Party officials and from Frontier Troop noncommissioned officers of demonstrated proficiency. Possession of a high school education is reportedly a prerequisite for admission to officer candidate school. Candidates are trained to become combat, politi-

cal, signal, or engineer officers in courses extending over a 3-year period. The graduates receive the rank of candidate officer, junior lieutenant, lieutenant, or senior lieutenant, depending on individual merit and length of prior service.

Each year a few Frontier Troop officers, together with officers of the regular armed forces and the Interior Troops, are admitted to Soviet schools for training. Upon return to Bulgaria, these officers are assigned to key staff or operational posts.

67. INTERIOR TROOPS

a. General. The Interior Troops are also under the Main Directorate of Frontier and Interior Troops. Large-unit, usually battalion, headquarters are located in cities and large towns; smaller units, companies and below, are located in towns and villages throughout the country. Recruits for the Interior Troops are selected by conscription boards, largely for political reliability. Usually they belong to the Dimitrov Union of People's Youth (DSNM). The basic term of service is 2 years.

b. Training. Recruit training for Interior Troops lasts for 5 or 6 months. The first month of training includes instruction in political theory, close-order drill, service regulations, and general courses on maintaining the security and control of towns. Weapons are usually issued during the second month when troops are given weapons familiarization, drill, and tactical training in squad-level exercises. During the third and fourth months, this training proceeds to platoon and company level, and in the fifth month, battalion level. Throughout this training, an intensive political training program is conducted.

Section IV. WEAPONS

68. INTRODUCTION

Bulgarian munitions production is on a very small scale, and no significant weapons are locally produced. Virtually all arms in the hands of the Army are of Soviet manufacture, although some infantry AT weapons and artillery rocket launchers are of Czechoslovak postwar manufacture. This equipment is of good quality, the bulk of it of World War II standard. Soviet equipment of postwar models is becoming available in growing quantities. German World War II equipment has been relegated to reserve stockpiles.

69. INFANTRY

a. General. Most Bulgarian infantry weapons are of Soviet type and World War II standard, although the latest Soviet infantry weapons are appearing. Weapons holdings are believed adequate for peacetime needs and for limited mobilization. Some component parts are produced locally for replacement. Ammunition production is adequate for peacetime needs and probably could be expanded substantially in wartime.

b. Pistols. The various German pistols which were standard in the Army during and after

World War II have been completely replaced, although some are still in service in the Frontier and Interior Troops. The standard Army sidearm is the Soviet 7.62-mm TT (Tula-Tokarev) M33 pistol.

c. Submachineguns. The standard submachinegun is the Soviet 7.62-mm PPSH-41 (fig. 6, p. 14); limited numbers of the PPS-43 (fig. 30) may also be available. The new Soviet 7.62-mm AK submachinegun (fig. 31) is also on issue in some quantity. The AK is an effective modern weapon. It fires the same round as the new Soviet SKS rifle and RPD light machinegun. The weapon is gas operated and capable of selective fire, semiautomatic and full automatic.

d. Rifles. The standard Army rifles are the Soviet 7.62-mm M44 carbine (fig. 7, p. 14) and M1891/30 sniper rifle. The modern Soviet 7.62-mm SKS carbine (fig. 79, p. 117) has also been

acquired in limited numbers. Both the M44 and SKS carbines would be classified as rifles in the U.S. Army. The SKS fires the common new 7.62-mm rifle round. It is a gas-operated, semiautomatic weapon. The Bulgarians probably still employ a few World War II type German and Czechoslovak Mauser rifles in the police and security organizations.

e. Machineguns. Soviet machineguns are now standard in the Army. These include the 7.62-mm RPD (fig. 32), DP (fig. 20, p. 29), and RP-46 light, 7.62-mm Goryunov heavy SG-43 (fig. 8, p. 15), and 12.7-mm DShK M38 (fig. 116, p. 161) and 14.5-mm ZPU-2/ZPU-4 heavy antiaircraft machineguns (figs. 117, p. 161, and 98, p. 140). A wide variety of older weapons of foreign makes, formerly standard, have been scrapped or relegated to war reserve, although some may still be used by the security forces.



Figure 30. Soviet 7.62-mm PPS-43 Submachinegun (being replaced by AK, fig. 31).



Figure 31. Soviet 7.62-mm AK Submachinegun.



Figure 32. Soviet 7.62-mm RPD Light Machinegun.

f. Infantry Antitank Weapons. The Bulgarians employ infantry AT weapons of two main types. The Czechoslovak AT grenade launcher P-27 ("Panceřovka") (fig. 46, p. 70) is a light, shoulder-fired recoilless weapon, similar to the Soviet RPG-2 recoilless AT grenade launcher. The other weapons are the Soviet 82-mm recoilless gun B-10 (fig. 118, p. 162) and Czechoslovak 82-mm recoilless gun T-21 ("Tarašnicě") (fig. 47, p. 70).

g. Grenades. All standard Soviet hand grenades are believed to be in use. These include the RG-42 offensive/defensive and the F-1 defensive hand grenades.

h. Mortars. Standard Bulgarian mortars are of Soviet origin. They include the 82-mm battalion mortar M41 and M37 (fig. 21, p. 29), the 107-mm mountain-pack regimental mortar M38, the 120-mm mortar M43 and M38 (fig. 9, p. 15), and the 160-mm mortar M43 (fig. 80, p. 118).

70. ARTILLERY

a. General. Soviet light and medium artillery is standard; older German equipment is either limited standard or in reserve. The Bulgarian munitions industry produces no more than component parts for light artillery and a small quantity of light artillery ammunition.

b. Field. The Army is equipped with a full range of Soviet field artillery pieces. The more important of these are the 76-mm field gun M42 (fig. 81, p. 118), the 85-mm field gun D-44 (fig. 10, p. 16), the 100-mm field gun M44 (fig. 23, p. 30),

the 122-mm howitzer M38 (fig. 11, p. 16), and small numbers of the 203-mm howitzer M31 (fig. 33). Sizable numbers of the complete family of German field pieces used during World War II are held in reserve or have been scrapped.

c. Antitank. The only standard AT weapon is the Soviet 57-mm Soviet gun M43 (fig. 12, p. 17). Some of the obsolete Soviet 45-mm AT guns M42 (fig. 24, p. 31) are still in limited use. The 76-mm, 85-mm and 100-mm field guns are also used in the antitank role.

d. Antiaircraft. The Soviet 37-mm M39 (fig. 25, p. 31) and 85-mm M39 (fig. 13, p. 17) AA guns are in standard use. They are gradually being replaced, however, by the more modern and effective 57-mm S-60 (fig. 64, p. 96) and 100-mm KS-19 (fig. 99, p. 140) guns. A few of the 130-mm M55 AA guns (fig. 34) have also been observed in the hands of Bulgarian troops. German World War II weapons, both light and medium, are limited standard, are in reserve, or have been scrapped.

e. Field Rocket Launcher. Two types of field rocket launchers are in use by the Army. One of these, the Soviet 82-mm (48-round) launcher, is of Soviet World War II manufacture. The other is the Czechoslovak-designed and produced 130-mm (32-round) RM-130 (fig. 52, p. 72). There is no evidence that any of the modern heavier Soviet truck-mounted launchers, ranging from 140- to 280-mm, have yet been received.



Figure 33. Soviet 203-mm Howitzer M31.



Figure 34. Soviet 130-mm Antiaircraft Gun M55 with AT-T Heavy Tracked Prime Mover in a Sofia Parade.

71. ARMOR

a. Tanks. The Bulgarians rely primarily on the well-known Soviet T-34(85) medium tank (fig. 29, p. 43) for armored support. Increasing numbers of the modern Soviet T-54(100) medium tanks (fig. 14, p. 18) are appearing in the hands of troops, and there may also be a few Soviet heavy tanks, although the presence of the latter is not confirmed.

b. Assault Guns. Standard assault guns include the SU-76, more appropriately termed a "support gun" (fig. 122, p. 163) and SU-100 (for Czechoslovak version of which, see fig. 54, p. 73), and the JSU-122 (fig. 15, p. 18). All are of Soviet design and manufacture. Only relatively small numbers of the JS-122 are available at present.

Section V. EQUIPMENT

72. TRANSPORTATION ¹

The Bulgarian Army has a heterogeneous assortment of transport vehicles, including Soviet, East German, Hungarian, and Czechoslovak. There is no local production, and vehicles are in relatively short supply. In addition, it is believed that maintenance standards are low and that the condition of the equipment is poor. Largely as a result of these considerations, the Army relies to a considerable extent on horse-drawn equipment.

The trucks currently in service include the following Soviet-type vehicles: ZIS-150 4½-ton cargo, ZIS-151 5-ton cargo and personnel (fig. 17, p. 19), GAZ-51 2½-ton cargo, GAZ-63 2-ton cargo and personnel (fig. 98, p. 140), and YaAZ-210G heavy-duty prime mover. Czechoslovak-made diesel-powered trucks include: Praga-V3S 5½-ton (fig. 55, p. 73), Skoda 5-ton cargo, and Tatra-111 11-ton heavy-duty (fig. 56, p. 74). The most numerous East German vehicle is the H3A 4-ton diesel truck (fig. 68, p. 98). The principal Hungarian vehicle is the Csepel-350 4-ton diesel truck (fig. 87, p. 121).

The Soviet Ya-12 and M-2 (fig. 18, p. 19) tracked prime movers are standard equipment. Several World War II German half-tracked prime movers of unknown type may also still be in service.

73. SIGNAL

a. General. Bulgaria is primarily dependent on the U.S.S.R. for all types of signal equipment. There is also limited local production of some types of equipment, and a few items have been acquired from Hungary and East Germany. There has been a trend since 1954 away from chief dependence on the telephone as a communications

means. There is no evidence of the use of VHF or UHF as yet, however. Available equipment is believed adequate for local peacetime needs, despite shortages and some dependence on inferior equipment.

b. Radio Sets. Virtually all the radio equipment comes from the U.S.S.R. This includes the EP-13 M1936, ERB, ERBEM, A-7-A, A-7-B, 13-R, RB, RB-M, RBM-1, RBM-5, RBE, ROM M1948, and 12-RP. German models include the Berta, B.U.F.E., and SPEZ 4456BS and M1938 radios. The Hungarian R/3 is also in use, particularly in artillery units.

c. Wire. Wire equipment includes several German items, although these are gradually being replaced by those of Soviet and, in a few cases, Bulgarian manufacture. It is believed that available equipment is generally of World War II standard and that quantities are below desired levels for peacetime military needs. The U.S.S.R. probably will assist in overcoming this deficiency with continued shipments of basic items.

74. ENGINEER

Only limited quantities and types of engineer equipment are produced in Bulgaria. Most standard equipment has come from the U.S.S.R. Other items have been provided by Czechoslovakia, and by Bulgaria's Axis allies during World War II.

Available engineer equipment includes most basic items and is of adequate quality. It does not include the most modern types of equipment available to the Soviet or the larger Western armies.

75. CHEMICAL

Bulgaria's chemical warfare equipment is adequate in quantity and quality to provide a good initial defensive capability. Much of it is provided

¹ Cargo capacities are given here in approximate U.S. short-ton equivalents, rather than in the larger metric-ton units which are frequently encountered elsewhere.

by the Soviets, upon whom the Bulgarians would be dependent for wartime resupply. The Army has a limited capability also for flame warfare and smoke operations. There is no known potential for offensive toxic warfare.

The standard protective mask is the Soviet Shlem-1, normally used with the MO-2 canister. Protective clothing is primarily of Soviet origin, although some Bulgarian equipment is available. The most commonly used items are the protective capes and antigas socks. There are also a number of antigas suits of various types.

Smoke munitions include artillery and mortar shells, stick grenades, and hand smoke pots. Some Soviet flamethrowing weapons are available for Army use.

Section VI. UNIFORMS, INSIGNIA, AND DECORATIONS

77. UNIFORMS

a. General. The Bulgarian Army has produced a standard olive-drab uniform which resembles the Soviet uniform in general design, though not always in color. Considerable standardization has been accomplished, but variations of design and color in uniform items are still observed. A trend toward nationalism has been evidenced in the recent appearance of the traditional Bulgarian national colors in collar insignia. The buckle emblem, which had been the five-pointed star, is being replaced by the lion emblem.

The same uniform is worn for both field and service. Winter uniforms are made of coarse wool and summer uniforms of a linen-like material, presumably cotton. Generally, the uniforms of the officers are of better quality and tailoring than those of enlisted personnel. Uniforms are illustrated in figure 35.

b. Field-Service

- (1) *Officers.* The winter uniform consists of the following items: service cap or garrison cap with earflaps; coat; breeches; boots; Sam Browne belt; gray overcoat; and brown gloves. A plain brown belt with solid buckle may be worn with the overcoat instead of the Sam Browne belt. The summer uniform consists of the tunic (*gymnastyorka*), breeches or trousers, boots or low-quarter shoes, and

76. MEDICAL

Bulgaria possesses an extremely limited potential for producing medical supplies and equipment. Stocks of medical materiel on hand at present are not adequate to meet requirements without importation. The system would be totally inadequate to meet the requirements of a sudden national medical emergency. A large portion of the available military medical equipment is of pre-World War II origin, and replacement parts are difficult to obtain. Most of the necessary medical supplies are imported from Bloc nations, although some noncritical supplies come from the West.

Military hospitals have a reasonable staffing and equipment level for peacetime operations but would not be able to meet the requirements presented by a war situation.

belt. Garrison cap or helmet may be worn with this uniform.

- (2) *Enlisted men.* The enlisted men's winter uniform is similar to that worn by officers with the following exceptions: short boots with cotton leggings and trousers are worn at all times; a fur cap may be substituted for the garrison cap; and a belt with a solid gold-colored buckle embossed with the Bulgarian lion or the five-pointed star emblem is worn in lieu of the Sam Browne belt. The summer uniform is the same as the officers' summer uniform except that short boots with cotton leggings and trousers are worn at all times.

c. Dress. Detailed information on dress uniforms of the Bulgarian military is not available. Armored officers have been observed wearing the western-style coat and khaki or white shirt with black tie, trousers, and shoes.

d. Women. Women in the Bulgarian Army wear uniforms similar in design to those worn by male personnel. Skirts and berets are worn in lieu of trousers and caps. Collar tabs depicting branch of service are not worn by female personnel.

e. Special.

- (1) *Cold weather.* A two-piece olive-green quilted uniform closely resembling the Soviet padded assembly is worn by Bulgarian troops in extreme cold weather.



WINTER FIELD-SERVICE UNIFORM, OFFICERS
Lieutenant Colonel, Infantry Shown



WINTER FIELD-SERVICE UNIFORM WITH OVERCOAT OFFICERS
Colonel, Engineers Shown



WINTER FIELD-SERVICE UNIFORM, ENLISTED MEN
Corporal, Artillery Shown



WINTER FIELD-SERVICE UNIFORM WITH OVERCOAT, ENLISTED MEN
Master Sergeant, Intendance Shown



SUMMER FIELD-SERVICE UNIFORM, ENLISTED MEN
Sergeant, Artillery Shown



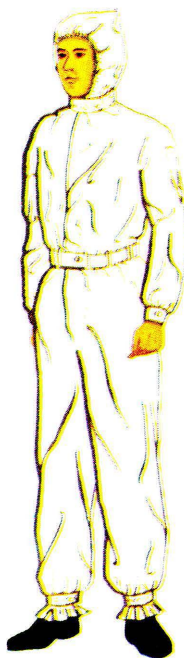
WINTER FIELD-SERVICE UNIFORM, WOMEN OFFICERS



SUMMER FIELD-SERVICE UNIFORM, WOMEN ENLISTED PERSONNEL



WINTER SPECIAL UNIFORM



WINTER CAMOUFLAGE UNIFORM



PARATROOPERS' UNIFORM

Figure 35. Bulgarian Army Uniforms.

- (2) *Camouflage.* A one-piece white coverall with hood is worn for winter camouflage. A summer camouflage jacket in the standard green and brown mottled pattern has been observed.
- (3) *Paratroopers.* In addition to the regular Army-type uniform, paratroopers are issued special items which include a camouflage jacket and elbow and knee protective pads. A close-fitting soft leather or canvas helmet with straps fastening beneath the chin may occasionally be worn; however, the steel helmet is generally worn.
- (4) *Armored.* Dark green or blue-black one-piece coveralls are worn by crews of armored vehicles. Leather crash helmets complete this uniform.

f. Militarized Security Forces. Frontier Troops and Interior Troops wear Army Uniforms with distinguishing insignia of branch.

78. INSIGNIA

a. Grade.

- (1) *General.* Insignia of grade closely follow the Soviet system. Grades are indicated by varying numbers and sizes of stars and stripes on shoulderboards. Insignia of grade are illustrated in figure 36.
- (2) *Officers.* The grade of general officers is indicated by the number of stars worn on shoulderboards, which have a crisscross pattern. Field-grade officers wear shoulderboards with two longitudinal stripes; company-grade officers wear one longitudinal stripe. The shoulderboards worn by officers of the combat branches, motor transport, and the militarized security

forces have a gold background and silver stars; those worn by technical and administrative services have a silver background and gold stars. The stars vary in size according to grade category, becoming progressively larger for each higher category (*i.e.*, company grade, field grade, generals).

- (3) *Enlisted personnel.* The shoulderboards of enlisted personnel have background and piping in the colors of the branch of service. Grade stripes are gold for combat and support branches and silver for technical and administrative services.

b. Branch. Branch of service is indicated by means of metallic devices and by use of color. Branch devices are worn on the shoulderboard by all personnel except generals. These devices are illustrated in figure 36.

Colors denoting branch of service are displayed on the shoulderboards and collar tabs of all personnel except generals, who display red, and women who wear no collar tabs. Officers display colors on piping and longitudinal stripes of the shoulderboards; enlisted men display colors on piping and background.

Two-color combinations are usually displayed on collar tabs and enlisted men's shoulderboards. Recent reports indicate the absence of piping on collar tabs and enlisted men's shoulderboards; however, both single- and two-color combinations continue to be worn. The Bulgarian rampant lion is also frequently worn on coat collar tabs. Collar tabs and other insignia are illustrated in figure 37.

Officers also display color on the piping and band of the service cap, on the sleeve cuffs, and on the outer seams of the trousers or breeches.

OFFICERS



ARMY GENERAL
(Arms)



COLONEL GENERAL
(Arms)



LIEUTENANT GENERAL
(Arms)



MAJOR GENERAL
(Arms)



COLONEL
(Infantry)



LIEUTENANT COLONEL
(Frontier Troops)



MAJOR
(Medical)



CAPTAIN
(Interior Troops)



SENIOR LIEUTENANT
(Artillery)



LIEUTENANT
(Engineers)



JUNIOR LIEUTENANT
(Armored)

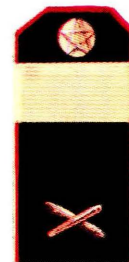


RESERVE LIEUTENANT
(Infantry)

ENLISTED MEN



MASTER SERGEANT
(Medical)



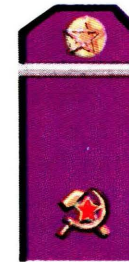
SERGEANT
1st Class
(Artillery)



SERGEANT
(Motor Transport)



CORPORAL
(Signal)



PRIVATE
1st Class
(Intendance)



PRIVATE
(Sappers)

BRANCH DEVICES



INFANTRY



ARTILLERY



ARMORED



ENGINEERS



SIGNAL



CHEMICAL



MEDICAL



INTENDANCE



MOTOR TRANSPORT



MILITARY BAND



SAPPERS

Figure 36. Bulgarian Insignia of Grade and Branch.

COLLAR TABS
SERVICE AND DRESS COATS



GENERAL OFFICERS



INFANTRY



ARTILLERY, ARMORED, AND
MOTOR TRANSPORT



ENGINEERS AND SIGNAL TROOPS
(Unpiped tab)



MEDICAL
(Unpiped tab)



FRONTIER TROOPS



INTERIOR TROOPS

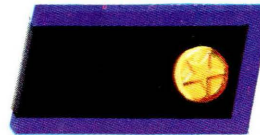
OVERCOATS



INFANTRY



ARTILLERY, ARMORED, AND
MOTOR TRANSPORT



ENGINEERS AND
SIGNAL TROOPS



INTENDANCE



ADMINISTRATION



FRONTIER TROOPS



INTERIOR TROOPS

HEADGEAR INSIGNIA



OFFICERS



ENLISTED MEN

Figure 37. Bulgarian Collar Tabs and Other Insignia.

Branch colors are as follows:

Branch	Shoulderboards			Collar tabs	
	Background	Stripes	Piping	Background	Piping
<i>Infantry:</i>					
Officers	Gold	Red	Red	Red	Black.
EM	Red	Gold	Black	Red	Black.
<i>Artillery, Armored, and Motor Transport:</i>					
Officers	Gold	Red	Red	Black	Red.
EM	Black	Gold	Red	Black	Red.
<i>Engineer, Signal, and Chemical:</i>					
Officers	Gold	Black	Black	Black	Blue.
EM	Black	Gold	Blue	Black	Blue.
<i>Medical:</i>					
Officers	Silver	Red	Red	Red	Black.
EM	Red	Silver	Black	Red	Black.
<i>Intendance:</i>					
Officers	Silver	Magenta	Magenta	Magenta	Black.
EM	Magenta	Silver	Black	Magenta	Black.
<i>Administration:</i>					
Officers	Silver	Brown	Brown	Brown	Red.
EM	Brown	Silver	Red	Brown	Red.
<i>Frontier Troops:</i>					
Officers	Gold	Green	Green	Green	Red.
EM	Green	Gold	Red	Green	Red.
<i>Interior Troops:</i>					
Officers	Gold	Blue	Blue	Red	Blue.
EM	Red	Gold	Blue	Red	Blue.

79. DECORATIONS AND AWARDS

a. *General.* Soviet decorations are worn by the Bulgarian military, in addition to Bulgarian military decorations. Decorations and awards are illustrated in figure 38.

b. *Orders.*

- (1) *Gold Star of the Heroes of the People's Republic of Bulgaria.* Basis for this award is not known.
- (2) *Order of Georgi Dimitrov.* This order is awarded to Bulgarian citizens and to citizens of other nations for outstanding service to Bulgaria.
- (3) *Order of the People's Republic of Bulgaria.* This order (three classes) is awarded to Bulgarian and foreign citizens and to army and higher commanders for outstanding service to Bulgaria.
- (4) *Order of the 9th of September 1944.* This order is awarded in three classes and two categories, with and without swords. The order with swords is awarded to Army personnel and that without swords to civilians. The 1st Class is given

to divisional and higher commanders, 2d Class to regimental and higher commanders, and 3d Class to all commanders below regimental level.

- (5) *Order of the People's Freedom 1941-1944.* This order (two classes) is awarded to military personnel and other citizens.
- (6) *Order of the Red Banner.* This order (one class) is awarded to military personnel and other citizens.
- (7) *Order for Bravery.* This order (three classes) is awarded to enlisted men and company-grade officers for individual heroic action.

c. *Medals.*

- (1) *Campaign medals.* The following campaign medals have been identified:
 For Participation in the People's Uprising of 1923.
 For Participation in the Anti-Fascist Struggle.
 Fatherland War 1944-45.
- (2) *Commendation medal.* A "Badge of Excellence" is awarded to soldiers for outstanding performance of duty.



GOLD STAR OF THE HEROES OF THE PEOPLE'S REPUBLIC OF BULGARIA



ORDER OF GEORGI DIMITROV



1st CLASS



2d CLASS



3d CLASS



1st CLASS



ORDER OF THE 9th OF SEPTEMBER 1944
2d CLASS



3d CLASS



ORDER OF THE PEOPLES FREEDOM 1941 - 1944
1st CLASS



2d CLASS



ORDER OF THE RED BANNER



1st CLASS



ORDER FOR BRAVERY
2d CLASS



3d CLASS

Figure 38. Bulgarian Military Decorations and Awards.

Section VII. GLOSSARY OF MILITARY TERMS

The Bulgarian language belongs to the family of Slavic languages (such as Serbian, Russian, Czech, and Polish), and, like Serbian and Russian, it uses the Cyrillic alphabet—a modification of the Greek alphabet. Bulgarian is closer to Russian than most Slavic languages, and since the advent of Communist rule in Bulgaria, many of the existing deviations from Russian have been removed. Russian and Bulgarian grammars are not the same, but differences in word roots are not great, and many words, including a large proportion of military terms, are identical in spelling in Bulgarian and Russian.

In the following list, the transliteration into the Latin alphabet is given in parentheses following the Cyrillic form.

A

авиабаза (aviabaza)	air base
автомобил (avtomobil)	automobile; motor vehicle
армейски генерал (armeyski general).	army general (four-star)
армия (armiya)	army
арсенал (arsenal)	arsenal
артилерия (artileriya)	artillery
атомно нападение (atomno napadenie)	atomic attack

Б

база (baza)	base
барака (baraka)	barracks
батальон (batal'on)	battalion
батарея (batareya)	battery
боева диспозиция (boeva dispozitsiya).	disposition; order of battle
боен батальон (boen batal'on)	combat battalion
боец (boets)	soldier; fighter
бойна готовност (boyna gotovnost).	combat readiness
бойна група (boyna grupa)	combat group
бойна подготовка (boyna podgotovka).	combat training
бойна част (boyna chast)	combat unit
бойни ред (boyni red)	order of battle
бойно отровно вещество (boyno otrovno veshchestvo).	chemical warfare agent
бомба (bomba)	bomb
бомбардиране (bombardirane)	bombardment
бомбардировка (bombardirovka)	bombardment
брегова артилерия (bregova artileriya).	coast artillery
бронетанкова техника (brone-tankova tekhnika).	armored equipment
бронирана кола (bronirana kola)	armored vehicle
брегова артилерия (bryagova artileriya).	coast artillery

В

взвод (vzvod)	platoon
военачальник (voenachalnik)	military commander
военен окръг (voenen okrüg)	military district
военна книжка (voenna knizhka)	identity book
военно-въздушните сили (voenno-vözdushnite sili).	air forces
военно звание (voenno zvanie)	military rank
военно-морските сили (voenno-morskite sili).	naval forces
вожд (vozhd)	chief
воин (voin)	soldier; warrior
войник (voynik)	soldier
войска (voyska)	body of troops
въздушна атака (vözdushna ataka)	air attack
вързоп (vürzop)	center (communications, etc.)

Г

газова атака (gazova ataka)	gas attack
гара (gara)	railroad station
гарнизон (garnizon)	garrison
гаубица (gaubitsa)	howitzer
генерален Щаб (generalen shtab)	general staff
генерал-лейтенант (general-leytenant).	lieutenant general (two-star).
генерал-майор (general-mayor)	major general (one-star).
генерал-полковник (general-polkovnik).	colonel general (three-star).
генералско звание (generalsko zvanie).	general rank; general officer.
главно командване (glavno komanduvane).	General Headquarters
гориво - смазочни материали, ГСМ (gorivo-smazochni material, GSM).	fuels and lubricants
граничар (granichar)	border guard; frontier trooper.
гранични войски (granichni voyski).	Frontier Troops
група (grupa)	group (unit)

Д

далноойна артилерия (dalnoboynа artileriya).	long-range artillery
двигател (dvigatel)	engine
дежурни офицер (dezhurni ofitser)	officer of the day, duty officer.
дивизион (divizion)	battalion (artillery)
дивизионен артилерийски полк (divizionen artileriyski polk).	divisional artillery regiment
дивизия (diviziya)	division

Е

ескадрон (eskadron)	troop (cavalry)
ефрейтор (efreytor)	private, first class
ешелон (eshelon)	echelon

Ж

железница (zheleznitsa) ----- railroad
 железопътен полк (zhelezopŭten polk). railroad regiment

З

задача (zadacha) ----- task, assignment, mission.
 заместник-командир по техническата част (zamestnik-komandir po tehnikeskata chast). deputy commander for technical affairs
 заместник по политическата част (zamestnik po politicheskata chast). deputy commander for political affairs.
 заместник по строева част (zamestnik po stroeva chast). deputy commander for tactical affairs.
 занятие (zanyatie) ----- exercise, drill, lesson, class.
 запас (zapas) ----- store; supply; reserve
 застава (zastava) ----- outpost, unit in Frontier Troops.
 звание (zvanie) ----- rank
 зенитна артилерия (zenitna artilleriya). antiaircraft artillery
 зенитно оръдие (zenitno orŭdie) .. antiaircraft gun

И

инженер (inzhenер) ----- engineer
 интендант (intendant) ----- quartermaster

К

кавалерия (kavaleriya) ----- cavalry
 казарма (kazarma) ----- barracks
 капитан (kapitan) ----- captain (army)
 картечница (kartechnitsa) ----- machinegun
 катюш(к)а (katyush(k)a) ----- rocket launcher
 ключар (klyuchar) ----- quartermaster sergeant
 кола (kola) ----- vehicle
 командир (komandir) ----- commander
 командно-наблюдателен пункт, КНП (komandno-nablyudatelen punkt, KNP). command-observation post
 контролно - технически пункт, КТП (kontrolno - tehnikeski punkt, KTP). technical check point
 кон (kon) ----- horse
 конна артилерия (konna artilleriya). horse artillery
 конница (konnitsa) ----- cavalry
 контра-удар (kontra-udar) ----- counterattack
 корпус (korpus) ----- corps
 крепостна артилерия (krepostna artilleriya). fortification artillery

Л

лейтенант (leytenant) ----- lieutenant
 лека артилерия (leka artilleriya) .. light artillery
 личен състав (lichen sŭstav) ----- personnel, complement.
 лична карта (lichna karta) ----- identification card

лично оръжие (lichno orŭzhie) ---- side arm, personal weapon.
 ловджийски самолет (lovdzhiyski samolet). fighter airplane

М

майор (mayor) ----- major
 маршал на република (marshal na republika). Marshal of the Republic.
 маскировка (maskirovka) ----- camouflage
 материална част (materialna chast). materiel
 милиция (militsiya) ----- militia
 мина (mina) ----- mine; mortar shell
 миномет (minomet) ----- mortar; rocket launcher
 млади войник (mladi voynik) ---- recruit, trainee
 младши лейтенант (mladshi leytenant). junior lieutenant
 младши сержант (mladshi serzhant). junior sergeant
 мост (most) ----- bridge
 мотострелкова рота (motostrelkova rota). motorized rifle company.
 мотоциклет (mototsiklet) ----- motorcycle

Н

наблюдателен пункт (nablyudatelen punkt). observation post
 нагледни пособия (nagledni posobiya). visual aids
 нападение (napadenie) ----- attack; assault
 началник (nachalnik) ----- chief; commander

О

обединение (obedinenie) ----- major unit (usually army level).
 обучение (obuchenie) ----- training, instruction
 огневи дивизион (ognevi divizion) .. firing battalion (artillery).
 огнехвъргач (ognekhvŭrgach) ---- flamethrower
 окоп (okop) ----- emplacement; trench
 опасност (opastnost) ----- danger; peril
 оръдие (orŭdie) ----- gun; cannon; piece
 отдел (otdel) ----- staff section
 отделение (otdelenie) ----- squad
 открит лист (otkrit list) ----- travel pass (for restricted areas).
 отред (otred) ----- detachment, unit in Frontier Troops.
 отряд (otryad) ----- unit in Frontier Troops (equal to an understrength regiment).
 офицереко звание (ofitersko zvanie). officer rank

П

парашутист (parashutist) ----- parachutist
 партизанин (partizanin) ----- partisan
 пехота (pekhota) ----- infantry

пехотна дивизия (pekhotna diviziya).	infantry division	стрелбище (strelbishte)	rifle range, firing range.
планинска артилерия (planinska artileriya).	mountain artillery	стрелкова дивизия (strelkova diviziya).	rifle division; infantry division.
поделение (podelenie)	small unit	съединение (sŭedinenie)	large unit (usually division).
подофицер (podofitser)	noncommissioned officer.		
		Т	
подполковник (podpolkovnik)	lieutenant colonel	танк (tank)	tank
подразделение (podrazdelenie)	subunit of a regiment or a separate battalion.	танкова бригада (tankova brigada).	tank brigade
		танкова дивизия (tankova diviziya).	tank division
полк (polk)	regiment	тежка артилерия (tezhka artileriya).	heavy artillery
полковник (polkovnik)	colonel	тежка картечница (tezhka kar-technitsa).	heavy machinegun
полска артилерия (polska artileriya).	field artillery	тежък танк (tezhŭk tank)	heavy tank
полски дивизионен щаб (polski divizionen shtab).	divisional field staff	транспорт (transport)	transport
полска фортификация (polska fortifikatsiya).	field fortifications	трудовак (trudovak)	member of the Labor Service.
понтон (ponton)	ponton	трудова повинност (trudova povinnost).	Labor Service
противовъздушна отбрана (protivovŭzdushna otbrana).	antiair defense; anti-aircraft defense.		
противотанкова пушка (protivotankova pushka).	antitank gun	У	
		удар (udar)	attack; blow
Р		улица (ulitsa)	street; road
разузнавателен взвод (razuznavatelen vzvod).	reconnaissance platoon.	управление (upravlenie)	command; administration; directorate; tactical control.
разчет (razchet)	gun squad, gun crew	управление на огъня (upravlenie na ogŭnya).	fire direction
ранг (rang)	rank	учебно-материална база (uchebno-materialna baza).	training materials base.
редник (rednik)	private		
рота (rota)	company	Ф	
		фортификация (fortifikatsiya)	fortification
С		фугас (fugas)	landmine
самолет (samolet)	airplane		
самоходна артилерия (samokhodna artileriya).	self-propelled artillery	Ч	
сапър (sap'or)	sapper; combat engineer.	част (chast)	unit; organization; regiment.
свързка (svrŭzka)	communications		
свързочник (svrŭzochnik)	communications man	Ш	
сержант (serzhant)	sergeant	шпагин (shpagin)	PPSh submachine-gun; Shpagin.
сержантско звание (serzhantsko zvanie).	sergeant rank; NCO	шмайзер (shmayzer)	Schmeisser submachinegun.
солдатин (soldatin)	soldier	шпионин (shpionin)	spy
старши лейтенант (starshi leytenant).	senior lieutenant		
старшина (starshina)	master sergeant	Щ	
старши сержант (starshi serzhant).	sergeant first class	Щаб (shtab)	staff

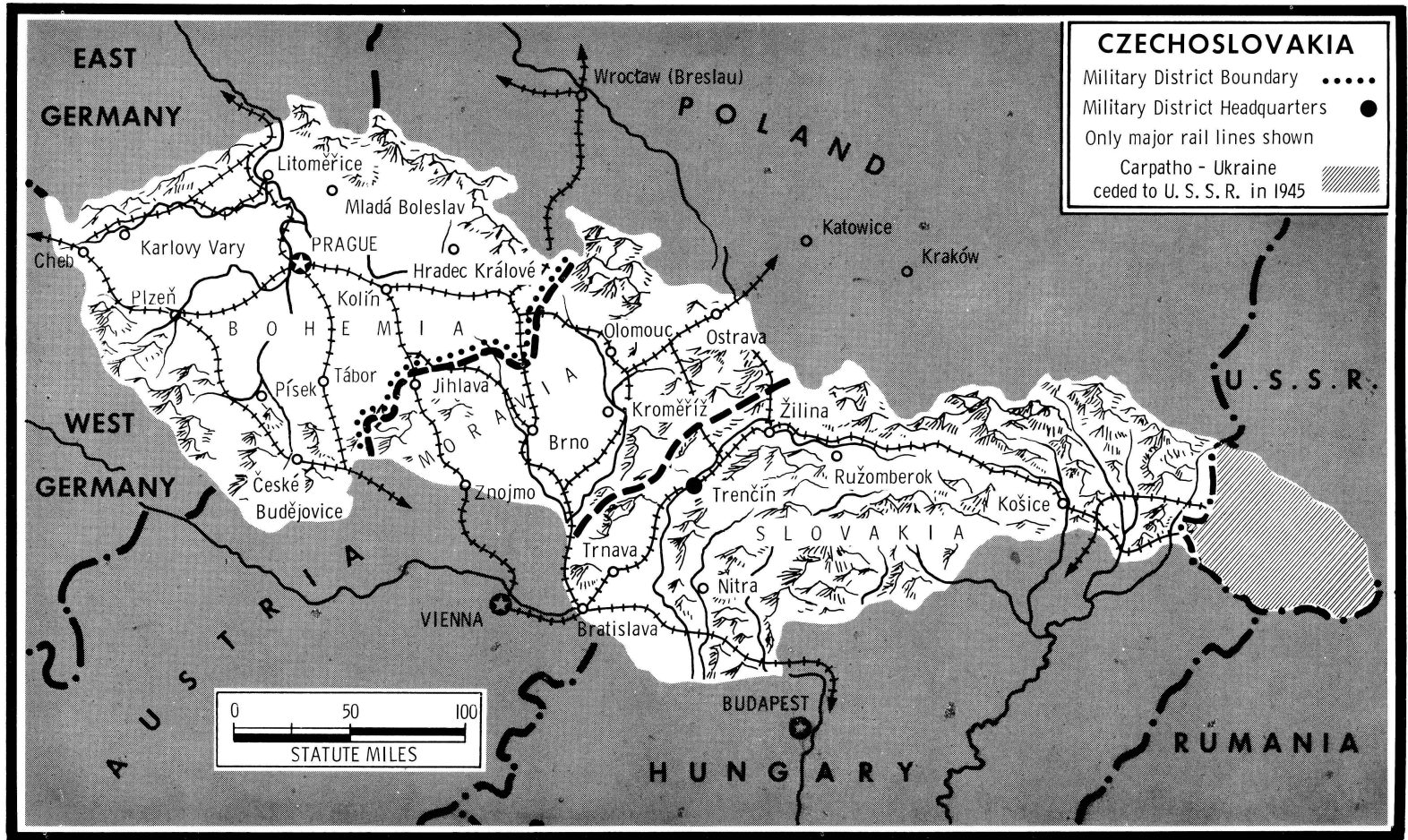


Figure 39. Czechoslovakia.

CZECHOSLOVAKIA

CHAPTER 4

Section I. THE MILITARY SYSTEM

80. NATURE OF THE ARMED FORCES

a. Composition. The Czechoslovak Army includes both ground and air forces. There is, of course, no naval force. The militarized security forces are auxiliary ground forces and include the Frontier Guard and the Interior Guard. Both are subordinate to the Interior Ministry. As in the other Bloc states, the militarized security forces are organized, trained, and equipped much the same as are military units and could perform many useful services if attached or assigned to military commands in wartime. In peacetime, however, their respective primary missions are to maintain security of the border and stability within the country.

The ground and air forces of the Czechoslovak Army constitute a single, highly centralized armed force. There are only two basic force components—the ground forces and the “air and air defense” forces. The former contains all the combat, support, and service units of the ground branches except for the antiaircraft artillery units which, along with the fighter-interceptor units of the air forces, are assigned to the Air and Air Defense Command. The latter is tied in with the Bloc-wide air defense network.

In Czechoslovakia, as in the rest of the Bloc, ground officers control the military establishment. The ground forces constitute the main element of military strength, although the air forces are relatively large by Satellite standards and fairly well equipped with jet fighters.

b. Development. The first Czechoslovak national army was organized in 1919 after the formation of the Czechoslovak Republic. For the next 20 years, the Army was to be supported and influenced by the French, and it employed basically French organization and doctrine. The Army was mobilized, but not used, during the Czechoslovak crises of 1938-1939. After the Germans took control of the country, the Army was disbanded.

During World War II, both the Soviets and the Western Allies raised Czechoslovak units. These

units came to form the nucleus of the restored national force after VE-day, but those sponsored by the Soviets gained a predominant influence. This factor was crucial in 1948: the Communist coup of that year was virtually bloodless, largely because the Army failed to oppose it.

By 1948, the Army had reached a high standard of organization and training. It was also relatively well equipped, chiefly with German-type weapons of World War II standard, many of which were produced in Czechoslovakia. Under the Communists, this efficient force was allowed to deteriorate for several years. Officers and noncommissioned officers who could not be trusted by their new Communist leaders were forced out of the Army, despite the extent and value of their military experience and their competence. They were replaced by less experienced men, purely on the basis of political reliability. In addition, the organizational and administrative doctrine, training procedures, and tactical concepts of the Army were tossed aside in favor of a wholesale adoption of Soviet military policies and procedures. At the same time, the production of German-type equipment was halted. As a result of these developments, the preparedness of the Army was seriously retarded. By the end of 1949 the force was virtually without a potential for effective combat.

In 1951, an extensive reorganization and revitalization was begun and the first significant shipments of Soviet equipment were received. Under the close supervision of the “advisors” from the Soviet Military Mission, the training program was extended in scope and accelerated. Reorganization of combat units along basically Soviet lines proceeded steadily. The Army remained for several years well below the standard of the forces that had existed both in 1938 and in 1948, but the main outlines of the new force were firmly established. With Soviet assistance it continued to improve.

c. Status. At the present time, the Czechoslovak Army has reached a status of development

that can be favorably compared with that of the pre-Communist era of the country's history. The force is one of the first among the Satellites to introduce some of the most recent changes in Soviet tactical organization. These are intended to increase the firepower and mobility of the ground forces and to adapt them for combat under the conditions of a possible atomic war. Similarly, the Army has received as many of the newer Soviet ground weapons as has any other Satellite. In addition, the country itself manufactures several of the more modern Soviet-type weapons as well as highly effective pieces of equipment of purely local design.

Combat training has included several large combined-arms maneuvers in recent years, and the Army is now one of the best-trained Satellite forces, despite the announcement in 1958 that certain aspects of the training program would be eliminated to cut "waste."

The Army is not large, containing something less than 175,000 men. It is maintained, as are most Bloc armies, by a form of universal conscription. An average of about 60,000 to 65,000 young men are inducted annually and must serve a 2-year term. This represents more than the number of available young men reaching conscript age annually, so that the age of induction is gradually going lower. Before it becomes necessary to conscript young men below 18 years of age, however, the size of the eligible age classes will have increased, so that the induction of a single class per year will sustain Army strength. The present conscript classes are inordinately small because of the disturbed social conditions between about 1936 and 1941 resulting from the depression, German occupation, and the early stages of World War II.

Although well equipped, organized, and trained, Czechoslovak troops are generally considered to lack a fighting spirit, and this is particularly true in the present era because of resentment toward the Communist regime and a disinclination to fight for the objectives of Soviet leadership. Discipline in the Army appears to be good, but morale is only fair at best.

Although Czechoslovakia is far better prepared for munitions production than any other Satellite state, present capacity could support only relatively limited actions over a brief period. Prolonged or large-scale operations would require

Soviet supply of quantities of various essential items.

81. THE HIGH COMMAND

Top control of the Czechoslovak Army follows the familiar Bloc pattern (ch. 1). One discrepancy from this pattern is the establishment of the President of the Republic as the nominal Commander in Chief of the Army. The actual exercise of authority over the armed forces, however, follows the usual procedures.

82. TERRITORIAL ORGANIZATION

Czechoslovakia is divided into a western (Bohemia and Moravia) and an eastern (Slovakia) military district for purposes of military-territorial administration. The western military district headquarters at Prague controls the areas adjacent to non-Bloc neighbors—Austria and West Germany. It commands most of the tactical units in the Army and all the better-prepared ones. The eastern district headquarters is at Trenčín.

The two military district headquarters are responsible for the administrative and logistic

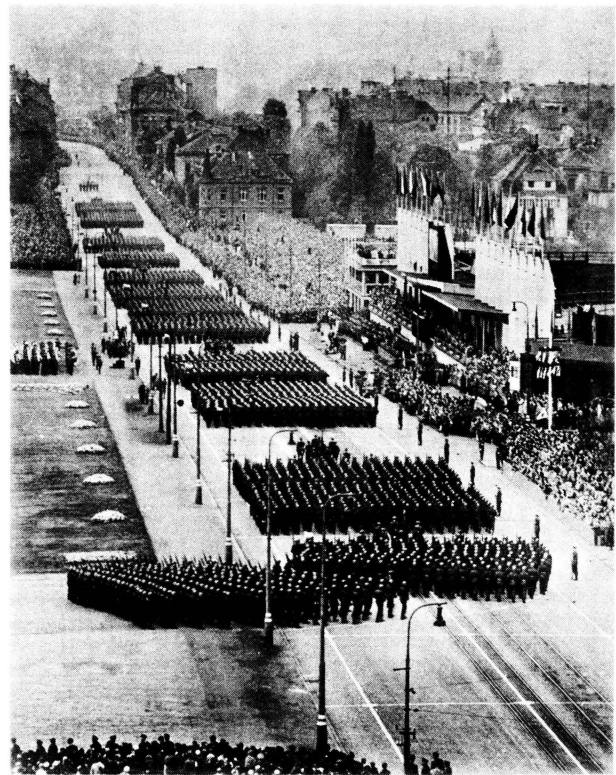


Figure 40. Czechoslovak Troops Parading Through Prague.

support of the units within their territories. They also serve in the line of command from the Minister of National Defense to the tactical units. The district commander generally supervises training and is responsible for the level of combat readiness of the units within his area, but he does not exercise tactical command.

In wartime, the district headquarters probably would provide cadres for field headquarters to control combat operations. In peacetime, corps or higher-level headquarters are sometimes established on an *ad hoc* basis to control maneuvers. The Army contained four corp headquarters until 1956. Their abolition was part of a Bloc-wide trend and may have been a peacetime expedient. It is possible, however, that in wartime combined-arms armies without the corps echelon would be formed.

83. ORGANIZATION OF THE ARMY FOR WAR

The Czechoslovak Army is now undergoing a general reorganization. This reorganization is expected to result in a force consisting entirely of motorized rifle and tank divisions; at present there are a number of old-style rifle divisions and several mechanized divisions, as well. In wartime, if the reorganization is complete, the motorized rifle divisions could be grouped into corps of two or three divisions or armies of four or more divisions. The tank divisions probably would be combined into armies of three or four divisions, although some tank divisions might be combined with motorized rifle divisions under a single field command.

The initial stage of mobilization would include the raising of the present divisions to full strength. Additional units could also be formed rather

quickly, although fewer than 10 additional divisions could be formed with existing equipment stocks; further mobilization would require Soviet logistic support. The Army has a significant mobilization potential, however, from the standpoint of available manpower and administrative machinery. A force of more than 1,000,000 men probably could be raised in a relatively few months. The bulk of these would have served on active duty or have been given refresher training in the Army since its adoption of Soviet organization, equipment, and tactical doctrine. An all-out mobilization could go still further, drawing on the remainder of the more than 2,000,000 fit males of military age in the country. Many of these have had prior military training, but not in the Sovietized Army, and few have had previous combat experience.



Figure 41. Political Indoctrination Session in the Field.

Section II. ORGANIZATION OF THE FIELD FORCES

84. ARMS AND SERVICES

The ground branches in the Czechoslovak Army are divided into Arms (*Zbraně*), Auxiliary Arms (*Pomocné Zbraně*), and Services (*Služby*).

a. Arms. The arms include Infantry (*Pěchota*), Armored Troops (*Tankové Vojsko*), Artillery (*Dělostřelectvo*), and Engineer Troops (*Ženíjní Vojsko*). These constitute the basic branches employed in ground combat.

b. Auxiliary Arms. These include Signal

Troops (*Spojovací Vojsko*), Chemical Troops (*Chemické Vojsko*), and Transportation Troops (*Automobilní Vojsko*).

c. Services. The services comprise Medical (*Zdravotní*), Veterinarian (*Zverolekarska*), Quartermaster (*Intendanční*), Ordnance (*Zbrojní*), Administration (*Kancelarska*), Justice (*Soudní*), and Topographic (*Zeměpisna*). Of these, only the latter three are not components of the rear-services apparatus.

85. PRINCIPLES OF TACTICAL ORGANIZATION

The basic principles of tactical organization are those of the Soviet Army. Czechoslovak Army units lag generally 2 or 3 years behind the Soviet units, however, in adopting the latest concepts. The Czechoslovaks also modify the Soviet TOE's somewhat in accordance with local requirements and variations in equipment holdings. Major discrepancies include failure to develop fully all the elements of the unit and the use of smaller caliber weapons in some instances than are called for by the Soviet TOE. In addition, some Czechoslovak-designed weapons are used in place of Soviet. These and other differences could be rapidly eliminated or overcome in time of war, if it were found essential or desirable to do so.

The tactical line units are now in the process of a general reorganization. The objective is to improve their flexibility and maneuverability as well as their fire and shock power. This program probably got underway some time in 1956 or 1957. It should culminate in 1960 or 1961 with a force much better suited to warfare under modern conditions.

86. HIGHER HEADQUARTERS

There are no tactical headquarters above division. The absence of Army or corps headquarters is believed not to have any special tactical or strategic significance and corresponds to the situation in other Bloc armies.

87. TACTICAL UNITS

a. Line Divisions. The line divisions are of rifle, motorized rifle, mechanized, and tank type. All are organized along familiar Soviet lines.

The rifle and mechanized divisions are currently being phased out in favor of the modern, effective, motorized rifle and tank divisions. Existing tank divisions are also being reorganized along more modern lines, in accordance with recent develop-

ments in the Soviet Army (for detailed discussion, see ch. 1).

b. Other units. There are a relatively large number of line, support, and service units in the Czechoslovak Army. The most important of these are—

- (1) *Artillery Division.* This single division is organized along the lines of the "breakthrough" artillery division of the Soviet Army. The main components of the Czechoslovak division include: a mortar brigade with both 120-mm and 160-mm mortars; a rocket brigade with 130-mm launchers; a medium howitzer brigade with 152-mm weapons; and a gun-howitzer brigade with 152-mm gun-howitzers. The division is designed to provide heavy fire support to line divisions under special circumstances. It can be employed as a whole, or its elements can be suballotted to various units in the line. Its special utility in major offensive actions has given rise to its title of "breakthrough" division.
- (2) *Antiaircraft Artillery Division.* There are several AAA divisions in the Czechoslovak Army assigned to the Air and Air Defense Command. These units are organized in the same fashion as the Soviet units of the same type. They contain a total of some 144 medium AA guns, organized into three regiments. Most of the weapons are Czech-produced 85-mm guns, although 100-mm AA guns are gradually being assigned.
- (3) *Nondivisional units.* There are a number of small units, brigade and lower, not assigned to any of the divisions. These are of both combat and service type, and their organization is generally along Soviet lines. They include parachute and engineer brigades and artillery, antitank, engineer, and signal regiments.

Section III. MILITARIZED SECURITY FORCES

88. GENERAL

Czechoslovak militarized security forces consist of the Frontier Guard (*Pohraniční Stráž*, PS) and the Interior Guard (*Vnitřní Stráž*, VS) both of some 20,000 to 25,000 men. They are subordinate

to the Ministry of Interior, but in wartime they could be used to augment the Army ground forces.

The PS and VS, while not large, are reliable and well trained. They are subject to military discipline and wear military uniforms. Their weapons

and much of their training are comparable to those of infantry troops. They are primarily responsible for defense of the regime and prevention of illegal entry into, or exit from Czechoslovakia, but also constitute specialized auxiliary ground troops. Organized units of both the PS and VS could be attached to Army field commands to perform certain specialized functions in wartime. These would include rear-area security, traffic control, counterintelligence, and military government. Should the situation require, PS and VS units could also be used as combat troops.

89. FRONTIER GUARD

The present PS was organized as a separate agency under the old Ministry of National Security during May 1950. The mission of the Frontier Guard is specified to be that of "protecting the working classes from Western influence and particularly of severing Czechoslovak underground contact with outside help."

Prior to 1950, the frontier opposite the U.S. Zone of Germany was patrolled by battalions of a security organization known as the National Security Corps (SNB) and by Army troops. The size of the force employed along this border was increased after the activation of the PS. Other brigades were organized along the borders with East Germany, Poland, and Austria. Few units serve along the Hungarian or Soviet borders.

PS conscripts are inducted during early November along with those for the other armed forces. The term of service is slightly more than 2 years.

Officers are procured from special PS officer-candidate schools. The basic frontier unit is the brigade, with a strength of some 2,000 men and usually 4 battalions. A battalion on a sensitive border is responsible for patrolling a sector of some 10 to 15 miles.

90. INTERIOR GUARD

The VS is similar in many respects to the PS. It is somewhat more highly specialized, however, and thus not so well prepared for ordinary infantry combat. The VS was organized in 1952, replacing elements of the National Security Corps (SNB). The basic operating VS units are the brigades, which are located in major interior cities and towns so that units could readily be deployed to potential trouble areas almost anywhere in the country.

Members of VS units are chosen from the most politically reliable conscripts inducted each year. They wear the Army uniform but can be distinguished by magenta-colored shoulderboards and collar patches. They are responsible for suppressing acts of resistance to the regime and antiregime demonstrations. VS troops also guard sensitive installations, including armament plants, bridges, uranium mines, and important government buildings, as well as government officials.

The VS is well trained for its special functions. Training includes emphasis on small-unit tactics and city warfare. The units are well supplied with motor transportation, and have some armored cars and tanks as well as light artillery.

Section IV. WEAPONS

91. INTRODUCTION

Czechoslovakia has the highest arms production capacity of any Satellite state, and produces a wide range of military equipment. Some is of purely Soviet design, some a slightly modified version of a basic Soviet design, and some of Czechoslovak design.

The bulk of the weapons designed in Czechoslovakia are of the same caliber as comparable Soviet weapons; only the light, 30-mm dual-mount antiaircraft gun, the 32-round, 130-mm field rocket launcher, and a pistol are not. Some of the Czechoslovak-designed weapons, however, cannot fire the Soviet ammunition round of the same caliber. This was true until recently of the

new family of small arms, which are now being modified to employ the new Soviet short round, and it is still true of the two recoilless antitank guns. In other respects, the performance of the Czechoslovak items so closely parallels that of the corresponding Soviet weapon that it appears they were designed to meet the same military requirements.

92. INFANTRY

a. General. Czechoslovak Army small arms are of good quality. Nearly all infantry weapons are of domestic design and manufacture, except for Soviet-type heavy machineguns. The World War II German equipment, previously standard

in the Army, has been sold for export, scrapped, or placed in reserve stocks, although some is still in use by militarized security forces, factory guards, and other semimilitary organizations.

b. Pistols. The standard Czechoslovak service pistol is the 7.62-mm automatic pistol M52. This is a Czech-designed and produced weapon that shows some evidence of German design characteristics. It fires Czechoslovak and Soviet pistol and submachinegun ammunition. Another Czechoslovak arm, the 7.65-mm M50, is a local copy of the German 7.65-mm Walther PP. This is used by Army officers and police personnel.

c. Submachineguns. The standard machinegun is the 7.62-mm Model 50 (fig. 42) which is virtually identical, except in caliber, with the 9-mm Models 23 and 25, also of local design and manufacture. Like the M52 pistol, the 7.62-mm submachinegun fires the Soviet M30 P ball and the Czechoslovak M48 round.

d. Rifles. The 7.62-mm semiautomatic rifle Model 52 (fig. 43) is standard in the Army. This is a modern weapon that has replaced the Mauser bolt-action rifles previously in general use. The rifle was designed to fire the Czechoslovak 7.62-mm M52 round but is being modified to fire the new Soviet 7.62-mm ammunition. Soviet M91/30 7.62-mm sniper rifles are still standard for sharpshooters.

e. Machineguns. The standard light machine-

gun is the Czechoslovak 7.62-mm Model 52 (fig. 44), which, like the Model 52 rifle, is being modified to fire Soviet ammunition; it is generally comparable to the Soviet RPD, although heavier. The standard heavy machinegun is the Soviet 7.62-mm Goryunov SG-43 (fig. 8, p. 15), which is also manufactured in Czechoslovakia. Soviet DShK 12.7-mm M38/46 heavy machineguns (fig. 116, p. 161) and a quadruple-mount version manufactured in Czechoslovakia (fig. 45) are used for defense against low-flying aircraft.

f. Infantry Antitank Weapons. Two primary types of infantry antitank weapons have been developed in Czechoslovakia since World War II. One is the light, shoulder-fired AT grenade launcher Model P-27 ("Pancéřovka") (fig. 46), a recoilless weapon very similar to the Soviet RPG-2 (fig. 94, p. 139). It fires a fin-stabilized, -shaped-charge projectile. The other weapon is the Czechoslovak 82-mm recoilless gun Model T-21 ("Tarašnice") (fig. 47). This is a very effective crew-served weapon mounted on a small, removable, wheeled carriage. The Soviet 107-mm recoilless gun B-11 (fig. 95, p. 139), which is also available, is the largest standard recoilless weapon now used.

g. Grenades. Czechoslovakia produces hand grenades of both domestic and Soviet design. The former include the Jedlicka or RG-4. It depends on both blast and light fragmentation



Figure 42. Czechoslovak 7.62-mm Submachinegun Model 50.

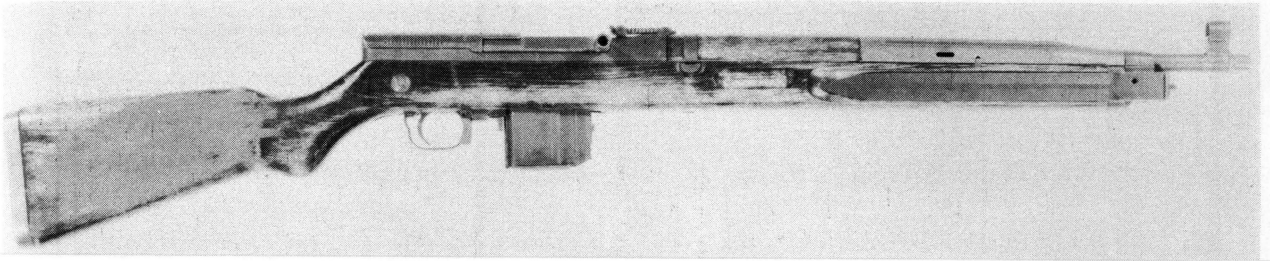


Figure 43. Czechoslovak 7.62-mm Semiautomatic Rifle Model 52.



Figure 44. Czechoslovak 7.62-mm Light Machinegun Model 52.

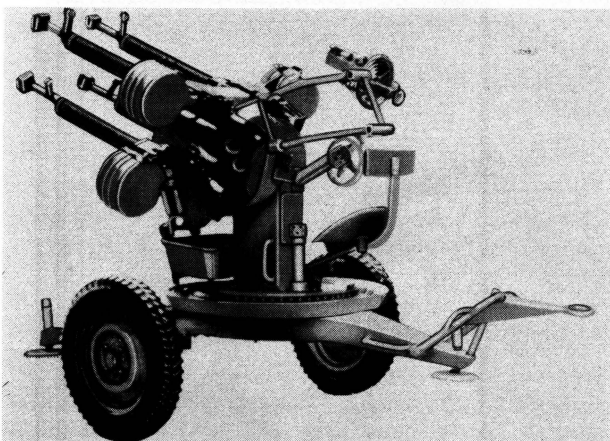


Figure 45. Czechoslovak Quad 12.7-mm Antiaircraft Machinegun.

for effect, but a fragmentation jacket may be added when it is used defensively. Two Soviet hand grenades are in standard use, the RG-42 offensive and the F-1 defensive grenades. Both are produced in Czechoslovakia.

h. Mortars. Only two mortars of local design have been produced in Czechoslovakia, the 82-mm and 120-mm; these are no longer in production, however. Other mortars include the German 81-mm M34 and 120-mm M42 and the Soviet 82-mm M41 and M37 (fig. 21, p. 29), the 107-mm M38 mountain, 120-mm M43 and M38 (fig. 9, p. 15), and 160-mm M43 (fig. 80, p. 118). The 81- and 82-mm mortars all fire Soviet and Czechoslovak 82-mm ammunition, as well as United States, French, and German 81-mm mortar ammunition.

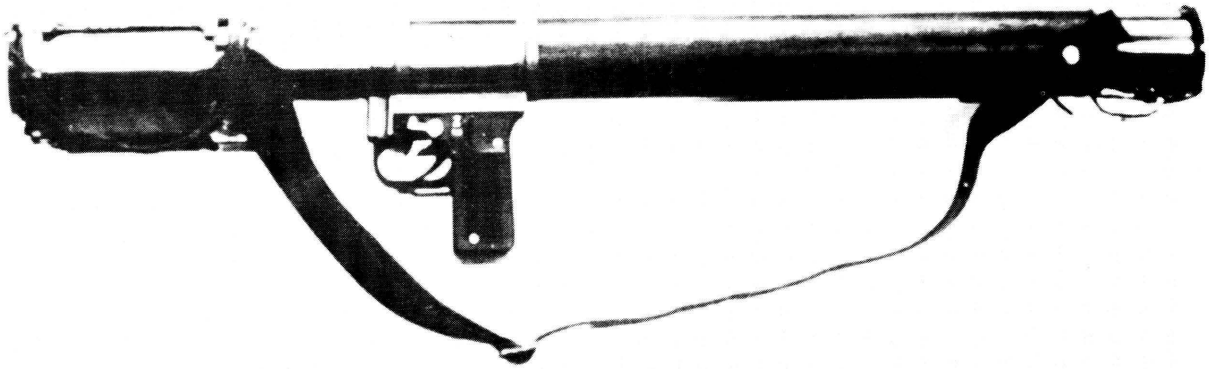


Figure 46. Czechoslovak Antitank Grenade Launcher "Pancéřovka," P-27.

93. ARTILLERY

a. General. All artillery weapons in the Czechoslovak Army are of standard Soviet calibers, except for the 30-mm AA gun and the 130-mm field rocket launcher. Most are of Soviet design. The 85-mm field gun M52 and the 100-mm field gun M53 are of distinct domestic design. The Czechoslovak 85-mm antiaircraft gun is believed to be a modified version of the Soviet 85-mm M44 gun, while the Czechoslovak 30-mm twin AA gun M53 and 130-mm field rocket launcher are of Czechoslovak design and manufacture. Some of the Soviet type 122-mm and 152-mm artillery pieces are produced in Czechoslovakia from Soviet

blueprints. Czechoslovak and Soviet artillery ammunition is interchangeable except for that used by the Czechoslovak 30-mm AA gun and the 130-mm rocket launcher, for which no Soviet counterparts exist.

b. Field. The Soviet 76-mm field gun M42 (fig. 81, p. 118) is being replaced by the Czechoslovak 85-mm field gun M52 (fig. 48) as the basic light field artillery piece. Nondivisional artillery units are receiving increasing quantities of the Czechoslovak 100-mm field gun M53 (fig. 49). Both of these are dual-purpose weapons with good anti-tank performance, as are their Soviet counterparts. The chief medium artillery weapons include the

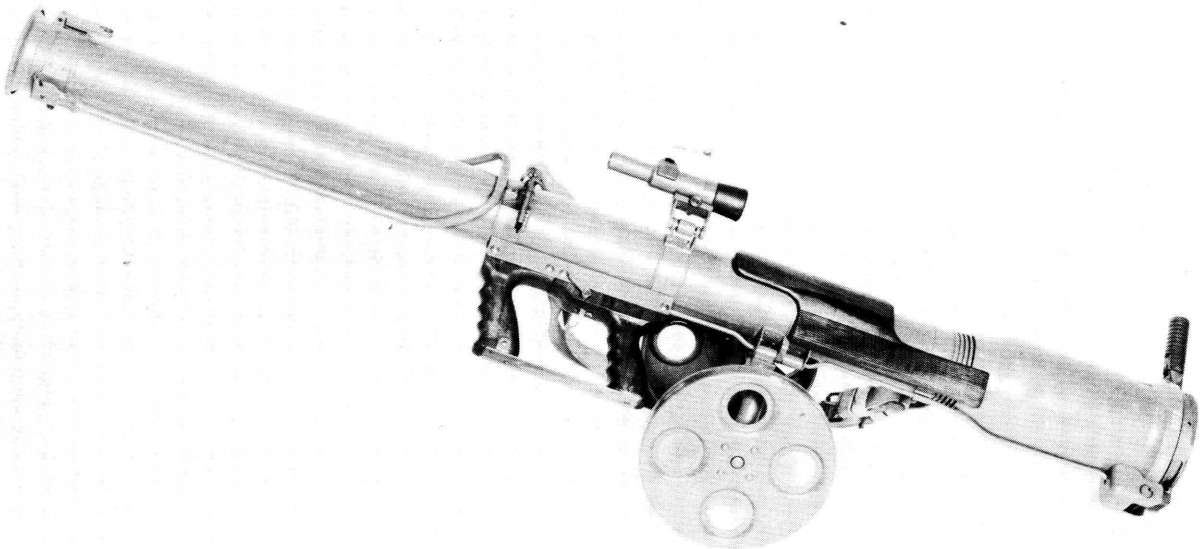


Figure 47. Czechoslovak 82-mm Recoilless Gun "Tárasnice," T-21.



Figure 48. Czechoslovak 85-mm Field Gun M52.

German 150-mm S.F.H. 18 howitzer, rebored to 152-mm and redesignated the 18/46, the Soviet 122-mm howitzer M38 (fig. 11, p. 16) and gun M31/37 (fig. 82, p. 119), and the Soviet 152-mm gun-howitzer M37 (fig. 96, p. 139).

c. Antitank. The principal antitank weapons in the Czechoslovak Army are the dual-purpose Czechoslovak 85-mm M52 and 100-mm M53 guns. There are large numbers of the Soviet-type

57-mm M43 AT gun (fig. 12, p. 17) in the hands of infantry units, but the effectiveness of this weapon against modern armor is limited. The older Soviet 45-mm AT guns are no longer in evidence and may have been scrapped.

d. Antiaircraft. The most numerous antiaircraft artillery weapons are the Soviet-type 37-mm M39 (fig. 25, p. 31) and Czechoslovak 85-mm (fig. 50) guns, although the former is rapidly being

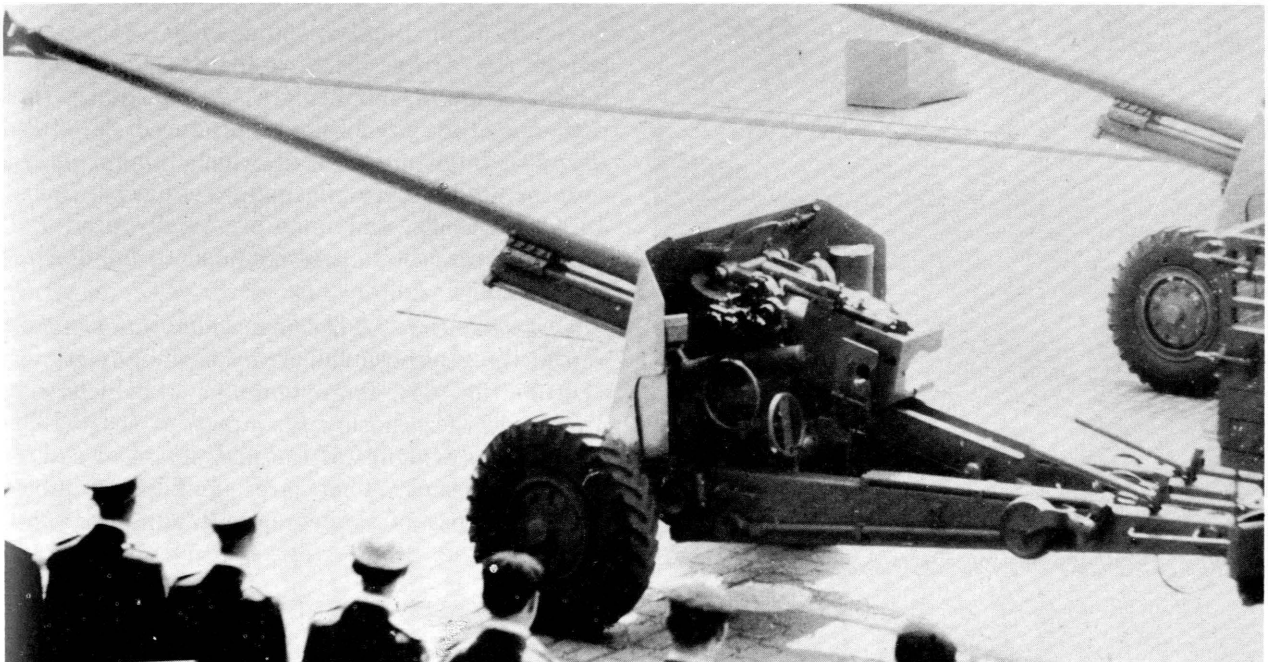


Figure 49. Czechoslovak 100-mm Field Gun M53.

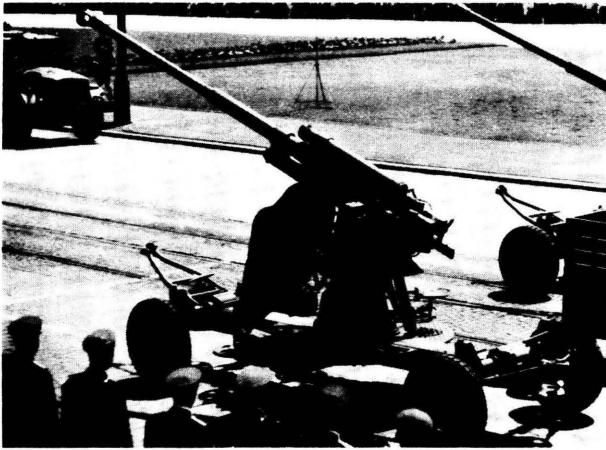


Figure 50. Czechoslovak 85-mm Antiaircraft Gun.

replaced by the Soviet 57-mm S-60 piece (fig. 64, p. 96). In addition, the modern Soviet 100-mm KS-19 gun (fig. 99, p. 140) is appearing in greater numbers and will become standard in place of the 85-mm. A rapid-firing dual-mount 30-mm anti-aircraft gun of Czechoslovak design (fig. 51) has



Figure 51. Czechoslovak Twin 30-mm Antiaircraft Gun M53.

recently been introduced for tactical employment in the field.

e. Field Rocket Launcher. The Czechoslovak-designed and -produced 130-mm (32-round) field rocket launcher RM-130 (fig. 52) is the only standard piece of its type in the Army. It is truck-mounted, usually on a Prage V3S 6 x 6. There are 4 horizontal rows of 8 tubes each on the launcher.



Figure 52. Czechoslovak 130-mm Rocket Launcher RM-130 (32-round).

94. ARMOR

a. Tanks. The Czechoslovak version of the Soviet T-54 medium tank (fig. 14, p. 18) is standard in the Army. It is a highly effective and modern weapon, mounting a 100-mm gun. It is replacing the Czechoslovak-produced T-34(85) (fig. 53), large numbers of which remain in the country. There are relatively few heavy (Soviet JS series) tanks, and none are locally produced. Their use may be largely confined to familiarization training.

b. Assault Guns. The most widely used assault gun in the Czechoslovak Army is the Soviet-type SU-100 (fig. 54), large numbers of which were produced in Czechoslovakia up to at least 1956. There is no evidence of the production of assault guns at present. There are significant numbers of other types of Soviet assault guns on hand, including the SU-85 (fig. 66, p. 97) and the

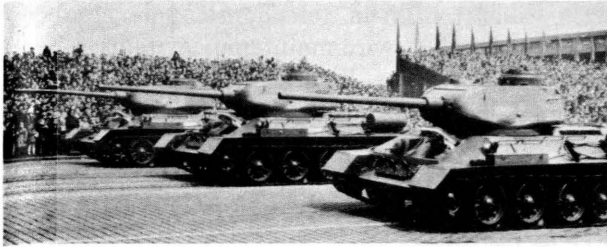


Figure 53. Czechoslovak T-34 Medium Tank (85-mm Gun).

JSU-152 (fig. 104, p. 142), as well as the lightly armored support gun SU-76 (fig. 122, p. 163).

c. Armored Personnel Carriers. Small numbers of Soviet-type carriers have been reported in the Czechoslovak Army, some possibly of Czechoslovak manufacture.

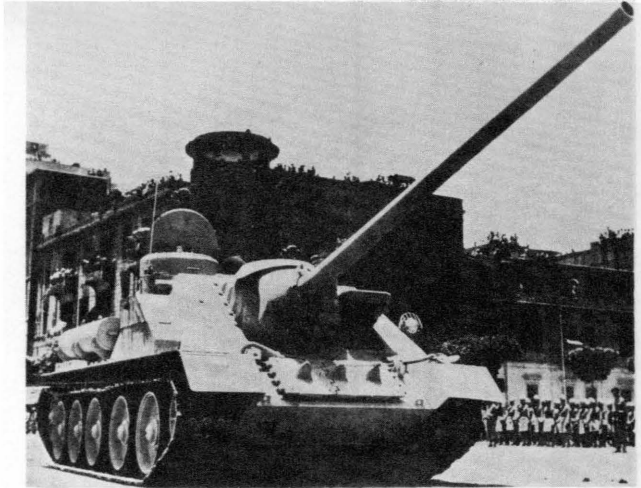


Figure 54. Czechoslovak SU-100 Medium Assault Gun.

Section V. EQUIPMENT

95. TRANSPORTATION ¹

Czechoslovakia is the largest producer of trucks and other automotive vehicles among the Satellite states. Multiwheel-drive vehicles range in size from 1½-ton to 13-ton capacity and are designed for both road and cross-country use. All the general-purpose vehicles used in the Czechoslovak Army are locally produced, except the Soviet GAZ-69, a ½-ton "jeep." Various special-purpose vehicles, including wheeled and tracked amphibians, are of Soviet manufacture.

The standard light utility truck is the Soviet GAZ-69 (fig. 117, p. 161). The GAZ-46 amphibious jeep (fig. 123, p. 164) and the GAZ-69A command and reconnaissance vehicle are also in general use. A Skoda-produced jeep and its amphibious counterpart were both discontinued in favor of the Soviet-manufactured vehicles several years ago. The Tatra 805, produced in Czechoslovakia, is a 1½-ton truck which has excellent obstacle and ditch-crossing capabilities. It is used as a light cargo and personnel carrier and with different bodies as an ambulance, panel truck, carryall, and command-post vehicle.

¹ Cargo capacities are given here in approximate U.S. short-ton equivalents, rather than the larger metric-ton units which are frequently encountered elsewhere.

The standard 5½-ton truck is the Praga V3S (fig. 55). It is reported to have excellent characteristics and can be modified for use as a cargo and personnel carrier, dump truck, fuel tanker, communications or shop van, or rocket-launcher carrier.

The standard 11-ton truck since 1949 has been the Tatra 111 (fig. 56). It has proved to be a reliable heavy truck usable for a wide variety of purposes. The Tatra 111 is to be replaced in production during 1959 and 1960 by two newer

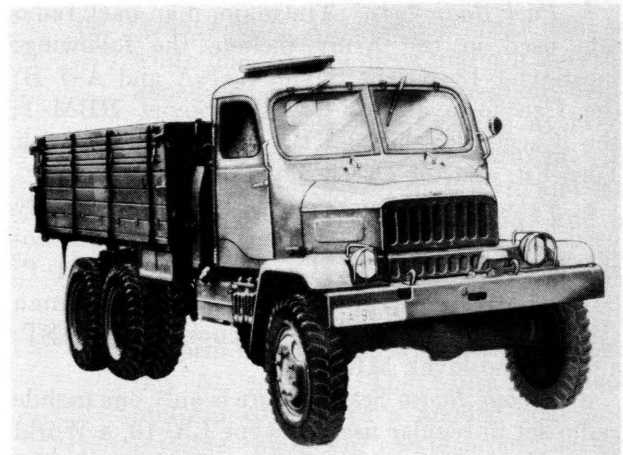


Figure 55. Czechoslovak Praga V3S 5½-ton Truck, 6 x 6.

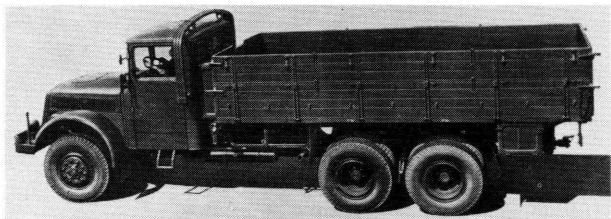


Figure 56. Czechoslovak Tatra 111 11-ton Truck, 6 x 6.

trucks, the Tatra 137, 7½-ton, and the Tatra 138, 13-ton. There is a heavy-wheeled tractor version of the Tatra 111 in use, termed the Tatra 141. It has additional reduction gears and can pull road loads over 100 tons.

96. SIGNAL

a. General. The heterogeneous collection of signal equipment held by the Army after the war is being replaced with recent models of Soviet and Czechoslovak equipment, supplemented by quality radio-relay equipment brought in from East Germany. Much of the older signal equipment is fairly reliable, in spite of the shortage of replacement parts. The amount of equipment available is not believed adequate for extended wartime operations. Local production, at the Tesla factory group and elsewhere, is increasing, however, and the country has a high potential for the manufacture of quality telecommunication equipment.

b. Pack Radio Sets. The major man-pack radio sets used in the Army include the following: the Soviet 13-R; the Soviet A-7-A and A-7-B; the Czechoslovak RF-11; the Soviet RBM-1; the Czechoslovak 50-RPN; the Czechoslovak Torn Fu; and the Czechoslovak Orlik.

c. Vehicular Radio Sets. The most frequently used vehicular radio sets include the Czechoslovak RM-31-50-TIA; Czechoslovak RM-31-P; Soviet 12-RTM; East German Torn E b; German (World War II) 80 WSa; Czechoslovak RMST; and Czechoslovak MK-19.

d. Mobile Radio Sets. There is only one mobile radio set in regular use, the type LR-10, a World War II German model designed originally for use in aircraft.

e. Wire. Local production of military wire equipment has been increasing, and foreign items—largely German and Soviet—are being replaced. Field telephone units, in wooden boxes of various

sizes, consist of field telephones, pole climbers, tools, and other wire-maintenance items. Such units have various K designations stamped on the outside of the box indicating the number of drums of field wire included with each unit, *e.g.*, K3, K6, K24.

97. ENGINEER

The Czechoslovak Army possesses significant quantities of engineer materiel in most major categories. Quantities are adequate for current requirements, and sufficient personnel have been trained to operate and maintain this equipment. Local production can supply the Army's continuing needs. Virtually the only imported engineer equipment in use by the Army is photogrammetric and precise surveying instruments from East Germany. Czechoslovakia produces sufficient quantities of the following for export to other countries: demolition and mine warfare equipment, bridging equipment, and explosives. The Army is believed to be equipped with a limited number of infrared devices of local production.

98. CHEMICAL

Czechoslovak chemical equipment is a mixture of wartime and postwar models of Czechoslovak, Soviet, and German design. The German items, once forming the bulk of chemical stocks, are rapidly being replaced by domestic production of Czechoslovak- and Soviet-type items and by some importation from the U.S.S.R. The Army is not at present adequately equipped to conduct offensive chemical warfare but is relatively well supplied with defensive materiel. The quality of chemical equipment now available is good, and continued production of high quality materiel in Czechoslovakia will improve the standard.

99. MEDICAL

Czechoslovakia is in a favorable medical position as compared to its Eastern European neighbors. Medical equipment is of good quality and is available in generally sufficient quantities to meet the needs of the country as well as to permit some export. Czechoslovakia produces X-ray tubes and other items of medical equipment. Pharmaceuticals and biologicals are also produced locally. An extensive hospital system is in existence and is capable of providing hospital care to the population on a generally effective basis.

Section VI. UNIFORMS, INSIGNIA, AND DECORATIONS

100. UNIFORMS

a. General. Czechoslovak Army uniforms are based primarily on German and British designs. With the exception of a new red star cap badge, the Czechoslovak Army continues to wear its own distinctive uniforms and to retain its methods of identification, unlike several other Satellites which have adopted Soviet types. Czechoslovak national emblems and buttons with crossed swords are displayed on all uniforms. The Army's uniforms are made of olive-drab wool material and are worn for both summer and winter. Although regulations specify that the cap, coat, and breeches must be of matching color and quality, considerable variation may be encountered, particularly in the uniforms worn by enlisted men. The uniforms worn by officers are of better quality and material than those worn by enlisted men. They consist of two principal types: field-service and dress. These uniforms are discussed below and are illustrated in figure 57.

b. Field-Service.

- (1) *Officers.* This uniform consists of: garrison cap or steel helmet; coat; khaki shirt and olive-drab tie; trousers; boots; and a Sam Browne belt. An overcoat and brown gloves are worn in winter.
- (2) *Enlisted men.* This uniform is similar to that worn by officers, with the following exceptions: the coat and shirt may be worn without a tie; olive-drab buttons are substituted for gold-colored buttons; trousers with the British-type large pocket on the left thigh may be worn; and a plain leather or web belt with solid brass buckle embossed with the Czechoslovak lion is worn. Black-laced hobnailed boots may be worn with British-type short leggings. A fur cap may be issued in winter.

c. Dress.

- (1) *Officers.* This uniform consists of: service cap or helmet; coat; white shirt and black tie; breeches or trousers; boots or shoes; and a Sam Browne belt. A steel helmet is worn for parade dress but is generally not worn on other dress occasions. The overcoat worn with the field-service uni-

form is also worn with the dress uniform as prescribed.

- (2) *Enlisted men.* The field-service uniform is worn by enlisted personnel for dress. As in the case of officers, the steel helmet is generally worn for parade dress.

d. Women. Uniforms worn by women officers and by enlisted women are generally of similar design. The same uniform is worn for field, service, and dress, with minor changes denoting the various types.

The uniform consists basically of a single-breasted coat and a skirt. A shirt, with the collar worn open or closed, and a khaki necktie are worn. Trousers may be substituted for the skirt for field duty. Black low-quarter shoes are worn for dress and service; boots are worn in the field. A beret is worn for dress and a garrison cap for service and field duty.

e. Special.

- (1) *Armored.* Armored troops wear olive-drab coveralls over the field-service uniform. These have two patch upper pockets, one large patch pocket on the right thigh, and a drawstring waist. Blue coveralls and Soviet-type padded winter uniforms have also been observed. A black beret is usually worn; crash helmets are worn in the field. Boots or service shoes with short leggings may be worn.
- (2) *Camouflage.* A reversible coat and a white one- or two-piece uniform may be issued for wear over the regular field-service uniform. The coat is a three-quarter length parka-type garment. It is made of mottled green, brown, and tan waterproof material on one side and is white on the other side. The coat has two lower pockets and drawstrings on the sleeve cuffs and waist. The one-piece uniform is a coverall with attached hood (fig. 57, p. 76). The white two-piece uniform consists of a hooded coat and trousers made of waterproof cotton material.
- (3) *Paratroopers.* Paratroopers are issued special clothing items which include: leather jump helmet; camouflage jacket;



FIELD-SERVICE UNIFORM, OFFICERS
Junior Lieutenant, Infantry Shown



FIELD-SERVICE UNIFORM, ENLISTED MEN
(with Overcoat Roll)
Corporal, Artillery Shown



DRESS UNIFORM, OFFICERS
Lieutenant Colonel, Infantry Shown



WINTER CAMOUFLAGE UNIFORM



PARATROOPER IN CAMOUFLAGE JACKET

HEADGEAR INSIGNIA



GARRISON CAP,
ALL RANKS

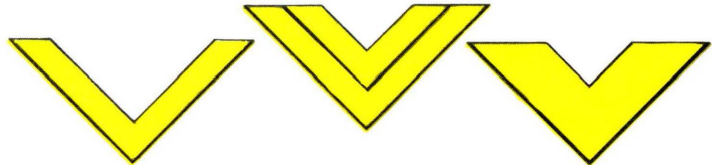


SERVICE CAP, OFFICERS



ARMY BUTTON
(Worn by officers and enlisted men on all uniforms and shoulderboards, but color is olive drab for enlisted men.)

SERVICE STRIPES WORN BY CAREER NCO'S



Single service stripe denotes first year of career service.

Two service stripes denote second year of career service.

Wide service stripe denotes career service of over two years.

NOTE: Yellow stripes indicate rear-echelon assignment; white stripes are worn by combat troops.

COLLAR TABS



GENERAL OFFICERS
(Arms)



GENERAL OFFICERS
(Services)



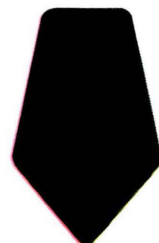
GENERAL OFFICERS
(Auxiliary Arms)



FIELD AND COMPANY
GRADE OFFICERS
(Arms)



FIELD AND COMPANY
GRADE OFFICERS
(Services)



CAREER NCO'S
(Auxiliary Arms)

Figure 57 Czechoslovak Army Uniforms and Insignia.

and jump boots. A heavy cotton fur-lined parka is worn for winter. The waist and sleeve cuffs have drawstrings. A web belt is worn with this item. In addition, paratroopers are issued a scarlet beret and a gray-green cotton summer uniform consisting of coat and trousers. The coat is single-breasted and has two patch upper pockets, two square lower pockets, and one small narrow pocket on each sleeve. The trousers have two inside hanging pockets, one right rear pocket with flap, two large pockets with buttoned flaps on the front thighs, and two small pleated pockets with buttoned flaps on the back thighs. The trousers are worn stuffed into jump boots.

f. Militarized Security Forces.

- (1) *Frontier Guard (PS)*. Frontier Guard personnel wear the regular Army uniform but are issued special items which include green service caps, green collar tabs with emblems, sheepskin coats, felt boots, camouflage capes, and padded winter uniforms.
- (2) *Interior Guard (VS)*. Interior Guard personnel also wear the Army olive-drab uniform. Officers and career NCO's wear magenta service caps, and conscripts wear the garrison cap. Emblems are worn on magenta collar tabs.

101. INSIGNIA

a. Grade.

- (1) *General*. Grades in the Czechoslovak Army are indicated by varying numbers and sizes of stars and stripes on shoulderboards. Insignia of grade are illustrated in figure 58.
- (2) *Officers*. The grade of general officers is indicated by the number of stars worn on shoulderboards, which have a criss-cross pattern. Field-grade officers wear shoulderboards with two longitudinal stripes; company-grade officers wear one longitudinal stripe. The shoulderboards worn by combat officers have a gold braid background and silver stars; those worn by certain administrative and technical officers have a silver background and gold stars. The stars vary

in size according to grade category, becoming progressively larger for each higher category (*i.e.*, company grade, field grade, generals). Officer categories are further indicated by means of metallic devices worn on collar tabs on dress uniforms. The devices consist of a lime leaf for general officers and a mace for all other officers (fig. 57, p. 76).

- (3) *Enlisted men*. Master sergeants wear a wide transverse and a narrow longitudinal stripe. Other noncommissioned officers wear transverse stripes which vary in width and number. Infantry NCO's performing conscript service have black rank stripes; others have red stripes. Career NCO's have gold or silver rank stripes, depending on whether they are in the combat or in the administrative and technical branches; they are also distinguished by plain collar tabs in branch color.

b. Branch.

- (1) *General*. Branch of service is indicated by means of metallic devices and by the use of color.
- (2) *Metallic devices*. Metallic devices are silver-colored for officers of the combat and auxiliary arms (except infantry, which has no device) and gold-colored for officers of the administrative and technical services and for all enlisted men. They are worn on the shoulderboards by all personnel except generals. These devices are illustrated in figure 59.
- (3) *Color*. The Czechoslovak Army does not use a specific color to identify each branch of service. Rather, branches are placed in one of three categories: red for combat arms; black for auxiliary arms; and brown for services. (These are the basic colors, but variations exist, as shown in the accompanying table.) Officers' branch of service is indicated by color displayed on collar tabs, piping and longitudinal stripes on shoulderboards, and piping on service caps, trousers, and breeches of the dress uniform. (See fig. 57, p. 76 for illustrations of use of color in collar tabs.) Two-color combinations

OFFICERS



SUPREME COMMANDER



ARMY GENERAL
(Arms)



COLONEL GENERAL
(Arms)



LIEUTENANT GENERAL
(Services)



MAJOR GENERAL
(Arms)



COLONEL
(Armored Troops)



LIEUTENANT COLONEL
(Artillery - Technical)



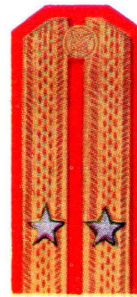
MAJOR
(Signal Troops)



CAPTAIN
(Quartermaster Service)



SENIOR LIEUTENANT
(Chemical Troops - Technical)



LIEUTENANT
(Infantry)



JUNIOR LIEUTENANT
(Engineer Troops)

ENLISTED MEN



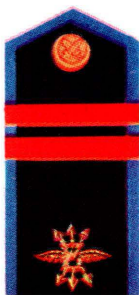
MASTER SERGEANT
(Airborne Troops)



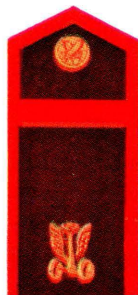
SERGEANT 1st CLASS
(Infantry)
(Career NCO)



SERGEANT
(Antiaircraft Artillery)



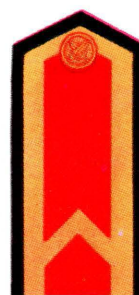
CORPORAL
(Signal Troops)



PRIVATE 1st CLASS
(Motor Transport Troops)



PRIVATE
(Topographic Service)



CADET
(Arms)



RESERVE
(Arms)

Figure 58. Czechoslovak Insignia of Grade.

(Infantry has no device.)



ARTILLERY



RAILROAD TRANSPORT



AIRBORNE TROOPS



MOTOR TRANSPORT TROOPS



MILITARY BAND



QUARTERMASTER SERVICE



SIGNAL TROOPS



MEDICAL SERVICE



ADMINISTRATIVE SERVICE



ARMORED TROOPS



JUSTICE SERVICE



TOPOGRAPHIC SERVICE



ENGINEER TROOPS



ANTIAIRCRAFT



CHEMICAL TROOPS



CONSTRUCTION UNITS



FRONTIER GUARD



INTERIOR GUARD

Figure 59. Czechoslovak Insignia of Branch.

are used to indicate the branch of service for enlisted personnel. The colors are shown on the piping and background of

the shoulderboards. Specific colors used for identifying branch of service on shoulderboards are as follows:

<i>Branch of service</i>	<i>Officers</i>	<i>Enlisted men</i>
Infantry, Airborne, Band.....	Gold background with red stripes and piping.	Red background with black piping.
Artillery, Armored, Antiaircraft.....	Gold (combat) or silver (administrative and technical) background with red stripes and piping.	Black background with red piping.
Engineers, Signal, RR Transport, Chemical, Topographic, Labor.	Gold (combat) or silver (administrative and technical) background with black stripes and piping.	Black with black piping, except for Signal and RR Transport troops who display black background and blue piping.
Quartermaster, Medical, Motor Transport, Justice, Administration.	Silver background with brown stripes and piping.	Brown background with red piping.
Frontier Guard.....	Gold background with green stripes and piping.	Green background with red piping.
Interior Guard.....	Gold background with magenta stripes and piping.	Magenta background with black piping.

102. DECORATIONS AND AWARDS

Orders and medals are awarded to individuals, units, and institutions. Prior to 1955, the five highest decorations awarded to military personnel were as follows: Czechoslovak Military Order of the White Lion for Victory; Czechoslovak Award of General Milan Restuslav Stefanik "Sokol"; Gallantry Medal; Award of Slovak Uprising; and the Honor Medal.

In 1955, the Czechoslovak Government issued an ordinance instituting new decorations and awards, some of which are comparable to Soviet decorations *e.g.*, the Order of the Red Banner and the Order of the Red Star. Also, as in the Soviet system of awarding the title "Hero of the Soviet Union" to recipients of the Order of Lenin, the Czechoslovak Government has created the title, "Hero of the Czechoslovak Republic" to be awarded simultaneously to recipients of the new Order of Klement Gottwald.

The decorations awarded prior to 1955 and the new decorations are discussed below. The order of precedence of the new decorations in relation to those instituted prior to 1955 is not known.

a. Czechoslovak Military Order of the White Lion for Victory. This medal is awarded to citizens and to foreigners for outstanding military service to Czechoslovakia.

b. Czechoslovak Award of General Milan Restuslav Stefanik "Sokol." This medal is awarded in two classes for outstanding gallantry in battle and for command and conduct of military operations.

c. Gallantry Medal. This medal was awarded to commemorate the liberation of the Czechoslovak Republic.

d. Award of Slovak Uprising. This order was awarded to members of the underground and to those who took part in the uprising. It may be awarded posthumously. The award has two classes and a commemorative medal.

e. Honor Medal. This is a special medal awarded to soldiers for excellence in a particular field. The Honor Medal has different inscriptions and pictures, depending upon the recipient's branch of service and achievement.

f. Order of Klement Gottwald, for the Construction of the Socialist Homeland. This order is the highest decoration to be awarded for outstanding meritorious service to the government. The medal has a picture in relief of President Gottwald in the center of a five-pointed star. The recipient of this order simultaneously is awarded the title, "Hero of the Czechoslovak Republic," and will wear a gold star. The recipient also is given a diploma certifying the award and an Order Book entitling him to wear the star.

g. Order of the Red Banner. This order is awarded for outstanding achievements to commanding officers, political officers, individuals, and units. The order also is awarded to professional officers in recognition of their 20 years' service in the armed forces or in the Ministry of Interior.

h. Order of the Red Star. This order is awarded to military and civilians for outstanding work in the improvement of military operations in war-

time and for individual exploits in the defense of the country in peacetime. It also is awarded to professional officers after 15 years of service.

i. Medal for Merit in the Defense of the Homeland. This medal is awarded for courage in the struggle against the enemy in wartime and for personal courage shown in protecting the country in peacetime. Professional officers are awarded

this medal after 10 years' service.

j. Medal for Service to the Homeland. This medal is awarded for active assistance to military units in wartime, and for outstanding work in connection with military training and improvement of military equipment. It also is awarded to professional officers after five years' service in the armed forces or in the Ministry of Interior.

Section VII. GLOSSARY OF MILITARY TERMS

Czech and Slovak are the two official languages of Czechoslovakia. Czech is spoken by the people of Bohemia and Moravia, who comprise a large majority of the total population; Slovak, by the inhabitants of Slovakia, the elongated eastern third of the country. The two languages are closely related; in fact, Slovak is sometimes regarded as a dialect of Czech. Most of the vocabulary is the same, but spelling and pronunciation differ considerably. The Czech spellings are used in this Glossary.

The stress in Czech words is always on the first syllable. Acute accent marks (´) serve merely to lengthen vowels. Other diacritical marks modify the sound. The following letters require special attention:

a	a in father
c	ts in hats
č	ch in church
ě	ye in yet
é	a in ate
h	between <i>h</i> in hat and <i>ch</i> in Scottish loch
ch	<i>ch</i> in Scottish loch or German <i>Buch</i> (this digraph comes after <i>h</i> in the alphabet).
í	<i>i</i> in machine
j	<i>y</i> in young
ň	<i>ny</i> in canyon (but with the <i>y</i> less prominent).
ř	<i>rsh</i> in marsh or <i>rg</i> in French <i>largesse</i>
š	<i>sh</i> in show
ů	<i>oo</i> in noon
y	<i>y</i> in very
ž	<i>z</i> in azure

Word order is highly flexible. A modifier, for example, may either precede or follow the word modified. In this glossary, combinations of nouns and adjectives may be found under the adjective or under the noun, or both.

armáda	army
armáda polní	field army
armádní	army (adj.)

armádní dílny	army workshops
armádní skupina	army group
armádní zbrojnice	army arsenal
aspirant	cadet
atomová puma	atomic bomb
atomový útok	atomic attack
atrapa	dummy, mock

B

baterie	battery
benzín	gasoline
bitva	battle
boční	flanking, lateral
boční voj	flank guard
bodák	bayonet
boj	fighting, fight, combat, engagement, battle.
boj v horách	mountain fighting
boj v lese	wood fighting
boj v noci	night fighting
boj v ulicích	street fighting
boj z blízka	close fighting
bojiště	battlefield
bojovat	to fight
bojové chemické látky	chemical warfare agents
bojový tvar	battle formation
branec	conscript
brániti	to defend
branná povinnost	defense obligation
branný zákon	defense law
brigáda	brigade
busola	compass

C

cesta	road
chemické vojsko	chemical troops
cíl	object, objective, target, goal
cvičení	drill, exercise
cvičitel	instructor, trainer
cvičiti	to drill, to train

Č

čára	mark, line
čas	time
čelo	front, head of
četa	platoon
četař	sergeant

D			
dalekohled.....	telescope, field glasses	granát.....	grenade
dálkoměr.....	range-finder	granát ruční.....	hand grenade
dálkové řízení.....	remote control	granátomet.....	grenade launcher
dávka.....	burst (from MG)	gros.....	main forces
degradace.....	degradation	H	
délka.....	length, range	heslo.....	password
dělmistr.....	master gunner (arty)	hipomobilní.....	horse-drawn
dělo.....	artillery piece	hlášení.....	report, message, information
dělostřelec.....	artilleryman, gunner	hlášení ztrát.....	casualty report
dělostřelectvo.....	artillery	hlásiti.....	to report
desátník.....	corporal	hlaveň.....	barrel
dílny.....	workshops	hlavní.....	principal, main, chief
divise.....	division	hlavní štáb.....	general staff
dolet.....	range (of flight)	hlavní stan.....	main headquarters
doplňék.....	complement	hledí.....	backsight, tangent sight
doplňovati.....	to recruit, to complete	hlídka.....	patrol, guard, picket
doprovod.....	convoy, escort	hodnost.....	rank
dostřel.....	effective range (of fire)	hotovost.....	readiness
dotyk.....	contact, touch	hotovost k boji.....	readiness for action
drát.....	wire	houfnice.....	howitzer
drátěná překážka.....	wire obstacle	hranice.....	border, boundary, frontier, demarcation line.
družstvo.....	squad, section	hranice bezpečnostní.....	safety limit
důstojník.....	officer	hranice pásma činnosti.....	line of demarcation, boundary
důstojník aktivní.....	regular officer	hudba vojenská.....	military band
důstojník dozorčí.....	officer on duty, orderly officer	CH	
důstojník generálního štábu.....	officer of the general staff	charakteristika.....	characteristic
důstojník nižší.....	junior officer	chrániti.....	to cover, to secure, to protect
důstojník služeb.....	administrative officer	I	
důstojník vyšší.....	senior officer	infiltrace.....	infiltration
důstojník záložní.....	reserve officer	instruktor.....	instructor, trainer
důstojník řadový.....	line officer	intendance.....	intendance, supply department
důvěrný.....	confidential	intendanční služba.....	intendance (supply) service
dýchací přístroj.....	breathing apparatus	J	
E		jaderná zbraň.....	nuclear weapon
eskadrona.....	squadron	jednotka.....	unit, troop, detachment, body
etapa.....	communications zone	jednotka bojová.....	combat unit
F		jednotka odloučená.....	detachment
fronta.....	front	jednotka rámcová.....	skeleton unit
funkce.....	function	jednotka rychlá.....	mobile unit, mechanized unit
G		jednotka zajišťovací.....	protective troops, covering party
generál.....	general	jednotky.....	troops
generál armádní.....	army general (four-star)	jednotky dopravní.....	transportation corps
generál brigádní.....	brigadier general (old designation; one-star)	jednotky dopravované vzduchem.....	airborne troops
generál divisní.....	major general (old designation; two-star)	jednotky lyžařské.....	ski troops
generál major.....	major general (new designation; one-star)	jednotky padákové.....	paratroops, parachute troops
generál poručík.....	lieutenant general (new designation; two-star)	jednotky výsadkové.....	airborne troops
generál plukovník.....	colonel general (new designation; three-star)	jednotky záložní.....	reserve troops
generál sborový.....	lieutenant general (old designation; three-star)	jezdeckvo.....	cavalry
generální štáb.....	general staff	jih.....	south
		jméno krycí.....	code name
		jmenování důstojníkem.....	commission
		justiční služba.....	legal service

K			
kadence střelby	rate of fire	mezikontinentální balistická střela	intercontinental ballistic missile.
kádr	cadre	míle	mile
kanon	cannon, gun	mimořádná událost	exceptional occurrence
kapitán	captain	mina	mine
kapsa	pocket	Ministerstvo Národní Bezpečnosti.	Ministry of National Security
karabina	carbine	Ministerstvo Národní Obrany.	Ministry of National Defense
kasárna	barracks	minomet	mortar
kasární vězení	confinement to barracks	minové pole	mine field
kázeň	discipline	místo	locality, place, spot
kázeň palebná	fire discipline	mobilisace	mobilization
kázeň pochodová	march discipline	mobilisační plán	mobilization plan
kázeňský	disciplinary	mobilisovati	to mobilize
kázeňský řád	disciplinary code	model	model
klásti odpor	to resist	most	bridge
kolesna	gun limber	most pontonový	ponton bridge
kompas	compass	motor	engine
křídlo	flank, wing	motorisovaný	motorized
kryt	cover, shelter	motostřelecký pluk, etc.	motorized-rifle regiment, etc.
krýti se	to take cover	moždír	mortar
kukátko polní	field glasses	mužstvo	rank and file, troops
kulomet	machinegun		
kulomet lehký	light machinegun		
kulomet spráhnutý	coaxial machinegun (tank)		
kulomet těžký	heavy machinegun		
kulometčík	machinegunner		
kůň	horse		
kurs	course		
kybernetika	cybernetics		
L		N	
léčka	ambush	náboj	cartridge, round
lékař	physician, doctor	nábojka	cartridge case, case cartridge bag.
les	forest	nábojnice	cartridge case
let	flight	náčelník	chief
letadlo	aircraft	náčelník hlavního štábu	chief of general staff
letec	airman	náčelník štábu	chief of staff
letectvo	air force	nádraží	station
letiště	airdrome, airfield	nádraží železniční	railroad station
letka	flight	nájezd	invasion, raid
letoun	airplane, plane	nálet	air raid
letoun bezmotorový	glider	nálož	blasting charge, demolition set
letoun bombardovací	bomber	námořní pěchota	naval infantry
letoun noční stíhač	night fighter	nápor	effort, attack
letoun stíhač	fighter	navázání dotyku	establishing contact
letoun střemhlavý	dive bomber	navázání styku	establishment of contact (signal).
letoun výzvědný	reconnaissance plane	nekázeň	lack of discipline
lyžařská hlídka	ski patrol	nemocnice	hospital
lyže	ski	nemocnice polní	field hospital
		nepřítel	enemy, adversary
		neutralisace	neutralization
		neutralisovati	to neutralize
		nevycvičený	untrained
		nováček	recruit, novice
M		O	
major	major	obchvat	outflanking, turning movement
maketa	mock-up	obchvat hluboký	wide turning movement
manéver	maneuver	obchvat oboustranný	pincer movement
mapa	map, sheet	obchvátiti	to outflank, to turn, to flank
maska plynová	gas mask	obklíčiti	to enclose, to encircle
maskování	camouflage	oblast	district
mechanisovaný	mechanized	obrana	defense
měřítka	scale, measure		

obrana civilní protile- tecká.	air raid precautions, civil air defense.	pěchota	infantry
obrana proti letadlům.....	antiaircraft defense.	perut'	squadron
obránce	defender	pěšák	infantryman
obranný	defensive	pěší	infantry (adj.)
obrněný	armored	pěší pluk	infantry regiment
obsaditi	to occupy, to seize, to garrison	pěší prapor	infantry battalion
obsazení	occupation	pěší rota	rifle company
obsluha	crew, detachment, team	pevnost	fortress
obsluhovati	to handle, to operate	pevnůstka	blockhouse, pillbox
obvaziště	aid post, dressing station	pilot	pilot
ochrana	protection	písař	unit clerk
ochrana boku	flank protection	pistole	pistol
ochranný oděv	protective clothing	plamenomet	flamethrower
odbor	department, office	plamenometčik	flamethrower operator
oddělení	section, branch, echelon	plán	plan
oddíl	branch, detachment	plán mobilisační	mobilization plan
oddíl dělostřelecký	artillery battalion	plán nastupový	concentration plan, assembly plan.
oddíl přezvědný	reconnaissance detachment	plán paleb	fire plan
odmoření	decontamination	pluk	regiment
odmořiti	to decontaminate	plukovní	regimental
odmořovač	decontaminator	plukovník	colonel
odmořovací družstvo	decontamination squad	plyn	gas
odmořovací náradí	decontamination equipment	plynomet	gas projector
odmořovací stanice	decontamination station	pobočník	aide-de-camp, adjutant
odmořovací zařízení	decontamination installation	pochod	march
odpoutati se	to disengage, to break off the fight.	pochod pěší	movement by march route
odřad	park, echelon, convoy	pochod usilený	forced march
odsun	evacuation	pochodovati	to march
ofensiva	offensive	počty	numbers, strength
operace	operation	počty mírové	peacetime strength
opevnění	fortification	poddůstojník	noncommissioned officer
opevnění polní	field fortification	podminovati	to undermine
opevnění stálé	permanent fortification	podnáčelník štábu	deputy chief of staff
opevniti	to fortify	podplukovník	lieutenant colonel
organisace	organization	podpora	support, assistance
osádka	crew, manning	podpora dělostřelecká	artillery support
ošetřovna	infirmary	podpora palebná	fire support
		podporučík	second lieutenant
		pohonná hmota	fuel
	P	pohov!	at ease!
padák	parachute	Pohraniční Stráž	Frontier Guard
palba	fire	pole	field
palba boční	flanking fire, enfilade fire	pole minové	mine field
palba daleká	long-range fire	pole zorné	field of view
palba křížová	crossing fire	policie vojenská	military police
palba ničivá	demolition fire	politická správa	political administration
palba ochranná	covering fire	polní	field (adj.)
palba plochá	grazing fire	polní kuchyně	field kitchen
palba postupná	rolling fire	polní lopatka	entrenching tool
palba přehradná	barrage fire	poločeta	section, subplatoon
palba přímé podpory	covering fire, supporting fire	pomoc	assistance
palba protibaterijní	counterbattery fire	pomocný	auxiliary
palba rozstupňovaná	echelon fire	ponton	ponton
palba zabraňující	interdiction fire	poplach	alarm, alert
páliti	to fire	poplach letecký	air raid alarm
pancéřový	armored	poplach plynový	gas alarm
pásmo	zone	poručík	lieutenant
pásmo bezpečnostní	safety zone	posádka	garrison
pásmo činnosti	sector, zone of action	posílit	to reinforce
pátrač	scout, spy	postavení	position, emplacement

postavení bočné.....	flanking emplacement	průraz.....	penetration
postavení obranné.....	defense position	průrazný.....	piercing
postavení palebné.....	firing position	průsmyk.....	defile, pass
postavení ústupové.....	rear guard position	průzkum.....	reconnaissance
postavení záměnné.....	alternate position	puška.....	rifle
postup.....	advance	puška protitanková.....	antitank rifle
potraviny.....	supplies, provisions		
povýšení.....	promotion		R
pozor!.....	attention!	řad.....	line, file, row
pozorování.....	observation	radio.....	radio
pozorovatel.....	observer, lookout man	radiolokace.....	radar
pozorovatelna.....	observation post	řadový důstojník.....	line officer
prapor.....	battalion	raketa.....	rocket
prapor motorizovaný.....	motorized battalion	raketa osvětlovací.....	lighting flare
prapor náhradní.....	replacement battalion	raketa signální.....	signal flare
prapor samostatný.....	separate battalion	raketomet.....	rocket launcher
pravidelný.....	regular	raketový letoun.....	rocket aircraft
právní.....	legal	raněný.....	wounded
přechod.....	crossing, pass	ráže.....	caliber
předmostí.....	bridgehead	reaktivní letoun.....	jet aircraft
přednosta.....	chief, head	řízená střela.....	guided missile
předpis.....	instruction, directive, prescription.	roj.....	patrol, squad
předpisy.....	regulations	rojnice.....	line of skirmishers
představený.....	superior, chief	rota.....	company
předsunutý.....	advance	rota kulometná.....	machinegun company
předvoj.....	vanguard	rota minometná.....	mortar company
předvojenský.....	premilitary	rota pěší.....	rifle company
přehrada palebná.....	barrage	rota pomocná.....	support company
přejezd.....	level crossing	rota spojovací.....	signal company
překážka.....	obstacle, hindrance	rota zákopnická.....	engineer company
překážka drátěná.....	wire obstacle	rotný.....	sergeant first class
překážka protitanková.....	antitank obstacle	rozbuška.....	blasting cap
překročiti.....	to cross, to pass over	rozkaz.....	order
překvapení.....	surprise	roznětka.....	detonator
přesun.....	movement	rozptýlení.....	dispersion
přezvědy.....	reconnaissance	rozptýliti.....	to disperse
přibližování.....	approach march	rozvinouti.....	to deploy, to form
přilba.....	helmet	rozvinutí.....	deployment
příměří.....	armistice, truce		S
pronásledovati.....	to pursue	salva.....	salvo
pronikání.....	penetration	samochoodka.....	self-propelled gun
prosakovati.....	to infiltrate	samočinný.....	automatic
prostor.....	area, locality, space	samopal.....	submachinegun
prostor bojový.....	fighting ground	sbor.....	corps
prostor hluchý.....	dead ground	sbor armadní.....	army corps
prostor nastupový.....	assembly area	Sbor Národní Bezpečnosti (SNB).....	National Security Corps
prostor protitankový.....	antitank locality		
protiletadlové dělostřelectvo.....	antiaircraft artillery	sebeobrana.....	self-defense
protiútočiti.....	to counterattack, to react	seskok padákem.....	parachute jump
protiútok.....	counterattack	sestava.....	formation, system, order of battle.
protivník.....	adversary		
protivzdušná obrana státu.....	antiair defense of the state	setnina.....	company
průchod.....	lane	sever.....	north
průchod v překážkách.....	lane in the obstacles	signalisace.....	signaling
průchodiště.....	passing place	silnice.....	road, highway
průkaz totožnosti.....	identity card	silnice asfaltovaná.....	light-asphalt road
průlom.....	breakthrough, penetration, breach.	silnice dehtovaná.....	asphalt road
		silnice štěrkovaná.....	graveled road
		situace.....	situation

sklad	depot, magazine, dump
skladiště	storehouse
skupina	group
skupina armadní	army group
sled	echelon
složení	composition
složka	component, ingredient
služby	services
směr	direction, course, route
směrnice	directives, instructions
souřadnice	coordinates
soustředění	concentration
soutěska	defile
spojení	communication, connection, contact.
spojovací vojsko	signal troops
správa	administration; repair
stanice	station
stanice nakládačí	entraining station, loading station.
stanice první pomoci	first aid station
stanice vykládačí	detraining station, unloading station.
stanice zásobovací	supply station
stanoviště	command post, location
staršina	master sergeant
stejnokroj	uniform
stejnokroj polní	field uniform
stejnokroj vycházkový	walking-out dress
stráž	guard
strážný	sentinel, sentry
střela	bullet, projectile, missile
střelba	fire, firing
střelba křížová	crossing fire
střelba nepřímá	indirect fire
střelba plochá	sweeping fire, grazing fire
střelba přímá	direct fire
střelba šikmá	oblique fire
střelivo	ammunition
střelnice	firing range
střetnouti se	to encounter
střetný boj	meeting engagement
střfletí	to fire
střfina	embrasure, loophole
stůj!	halt!
styk	contact, liaison
světlomet	searchlight
svobodník	private first class
systém	system

Š

šifrování	enciphering
šířka	width; latitude
škola	school
štáb	staff

T

tábor	camp
táboření	encampment
tábořiti	to camp
tajný	secret

taktický	tactical
taktika	tactics
tank	tank
tankové vojsko	armored troops
telefon	telephone
telefonie drátová	line telephony
telegraf	telegraph
telegrafie drátová	line telegraphy
telegram	telegram
terč	mark, target
terén	ground, terrain
těžký	heavy
thermonukleární výbuch	thermonuclear explosion
tlaková vlna	pressure wave
topografický	topographical
topografie	topography
třaskavina	explosive
trat'	track, line
tryskový letoun	jet aircraft
tvar	formation, shape
tvrz	fort
týl	rear

U

ubikace	barracks, quarters
ubytování	billeting, quarters
účetní	supply sergeant, accountant
učiliště	school, training center
účinnost	efficiency, effectiveness
úderník	rifleman, skirmisher
úkol	task, mission
umělá družice	artificial satellite
úmysl	intention
úprava	arrangement
úřad	authority, office
úsek	sector
uskladniti	to dump, to store
ústředna	center, exchange
ústřední nemocnice	central hospital
ústroj	dress
ústup	retreat, withdrawal
utajení	secrecy
útočiti	to attack, to assault, to storm
útočník	attacker, assailant
útočný	offensive (adj.)
útok	attack, offensive
útvár	unit
území	territory
územní	territorial
úzkokolejný	narrow gage

V

v činné službě	on active service
v poli	on field service
válčiště	theater of war, war area
válečný	war (adj.), military
válečný počet	war strength
válečný průmysl	war industry
válečný zajatec	prisoner of war
válka	war
válka drobná	guerrilla warfare

ve službě.....	on duty	zajištění.....	protection, security
ve výslužbě.....	retired	základna.....	base
vedení.....	conduct, leadership	základní.....	basic, elementary
vedlejší.....	secondary, adjoining	zákon.....	law
velení.....	command	zákop.....	trench, ditch
veletí.....	to command	zakopati se.....	to entrench
velitel.....	commander	zákrok.....	intervention
velitel čety.....	platoon commander	záloha.....	reserve
velitel praporu.....	battalion commander	zaměstnání.....	occupation, profession
velitel pluku.....	regimental commander	zaminovaný.....	mined
velitel roty.....	company commander	zamoření.....	contamination
velitelství.....	headquarters	zamořený prostor.....	contaminated area
větroň.....	glider	záření.....	radiation
věž.....	turret, tower	záření světelné.....	light radiation
viditelnost.....	visibility	záření tepelné.....	heat radiation
vítěz.....	conqueror, victor	záření roentgenové.....	X-ray radiation
vížka pozorovací.....	cupola	záření gamma paprsků.....	gamma radiation
vlak.....	train	záření alfa paprsků.....	alpha radiation
vniknouti.....	to break into	zásah.....	direct hit
vodíková puma.....	hydrogen bomb	zásek.....	abatis, tree entanglement
voj.....	guard, troops, forces	zásobovati.....	to supply
voj boční.....	flank guard	zástava.....	banner
voják.....	soldier	záštita.....	protection, screen
vojenský.....	military	zástupce.....	deputy, representative
vojín.....	private	zátaras.....	barricade, block
vojsko.....	troops, army, armed forces	zatarasiti.....	to block
vpravo.....	to the right	záznam.....	record
vertulník.....	helicopter	zběh.....	deserter
výbuch.....	detonation, explosion	zběhnouti.....	to desert
výbušnina.....	explosive	zbraň.....	arm, weapon
vycházková propustka.....	leave pass	zbraně.....	arms
východiško.....	starting point	zbraně pěchotní.....	infantry weapons
východiště.....	forming-up place, initial position.	zbrojíf.....	armorer
výchova předvojenská.....	premilitary training	zbrojnice.....	armory, arsenal
výcvik.....	exercise, drill, training	zbrojní služba.....	ordnance service
vyhlásiti válku.....	to declare war	zdravotnický.....	medical, sanitary
výhled.....	view, outlook	zdravotní služba.....	medical service
výkon.....	efficiency, performance	zdravotník.....	health worker, medical orderly
výsadcák.....	paratrooper	zeměpis.....	geography
vysloužilce.....	veteran, ex-serviceman	zeměpisný.....	geographical
vyslýchati.....	to interrogate	zemní práce.....	earthworks
výstraha.....	warning (poster)	zpráva.....	report, information, message
výstroj.....	equipment	zpravodajství.....	intelligence
výzbroj.....	armament	zpravodajství obranné.....	security, counterintelligence
vyznamenání.....	decoration	zrada.....	treason
vyzvědačství.....	espionage	zranitelný.....	vulnerable
	Y	zteč.....	assault, rush
yperit.....	mustard gas	ztéci.....	to assault
	Z	zvědy.....	reconnaissance
			Ž
záchranný člun.....	lifeboat	železnice.....	railroad
zád'.....	rear	železniční vojsko.....	railroad troops
zahajovací boj.....	preliminary engagement	železniční stanice.....	railroad station
zajatec.....	prisoner	ženijní vojsko.....	engineer troops
		ženista.....	engineer



Figure 60. East Germany.

EAST GERMANY

CHAPTER 5

Section I. THE MILITARY SYSTEM

103. NATURE OF THE ARMED FORCES

a. Composition. The East German Armed Forces are known as the National People's Army (*Nationale Volksarmee*—NVA). The ground forces constitute by far the largest component of the NVA. They are directly subordinate to the Minister for National Defense. The militarized security forces of the Interior Ministry, the Frontier Police and the Alert Police, are, in effect, auxiliary ground forces. They are organized and equipped much like infantry troops and receive combat-type training on a small-unit level in addition to their specialized preparation for security missions.

The NVA also contains the semiautonomous Naval Forces (*Seestreitkräfte*) and an Air Forces and Air Defense (*Luftstreitkräfte und Luftverteidigung*) organization which controls the air units and those ground antiaircraft artillery units assigned to the territorial antiair defense mission. The Navy is very small and possesses no vessels of significant size. Its mission is consequently very limited. The air forces are composed almost entirely of jet fighter-interceptor units and are restricted almost exclusively to the air defense role. The Air Forces and Air Defense organization which controls all territorial air defense is closely tied in with similar agencies in other Bloc states, including the Soviet Antiair Defense (PVO) organization.

b. Development. There is little direct relationship between the present East German Army and the German Army of World War II. Only a portion of the present officer cadre is made up of war veterans. The rest are either men selected primarily for their political background and reliability or younger men trained and schooled for military leadership since the war.

The history of the present force is a devious one. It starts with the formation of a force known as the Alert Units (*Bereitschaften*) in 1948. This was accomplished by the transfer of approximately

7,500 men from the regular civil police into the Alert Units. Most of the original members of this force were German veterans of World War II who had been prisoners of war in the U.S.S.R. where they were indoctrinated in anti-Fascist schools.

By mid-1949, the Alert Units were receiving essentially military training and were "police" in name only. By late 1950, the force had a strength of more than 50,000 troops. It was organized into some 40 units of military type, including infantry, tank, artillery, signal, and engineer. In the winter of 1950-1951, these units were combined into about half the previous number, each containing a balance of the various arms and with a personnel strength of from 1,600 to 1,800 men each. It was at this time that the Sea Police and Air Police were created. In 1952, the term "Alert Units" was dropped in favor of "Garrisoned People's Police" (*Kasernierte Volkspolizei*, KVP), which included the ground, sea, and air forces.

By this time, the ground units were, in effect, cadre divisions, containing elements of all the required arms and services. The general structure and the balance of arms were very similar to those of the Soviet-type rifle division. Since the cadre units contained a preponderance of officers and noncommissioned officers, they were capable of easy expansion to full divisions.

Not all the cadre units were destined to become full-strength divisions, however. In late 1952 and 1953, the previous units were disbanded and replaced by a smaller number of fully developed line divisions, although these remained well below estimated TOE strength. Two corps headquarters were also established—later to be replaced by military districts—each with three of the new divisions subordinate; a seventh division, located near Berlin, remained under GHQ control. Ground strength ultimately reached nearly 100,000 men.

The KVP, including Sea Police and Air Police, as well as the seven-division ground force, re-

mained essentially unchanged until early 1956. The name Air Police had by then been discarded for that of Aero Clubs, but the organization and nature of the force was not altered. The entire KVP was controlled by a main directorate within the Interior Ministry.

The fiction of referring to these armed forces as police forces arose from two major considerations: first, the Soviets wished to avoid the stigma of restoring German "militarism" so soon after the war, and second, they sought to delay provoking a parallel development in West Germany, with its much greater military potential. The fiction was transparent, however, and has had little apparent effect on the course of developments in West Germany.

In January 1956, the Soviet and East German leaders decided the appropriate time had arrived for abolishing the term "police" and acknowledging that an armed force existed. Significantly, this did not occur until after West Germany had joined NATO and stepped up her rearmament. An East German Ministry for National Defense was established by upgrading the former KVP

Main Directorate. A former Interior Minister, Willi Stoph, was appointed Defense Minister. Within several months, all KVP ground, sea, and air units had been formally transferred into the new "armed forces," known as the National People's Army.

c. Status. The Army ground troops constitute a compact, well-equipped, and exceptionally well-organized force. It is the first Bloc Army to have completed the conversion of rifle divisions to motorized rifle units, and to have eliminated the mechanized division in favor of a modernized version of the tank division. This reorganization has resulted in a force with high mobility and firepower. The balance of arms is exceptionally good, with a notably high proportion of armor. This provides a great deal of flexibility in the manner of employment of the respective units. It also is clearly designed to account for the main features of atomic warfare.

The status of equipment is almost equally good. The Soviets have provided East Germany with many new items of equipment sooner than any other Satellite country. In addition, while the



Figure 61. East German Troops in New Uniforms of World War II Type.

available quantities of some newer weapons are not large, they are generally higher than in the other countries in relation to total Army ground forces strength. The force is almost completely dependent upon Soviet equipment shipments, as the local munitions potential has not been significantly exploited since the war.

All line divisions are adequately trained through regiment, and several division and higher-level maneuvers have been held. A significant feature of East German training in the last few years has been the conduct of combined command-post exercises and large-unit maneuvers with Soviet troops. This activity has included such special features as simulated atomic explosions, river-crossings, and tactical air support.

Army ground strength remains low, now at 6 line divisions and about 75,000 men. This is largely because East Germany is the only Bloc state not to have a form of universal conscription. Voluntary enlistments have not been adequate to maintain the former strength of 100,000 men, despite numerous recruiting drives, the lowering of the enlistment term from 3 to 2 years, and the employment of various forms of direct and indirect duress.

The absence of conscription and the Army's small size have been made the subject of repeated propaganda pronouncements intended to reduce the pace of West German rearmament. Numerous statements by East German public officials on these matters have been broadcast just before West German decisions on important military issues.

The administrative machinery for conscription has long existed in East Germany. Should the regime decide to institute compulsory service, it could do so almost overnight and the Army could be rapidly increased in size. The fact that the West German Army has come to be larger than the East German may serve as a pretext for doing so.

Section II. ORGANIZATION OF THE FIELD FORCES

106. ARMS AND SERVICES

In the East German Army, ground branches are divided into combat arms and rear services. The former include Infantry (*Infanterie*), Artillery (*Artillerie*), Armored Troops (*Panzertruppen*), Engineer Troops (*Pioniertruppen*), Signal Troops

It is not likely that the East German Army will be used extensively in wartime, particularly because of its uncertain reliability. Its utility would be limited in any case, since the Soviets themselves can be expected to carry out the bulk of the ground fighting in the North German plain area. Some East German troops could be used, however, either integrated with Soviet forces for combat, or for various rear-area duties.

104. THE HIGH COMMAND

The Minister for National Defense controls all the Armed Forces in accordance with policy directives handed down by Party and government leaders in both East Germany and the U.S.S.R. The ministerial staff, or high command, consists of a Main Staff (actually a General Staff under another name); Main Directorates for Political Affairs, Rear Services, Training, and Research and Armament; a Deputy Minister for Naval Forces; a Deputy Minister for Air Forces and Air Defense; and Troop Directorates for the various ground branches. These agencies correspond to those of the typical Soviet-Bloc high command (ch. 1).

There is no overall ground forces command corresponding to those for the naval and air forces. Direct control of ground units is exercised by the Defense Minister himself, or perhaps by his First Deputy. The first command echelon below the Ministry is that of the military districts, although a few small tactical units are subordinate directly to the high command.

105. TERRITORIAL ORGANIZATION

East Germany is divided into a northern and a southern military district. Each is responsible for the administrative and logistic support of the roughly equal number of units within its territory. The district commander is in the line of command from the Ministry to the tactical units. As the ranking officer in the area, he is in charge of the general development, training, and combat readiness of the various units.

(*Nachrichtentruppen*), and Chemical Troops (*Chemische Truppen*). The Rear Services (*Rückwärtige Dienste*) include Intendance (Supply), Medical, Veterinarian, Finance, Administrative, Motor Transportation, and Construction Troops.

107. PRINCIPLES OF TACTICAL ORGANIZATION

The East German Army is the best organized of all the Satellite forces. It has closely followed Soviet principles and has been prompt in adopting modern changes to increase mobility, firepower, and flexibility of control (for detailed discussion, see ch. 1).

108. HIGHER HEADQUARTERS

There are no tactical headquarters higher than division in East Germany. The previous corps have been replaced by military districts, and probably were themselves actually more administrative than tactical in function. When high-level field commands are needed for training purposes, they are formed from members of the staffs of the military districts. In wartime, corps or army field headquarters could be quickly established to control tactical units in combat.

109. TACTICAL UNITS

a. Line Units. All six East German line divisions have been converted to motorized rifle and tank type. This development, completed in 1957, has not yet occurred in any other Satellite force, although Poland, Czechoslovakia, and apparently Hungary, are already working in the same direction. The former divisions included several of rifle and mechanized type.

b. Other Units. The largest support unit is an antiaircraft artillery division assigned to home antiair defense. Its organization follows that of the Soviet PVO-type division. It is equipped primarily with 85- and 100-mm AA guns, of which there are approximately 144 in the division. Other separate units include regiments and battalions of various combat and service types. These are assigned either to the military districts or to GHQ. Their organization is basically Soviet.

Section III. MILITARIZED SECURITY FORCES

110. GENERAL

The East German militarized security forces, Frontier Police (*Grenzpolizei*—GP) and Alert Police (*Bereitschaftspolizei*—BP), have an aggregate strength of nearly 50,000 men. Of the two forces, the GP is substantially the larger.

These forces are organized into military-type units and are equipped with Army weapons, including small arms, mortars, light artillery, armored cars, and a few medium tanks and self-propelled 76-mm support guns. They are trained for small-unit combat, in addition to their specialized security functions. Troops of both the GP and BP could be used in wartime to augment the Army ground forces, particularly for the conduct of security duties in rear areas. The GP also has a limited capability to conduct a delaying action at the border in event of an armed invasion.

111. FRONTIER POLICE

Recent developments of the GP have had the effect of increasing the force's capability for regular ground combat. The GP is not designed for full-scale military action, however, and there has been no reduction of preparations for its specialized security functions. The basic mission of the force, maintaining the security of the East German

national frontier and the Berlin sector and zonal borders, remains unchanged

The largest unit level is the brigade. Each brigade controls from two to four smaller units of less than regimental size. These are called border alert units (*Grenzbereitschaften*) and contain three battalions each of four companies. The brigades also have small support elements of both combat and service type.

The GP maintains its own specialist schools, although selected personnel attend various schools maintained by Army branches. A few GP officers may also attend special courses in the U.S.S.R.

In the past 2 years, combat training at the small-unit level has been increased. This training has sometimes been taken together with Army or Alert Police units.

GP equipment is usually received from the Army, often as that equipment is replaced by more modern weapons. Basic arms include most types of infantry weapons.

112. ALERT POLICE

The first East German internal security force was activated in 1955 under the name of Interior Troops (*Innere Truppen*). The internal security mission previously had been performed by a large force of Soviet MVD troops. The Interior

Troops—and the Frontier Police—were subordinate to the Ministry for State Security until February 1957 when they were transferred to the Interior Ministry. Shortly thereafter, the name of the force was changed to *Bereitschaftspolizei*—literally, Alert Police, BP.

The basic mission of the BP is detection and suppression of antiregime activity. Close liaison is maintained with the local civil police. The force is not so fully militarized as the GP but could provide valuable support to the Army in wartime, particularly in the performance of security duties.

The BP is organized into nearly a dozen motorized regiments. Each has the familiar triangular structure and a strength of approximately 1,000 men. The BP regiments have tactical as well as

administrative functions. They are located in areas, usually in or near large cities, where trouble is most likely to break out.

Basic recruit training is carried out within the tactical units. Specialized training is given by a separate training regiment which conducts both an NCO and a junior-officer school. BP training includes some practice in infantry small-unit tactics.

Most of the basic Soviet-type small arms and some heavy infantry weapons are held by the BP. The latter include 45- and 57-mm antitank guns and 82-mm mortars. A wide variety of motor vehicles is available, including trucks and armored personnel carriers. There are also specially designed vehicles for throwing water on unruly crowds.

Section IV. WEAPONS

113. INTRODUCTION

The arms production potential of East Germany has not been exploited and virtually all Army weapons are of Soviet manufacture. The Soviets have supplied sufficient equipment for current training needs and limited replacement stocks, including improved types, generally before issue to other Satellite forces. As a result, on a man-for-man basis, the Army is perhaps the best equipped of the Satellite forces. Mobilization stocks are extremely limited in all major categories, however, and virtually none of the World War II German equipment is still on hand.

Non-Soviet weapons include Czechoslovak infantry AT weapons and 85-mm field guns and Soviet-type medium tanks made in Poland. Both Czechoslovak and Polish items are available in only limited quantities. Major equipment deficiencies, based on estimated TOE requirements, include heavy tanks and heavy mortars. The reason for the shortage of these weapons is not clear. For the present, medium tanks and 120-mm mortars are used in their place. Requirements for such weapons in wartime could quickly be filled, if desired, from Soviet stocks in East Germany or the U.S.S.R.

The quality of available materiel is good and its condition at least adequate. Maintenance practices, standards, and capabilities are high in relation to those of some other Satellite armies.

114. INFANTRY WEAPONS

a. General. Most standard East German infantry weapons are of Soviet World-War-II type, although the postwar Soviet models are appearing in increasing numbers. Present holdings are of good quality and adequate for peacetime needs.

b. Pistols. The standard East German pistol is the Soviet 7.62-mm pistol TT M1933. There are also limited numbers of the 9-mm Makarov (PM) pistols (fig. 62) and 9-mm Stechkin (APS) machine pistols in use. Other weapons include older Soviet weapons and a few German Mauser, Sauer, Walther, and Luger types.



Figure 62. Soviet 9-mm Makarov Pistol.

c. Submachineguns. The Soviet 7.62-mm PPSH-41 (fig. 6, p. 14) is now limited standard, but still represents the bulk of SMG's in service. The new Soviet 7.62-mm AK submachinegun (fig. 63) is being received in growing numbers. This weapon fires the new rimless round, 7.62-mm M43.

d. Rifles. The standard shoulder arm is the Soviet 7.62-mm M44 carbine (fig. 7, p. 14). The Soviet M38 carbine and M91/30 sniper rifle of the same caliber are also in use. The new Soviet 7.62-mm SKS semiautomatic carbine (fig. 63) is now appearing in small quantities and will eventually replace the older weapons.

e. Machineguns. The standard East German Army machineguns are the Soviet 7.62-mm DP light (fig. 20, p. 29), the 7.62-mm Goryunov SG-43 heavy (fig. 8, p. 15), and the 12.7-mm DShK M38 heavy (fig. 116, p. 16). The DP is a light, reliable weapon that is simple to operate, but it has a relatively low rate of fire. The newer Soviet 7.62-mm RPD (fig. 63), which fires the new M43 rimless round, is gradually replacing the DP. The Goryunov is an air-cooled, gas-operated weapon capable of being converted to antiaircraft fire by simple adjustment of the mount. The DShK M38 is used primarily for AA fire with a secondary ground-support mission.



Figure 63. Soviet 7.62-mm Rifle Squad Weapons:
(Left) SKS Semiautomatic Carbine.
(Center) AK Submachinegun.
(Right) RPD Light Machinegun.

The modern Soviet 14.5-mm dual-mount ZPU-2 and quadruple-mount ZPU-4 are also on hand (figs. 117, p. 16, and 98, p. 40).

f. Infantry Antitank Weapons. The principal infantry AT weapons are the Soviet RPG-2 (fig. 94, p. 139) and Czechoslovak P-27 ("Pancéřovka") (fig. 46, p. 70) AT grenade launchers; the Soviet 82-mm SPG-82 AT rocket launcher; and the Czechoslovak 82-mm T-21 ("Tarašnice") (fig. 47, p. 70), the Soviet 82-mm B-10 (fig. 118, p. 162), and the Soviet 107-mm B-11 (fig. 95, p. 139) recoilless AT guns.

g. Grenades. East German hand grenades are of Soviet World War II types. They include the RG-42 offensive and F-1 defensive grenades, the RPG-40 AT hand grenade, and the RPG-43 and RPG-6 HEAT grenades. No rifle grenades are in service. Some of the new postwar Soviet hand grenades are probably being received in limited quantities.

h. Mortars. The East German Army has the Soviet 82-mm M41, M43, and M37 (fig. 21, p. 29) and the 120-mm M43 and M38 (fig. 9, p. 15) mortars in regular use. The 82-mm pieces are drop-fired; the 120-mm is muzzle-loaded and can be either trigger or drop-fired. Adequate numbers of both types of mortars are available.

115. ARTILLERY

a. General. Virtually all East German artillery is of Soviet type. It includes many models currently standard in the Soviet Army as well as some older pieces. Quantities available are adequate for present needs. Weapons calibers range from 37-mm to 152-mm.

b. Field. The standard light field gun is the Soviet 85-mm field gun D-44 (fig. 10, p. 16), although a few Czechoslovak 85-mm M52 guns (fig. 48, p. 71) are also in service. Both are effective modern dual-purpose field/AT guns of similar performance and fire the same ammunition. The D-44 is gradually replacing the older Soviet 76-mm field gun M42 (fig. 81, p. 118). The Soviet 122-mm howitzer M38 (fig. 11, p. 16) is also a standard piece. Limited quantities of the Soviet 152-mm gun-howitzer M37 (fig. 96, p. 139) and howitzer M43 (fig. 121, p. 163) are also available to East German troops.

c. Antitank. The most numerous antitank guns are the Soviet 45-mm M42 (fig. 24, p. 31) and 57-mm M43 (fig. 12, p. 17) weapons. Both have

limited effectiveness against modern armor. The Soviet-type 76-mm and 85-mm and Czechoslovak 85-mm field guns, as well as the Soviet antiaircraft guns, are also used in the antitank role. The Soviet 85-mm auxiliary-propelled AT gun (fig. 97, p. 140) is gradually replacing the towed 45- and 57-mm guns, providing greater ease and speed of tactical movement. The infantry recoilless guns discussed above are also employed as antitank weapons.

d. Antiaircraft. The standard East German antiaircraft weapons are the Soviet 37-mm M39 light (fig. 25, p. 31) and the 85-mm M39 medium (fig. 13, p. 17) antiaircraft guns. A limited number of the more modern Soviet 57-mm S-60 light (fig. 64) and 100-mm KS-19 medium (fig. 99, p. 140) AA guns have also been received; they will ultimately replace the older 37- and 85-mm pieces. In addition, some East German Army units are now being equipped with the modern Soviet 57-mm self-propelled twin antiaircraft guns.

116. ARMOR

a. Tanks. The Army is well supplied with the older Soviet T-34 (85) medium tanks, as well as some of Polish manufacture (fig. 102, p. 141). Several hundred of the more modern and highly effective T-54 medium tanks (fig. 14, p. 18) have also been received. The latter weapon, armed with a high-performance 100-mm gun, is steadily replacing the T-34. Relatively small numbers of JS-2, and perhaps JS-1, Soviet heavy tanks (fig. 84, p. 120) are also available. So far as is known, however, no JS-3 or T-10 Soviet heavy tanks have been acquired. Small numbers of the new Soviet PT-76 amphibious light tank (fig. 65) are available. This tank mounts a 76-mm gun.

b. Assault Guns. The East Germans possess quantities of most types of Soviet assault guns. These include the SU-76 support gun (fig. 122, p. 163) and the SU-85 (fig. 66), SU-100 (for a Czechoslovak version of which, see fig. 54, p. 73), and JSU-122 (fig. 15, p. 18) assault guns. No JSU-152's have yet been identified. These self-propelled assault guns are in process of being phased out of Army units as greater numbers of tanks are received. Some of these weapons are being turned over to the militarized security forces.

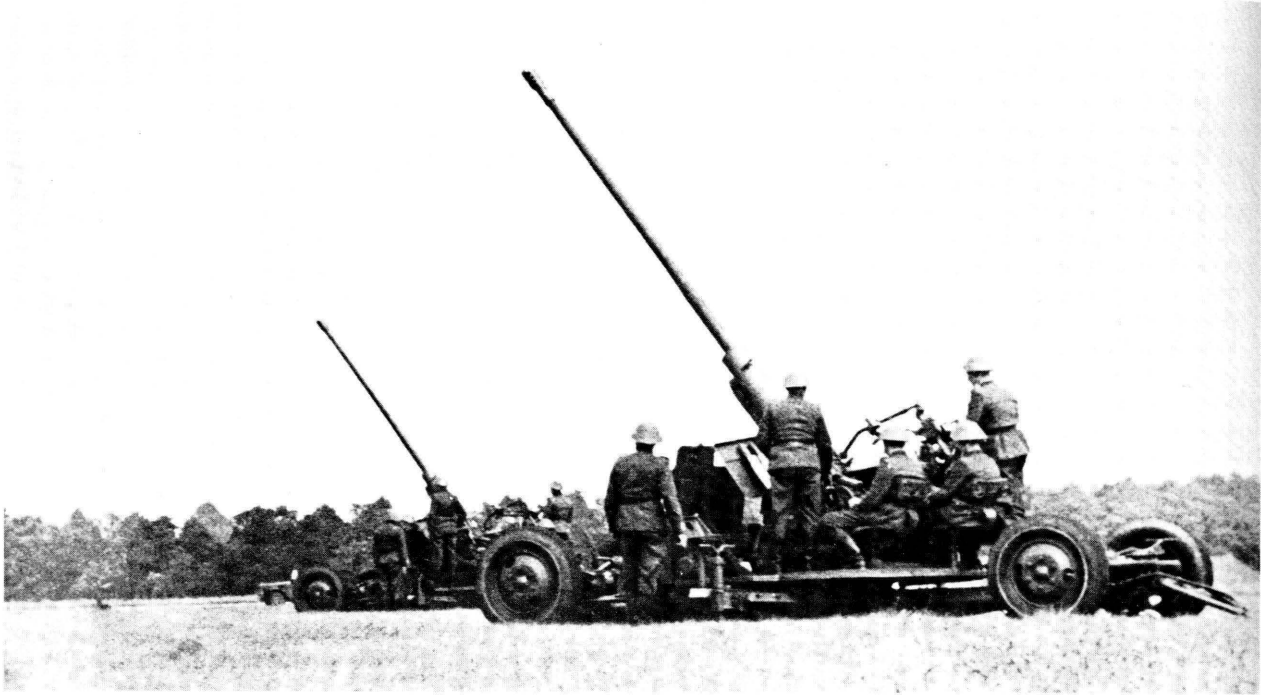


Figure 64. Soviet 57-mm Antiaircraft Gun S-60.



Figure 65. Soviet PT-76 Amphibious Tank.

c. *Armored Personnel Carriers.* Both of the Soviet carriers, the BTR-40 (fig. 101, p. 141) and

the BTR-152 (fig. 16, p. 19), are in use by East German troops.

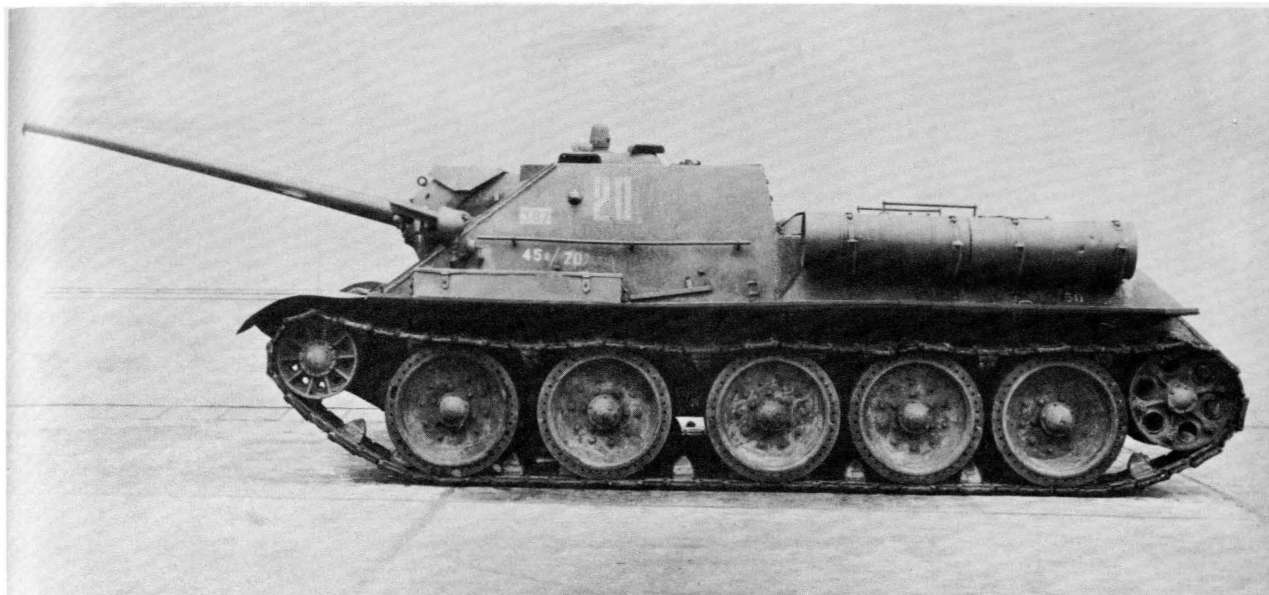


Figure 66. Soviet SU-85 Assault Gun.

Section V. EQUIPMENT

117. TRANSPORTATION.¹

a. *General.* Military trucks and other vehicles are produced on a substantial scale in East Germany. Some of the equipment available to the Army is of Soviet design, however. Maintenance standards and practices are relatively high and the bulk of the motor transportation equipment is in good condition. Sufficient spare parts are on hand for peacetime needs. Although equipment holdings have been increasing steadily, they remain below estimated TOE requirements.

b. *Trucks.* Several trucks of local production are now standard. These include the 2-ton Garant-30K (fig. 67), the 4-ton Horch H3A (fig. 68), the 5½-ton Horch G-5 (fig. 69), and the 6½-ton Horch H-6. Soviet types that are standard include the 2½-ton GAZ-51, the 4½-ton ZIS-150, and the 5-ton ZIS-151 (fig. 17, p. 19). Modifications of these vehicles have been employed in such diversified roles as mobile repair shops, panel trucks, petroleum tankers, and prime movers. Some new East German vehicles may also be

forthcoming, including improved 4-ton models and replacements for the H-6.

The chief jeep-type vehicle is the East German ½-ton P2M (fig. 70), which has an amphibious version, the P2S (fig. 71). Small numbers of Soviet "jeeps" are also available, including the GAZ-67B, GAZ-69 (fig. 117, p. 161), and the GAZ-46 (MAV, an amphibious version of the GAZ-69) (fig. 123, p. 164).

c. *Tractors.* Small numbers of Soviet tracked prime movers are in use. These include the full-tracked YA-12, YA-13, and AT-S (fig. 109, p. 143) models. Other vehicles probably in use as prime movers include the Soviet S-80 and East German KS 07 and K30 general-purpose tractors.

d. *Other Vehicles.* The most commonly used staff car is the Soviet GAZ-M20 *Pobeda*. Several other types of cars, of both Soviet and East German manufacture, are also in use. Motorcycles of Czechoslovak, Soviet, and East German types are standard.

The Army has a limited number of several types of tracked and wheeled amphibious vehicles. Of these, only the P2S mentioned above is of East German manufacture. The Soviet GAZ-46

¹ Cargo capacities are given here in approximate U.S. short-ton equivalents, rather than the larger metric-ton units which are frequently encountered elsewhere.



Figure 67. East German Garant-30K 2-ton Truck, 4x4.

and BAV (fig. 124, p. 164) wheeled amphibious trucks and the K-61 full-tracked amphibious carrier (fig. 108, p. 143) are available. The BAV resembles the U.S. World-War-II DUKW. The BAV and K-61 are used for carrying both cargo and personnel.

118. SIGNAL

a. General. Radio communication is being increasingly employed in the place of wire means, thus improving field mobility capabilities. Avail-

able signal equipment includes both Soviet and East German items. In general, it is not significantly advanced over World-War-II standards. The only significant recent improvement has been the increased mobility afforded by the installation of many different radio and wire-equipment items.

Fixed signal communications are well established from GHQ down to regiment level. They rely chiefly on teletypewriter and telephone circuits operated largely over the civil communications network. Radio communications backup is provided at every echelon.

Radio equipment consists primarily of familiar Soviet types or of comparable items produced in East Germany. Some newer Soviet radio equipment, such as the "R-100 series," is being introduced gradually.

Military radio communication in East Germany employs either continuous wave or amplitude modulation voice transmission. There are no FM tactical radio sets known to be in use.

b. Ground and Vehicular Radio Sets. The most widely used radio sets within Army infantry and artillery units are the FK-1 and FK-1a. They

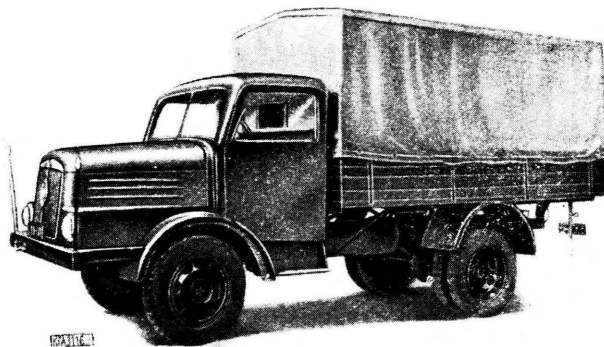


Figure 68. East German H3A 4-ton Truck.



Figure 69. East German G-5 5½-ton Truck, 6x6.

are comparable to the Soviet RBM-1 set, which is also used, along with the RBM-5, in artillery, signal, and other units. Various other sets include the East German FK 3.5 and the Soviet 9-RS, 10-RK, and 10-RT.

c. Mobile Radio Stations. The East Germans have produced several items of this category, including the FK-50, FK-500, and EK-1. Major Soviet items include the old RSB and the newer R-118, as well as the RAF and KW-M.

d. Radio Relay Stations. Only one operational radio relay equipment is used, the East German multichannel UHF radio relay transmitter-receiver, RVG-902E.

e. Wire. Nearly all wire equipment now used is produced in East Germany. Most items are close copies of Soviet World War II equipment. The quality of most equipment is good and supplies are adequate for peacetime training and operational needs. There has been a marked trend toward increasing vehicular installations, particularly for regimental and higher-unit switchboards.

Teletypewriters are used from GHQ to regi-

mental headquarters within the Army for fixed communications. In the field, they are not used below division.

119. ENGINEER

a. General. The bulk of available engineer equipment is Soviet-produced. Operating plants within East Germany are, however, capable of providing adequate quantities of explosives and detonators for peacetime requirements.

b. Mine Warfare. Most mine warfare equipment is Soviet, and that produced locally is of Soviet design. Principal holdings include the Soviet metallic TM-41 and wooden TMD-B antitank mines, and the shrapnel POMZ-2 wooden antipersonnel PMD-6 mines. The Army emphasizes mechanical and possibly explosive methods of minefield breaching, and mechanical mine dispensing. Field-improvised, electrically-detonated bangalore torpedoes and artillery fire are also employed for clearing minefields.

c. Bridging. Engineer units are equipped with bridging and stream-crossing equipment mostly



Figure 70. East German P2M Command/Reconnaissance Car.

of Soviet origin. Major items include the Soviet MPK flotation suit, LMN pneumatic reconnaissance boats, NDL-10 pneumatic assault boats, DL-10 folding plywood assault boats, TZI foot-bridges, DPL light wooden ponton bridges, and TMP and TPP heavy ponton bridges. German-manufactured items include BMK-90 powerboats, assault boat motors M39, 2-man pneumatic reconnaissance boats, and RMM-4 portable steel bridges.

Three new bridging items have reportedly been tested: a plastic treadway ponton bridge, a truck-laid treadway bridge, and a T-34-tank-launched scissors bridge. Development of an amphibian bridge somewhat similar to the French class 50 is believed underway.

d. Construction. Available construction equipment is mostly of Soviet origin, although some of domestic manufacture and even some of World War II German type is in use. Soviet-made equipment includes truck-mounted cranes, tractors, bulldozers, crane-shovels, graders, scrapers, trenching machines, road rollers, concrete mixers, and

stone crushing and screening plants. Domestically produced items include truck-mounted cranes, tractors, road rollers, trenching machines, and piledrivers.

e. Infrared. East Germany conducts considerable research, development, and production of infrared equipment. This probably is a continuation of World War II German efforts in the fields of near- and far-infrared development.



Figure 71. East German P2S Amphibious Jeep.

120. CHEMICAL

East German chemical warfare munitions, doctrine, and training are primarily defensive, although recent developments indicate offensive chemical warfare preparations may be given more prominence. Available munitions to conduct toxic chemical warfare are limited. Flame weapons are scarce and consist chiefly of German World War II types of relatively short range. Smoke munitions in all basic categories are available in good quantity. Defensive materiel, including detection and decontamination equipment, protective masks, and clothing, ranges from good to excellent in quality. Individual protective kits are adequate for use against all agents except the nerve gases.

121. MEDICAL

The East Germans have a good capability for the

production of medical equipment. Based upon their past knowledge in the field of medical optical equipment, they have expanded production of this type of equipment. It is of a good quality. Other medical equipment is produced, including surgical instruments and complicated electronic medical equipment. This equipment is of a reasonable quality and is produced in sufficient quantity to permit export.

Despite the relatively favorable position of East Germany in the medical equipment field, it is in a poor position in regard to medical manpower. Training of medical personnel was disrupted by World War II and has not been successfully reinstated. A certain amount of training is going on, but the resultant product is inferior in quality and inadequate in quantity. The shortage is compounded by the defection of East German physicians to the West.

Section VI. UNIFORMS, INSIGNIA, AND DECORATIONS

122. UNIFORMS

a. General. On 18 January 1956, when the German Democratic Republic (GDR) officially established the National People's Army, it also formally approved new uniforms, ranks, and insignia. Although the new uniforms were not officially adopted until that time, they were introduced in some of the units of the former Garrisoned People's Police (KVP) in late 1954. The former olive-drab uniforms were still worn on duty by some personnel as late as mid-1957.

The East German uniforms, ranks, and insignia generally resemble those of the German Army in World War II, although several former ranks are now missing. The same general designs are used and the basic color corresponds to that of the German uniforms introduced in the latter stages of World War II. The current slate-like color called "stone-gray" (*steingrau*) is in contrast to the greenish "field-gray" (*feldgrau*) used early in the war.

Uniforms are divided into three categories: field-service, semidress, and dress. East German Army uniforms are illustrated in figure 72.

b. Field-Service.

- (1) *Officers.* This uniform consists of the following items: field cap; steel helmet or

service cap; service coat; breeches; boots and a black belt with double-prong bar buckle. In winter, an overcoat is worn. Both the service coat and the overcoat have dark gray collars.

- (2) *Enlisted men.* This uniform is similar to that worn by officers, with the following exceptions: a garrison cap is substituted for the service cap; the collar of the service coat is stone-gray rather than dark-gray; trousers are worn in lieu of breeches; and the belt has a solid silver-colored buckle embossed with the emblem of the "German Democratic Republic."

c. Semidress.

- (1) *Officers.* Formally entitled the "walking-out" uniform, this uniform consists of a service cap, dress coat (similar to the service coat), trousers, and shoes. The coat has a dark-gray collar. General officers wear a dress coat which is double-breasted and has an open roll collar, but which is otherwise similar to the single-breasted dress coat. A white shirt and black tie are worn by general officers.



FIELD-SERVICE UNIFORM, OFFICERS
Major, Infantry Shown



FIELD-SERVICE UNIFORM, ENLISTED MEN
Sergeant, Artillery Shown



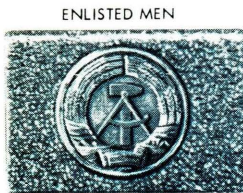
WINTER FIELD-SERVICE UNIFORM, ALL RANKS
Captain, Rear Services Shown



SEMI-DRESS UNIFORM, OFFICERS
Major, Artillery Shown

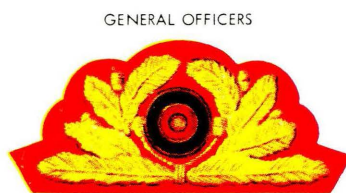


DRESS UNIFORM, ENLISTED MEN
Private, Infantry Shown



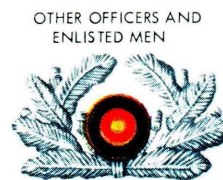
ENLISTED MEN

BELT BUCKLE



GENERAL OFFICERS

SERVICE CAP DEVICE AND ORNAMENTATION



OTHER OFFICERS AND ENLISTED MEN



GARRISON AND FIELD CAP DEVICE

Figure 72. East German Army Uniforms.

- (2) *Enlisted men.* The semidress uniform for enlisted men is the same as that worn by officers, except that a belt is worn with the coat and boots are worn instead of shoes.

d. Dress.

- (1) *Officers.* Formally called the "parade" uniform, this uniform differs from the semidress uniform in that breeches, boots, and a dress belt and dagger are worn. Officers of honor guard companies carry a saber.
- (2) *Enlisted men.* The dress uniform is the same as the semidress uniform except that the steel helmet is substituted for the service cap.

e. Work. A stone-gray work uniform, which has the same general design and insignia as the field-service uniform, is worn for summer and fatigue duty. The coat is generally worn with the collar open. A garrison cap, breeches, leather waist belt, and boots complete the ensemble.

f. Women. Limited information is available on the new uniforms for female personnel. The service coat has an open roll collar, is of the double-breasted type, and buttons on the left side (instead of the right side, as for male personnel). A white shirt and black tie are worn with the coat. Other components of the field-service uniform probably include a beret or garrison cap, skirt, stockings, shoes, and belt. Semidress and dress uniforms require a similar type of coat and possibly a service cap.

g. Special.

- (1) *Armored.* Tank personnel wear a black soft crash helmet and olive-drab or stone-gray coveralls, both resembling Soviet types. In winter, a two-piece padded uniform is sometimes worn.
- (2) *Motorcyclists.* In summer, motorcyclists wear a black rigid crash helmet, goggles, stone-gray rubberized coveralls, and boots. Additional winter items include a black, leather helmet worn under the crash helmet, a stone-gray short jacket worn over the coveralls, and gloves with large gauntlets.
- (3) *Truck drivers and mechanics.* Truck drivers generally wear a two-piece denim suit, with garrison cap, belt, and boots.

Vehicle maintenance shop personnel wear a garrison cap and coveralls.

- (4) *Paratroopers.* The jump uniform consists of a padded helmet, goggles, coveralls, jump boots, and leather gloves.
- (5) *Other.* During extreme winter weather, troops on guard duty wear a sheepskin overcoat with the pelt leather exposed on the outside, a wool toque under the field cap, and sometimes felt boots. All personnel wear a stone-gray rubberized raincape with detachable hood. Camouflage coveralls with an attached hood and with mottled patterns of green and light and dark brown colors are worn by infantry, artillery, and reconnaissance troops during summer tactical exercises. A white camouflage suit has been in use by ski troops, and other personnel as directed, during winter. The militarized Frontier Police and Alert Police are converting to uniforms similar to those worn by Army personnel.

123. INSIGNIA

a. Grade.

- (1) *General.* Grade is indicated on the shoulderboards of officers and enlisted men. The traditional four-pointed star (often called a "pip") continues to designate field and company-grade officers and the higher NCO grades as was customary during World War II. General officers' grades are indicated by five-pointed stars. In addition, sleeve insignia are used to denote grade on special items of clothing when shoulderboards are not worn. The number and position of stars used to indicate grade for officers and enlisted men are illustrated in figure 73.
- (2) *Officers.* General officers' grades are identified by silver stars on gold- and silver-colored plaited braid on a red background. Field-grade officers have gold stars on silver-colored plaited braid on a background in the branch of service color. Company-grade officers have gold stars on a silver-colored braided background with piping in the branch of service color.

OFFICERS



ARMY GENERAL



COLONEL GENERAL



LIEUTENANT GENERAL



MAJOR GENERAL



COLONEL
(Rear Services)



LIEUTENANT COLONEL
(Signal)



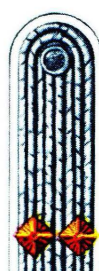
MAJOR
(Engineers and
Technical Troops)



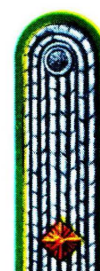
CAPTAIN
(Armored)



SENIOR LIEUTENANT
(Artillery)



LIEUTENANT
(Infantry)



JUNIOR LIEUTENANT
(Rear Services)

ENLISTED MEN



MASTER SERGEANT
(Frontier Police)



SERGEANT 1st CLASS
(Signal)



SERGEANT
(Engineers and
Technical Troops)



SPECIALIST
(Armored)



PRIVATE 1st CLASS
(Artillery)



PRIVATE
(Infantry)

Figure 73. East German Insignia of Grade.

- (3) *Enlisted men.* The shoulderboards worn by enlisted men have a background in the color of the uniform. Grade is indicated by silver stripes, silver braid, and four-pointed stars. Noncommissioned officers also wear a silver trim around the edge of the collar on both their service and dress coats.
- (4) *Sleeve insignia.* Sleeve grade insignia resembling German World War II types are sometimes worn on coveralls and on other special clothing on which shoulderboards are not worn. The insignia consist of horizontal silver or white bars (about 4 inches long and one-half inch wide) which are sewed on midway between the shoulder and the elbow.

b. Branch. Branch of service is indicated by use of color. Branch color is displayed by all personnel, except general officers who wear red. Shoulderboards have colored piping or background.

All ranks wear piping on the sleeve cuffs of dress coats and on the crown seam and upper edge of the cap band of service caps. Officers also wear piping on the collar and sleeve cuffs of the service coat; on the collar of the dress coat; on the crown seam of field caps; and on the outer seams of breeches and trousers. Branch colors are as follows:

Infantry.....	White
Artillery.....	Red
Armored.....	Pink
Engineers and Technical Troops...	Black
Signal.....	Yellow
Rear Services.....	Dark Green
Frontier Police.....	Light Green
Alert Police.....	Light Green

All personnel wear tabs with stripes in the branch color on both the collar and cuffs of dress

coats. Collar tabs are worn on service coats. Collar, cuff, and sleeve insignia are illustrated in figure 74.

c. Specialist. An announcement on 17 December 1957 stated that specialist insignia are to be conferred on Army enlisted personnel who have been trained in a specialty of their branch but who are assigned to units of other branches in specialist capacities. These insignia closely resemble the German specialist badges of World War II. The announced specialist badges depict the following symbols:

Tankman.....	Tank
Reconnaissance Scout.....	Armored car and arrow
Driver.....	Winged wheel
Radioman.....	1 lightning flash
Radio Repairman.....	6 lightning flashes radiating from a circle.
Engineer Radarman.....	3 lightning flashes, radio wave, and arrow.
Engineer Assault-Boat Helmsman.....	Helm and anchor
Ordnance man.....	Crossed guns
Pyrotechnician.....	Gothic "F" (for <i>Feuerwerker</i>)
Medical Corpsman.....	Staff and serpent
Musician.....	Lyre

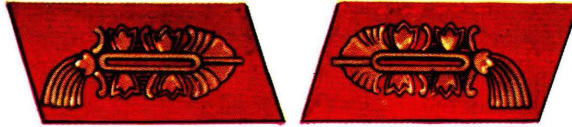
d. Other. Sleeve insignia are used to indicate length of service and the First Sergeant position. Silver chevrons indicate length of service. Assignment of personnel as First Sergeant is shown by a silver band just above each sleeve cuff.

124. DECORATIONS

Detailed information on the basis for conferring East German decorations and awards is not available. However, the established decorations and awards include those listed below and illustrated in figure 75.

COLLAR TABS

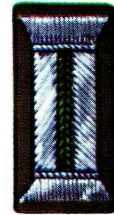
GENERAL OFFICERS



CUFF TABS



FIELD AND COMPANY
GRADE OFFICERS
(Rear Services shown)



ENLISTED MEN
(Armored shown)



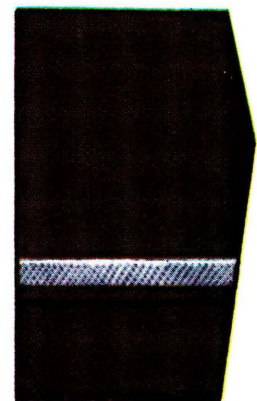
SLEEVE INSIGNIA



5 YEARS SERVICE



3 YEARS SERVICE



1st SERGEANT

Figure 74. East German Collar, Cuff, and Sleeve Insignia.



MEDAL FOR OUTSTANDING SERVICE
IN THE NATIONAL PEOPLE'S ARMY

MEDAL FOR FAITHFUL SERVICE
IN THE NATIONAL PEOPLE'S ARMY

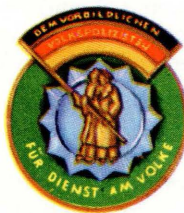
BADGE FOR ACHIEVEMENT
IN THE NATIONAL PEOPLE'S ARMY



ORDER OF KARL MARX

ORDER FOR SERVICE
TO THE FATHERLAND

BADGE FOR VOLUNTEER SERVICE
IN THE SPANISH CIVIL WAR



BADGE FOR EXEMPLARY
SERVICE TO THE PEOPLE
(KVP)

BADGE FOR OUTSTANDING
ACHIEVEMENTS (KVP)

BADGE FOR OUTSTANDING
ATHLETIC ACHIEVEMENTS

Figure 75. East German Decorations and Awards.

Section VII. GLOSSARY OF MILITARY TERMS

Military terms used by the East German Army conform, in general, to those used by the German Army of World War II, with a few additions and modifications reflecting Communist ideology and Soviet organizational influence.

Only those compounded words most frequently encountered are included in the present glossary. The German habit of putting two or more nouns together to form a single compound noun makes possible many more combinations than are listed here. Such words often contain a connecting letter "s" or "n." For example, an *Aufklärungsabteilung* is a reconnaissance battalion; a *Waffenwerkstatt* is a workshop for repair of weapons. Users should look up such words under both components (*Aufklärung* and *Abteilung*; *Waffe* and *Werkstatt*).

A	
Abteilung	branch (of an office); battalion (artillery, armor, signal troops).
Abwehr	defense; counterintelligence
Amt	office
Angriff	attack
Anwärter	candidate, aspirant
Armee	army, armed forces
Armeegeneral	army general
Armeekorps	army corps
Artillerie	artillery
Arzt	doctor (medical)
Aufklärung	reconnaissance; intelligence
Ausbildung	training
Ausrüstung	equipment
B	
Bataillon	battalion (infantry, engineers)
Batterie	battery
Bau	construction; structure
Bautruppen	construction troops
Beamte	official; civil servant
Befestigung	fortification
Bereitschaft	readiness, preparedness; Alert unit.
Bereitschaftspolizei	Alert Police
Besatzung	garrison, crew
Besetzung	occupation (of a place or territory).
Betriebsstoff	fuel
Bewaffnung	armament
Bombe	bomb
Bombenflugzeug	bomber aircraft
Brigade	brigade
Brücke	bridge

C	
Chef	chief (of an office, staff, etc.)
chemische Truppen	chemical troops
D	
Dienste	services
Dienststelle	agency; military unit or organization.
Division	division
Draht	wire
E	
Einheit	unit (usually company-level)
Einkreisung	encirclement
Eisenbahn	railroad
Entaktivierung	decontamination (radiological)
Entgiftung	decontamination
Ersatz	replacement
erstürmen	to take by storm
Etappe	communications zone
F	
Fahnenjunker	officer candidate (junior)
Fähnrich	officer candidate (senior)
Fahrrad	bicycle
Fallschirm	parachute
Fallschirmjäger	paratrooper
Feind	enemy
Feld	field (of battle)
Feldkanone	field gun
Feldpost	army postal service
Feldpostnummer	APO number
Feldwebel	sergeant first class
Feldzeug	ordnance
Fernschreiber	telegraph, teletype
Fernsprecher	telephone
Festung	fortress
Feuerleitung	fire control
Feuerwerker	ordnance technician
Flakartillerie	antiaircraft artillery
Flakvierling	quadruple-mount antiaircraft gun (20-mm).
Flammenwerfer	flamethrower
Fliegerabwehr	antiaircraft defense
Fliegerabwehrkanone	antiaircraft gun
Flugplatz	airfield
Flugzeug	aircraft
Friedensstärke	peacetime strength
Friedensstärkenachweis	peacetime table of organization
Führung	leadership; command
Funk	radio
Funker	radio operator; private (signal troops).

	G		
Gasschutz	antigas protection	Kanone	gun
Gebirgsartillerie	mountain artillery	Kanonier	gunner; private (artillery)
Gebirgsjäger	mountain infantryman	Karabiner	carbine
Gefecht	combat; fire fight	Kasernierte Volkspolizei ..	Garrisoned People's Police
Gefreiter	private first class	Kavallerie	cavalry
Gegenangriff	counterattack	Kernwaffenkrieg	nuclear war
Gegenstoss	counter blow	Kommandantur	area (or sector) headquarters
Gegner	opponent	Kommandeur	commander (battalion to division).
General	general officer	Kommandierender General ..	corps commander
Generalinspekteur	inspector general	Kommando	headquarters; detachment
Generalkommando	corps headquarters	Kompanie	company
Generalleutnant	lieutenant general (two-star)	Kompaniechef	company commander
Generalmajor	major general (one-star)	Korps	corps
Generaloberst	colonel general (three-star)	Kradschütze	motorcycle rifleman
Generalstab	general staff; general staff corps	Kraftfahrpark	motor vehicle park
Geschütz	artillery piece	Kraftfahrer	motor vehicle driver
Geschwader	wing (aviation)	Kraftfahrrad	motorcycle
Gewehr	rifle	Kraftfahrzeug	motor vehicle
Granate	shell	Kraftwagen	automobile
Granatwerfer	mortar	Krankenpfleger	nurse
Grenadier	infantryman; private (infantry)	Krankenträger	stretcher bearer
Grenzpolizei	Frontier Police	Krieg	war
Gruppe	squad; group (aviation); section (of an office).	Kriegführung	conduct of war
Gruppenkommando	army group headquarters	Kriegsgefangener	prisoner of war
	H	Kriegslazarett	base hospital
Handgranate	hand grenade	Kriegsmarine	navy
Haubitze	howitzer	Kriegspfarrer	chaplain
Hauptabteilung	main branch (of an office)	Kriegsstärke	wartime strength
Hauptfeldwebel	first sergeant	Kriegsstärkenachweis	wartime table of organization
Hauptmann	captain	Küstenartillerie	coast artillery
Hauptquartier	general headquarters		L
Hauptverwaltung	main directorate	Lafette	carriage
Hauptwachtmeister	first sergeant (artillery, cavalry).	Lage	situation
Heer	army (overall)	Lager	depot, warehouse
Heereseinheit	GHQ unit	Landstreitkräfte	land forces
Heeresgruppe	army group	Landsturm	reserve category aged 45-55
	I	Landwehr	reserve category aged 35-45; militia.
Igel	hedgehog (position with all-round defense).	Längerdienender	reenlistee; extended service soldier.
Infanterie	infantry	Lastkraftwagen	truck
Infanteriegeschütz	infantry howitzer	Lazarett	military hospital
Ingenieur	engineer (civil or mechanical)	Lehrgang	course (of instruction)
Inspekteur	inspector	Lehrregiment	demonstration regiment
Inspektion	inspectorate	leichte Artillerie	light artillery
	J	Leutnant	second lieutenant
Jagdflugzeug	fighter aircraft	Lichtmessgerät	flash-ranging apparatus
Jäger	light infantryman; private (light infantry); fighter aircraft; hunter.	Luftkrieg	air warfare
Jägerregiment	light infantry regiment	Luftpolizei	Air Police
	K	Luftschutz	civil air defense
Kader	personnel; cadre	Luftstreitkräfte	air forces
Kampf	fight, battle; combat	Luftverteidigung	air defense
Kampfflugzeug	bomber aircraft	Luftwaffe	air force
Kampfgruppe	battle group; small task force		M
		Major	major
		Mannschaft	crew (of a weapon); rank and file.
		Maschinengewehr	machinegun

U	W
überschwere Artillerie.....	superheavy artillery
Übersetzeinheit.....	ferrying unit
Unterführer.....	subordinate commander
Unteroffizier.....	noncommissioned officer; (as specific rank) sergeant.
V	
Verband.....	unit (battalion or larger)
Verbandplatz.....	first aid station
Verbindung.....	liaison; connection
Vermessung.....	survey
Verpflegung.....	rations; supply of rations
Versorgung.....	supply; supply organization
verstärkt.....	reinforced
Verteidigung.....	defense
Verwaltung.....	directorate; administration
Volkspolizei.....	People's Police (i.e., civil police)
Vorstoss.....	advance; thrust
	Z
	Zug.....
	platoon; railroad train

Wache..... guard
Wachtmeister..... sergeant first class (artillery, cavalry).
Waffe..... weapon
Waffenamt..... ordnance office
Waffengattung..... branch of service
Wehrdienst..... military service
Wehrkreis..... military district; corps area
Wehrmacht..... armed forces
Wehrpflicht..... liability to perform military service.
Werfer..... projector; launcher
Werkstatt..... workshop

Zug..... platoon; railroad train

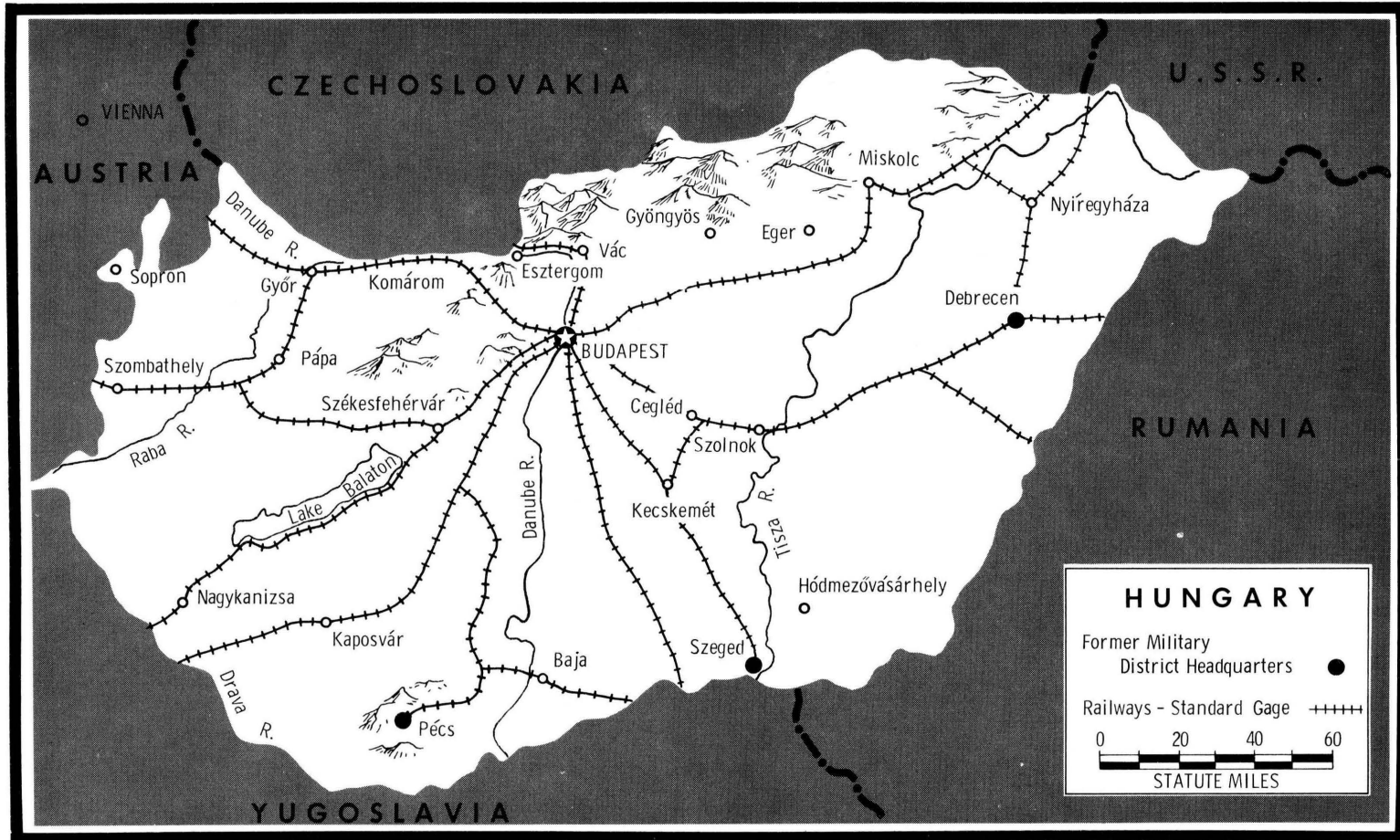


Figure 76. Hungary.

HUNGARY

CHAPTER 6

Section I. THE MILITARY SYSTEM

125. NATURE OF THE ARMED FORCES

a. Composition. The Hungarian People's Army (*Magyar Nephadsereg*, MN) consists of a ground Army and two specialized components, the air forces and the River Guard. Auxiliary ground forces subordinate to the Interior Ministry include the Frontier Guard and the Security Guard, militarized security forces intended for border security and for the protection of the regime from internal threats. These are organized and equipped in much the same way as infantry troops and in addition to their specialized security training, are prepared for small-unit combat. In wartime, they could lend valuable support to the Army in rear areas and perhaps in combat as well, especially where their specialized training would be most useful, as in city warfare.

The MN is a unified and centrally controlled force, dominated by ground officers. The air forces are small and consist almost entirely of fighter-interceptor aircraft. Air units are subordinate to the "Air and Air Defense Command," which also controls those antiaircraft artillery units assigned to the strategic defense role. As in the other Satellite countries, the air defense system is closely linked with that of the U.S.S.R. and all other Bloc members.

The River Guard is a very small organization controlling a few patrol craft. Its mission is to police the Danube River and its major tributaries within Hungary.

The MN is subordinate to the Ministry of National Defense. The present Minister is, like his predecessor, a ground officer who previously served in the Soviet Army. Both are Hungarians who fled the country after the abortive Communist Bela Kun revolution of 1919.

b. Development. Prior to World War II the Hungarian Army was strongly pro-German. Hungary supported Hitler in the Czechoslovak crises of 1938 and 1939. Hungarian troops participated in the invasion of Yugoslavia in the spring of 1941, and provided sizable forces to

fight against the U.S.S.R. after the German attack on that country in June 1941. These forces showed little fighting spirit, however, and were severely mauled by Soviet forces in 1943. Hungary itself was invaded by the Red Army in September 1944, and an anti-Fascist government was set up in Eastern Hungary the following December.

After the war, because of its basic German orientation and influence, the Hungarian Army was allowed to deteriorate rapidly. It reached almost the vanishing point in size and for several years was even below the limits imposed by the peace treaty. After the Communist seizure of power in 1947, the Army was purged of virtually all remaining officers who had served under the wartime Fascist regime. In 1948, a Moscow-trained Communist became Defense Minister, and a reorganization of the Army was commenced. This program was conducted under strict Soviet surveillance and involved the introduction of basic Soviet concepts of organization, tactics, logistics, and political indoctrination.

The necessary groundwork had been laid by 1950, and the reorganization was accelerated. During that year and the next, perhaps partly because of the Korean War, large quantities of Soviet equipment were brought into the country and distributed to units being formed or expanded throughout the country. Personnel strength was rapidly increased as well.

Under the direction of the ubiquitous Soviet military "advisors" the Army digested these changes rather rapidly. Soviet organizational and tactical concepts followed as a matter of course. Soviet training procedures were introduced and became routine. The troops were made fully familiar with the operation and manner of employment of Soviet weapons and equipment, although some German-type materiel continued in use for several years.

By 1956, the Hungarian Army was a relatively efficient, well-organized, and well-equipped Satel-

lite armed force. It was believed to be fairly reliable, despite the widespread apathy toward Communism and Soviet domination throughout the country. It had reached a generally high standard of training and had conducted several large-scale maneuvers. At least one combined command-post exercise had been held with Soviet troops. The new officer corps was rapidly gaining the necessary schooling and practical experience to provide the army with effective leadership. Most of these gains were lost as a result of the revolt that shook Hungary in October and November of 1956.

c. Effects of 1956 Revolt. The Army was virtually destroyed as an effective force during the revolt. It proved itself unwilling to support the regime against an aroused civil populace, was riddled by dissension and desertion, and suffered the uncompensated release of an entire class of conscripts by government order. Sizable Soviet forces were brought into the country to protect the Soviet position there. The Hungarian Army, except for a few elements, was as unwilling to oppose this superior force as it had been to fire on unarmed Hungarian civilians.

When the revolt first broke out, at least one major Army unit—a mechanized division—was moved to Budapest to resist the demonstrators. It proved unwilling to perform its duty, suffered from desertions, and was quickly withdrawn and returned to its permanent garrison. No serious effort to employ Hungarian troops against the revolt was made after that.

For the most part, the Army remained inactive and took no active part in the fighting. Some troops deserted to the rebel side, many others

took advantage of the disturbed situation to return home without leave. Only a few organized units, *e.g.*, antiaircraft battalions in the Budapest area, went over to the rebellion. Other units, including all major line units, remained in their garrison areas. When the leader of the Hungarian Government, Imre Nagy, joined the rebel side and became its chief spokesman, the Army theoretically was joined to the rebellion. It still took no overt action, and when the Soviet forces moved to take over control of the country early in November, the Hungarian Army units still remained inactive.

At about this time, the older of the Army's two conscript classes was released from service, having completed its conscript term. It would have been normal for a new age class to be inducted at the same time, but this was administratively impossible. As a result of this and of the desertions during the revolt, Army strength was reduced appreciably from a prerevolt 150,000 men to somewhere between 25,000 and 40,000. New inductions were not accomplished until the spring of 1957, when the age class due in the autumn of 1956 was called. The Army contingent was substantially reduced from its normal size as a result of careful political screening. It is believed that total Army strength at that time was between 50,000 and 75,000.

In the autumn of 1957 and in the autumn of 1958 two other age classes were inducted. Even with careful screening, they substantially exceeded the number of conscripts due for discharge. As a result, Army strength was increased to nearly 100,000 men by late 1958.

Meantime, efforts to reestablish the Army were apparently meeting with gradual success. These included the establishment of shadow units of various arms throughout the country and the reissue of some equipment stored since the revolt. Training emphasized individual and small-unit activity.

The experience of the Hungarian Army during the 1956 revolt provides no clear indication of the potential reliability of Hungarian or other Satellite troops to the Soviets in wartime. It is a truism that the most difficult duty an Army can perform is to fire on unarmed civilians in its own country. Its failure to do so is not necessarily a measure of its reliability. In a war against traditional enemies and for age-old na-



Figure 77. Damage in Budapest after 1956 Revolt.

tional objectives, the Hungarian Army of 1956 might have performed creditably even for what ultimately were Soviet objectives.

d. Status. The present Army still has a long way to go to reestablish anything like its pre-revolt status. Only the rudiments of a tactical organization are now apparent. Unit training progressed only to battalion level in some of the units and only rarely to regiment in 1958. Personnel strength remains at about 100,000. The equipment now in use is little changed from that available before the revolt.

A continued development of the Hungarian Army is expected. Present indications are that it will not be raised to its former strength. A force of about the present size and including six or more divisions is anticipated. It will be several years, perhaps not until 1962, before such a force can be fully developed, however, and its combat readiness will improve slowly.

126. THE HIGH COMMAND

The restored Hungarian high command follows the general features of the familiar Bloc pattern (ch. 1).

127. TERRITORIAL ORGANIZATION

Prior to the 1956 revolt, Hungary had the normal Bloc military territorial organization, with 5 military district headquarters having the usual

territorial-administrative and logistic responsibilities. The pre-revolt Military District Headquarters were located at Budapest, Pécs, Szeged, Debrecen, and Székesfehérvár. None of the five has yet been reidentified, and the present territorial organization, if any, is unknown.

128. ORGANIZATION OF THE ARMY FOR WAR

The inconclusive state of development of the Hungarian Army makes it almost impossible to assess its probable wartime organization. It can be expected that the Army will come to consist of a number of motorized rifle and tank divisions, and these could be grouped into either corps or armies.

Under mobilization, the army could be increased in size, but it is unlikely that plans for mobilization will be seriously considered for some years to come because of the virtually nonexistent state of combat readiness of the present force. Reserves who have served in the Sovietized army, largely before the revolt, number more than 500,000 men, and the total number of fit males is on the order of 1,500,000. Should the army be able to reestablish its pre-revolt level of preparedness, a mobilization of up to 30 divisions might be possible. Soviet logistic support would, of course, be necessary for any substantial expansion and for sustained operations by even a modest force.



Figure 78. Hungarian Army Barracks.

Section II. ORGANIZATION OF THE FIELD FORCES

129. ARMS AND SERVICES

Division of the Hungarian Army into ground branches follows the Soviet system. The combat arms include: Infantry (*Gyalogság*), Armor (*Pán-célos*), Artillery (*Tüzérség*), Engineers (*Muszaki*), Signal (*Híradó*), and Chemical (*Vegyvi*). The services include various administrative and technical branches, as well as Supply, Motor Transport, Medical, and Veterinarian.

130. PRINCIPLES OF TACTICAL ORGANIZATION

The prerevolt principles of tactical organization were drawn almost exclusively from those of the Soviet Army. Vestiges of the wartime German influence had been replaced during the buildup of 1950-1951, when the use of Soviet equipment, tactical concepts, and training methods became the rule. The rifle, mechanized, and tank divisions that existed up until the autumn of 1956 were rather close copies of the comparable units in the Soviet Army.

Only the beginning of a tactical organization was apparent in the postrevolt force as late as the spring of 1959. The indications are that conformance to Soviet organizational principles and TOE's will again be the rule. It appears that the divisions now forming will be of motorized rifle

and tank type. If this is borne out by future developments, the new organization will represent the more recent concepts of Soviet tactical organization and an advance beyond those of the prerevolt period.

131. HIGHER HEADQUARTERS

There are now no tactical-unit headquarters higher than division, and, in line with recent developments in other Bloc armies, it is believed that corps headquarters will not be established. Corps or army headquarters could be formed in peacetime on an *ad hoc* basis to control large training exercises and maneuvers and could readily be established from available cadres to command field forces in wartime.

132. TACTICAL UNITS

Present indications are that the organization of the tactical units in Hungary will follow established Soviet patterns (ch. 1). It is expected, however, that the relative level of organizational development of the Hungarian units will remain several years behind that of their Soviet counterparts. Barring unforeseen developments or the recurrence of popular disturbances within Hungary, however, the Army should eventually reach a position very near that of the better organized Satellite forces.

Section III. MILITARIZED SECURITY FORCES

133. GENERAL

Hungarian security organizations having a military character include the Frontier Guard and the Security Guard which together number about 35,000. In time of peace, these organizations are under the Minister of the Interior; in time of war, some Frontier and Security Guard units probably would come under the tactical command of Army ground-unit headquarters.

134. FRONTIER GUARD

The Frontier Guard (*Határőrség*, HO) is divided into 11 district commands. Each is believed to contain several battalions which in turn are broken down into a number of Frontier Guard posts and deployed along the borders of Hungary. The mission of the Frontier Guard is the control of all frontier traffic and the protection of the border areas. Guard personnel are armed with

infantry-type weapons and are trained in the use of land mines. Members of the organization serve for 2 years, the same as most Army ground force personnel.

Members of the Frontier Guard wear Army-type uniforms with green for their basic color. Ranks for the Frontier troops are the same as for the Army.

135. SECURITY GUARD

The Security Guard is organized into several regiment-size units. Elements of these regiments are stationed in various strategic locations throughout Hungary to guard critical installations and areas.

Personnel are armed with light weapons and are trained in basic infantry tactics. They serve for 2 years. Members of these regiments wear Army-type khaki-colored uniforms with blue for the basic identifying color.

Section IV. WEAPONS

136. INTRODUCTION

Hungary has a significant munitions production capacity, and prior to the 1956 revolt, various types of Soviet equipment were manufactured locally. These included small arms, mortars, artillery ammunition, explosives, military optical and precision equipment, communications and electronic equipment, trucks, replacement parts for tanks and artillery, and some artillery pieces. The current status of munitions production in Hungary is not fully known, but at least a part of the prerevolt production has been restored. Except for a very limited amount of pre-World War II German equipment, the Army is almost completely equipped with materiel of Soviet design. Most of this equipment is of World War II standard, although some postwar types are available.

137. INFANTRY

a. General. Hungary produced quantities of small arms and other infantry weapons up to the end of World War II. None of these weapons is still in general use, however, except possibly in the militarized security forces.

b. Pistols. The standard Hungarian Army pistol is the Soviet 7.62-mm TT-1933 Tokarev. The Hungarian 7.62-mm M48, a modified version of the German Walther PP pistol, is also used.

c. Submachineguns. The 7.62-mm PPSH-41 (fig. 6, p. 14), produced by both the U.S.S.R. and Hungary, is standard throughout the Army. The Soviet 7.62-mm PPS-43 (fig. 30, p. 47) is also available in limited quantities.

d. Rifles. The standard rifle is the Soviet 7.62-mm M44 Carbine (fig. 7, p. 14), some of

which are made in Hungary. There are reports that the new Soviet semiautomatic carbine SKS (fig. 79) was to have been produced in Hungary, but the revolt may have delayed this development. Hungary has produced large amounts of Soviet 7.62-mm ammunition.

e. Machineguns. Soviet-type machineguns are standard in the Hungarian Army. These include the 7.62-mm DP light (fig. 20, p. 29), the 7.62-mm Goryunov SG-43 heavy (fig. 8, p. 15), and the 12.7-mm DShK M38 heavy (fig. 116, p. 161). Other types, both German and Hungarian, are used by the militarized security forces or are held in reserve.

f. Infantry Antitank Weapons. The Hungarian Army is not known to have any recoilless antitank guns of either Soviet or Czechoslovak types, despite their prevalence elsewhere in the Satellite area. The only infantry AT weapons known to be in use are the obsolete and ineffective PTRS and PTRD 14.5-mm AT rifles.

g. Grenades. Hungarian-produced grenades are believed to have familiar features and characteristics. They are labeled the 36M, M39, and M42. The M39 is a World War II type. Soviet grenades in use include the RG-42, F-1 defensive, and RPG-43 antitank hand grenades.

h. Mortars. The Army employs the Soviet 82-mm M37 (fig. 21, p. 29) and 120-mm M38 (fig. 9, p. 15) mortars. There are also limited numbers of the Soviet 160-mm M43 mortar (fig. 80) available. A significant number of German and Hungarian 81-mm mortars, which can fire the Soviet 82-mm mortar shell, are also on hand.

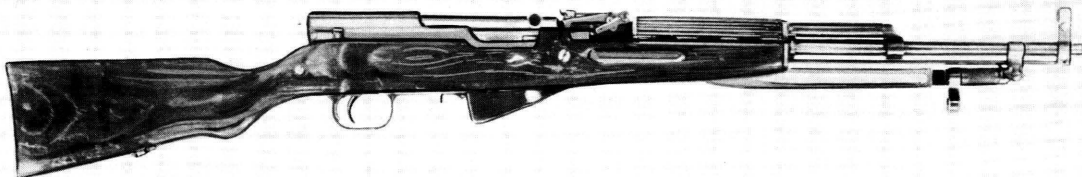


Figure 79. Soviet SKS Semiautomatic Carbine.

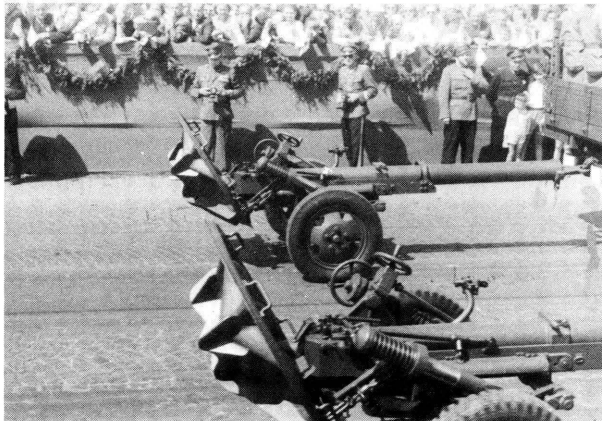


Figure 80. Soviet 160-mm Mortar M43 (here shown in a Polish parade).

138. ARTILLERY

a. General. Prior to the 1956 revolt, the Hungarian Army was well equipped with Soviet-type artillery of World War II manufacture. In addition, a few postwar Soviet artillery weapons were available for familiarization and training purposes. A portion of the Soviet-type World War II equipment was manufactured locally. The extent to

which artillery production has been restored since the revolt is unknown.

b. Field. The basic light field gun in service with the Army is the Soviet 76-mm gun M42 (fig. 81) although it is being replaced by the newer 85-mm D-44 field gun (fig. 10, p. 16). Medium artillery is all of Soviet type and includes the 122-mm howitzer M38 (fig. 11, p. 16), the 122-mm field gun M31/37 (fig. 82), the 152-mm howitzer M38 and M43 (fig. 121, p. 163), and the 152-mm gun-howitzer M37 (fig. 96, p. 139).

c. Antitank. Army units employ the Soviet 57-mm AT gun M43 (fig. 12, p. 17). Some 45-mm AT guns (fig. 24, p. 31) are also available but are little used.

d. Antiaircraft. The basic AAA weapons are the Soviet 37-mm M39 gun (fig. 25, p. 31) and the 85-mm M39 gun (fig. 13, p. 17). Significant numbers of the modern Soviet 57-mm S-60 guns (fig. 64, p. 96) have been acquired, and a pilot issue of Soviet 100-mm KS-19 guns (fig. 99, p. 140) is also available. These latter weapons ultimately will replace the former.

e. Field Rocket Launcher. The only field rocket launcher known to be held is the 16-round Soviet 132-mm BM-13 (fig. 83).



Figure 81. Soviet 76-mm Field Gun M42.

139. ARMOR

a. *Tanks.* The Hungarian Army is equipped with several types of standard Soviet tanks. The basic Army tank is the T-34 (85) medium (fig. 102, p. 141), although there is evidence that it is to be replaced by the modern T-54 (fig. 14, p. 18). Heavy tanks include the JS-1, JS-2 (fig. 84), and JS-3 (fig. 103, p. 141), but only small numbers of these are available.

b. *Assault Guns.* The Hungarian Army also employs assault guns exclusively of Soviet type. These include both the SU-76 support gun (fig. 122, p. 163) and the JSU-122 assault gun (fig. 15, p. 18).



Figure 82. Soviet 122-mm Field Gun M31/37 (A19) (here shown in a Czechoslovak parade).

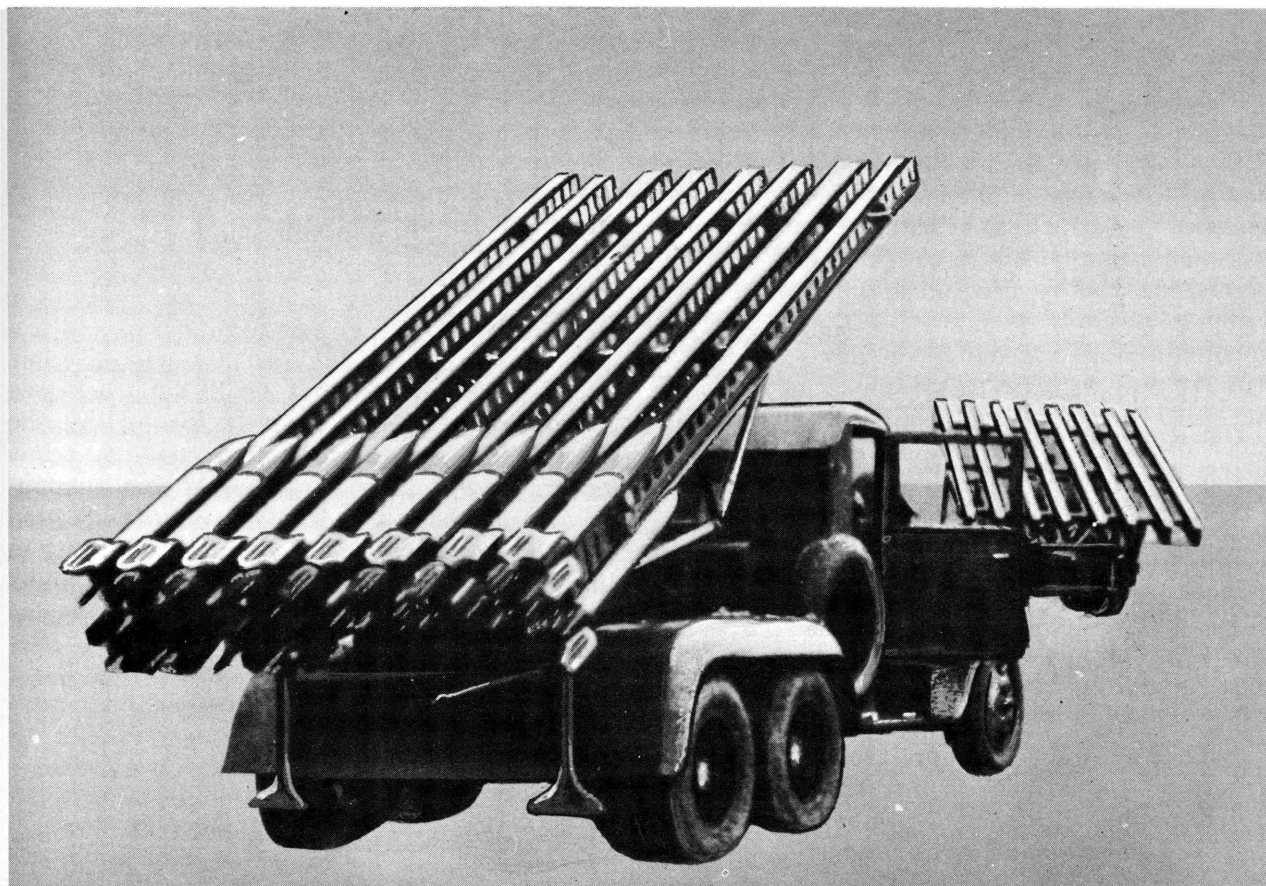


Figure 83. Soviet 132-mm Rocket Launcher BM-13 (16-round).



Figure 84. Soviet JS-2 Heavy Tank (122-mm Gun).

Section V. EQUIPMENT

140. TRANSPORTATION¹

The Hungarian automotive industry has been revived since World War II. It is now centered primarily on Csepel Island, just south of Budapest in the Danube, although assembly plants exist elsewhere as well. Prior to the 1956 revolt, Hungary was producing trucks of various types for the Army and for export and civilian purposes. The extent to which production of individual trucks has been restored since the revolt is not known, although the overall production probably is proceeding at about the prerevolt rate. There are also several new models of trucks known to be now in production or in the prototype or design stage and soon to enter series production. Some of the more widely used trucks, most produced before the revolt, are discussed below.

The Csepel 130 1½-ton truck (fig. 85) is a copy of the U.S. World War II Dodge ¾-ton weapons carrier. It is not believed to be still in production.

¹ Cargo capacities are given here in approximate U.S. short-ton equivalents, rather than the larger metric-ton units which are frequently encountered elsewhere.

The Csepel K-300, 6 x 6, 3½-ton truck was introduced in 1950 exclusively for use by the Army. It is an all-wheel-drive artillery prime mover, cross-country cargo truck, and communications or shop van. It is believed to have been replaced as an artillery prime mover, starting in 1954, by the Csepel K-800 light tracked prime mover (fig. 86). The latter is a modernized version of the Soviet M-2 tractor (fig. 18, p. 19).

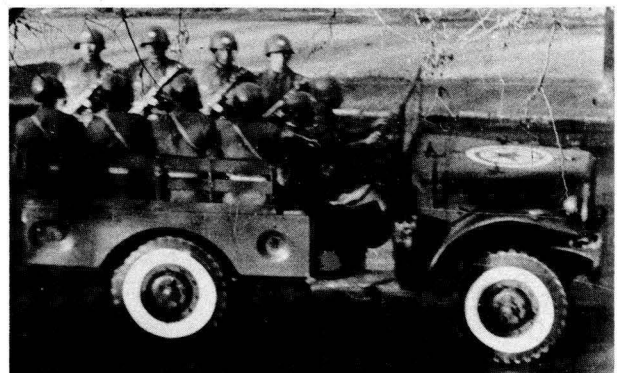


Figure 85. Hungarian Csepel 130 1½-ton Truck.

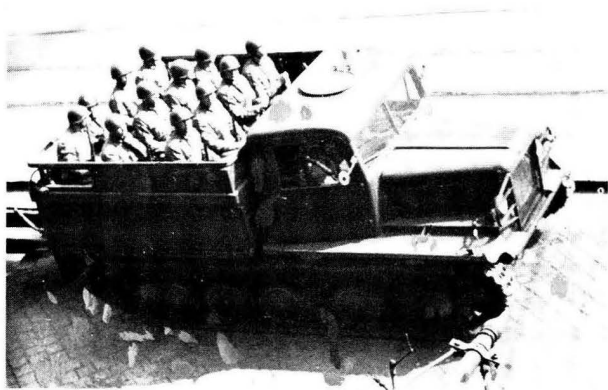


Figure 86. Hungarian Csepel K-800 Light Tracked Prime Mover.

The Csepel 350, 4 x 2, 4-ton truck (fig. 87) has been the workhorse of the Csepel truck family. It is a licensed copy of an Austrian Steyr truck. The Csepel 350 is available with either a gasoline or diesel engine. It exists in both long- and short-wheel-base versions and with a variety of body types. A prerevolt companion vehicle to this truck is the similar Csepel 352, introduced in 1956.

Another truck, introduced in 1957, is the Csepel 420, 4 x 2, 4½-ton truck. It is intended to supplement the Csepel 352 and comes in several body styles. An improved version, the Csepel 450, was under development in 1958. It has a new and more powerful engine and other mechanical and physical improvements.

The Csepel 700, 4 x 2, 7½-ton truck is another new vehicle. It has the heaviest capacity of any truck developed in Hungary since World War II. It possesses the cab-over-engine design and has been produced in cargo, van, tanker, and semi-trailer tractor versions.



Figure 87. Hungarian Csepel 350 4-ton Truck.

141. SIGNAL

Most Hungarian signal equipment is manufactured domestically and consists of both Soviet and Hungarian types. Some Soviet equipment, in addition, has been provided from the U.S.S.R. The bulk of the Hungarian-designed equipment is obsolescent, and much of it is being phased out in favor of the more effective Soviet-type material.

The Hungarian capacity for producing signal equipment is among the highest in the Satellite area. The temporary setback resulting from the 1956 revolt has been overcome and production is probably about up to previous levels.

Both wire and radio equipment is employed at tactical levels. Dependence on improved types of radio transmission is probably increasing. Visual signals are probably still employed extensively within the small units.

142. ENGINEER

Hungarian engineer equipment is generally of good quality and includes most basic types. The greater proportion of it is of Soviet design, and much is manufactured in the U.S.S.R. Hungary does produce several types of equipment, however, and should become increasingly self-sufficient in certain categories.

The mine-warfare equipment used by the Army is largely of Soviet origin, although some production of both Soviet and locally designed items has occurred. Several new types of antipersonnel and antitank mines were produced in Hungary in the late 1940's, but these have been largely replaced by Soviet World War II mines, including the TMD-B wooden antitank and PMD-6 wooden antipersonnel mines. Mine fuzes are largely of Soviet type, in particular the MUV pull and MV-5 pressure fuzes. The Soviet VIM-203 mine detector is in use, as is a Hungarian version, the FV Model 47.

A variety of types of construction equipment is produced in Hungary, including tractors, dump trucks, trailers, concrete mixers and vibrators, rock crushers, shovels, and cranes. This equipment is of modern design and includes copies of several Soviet items. Construction equipment is also imported from the U.S.S.R.

The Army engineers are equipped with bridging and stream-crossing equipment of Soviet and Hungarian origin. There is possibly also a small amount of German World War II equipment used

for training purposes. Hungary is producing the Soviet DLP and N2P pontons with only slight modifications. Assault boats, storm boats, and outboard motors, similar to the German World War II types, are also produced locally.

The Army appears well equipped with light stream-crossing equipment. This includes Soviet MPK flotation suits; LMN small pneumatic boats; DSL folding assault boats; A-3 pneumatic boats; NLP pontons; and TZI footbridges. Hungarian-manufactured items include 48-M assault boats; storm boats; Kovacs outboard motors; and Mocso powerboats. Aluminum assault boats, aluminum pontons, and 2-man, 8-man, and 16-man pneumatic boats of unknown types have also been reported.

The standard floating bridge equipment consists of the DLP light ponton and NPO heavy ponton bridges. Both sets are locally manufactured, the NPO being a modified version of the Soviet TMP.

143. CHEMICAL

The Hungarian Army is not well equipped for chemical warfare. It lacks modern offensive materiel, and much of the available defensive equipment is obsolete. Nonetheless, continued logistic support from the U.S.S.R. and the rehabilitation and expansion of existing local production facilities are steadily improving the Army's CW capabilities.

Hungary probably produces small quantities of toxic chemical agents and tear gas. Available smoke munitions consist primarily of Hungarian-produced smoke grenades and smoke pots. Lo-

cally produced incendiary grenades and Soviet smoke artillery shells are also available.

Hungarian factories are producing Soviet-model flamethrowers, of both portable and tank-mounted types. One tank-mounted flamethrower may have a maximum range in excess of 150 yards. Fuel thickeners may be in use.

Both portable and vehicular spray equipment is available. It is of Soviet types but can be produced locally.

Soviet protective masks and clothing are being imported to replace World War II German, Hungarian, and Rumanian items and are becoming standard. Soviet-type materiel is probably also produced within Hungary. The most widely used type of mask is the ShM-1.

There is a collective protector used to supply filtered air to shelters and fixed installations. It comes in three sizes with 600, 1,200, and 5,000 liters-per-minute capacity.

144. MEDICAL

Hungary produces medical equipment for its own use and is also able to export a certain amount. Antibiotics are in plentiful supply. The medical economy of Hungary has suffered from the effects of World War II and the subsequent Soviet occupation, but is still in fairly good condition and is capable of handling normal demands of the population in peacetime. The demands of a major disease outbreak or wartime operations would find the medical resources incapable of providing necessary support without assistance.

Section VI. UNIFORMS, INSIGNIA, AND DECORATIONS

145. UNIFORMS

a. General. Prior to the 1956 revolt, there was a noticeable trend toward the return of the traditional Hungarian military uniform. Subsequent to the revolt, the demand was intensified for the further elimination of remaining Soviet influences. In view of stock levels of uniforms on hand and for other reasons of economy, a compromise reportedly was effected whereby the immediate changes were concerned primarily with the elimination of the Soviet-type shoulderboards and a return to the pre-Communist national insignia. More recently, minor changes in uniform design were introduced.

The basic color of Hungarian Army uniforms is olive drab for winter and olive drab or khaki for summer. Winter uniforms for all ranks are made of wool material. Summer uniforms generally are made of lightweight cotton or wool material. Buttons on coats and overcoats, formerly embossed with a star, hammer, and wheat head, now display crossed rifles superimposed on a wreath. These buttons are gold-colored for officers and bronze for enlisted men.

Uniforms fall into two general categories: field-service and dress. These uniforms are discussed below and are illustrated in figure 88.



FIELD-SERVICE UNIFORM, OFFICERS
Major, Artillery Shown



WINTER FIELD-SERVICE UNIFORM
WITH OVERCOAT, OFFICERS
Captain, Signal Shown



WINTER FIELD-SERVICE UNIFORM,
ENLISTED MEN
Private 1st Class, Infantry Shown



WINTER FIELD-SERVICE UNIFORM
WITH OVERCOAT, ENLISTED MEN
Master Sergeant, Infantry Shown



SUMMER FIELD-SERVICE UNIFORM,
ENLISTED MEN
Sergeant 1st Class, Artillery Shown



DRESS UNIFORM, OFFICERS
Lieutenant, Armored Shown



DRESS UNIFORM, ENLISTED MEN
Sergeant, Infantry Shown



WOMEN'S FIELD-SERVICE UNIFORM
Captain, Signal Shown

Figure 88. Hungarian Army Uniforms.

b. Field-Service.

- (1) *Officers.* The basic field-service uniform worn by officers for summer and winter duty is comprised of: service cap, garrison cap, or fur cap; closed-collar coat; trousers or breeches; brown shoes or black boots; and Sam Browne belt or waist belt. In winter, brown gloves and an overcoat are added.
- (2) *Enlisted men.* The summer uniform consists of a garrison cap, tunic, breeches, boots, and belt. The winter uniform worn by enlisted men consists of: garrison cap or fur cap; tunic; trousers; leggings; shoes; belt; and overcoat.

c. Dress.

- (1) *Officers.* The dress uniform comprises a service cap, single-breasted open-collar coat, khaki shirt and brown tie, trousers, brown shoes, and brown gloves. Breeches, black boots and a Sam Browne belt or waist belt are worn for parade duty. For social occasions, a white shirt and no belt or gloves are worn.
- (2) *Enlisted men.* The dress uniform is the same as the field-service uniform except that service caps or steel helmets are worn in lieu of garrison or fur caps.

d. Women. Women in the Hungarian Army wear the same type uniform for all occasions. The field-service uniform consists of a service cap, single-breasted open-collar coat, khaki shirt and brown tie, beige stockings, and brown shoes. For field duty, the shirt may be worn without the coat and tie, and a garrison cap is substituted for the service cap. Officers may wear a dress uniform including a beret, coat and skirt of tropical fabric, and white shirt.

e. Special

- (1) *Armored.* Armored troops wear a leather coat with the regular Army uniform trousers; boots and Soviet-type crash helmet complete the uniform.
- (2) *Camouflage.* Two types of camouflage capes are issued: one is a waist-length sleeveless garment which protects the shoulders and pack; the other is a longer, knee-length garment which buttons in the front and has wide elbow-length sleeves.

f. Militarized Security Forces.

- (1) *Frontier Guard.* Members of the Frontier Guard wear Army-type uniforms. They are distinguished by green collar tabs and piping on the uniform. For winter duty, troops may be issued Soviet-type quilted uniforms.
- (2) *Security Guard.* Uniformed personnel of the Security Guard wear Army-type uniforms with blue collar tabs and piping.

146. INSIGNIA*a. Grade.*

- (1) *General.* All ranks display insignia of grade on shoulderboards. New-type shoulderboards similar to pre-Communist Hungarian insignia have been introduced for all ranks. The new insignia of grade are shown in figure 89.
- (2) *Officers.* General officers' shoulderboards display large silver stars on a gold field with a red background piped in gold. The shoulderboards worn by field and company grade officers have a branch colored background piped in gold. Field grades are indicated by medium-sized silver stars on a gold field. Company grades are indicated by small gold stars on the branch colored background, except that junior lieutenants have a silver star placed on a gold longitudinal stripe.
- (3) *Enlisted men.* All enlisted men wear shoulderboards with background in the branch of service color. Reenlistees also display silver piping. The three highest enlisted grades are indicated by a lateral silver stripe near the outer end and 1-3 silver stars (of a size smaller than for company grades) in the inner section. The lower three enlisted grades are differentiated by their wearing of two, one, or no silver lateral stripes.

b. Branch.

- (1) *General.* Insignia of branch is indicated by means of metallic devices and by the use of color. Only four colors are used to denote the various branches and services: black for armored troops, red for artillery, blue for frontier guard, and green for all others, including the basic infantry and the frontier troops.



COLONEL GENERAL



LIEUTENANT GENERAL



MAJOR GENERAL



COLONEL
(Artillery and
AA Artillery Units)



LIEUTENANT COLONEL
(Infantry Unit*)



MAJOR
(Armored Unit)



CAPTAIN
(Infantry Unit*)



SENIOR LIEUTENANT
(Artillery and
AA Artillery Units)



LIEUTENANT
(Armored Unit)



JUNIOR LIEUTENANT
(Artillery and
AA Artillery Units)



MASTER SERGEANT
(Armored Unit)



SERGEANT 1st CLASS
(Artillery and
AA Artillery Units)
(Career NCO)



SERGEANT
(Infantry Unit*)



CORPORAL
(Armored Unit)



PRIVATE 1st CLASS
(Artillery and
AA Artillery Units)



PRIVATE
(Infantry Unit*)

* Also units of other branches except Armored, Artillery, and AA Artillery.

Figure 89. Hungarian Insignia of Grade.

- (2) *Metallic devices.* Gold emblems indicative of branch of service are displayed on the collar tabs of the coat, tunic, and overcoat by all ranks. These devices are illustrated in figure 90.
- (3) *Color.* Branch of service color is displayed on collar tabs, shoulderboards, service cap bands, and cap crown piping. Collar tabs are worn on all uniforms except the officer's dress uniform; the open collar of the dress coat displays a branch of color backing under branch emblems, as well as branch color piping around the collar. Collar tabs are illustrated in figure 90.

c. Specialist Insignia. The outstanding Craftsman Badge was created in January 1950, and reportedly is made of pressed brass or bronze. It is awarded to quartermaster-type personnel, such as drivers, supply men, shoemakers, and cooks.

147. DECORATIONS AND AWARDS

On 24 March 1953, the Hungarian Council of Ministers announced the institution of military decorations and awards. These awards are described below in the accepted order of precedence. Hungarian decorations, awards, and badges usually are worn on the left breast. Service ribbons may be worn in lieu of medals.

a. Order of Merit of the Hungarian People's Republic. Awarded for 30 years of service, the medal consists of a five-pointed enameled star superimposed on a background of sun rays. The star bears in its center the enameled emblem of the Hungarian People's Republic. The medal is suspended from a triangular white ribbon which has a red, white, and green stripe from the right-hand border, and a red stripe from the left border. The Order has five classes.

b. Kossuth Order of Merit. This Order is awarded in three classes. The medal consists of a gold-colored eight-pointed star placed in the center of the Kossuth coat of arms. The star is girded by a green-enameled wreath and is placed on a white field. The back of the star bears the

date of the founding of the Order. Basis for award is not known.

c. Red Banner Order of Merit. Awarded for 25 years of service, the Order consists of a stylized circular light-blue enameled field inclosed within two wreaths of wheat. In the upper part of the medal is a gold-bordered red flag and in the center of the medal is the emblem of the Hungarian People's Republic superimposed on gold rays. The medal is suspended from a triangular red ribbon, on the upper third of which is a red, white, and green stripe.

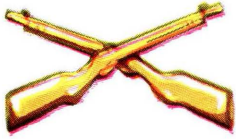
d. Red Star Order of Merit. Awarded for 20 years of service, the Order consists of a gold-colored circular laurel wreath ornamented at the base by a red, white, and green stripe. A five-pointed red-enameled star is superimposed on the laurel wreath, and in its center is a small gold-colored emblem of the Hungarian People's Republic.

e. Medal of Merit for Outstanding Service. Awarded for 15 years of service, this medal is gold-colored, round, and bears in its center a laurel wreath, the bottom ends of which are joined by a ribbon. The outside periphery of the medal is inscribed: *Kivalo Szolgalatert* (For Outstanding Service). The medal is suspended from a triangular red ribbon, on the upper left-hand third of which are two red, white, and green stripes on a white stripe.

f. Service Medal of Merit. Awarded for 10 years of service, this medal is a bronze disc. The center is embossed with the emblem of the Hungarian People's Republic. The medal is suspended from a triangular red ribbon which has three sets of red, white, and green stripes.

g. Frontier Guard's Badge. The badge consists of a metal shield, the top of which has a straight edge. The two side edges are convex and pointed. The badge has two green olive branches placed approximately one-quarter of an inch from either side. The national colors, red, white, and green, are painted parallel to the top edge. A blue letter "V", imposed on a red letter "H", is placed on the center. Basis of award is not known.

BRANCH DEVICES



INFANTRY



ARTILLERY



ANTIAIRCRAFT ARTILLERY



ANTIAIRCRAFT ARTILLERY SIGNAL



ARMORED



SIGNAL



ENGINEER AND CHEMICAL



SUPPLY



MOTOR TRANSPORT



RAILROAD TRANSPORT



MEDICAL



TOPOGRAPHIC



JUSTICE



BAND



ARTISTIC ENSEMBLE

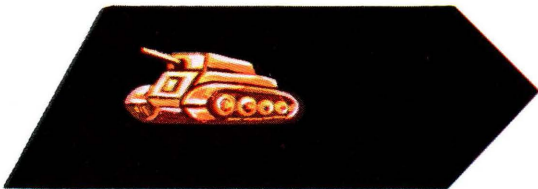


UNITED OFFICERS' SCHOOL



TECHNICIAN

COLLAR TABS



ARMORED UNIT



ARTILLERY AND ANTIAIRCRAFT ARTILLERY UNITS
(Medical component shown)



OTHER BRANCH UNITS
(Supply component shown)

Figure 90. Hungarian Insignia of Branch.

Section VII. GLOSSARY OF MILITARY TERMS

The Hungarian language is not closely related to the Slavic, Germanic, or Romance languages of Europe, and most of its vocabulary appears totally strange to the beginner. Like German, it makes frequent use of compounds, only a few of which are reproduced here; the user must, therefore, look up both elements of such words.

Pronunciation is based on fixed rules, to which there is no exception. The stress is invariably on the first syllable of the word, or of each element of a compound. Acute marks are used to indicate long vowels. Umlauts occurring on *o* and *u* modify the vowel sound, as in German. The following are the principal letters and letter combinations requiring special attention:

a	<i>o</i> in not
á	<i>a</i> in father, but more open
c	<i>ts</i> in fits
cs	<i>ch</i> in church
e	<i>e</i> in met
é	<i>ei</i> in eight
gy	<i>dy</i> in did you, said rapidly
i	<i>i</i> in hit
í	<i>i</i> in machine
j	<i>y</i> in yes
ly	<i>y</i> in yes
ng	<i>ng</i> in finger (never as in singer)
nk	<i>nk</i> in sink
o	<i>o</i> in obey
ó	<i>o</i> in open
ö	somewhat like <i>u</i> in church; German <i>ö</i> in <i>Röckchen</i>
ő	some whatlike <i>u</i> in urn; German <i>ö</i> in <i>schön</i>
s	<i>sh</i> in ship
sz	<i>s</i> in sit
ty	<i>ty</i> in hit you, said rapidly
u	<i>oo</i> in foot
ú	<i>oo</i> in boot
ü	French <i>u</i> , short; German <i>ü</i> in <i>füllt</i>
ű	French <i>u</i> , long; German <i>ü</i> in <i>Führer</i>
zs	<i>s</i> in pleasure

The following Glossary includes military abbreviations, shown in parentheses where applicable.

A

ágyú (á)	gun
akadály	obstacle
akna	mine
aknamező	minefield
ál	false, dummy
alakulat	troops; formation; major unit
alezredes (alez)	lieutenant colonel

alhadnagy (alhdgy)	junior lieutenant
állás	situation; gun position
állomás	station, post, depot
állomány	total strength
alosztály	subunit, company
altábornagy (altbgy)	lieutenant general
altiszt (alti)	noncommissioned officer
árkász	engineer, sapper
árok	trench
atomfegyver	atomic weapon

B

berendezés	installation
------------	--------------

C

cél	target, objective
csapat	body of troops; detachment; team
csapatrend	tactical disposition of troops
csata	battle
cső	barrel, tube
csoport (csop)	group, section, detachment

D

dandár (dd)	brigade
domb	hill
drót	wire

E

egészségügyi osztály	medical battalion
egység	unit
ejtőernyős	parachutist, paratrooper
ellenség (elg)	enemy
ellentámadás	counterattack
elővéd (evéd)	advance guard
erdő	forest
erő	force, strength, power
ezred (e)	regiment
ezredes (ezds)	colonel

F

fegyver	arm, weapon
Fegyveres erők	Armed Forces
felderítő járőr (fejőr)	reconnaissance patrol
felvételező állomás (f.á)	distributing point
fertőtlenítés	decontamination
fertőtlenítési központ	decontamination center
fertőzött terület	contaminated area
figyelőhely	observation post
flotta	navy
főcsapat (főcs)	main body
fogatolt	horse-drawn
főhadiszállás	general headquarters
főhadnagy (fhdgy)	senior lieutenant
folyamerő (foe)	river force
főparancsnok	commander-in-chief
főtörzsőrmester	master sergeant
fővezér (főv)	supreme commander
fővezérség (főv)	high command

G	
gázmentes ruházat.....	protective clothing
gép.....	machine
gépesített ezred.....	mechanized regiment
gépesített hadosztály.....	mechanized division
gépesített osztály.....	mechanized battalion
gépfegyver.....	light machinegun
gépkocsizó gyalogság ezred.	motorized rifle regiment
géppuska.....	machinegun
golyószóró (gsz).....	automatic rifle
gránát (gr).....	shell; grenade
gránátvető.....	mortar
gyalogcsapat.....	rifle company
gyalogezered.....	infantry (rifle) regiment
gyaloghadosztály.....	infantry (rifle) division
gyalogság (gység).....	infantry
gyors.....	mobile
H	
háború.....	war
hadnagy.....	lieutenant
hadosztály (ho).....	division
hadrakelt.....	mobilized, under arms
hadrend.....	order of battle, TOE
hadsereg (hds).....	army
hadtest (hdt).....	corps
Hadügyminiszter.....	Minister of Defense
harc.....	combat, engagement
harcálláspont (háp).....	command post
harcászat.....	tactics
harcokosi (hk).....	tank
harcokosi hadosztály.....	tank division
harcokosi hadtest.....	tank corps
határ.....	frontier, limit
Határőrség.....	Frontier Guard
hegy (hgy).....	hill, mountain, sharp point
hegyi.....	mountain (adjective)
helikopter.....	helicopter
helyőrség.....	garrison
helyzetmegítélés.....	estimate of the situation
híd.....	bridge
hídépítés dandár.....	bridge-building brigade
híradó osztály.....	signal battalion
Honvéd; honvéd.....	Armed Forces; private soldier
Honvédelmi miniszter.....	Minister of National Defense
I	
intézkedés (int).....	field order, administrative order
iskola.....	school
J	
jármű (jmű).....	vehicle
járőr (jőr).....	patrol
jelszó.....	password
K	
káplár.....	corporal
katonai.....	military

kém.....	spy, scout
kerékpár (kp).....	bicycle
kocsioszlop (ko).....	transport column
könnyű (k).....	light (weight)
kórház (k).....	hospital
kötélék.....	body of troops
közepes.....	medium
különítmény.....	detachment
L	
lángszóró.....	flamethrower
légelhárító.....	antiaircraft
légierők (le).....	air forces
légoltalmi óvóhely.....	air-raid shelter
légoltalom.....	civil defense
légvédelmi üteg.....	antiaircraft battery
lesállítás.....	concealed gun position, ambush
lökajtásos repülőgép.....	jet plane
lőszertelep.....	ammunition depot
lovasság.....	cavalry
lovas század.....	cavalry company
lövédék.....	projectile
löveg (löv).....	gun, artillery piece
lövész.....	rifleman; sniper
M	
Magyar Népköztársaság.....	Hungarian People's Republic
Magyarország.....	Hungary
megegerősített.....	fortified
menetvonal.....	route, line of advance
minta (M).....	model, type
motorkékpáros osztály.....	motorcycle battalion
mozdulat.....	movement, maneuver
mozsár (mo).....	mortar; heavy howitzer
műszaki dandár.....	technical brigade
műszaki osztály.....	engineer battalion
N	
nehéz.....	heavy
O	
őr.....	guard, sentry
őrmester (őrm).....	sergeant
őrnagy (őrgy).....	major
őrvezető.....	private first class
oszlop (oszl).....	column
osztály.....	battalion, class, section
P	
páncélautó.....	armored car
páncélgépkocsi.....	armored car
páncélos (pc).....	armored; tank; armored troops
páncéltörő (pet).....	antitank, armor-piercing
páncélvonat (pv).....	armored train
parancs (pes).....	order, command
parancsnok.....	commander
parancsnokság (pk., p).....	headquarters
puska.....	rifle

	R		
rádió.....	radio	tehergépkocsi (tgc).....	truck
raj.....	squad	tengeri erők.....	naval forces
raketavető.....	rocket launcher	térkép.....	map, chart
raktár (R).....	depot, dump, warehouse	terv.....	plan
rejtőzés.....	concealment, camouflage	tizedes.....	corporal
repülőgép (repgép).....	airplane	titkos.....	secret
repülőtér (repter., R).....	airfield	tolmács.....	interpreter
riadó.....	alarm, warning signal	törzsőrmester.....	sergeant first class; senior ser- geant.
	S	tüzérség (tü).....	artillery
sugárzás.....	radiation	tüzérségi dandár.....	artillery brigade
szakasz (szak).....	platoon	tüzérségi üteg.....	artillery battery
szakaszvezető (szkv).....	junior sergeant		U
szállítóosztály.....	transport battalion	út.....	road
szárazföld erők.....	ground forces	üteg (ü).....	battery
század (szd).....	company	üzemanyag (üza).....	fuel, gasoline
százados (szds).....	captain		V
szer.....	equipment, materiel	vasút (v).....	railroad
	T	vegyiharc osztály.....	chemical warfare battalion
tábor.....	camp	vezérezredes.....	colonel general
tábori ágyúezred.....	field artillery regiment	vezerőrnagy.....	major general
tábornagy.....	field marshal	visszavonul (vivon).....	retreats, withdraws
tábornok.....	general officer	viz.....	water
támad (tád).....	attack	völgy.....	valley
tankelhárító dandár.....	antitank brigade		Z
tarack (tar).....	howitzer	zászlóalj.....	battalion
tarack ezred.....	howitzer regiment		

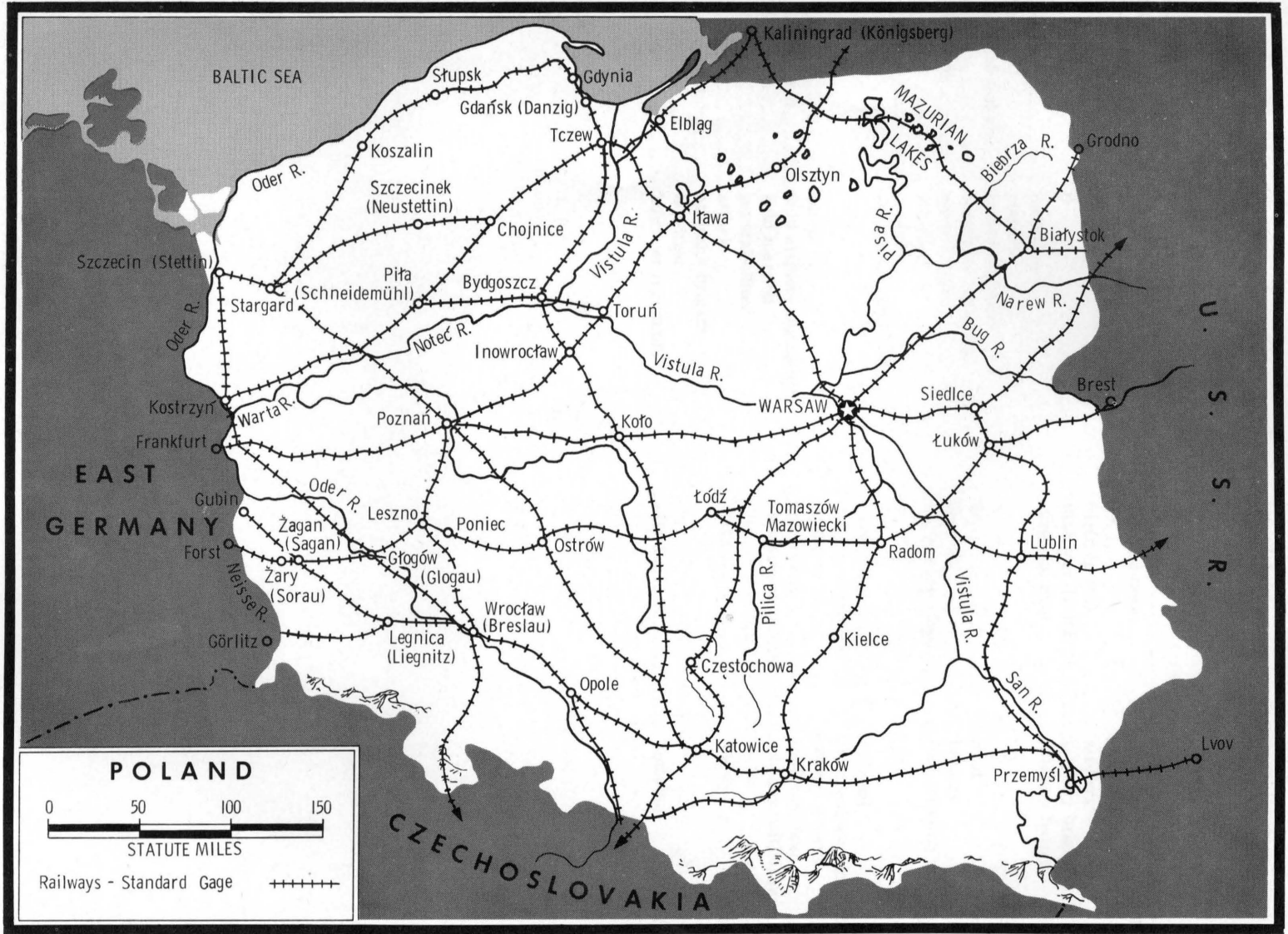


Figure 91. Poland.

POLAND

CHAPTER 7

Section I. THE MILITARY SYSTEM

148. NATURE OF THE ARMED FORCES

a. Composition. The Polish Armed Forces, consisting of the ground forces, the navy, and the air and home territorial antiair defense forces, represent a single, centralized military force dominated by ground officers. The militarized security forces, Frontier Guard and Internal Security Corps, are subordinate to the Ministry of Internal Affairs, but constitute auxiliary ground forces that could serve numerous militarily useful functions in wartime. The latter forces were relatively large until the accession of Władisław Gomułka to power in October 1956. He has reduced the size and to some extent limited the authority of these and other security organs within the country. The Frontier Guard and Internal Security Corps are well trained and equipped both for their specialized security functions and for infantry-type combat.

The naval forces are the largest and best equipped in the Satellite area. They include several destroyers and at least half a dozen submarines. There is also a small, well-equipped naval air arm. The regular air units are subordinate to an agency called the "Air and Home Territorial Antiair Defense Command." This agency controls also those ground antiaircraft artillery units that are assigned to home defense and is linked directly with the antiair defense commands of the U.S.S.R. and the other Satellites.

b. Development. The pre-World War II Polish Army was largely influenced by French concepts. Since the Polish Government had carefully avoided establishing close ties with either its German or its Russian neighbors, the Poles were isolated when the inevitable Nazi attack occurred in September 1939. Although both Britain and France declared war on Germany following this attack, they were unable to bring force to bear to save Poland. Ill-prepared in materiel or tactics to face the German Blitzkrieg, the Army was quickly swept to defeat. The country was divided between Ger-

man and Soviet occupation forces and the Polish Army ceased to exist.

During World War II, Polish units were formed both by the U.S.S.R. and the Western Allies. The nucleus of the present army was the Soviet-sponsored rifle division formed in May 1943. By November 1943, the Polish ground units under Soviet control had expanded to a corps of two divisions and supporting units. This force was commanded by Colonel Zygmunt Berling, succeeded in February 1944 by Polish Marshal M. Rola-Zymierski. Most of the officers were either Russians or ethnic Poles who had served in the Soviet Army.

During the Soviet summer offensive of 1944, the "First Polish Army" was included in Marshal Rokossovskiy's First Byelorussian Front of the Soviet Army, which crossed the Pripet Marshes and penetrated central Poland. Additional recruits were obtained as Polish territory was conquered, elements of the Polish underground were incorporated, and the new Government, established first at Lublin and later at Warsaw, enforced a partial mobilization of fit Polish manpower. The first Polish Army took part in the final battle for Berlin. Eight more divisions and a Second Army were activated before VE-day, and still other units were added later. The force was kept on a war footing through 1945 and well into 1946 primarily for the purpose of policing the new territory acquired from Germany and scheduled to be resettled by Poles. Older and less fit personnel were gradually screened out and replaced by means of a regular system of conscription. An initial postwar Army of 16 understrength divisions emerged.

The Soviets, now in complete control of Poland, made sure that the new Army would remain subservient to their purposes. Most of the ex-Soviet officers in the Polish forces during the war remained in key positions. The Polish forces raised in the West were largely ignored in the reestablishment of a Polish national Army, despite their

useful contribution to the war effort, especially in Italy. Meantime, until about 1949, the Army was allowed to stagnate while the new Soviet-sponsored Communist regime in Warsaw sought to bring order out of the postwar chaos in Poland. Army units were frequently used for security duty, along with frontier and internal security forces. Virtually no new equipment was made available to the forces to replace or supplement the worn wartime stocks. Personnel, including officers, were regularly screened and those deemed least reliable to the new regime were purged. Morale was low throughout the force, and only limited training was undergone.

A decided change in the trend of Polish military developments occurred in 1949. In November of that year Marshal Rokossovskiy (who was at least partly Polish by birth) returned to Poland as Minister of National Defense. He was also to be made a Marshal of Poland (the only officer so honored since the war) and a member of the Polish Communist Party's Central Committee. Poland had been unique among the Satellites in that no Soviet military mission existed there. Instead, every top post in the high command and the majority of the military district, corps, and division commands were held by former Soviet officers, most of them of Polish extraction. Such officers were integrated into staff and command positions at all echelons in all branches of service and for the next 7 years dominated every aspect of Polish military activity. Most of these officers, including Rokossovskiy, returned to the Soviet Union after Gomulka assumed power in October 1956. The only former Soviet officer known to have been retained in a key position is Lieutenant General Jerzy Bordzilowski, who has been Chief of General Staff since 1954. At present, it is believed that few other ex-Soviet officers remain, except perhaps in the more technical positions at higher levels.

During 1950, a rapid reorganization and general development of the Army took place. Additional Soviet-type equipment was brought into the country. Strength was increased and additional units were formed. The Army's combat readiness steadily improved over the next several years as training reached ever higher standards. The level of unit field training also steadily advanced and division maneuvers became commonplace by 1955 and 1956.

c. Status. The present Army is one of the largest, best trained, best equipped, and best organized of the Satellite forces. Personnel strength has been reduced from a high of about 275,000 reached before Gomulka came to power. This was the largest Satellite army ground force of the postwar period. The present strength of some 200,000 men is still greater than that of any other Satellite force except Rumania's, which is approximately the same size. The reduction of Poland's Army strength has occurred under the regime of Poland's present leading political figure, Wladislaw Gomulka. While the reason for the reduction may have been in large part economic, it is related to the reduction in the size of all the security organs within the country and reflects an apparent confidence on Gomulka's part that he has relatively little to fear from either internal or external enemies. The reduction in Army strength has not significantly reduced overall military capabilities, however, because of the improved quality of the remaining forces and the growing number of trained reserves who could be rapidly mobilized in an emergency.

The quality of Polish Army training has continued to improve. Large-scale maneuvers, on an army or higher level, have been held in recent years. Combined training with Soviet forces has occurred several times since 1955, including both command-post exercises and field maneuvers. Recent changes have been made in the training program, including the adoption of a system of rotating units to the field for combat training rather than leaving them on bivouac in training



Figure 92. Polish Paratroops With Full Equipment.

areas throughout the period between May and October. These changes have not resulted in a lowering of the overall training standard, and they apparently permit a greater amount of specialized training than was previously possible.

Polish munitions production is second only to that of Czechoslovakia among the Satellite states, although the Army remains heavily dependent on the U.S.S.R. for logistic support in many equipment categories. The Army is one of the most favored Satellite forces in terms of the quality and quantity of Soviet equipment received. This includes a number of types of post-war weapons, although no missiles or atomic weapons have been provided.

The Polish tactical units have been undergoing an extensive reorganization for several years. In conjunction with the reduction of personnel strength, the number of line divisions, which reached as high as 20, has been reduced to less than 15. The remaining units have been reshaped in such a manner as to increase their firepower, mobility, and flexibility. These changes are in line with those being made in Soviet Army units. Only the East German and possibly the Czechoslovak armies have been more fully modernized than the Polish, among the Satellite forces.

The Polish Army is sustained by a form of conscription with a 2-year term of service in most ground branches. (Discharge after 1 year is permitted for young men who have satisfactorily completed military courses in colleges and secondary schools.) About half of the young men reaching conscription age annually are excused from any form of service because they are not needed to maintain the desired troop level. Some of these receive various other types of military training, as in college programs or in semimilitary organizations.

The wartime use of the Polish Army is highly uncertain and would be determined almost entirely by the circumstances and causes of the war. Should the situation make it desirable or feasible, selected Polish units could be integrated into Soviet field commands to participate directly in a Soviet offensive across the North German Plain. Polish units might also be used in rear areas on various types of security missions, or be employed for combat on a secondary front, as, for example, in Denmark.

The degree of reliability of Polish troops to the Soviets would be in large part dependent upon the causes and course of the war. The danger of subversion or defection is greatly restricted by various



Figure 93. Polish Army Engineers Ferrying a Camouflaged Tank.

forms of direct and indirect Soviet control. It is unlikely, in any case, that serious resistance would occur in wartime, at least until victorious Western ground forces were advancing onto Polish soil.

149. THE HIGH COMMAND

Top control of the Polish Armed Forces follows rather closely the familiar Bloc pattern (ch. 1).

150. TERRITORIAL ORGANIZATION

Poland is divided into three military districts. One covers the entire eastern half of the country, with headquarters in Warsaw. The western half of the country is divided into a northern and a southern part by two additional military districts, the Pomeranian and Silesian, with headquarters at Bydgoszcz and Wrocław, respectively. The districts are responsible for the usual administrative and logistical functions of district headquarters in other Bloc states. Their operational functions include transmission of orders from the Ministry, general supervision of training, and responsibility for the development and maintenance of the combat readiness of the tactical units within the area. In wartime, cadres for field command staffs probably would be formed from the district headquarters personnel. Also, since Poland no longer has corps headquarters, corps or army headquarters probably are formed by the district headquarters to control large-scale training exercises or maneuvers.

151. ORGANIZATION OF THE ARMY FOR WAR

In wartime, the Polish Army organization would be determined by the roles and missions assigned it by Moscow. These, in turn, would depend upon the circumstances of the war. If a large force

were to be mobilized, several combined-arms armies and tank armies probably would be raised. The former would be composed primarily of motorized rifle divisions, the latter, mainly of tank divisions. If adequately supplied by the U.S.S.R., these forces would constitute a formidable fighting force, unless confronted with modern NATO forces equipped with atomic weapons and missiles. If in the future the Soviets should support the Poles with such weapons and with adequate air support, the Poles probably could give a good account of themselves. The Poles have long considered Germany a traditional enemy, and their continued tenure of the German territories acquired after World War II will require successful opposition to German, or other Western, efforts to recapture those territories.

With mobilization, the standing units could quickly be raised to full strength and additional divisions formed. Sufficient trained manpower and the administrative machinery for mobilization already exist, but additional quantities of major equipment items would have to be provided from the U.S.S.R. A force substantially in excess of 1,000,000 men could be raised within several months of M-Day that could include up to 50 line divisions. Such a force would nearly exhaust the trained reserves, estimated at about 1,000,000 men, that have served in the Army ground forces since adoption of Soviet-type weapons, organization, and tactics. If all-out mobilization were contemplated, and if the necessary Soviet support for it were available, the Army could be still further expanded, utilizing additional numbers of the nearly 5,000,000 fit males of military age in Poland. Many of these men have served previously, but they would require varying periods of refresher training to be fully effective after mobilization.

Section II. ORGANIZATION OF THE FIELD FORCES

152. ARMS AND SERVICES

Branches of the Polish Army ground forces are classified as line or combat arms, technical and other services, and military specialties:

a. Combat Arms

- (1) Infantry (*Piechota*).
- (2) Artillery (*Artyleria*).
- (3) Armored Troops (*Wojska Pancerne*).
- (4) Engineer Troops (*Wojska Inżynieryjne*).
- (5) Signal (*Łączność*).
- (6) Chemical Troops (*Wojska Chemiczne*).

b. Technical and Other Services.

- (1) Quartermaster (*Kwatermistrzostwo*).
- (2) Ordnance (*Uzbrojenie*).
- (3) Medical (*Śłużba Zdrowia*).
- (4) Veterinary (*Weterynaria*).
- (5) Automotive (*Samochodowa*).
- (6) Transportation (*Komunikacje*).
- (7) Radio Technical Troops (*Wojska Radiotechniczne*).
- (8) Topography (*Topografia*).

c. *Military Specialties*

- (1) Billeting and Construction (*Kwaterunkowo-budowlana*).
- (2) Justice (*Sprawiedliwość*).
- (3) Administration (*Administracja*).
- (4) Internal Military Service (*Wojskowa Służba Wewnętrzna*).
- (5) Political (*Polityczna*).
- (6) Chaplains (*Duszpasterstwo*)

The Quartermaster service is comparable to the Rear Services in other Bloc armies, and was known as Rear Services in Poland during the period of greatest Soviet influence under Marshal Rokossovskiy. The quartermaster at any given headquarters not only organizes the supply and movement of rations, clothing, and general equipment, but also coordinates all other logistic matters and supervises the technical services responsible for them.

Poland is the only Bloc state that has a Chaplain's corps.

153. PRINCIPLES OF TACTICAL ORGANIZATION

The Polish tactical unit organization has followed that of the Soviet Army since 1943. There has been no discernible effort to deviate from Soviet concepts since Gomulka came to power in 1956 and large numbers of the former Soviet officers returned to the U.S.S.R. In fact, the Polish Army is one of the first three Satellite forces—the others being the East German and Czechoslovak—to adopt the newest Soviet divisional organization structure. There are some discrepancies from the Soviet, TOE's, of course, but these are relatively minor and reflect local

expedients rather than differing organizational concepts.

154. HIGHER HEADQUARTERS

Following the Bloc-wide trend, the Poles inactivated the corps headquarters several years ago, and there are no remaining tactical headquarters above division level. Higher headquarters are frequently established to control high-level training activities, and they would be quickly formed in wartime to control large field units.

155. TACTICAL UNITS

a. *Line Divisions*. In recent years the Polish Army has been undergoing an extensive reorganization of the basic line division structure. The Army previously contained divisions only of rifle and mechanized type, based on the older Soviet TOE's. These units are in the process of being replaced by motorized rifle and tank divisions, in accordance with the later Soviet organization. The results of this program, which is not yet complete, will greatly improve the armored shockpower, as well as the mobility and flexibility of the units. See chapter 1 for detailed discussion.

b. *Other Units*. The Polish Army is well provided with support units of brigade and regimental size. Some of the relatively large number of artillery brigades may be included in two or more "breakthrough"-type divisions, similar to those in the Soviet Army. Such divisions are primarily holding headquarters, and the respective brigades constitute the basic tactical units. The greatest proportion of the regiments are of anti-aircraft artillery type assigned to the territorial anti-air defense mission.

Section III. MILITARIZED SECURITY FORCES

156. GENERAL

The Polish militarized security forces, totaling approximately 50,000 men, include the Frontier Guard (*Wojska Ochrony Pogranicza*—WOP) and the Internal Security Corps (*Korpus Bezpieczeństwa Wewnętrznego*—KBW). The KBW was organized in 1945 and the WOP in 1947. During the next several years, they were especially active against the Partisan resistance, in maintaining order in the former German territories, and in preserving the integrity of Poland's new frontiers.

The militarized security forces were controlled

by the Ministry of Public Security until its dissolution in December 1954. Since that time they have been under the Ministry of Internal Affairs. The Ministry of National Defense has no responsibility for the KBW and WOP except in matters relating to conscription and logistics. Overall supervision of the KBW and the WOP is vested in a Deputy Minister of Internal Affairs for Internal Forces.

In time of war, it is believed that elements of the KBW and WOP would be attached to higher field commands of the Army to perform various spe-

cialized functions largely of a security nature. In such cases, however, administrative control would remain with the Ministry of Internal Affairs.

Prior to 1951, conscripts for the militarized security forces received their basic training in Army units. In 1951, the KBW and WOP began utilizing their own school systems and training schedules which had been evolved to meet their own peculiar needs. In the training battalions organic to each regiment or brigade, the recruit receives a rigorous 3-month training somewhat comparable to that received in the Army at rifle company level. In specialized training the KBW conscript receives instruction in street fighting, marching fire, forced marches, and small-unit combat tactics and techniques peculiar to the organization. Specialized WOP training includes night operations, border surveillance, and customs or immigration duties.

157. FRONTIER GUARD

The WOP has varied little in its strength and composition since it was established. The highest operational unit is the brigade, which varies from 1,500 to 2,500 men, depending on the location of the unit and requirements placed upon it. Brigade headquarters are located mostly in cities several miles from the border sector under the unit's jurisdiction. Each brigade is composed of four or five battalions organized into a number of

platoon-size units which are the basic operational elements.

One of the initial functions of the WOP was to act as a sort of military-government agency in restoring order to the liberated areas of Poland and to the former German areas annexed by Poland. Once civil government had been established by the new regime in Warsaw, the WOP reverted to its primary function of maintaining border security. The sea frontier and river boundaries are guarded by waterborne units of the WOP, equipped with patrol boats. In the port areas these units perform quarantine and customs functions as well as offshore patrol.

158. INTERNAL SECURITY CORPS

The KBW is responsible for maintaining the physical security of the regime. It seeks to detect in advance efforts to commit sabotage or subversion and also aims at preventing the establishment of organized resistance groups. The KBW mission includes protection of government officials and installations and the guarding of political prisoners.

The KBW is organized into regimental-size units, each with three or four subordinate battalions. In general, there is one regiment in each provincial capital. The basic operational units are the battalions. These are usually located near governmental, industrial, or population centers, or in other sensitive areas.

Section IV. WEAPONS

159. INTRODUCTION

Poland's munitions industry is second only to that of Czechoslovakia in the Satellite area. Military end items of various kinds, including major weapons, are produced as well as large quantities of parts and subassemblies. This production includes tanks, artillery, small arms, ammunition and explosives, chemical warfare equipment, aircraft, electronic and communications equipment, and trucks. All current Polish-produced weapons are of Soviet design. Many of the military electronic and specialized equipment items are of Polish design.

The great bulk of weapons and equipment in the hands of Polish troops is of Soviet origin, although the proportion of locally produced materiel is increasing significantly in certain categories. This trend is expected to continue,

although reliance on Soviet production probably will not be completely overcome.

160. INFANTRY

a. General. Infantry weapons of Soviet type are standard in the Army. A few Czechoslovak-designed and -produced weapons, notably two recoilless antitank weapons, are available. Soviet weapons of the same type are, however, also in service. Modern Soviet-type small arms and ammunition are being produced in Poland. German and prewar Polish weapons have been scrapped or put in reserve.

b. Pistols. The basic Polish Army pistol is the Soviet 7.62-mm TT-1933 Tokarev. The Soviet 7.62-mm M1895 Nagant is also in limited use. The Polish World War II 9-mm VIS M35 Radom pistol is believed in reserve.

c. Submachineguns. The familiar Soviet PPSH-41 (fig. 6, p. 14) and PPS-43 (fig. 30, p. 47) are standard in the Polish Army. Both were locally produced, as was also the Polish PM-50 version of the PPS. The Soviet 7.62-mm A K submachinegun (fig. 31, p. 47) is now standard and is produced locally.

d. Rifles. The standard shoulder arm has been the Soviet M44 carbine (fig. 7, p. 14) produced in Poland. The Soviet-type SKS semi-automatic carbine (fig. 79, p. 117), also produced in Poland, is replacing the M44 carbine.

e. Machineguns. All standard machineguns are of Soviet type. The light machinegun in common use is the 7.62-mm DP (fig. 20, p. 29). Heavy machineguns include the 7.62-mm SG-43 (fig. 8, p. 15) and the 12.7-mm DShK M38 (fig. 116, p. 161). The newer Soviet 7.62-mm RPD light machinegun (fig. 32, p. 48) is coming into service as the squad light machinegun.

f. Infantry Antitank Weapons. The Polish Army possesses the Soviet RPG-2 recoilless anti-tank grenade launcher (fig. 94), the 82-mm recoilless gun B-10 (fig. 118, p. 162), and the 107-mm recoilless gun B-11 (fig. 95). It also has the Czechoslovak 82-mm recoilless gun T-21 ("Tarašnice") (fig. 47, p. 70) and the grenade launcher P-27 ("Pancéřovka") (fig. 46, p. 70).

g. Grenades. The Army uses Soviet-type hand grenades, of both local and Soviet production. These include the RG-42 offensive, F-1 defensive, RPG-40 antitank, RPG-43 HEAT, and RPG-6 HEAT hand grenades.



Figure 94. Soviet Antitank Grenade Launcher RPG-2.

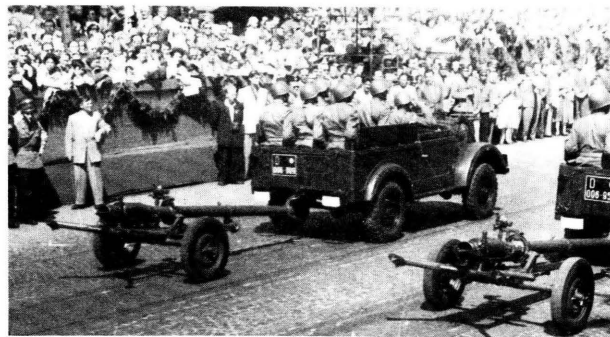


Figure 95. Soviet 107-mm Recoilless Gun B-11.

h. Mortars. Standard Army mortars include the Soviet 82-mm M41 and M37 (fig. 21, p. 29), the 120-mm M38 (fig. 9, p. 15), and the 160-mm M43 (fig. 80, p. 118). No significant quantities of World War II German or Polish mortars are available.

161. ARTILLERY

a. General. Except for some old coast defense guns, all Polish Army artillery is of Soviet type, some of it produced locally. Much older equipment of Polish and various foreign origins has been put in reserve. So also have some items of World War II Soviet equipment, which are being replaced by postwar weapons.

b. Field. The standard field artillery pieces in the Polish Army, all of Soviet type, are the 76-mm divisional gun M42 (fig. 81, p. 118), the 85-mm field gun D-44 (fig. 10, p. 116), the 122-mm howitzer M38 (fig. 11, p. 16), the 122-mm gun M31/37 (fig. 82, p. 119), the 152-mm howitzer M38 and M43 (fig. 121, p. 163), and the 152-mm gun-howitzer M37 (fig. 96). The Soviet 100-mm



Figure 96. Soviet 152-mm Gun-Howitzer M37.

field gun M44 (fig. 23, p. 30) and the 203-mm howitzer M31 (fig. 33, p. 49) are also in service. Several types of older Soviet-type 76-mm howitzers and guns have already been scrapped or placed in reserve. The standard 76-mm divisional gun M42 is being steadily replaced by the newer, more effective 85-mm piece.

c. Antitank. The standard light AT gun is the Soviet 57-mm M43 (fig. 12, p. 17) although small numbers of the Soviet 45-mm guns M37 and M42 (fig. 24, p. 31) may still be used in a few units. In addition, the Soviet 100-mm field gun M44 is in service in an antitank role. The 85-mm auxiliary-propelled gun (fig. 97) has also been identified in antitank units.



Figure 97. Soviet 85-mm Auxiliary-Propelled Gun.

d. Antiaircraft. Standard antiaircraft weapons are the 14.5-mm ZPU-2 dual and ZPU-4 quad-mount AA machineguns (figs. 117, p. 161, and 98),

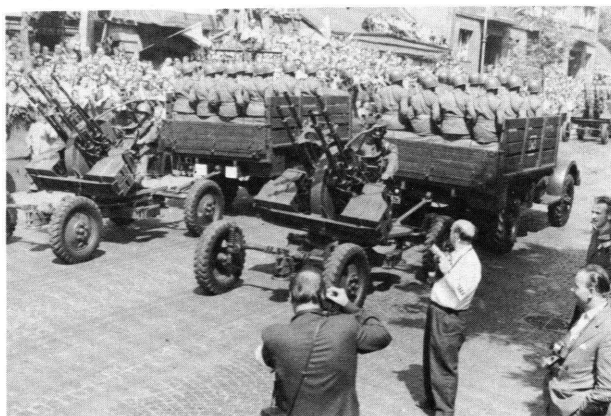


Figure 98. Soviet 14.5-mm Quad-Mount Antiaircraft Machinegun ZPU-4 with GAZ-63 Light Truck.

the Soviet 37-mm antiaircraft gun M39 (fig. 25, p. 31), and the Soviet 85-mm antiaircraft gun M39 (fig. 13, p. 17). The 37- and 85-mm pieces are being gradually replaced by the more effective Soviet 57-mm S-60 (fig. 64, p. 96) and 100-mm KS-19 (fig. 99) guns.

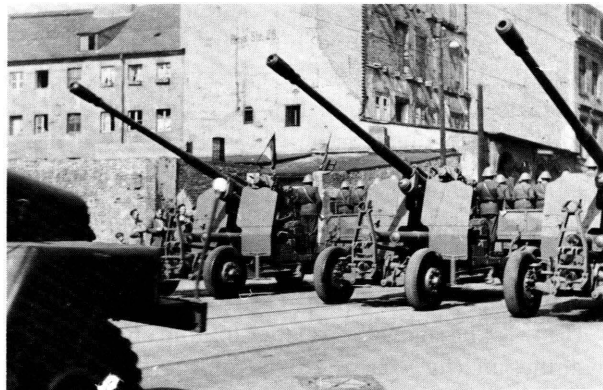


Figure 99. Soviet 100-mm Antiaircraft Gun KS-19.

e. Field Rocket Launchers. The Polish Army has two types of multiple-round field rocket launchers, both of Soviet origin. These are the 16-round 132-mm BM-13 (fig. 83, p. 119) and the newer 140-mm BM-14 (fig. 100).



Figure 100. Soviet 140-mm Rocket Launcher BM-14 (16-round).

162. ARMOR

a. General. All armored combat vehicles in the Polish Army are of Soviet design, although some T-34 (85) and T-54 medium tanks have been produced locally. Polish armored equipment includes almost the entire range of Soviet tanks, assault guns, and armored cars of World War II

1 April 1960

DA Pam 30-50-2

and some of postwar types, including both types of standard Soviet armored personnel carriers, the BTR-40 (fig. 101) and the BTR-152 (fig. 16, p. 19).



Figure 101. Soviet BTR-40 Armored Personnel Carrier.

b. Tanks. The most commonly used tank is the T-34 (85), (fig. 102), although it is steadily being phased out by the more modern T-54, mounting a 100-mm gun (fig. 14, p. 18). Numbers of all three JS- series heavy tanks, JS-1, JS-2 (fig. 84, p. 120), and JS-3 (fig. 103), are available as well. These mount a 122-mm gun. The postwar light amphibious Soviet tank PT-76 (fig. 65, p. 96) is also available.

c. Assault Guns. All basic types of Soviet assault guns are available, including the SU-85 (fig. 66, p. 96), the SU-100 (for a Czechoslovak version of which, see fig. 54, p. 73), the JSU-122 (fig. 15, p. 18), and the JSU-152 (fig. 104) assault guns. The light SU-76 support gun (fig. 122, p. 163) is also in the hands of troops in substantial quantities.



Figure 102. T-34 Medium Tank (85-mm Gun) in a Polish Field Exercise.

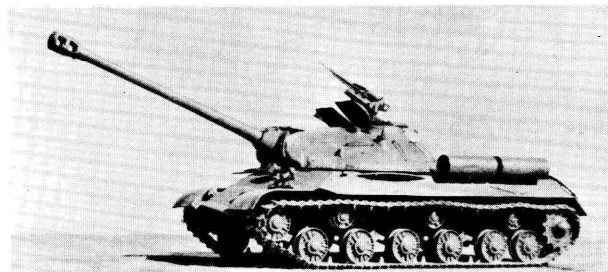


Figure 103. Soviet JS-3 Heavy Tank (122-mm Gun).



Figure 104. Soviet JSU-152 Heavy Assault Gun.

Section V. EQUIPMENT

163. TRANSPORTATION ¹

Poland has developed a significant motor vehicle production capability since World War II. The Polish Army still uses a relatively high proportion of Soviet-made trucks, but these are being gradually augmented by locally produced vehicles. Poland is still dependent on the U.S.S.R. for amphibious and other special-purpose vehicles, but even this dependence may be overcome in the future.

Polish-produced trucks include the Lublin FSC-51, 4 x 2, 2½-ton cargo truck (fig. 105). This is a copy of the Soviet GAZ-51. The FSC-51 is used throughout the Army and is available in many special body versions such as tanker, communications or shop van, and ambulance, as well as the normal cargo and personnel carrier.

The Star 20, a 4-ton cargo truck of Polish manufacture (fig. 106), has been used in the Army since 1948 and has been exported to other Bloc countries and Communist China. There are several versions of this truck, including the Star W-14 (a dump truck), the Star C-60 (a semitrailer tractor truck), a tank truck, a fire engine, and several construction equipment trucks, such as cement mixers, crane trucks, and shovels.

¹ Cargo capacities are given here in approximate U.S. short-ton equivalents, rather than the larger metric-ton units which are frequently encountered elsewhere.

The Star 21, 4 x 2, 4½-ton truck (fig. 107), was introduced in 1958 as an improved model of the Star 20. It has a reinforced frame and an improved transmission. It is produced in a full range of special body styles. As with the Star 20, its cab-over-engine design has found ready acceptance because of its provision of excellent forward visibility. A still later model, the Star 25, is now being produced.

A 9-ton truck, the A-80, 4 x 2, recently has been developed but may not be in series production until late 1959 or early 1960. It will be made in several versions in addition to the basic cargo design. There are also reports of a tracked

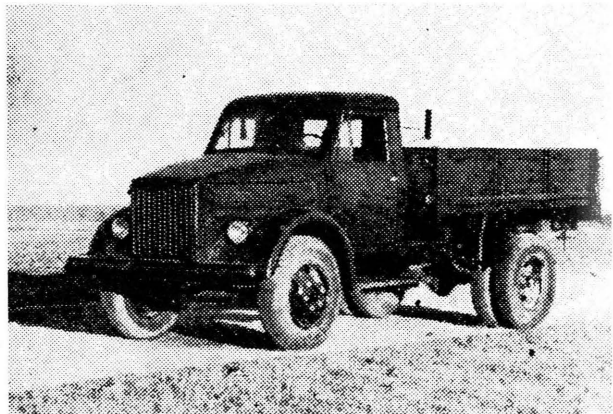


Figure 105. Polish Lublin FSC-51 2½-ton Truck.

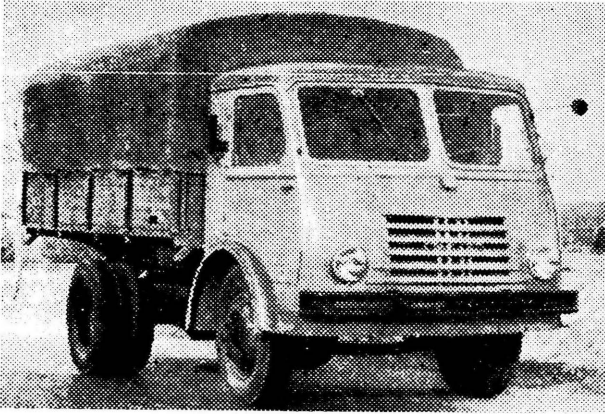


Figure 106. Polish Star 20 4-ton Truck.

artillery tractor of Polish design but based on a Soviet model.

Poland has received considerable quantities of Soviet amphibious transportation vehicles of recent design. These include the K-61 tracked amphibian (fig. 108), the GAZ-46 amphibious jeep (MAV) (fig. 123, p. 164), and the 6 x 6 amphibious truck (BAV) (fig. 124, p. 164).

Soviet-type prime movers used by the Polish Army include the highly efficient medium tracked artillery tractor AT-S (fig. 109), which hauls both medium and heavy artillery, is capable of carrying at least 20 men in the body and the cab, and attains a maximum speed estimated at 25 miles per hour.

164. SIGNAL

Virtually all Polish signal equipment is of Soviet design and manufacture although increasing quantities are produced locally. Some also is received

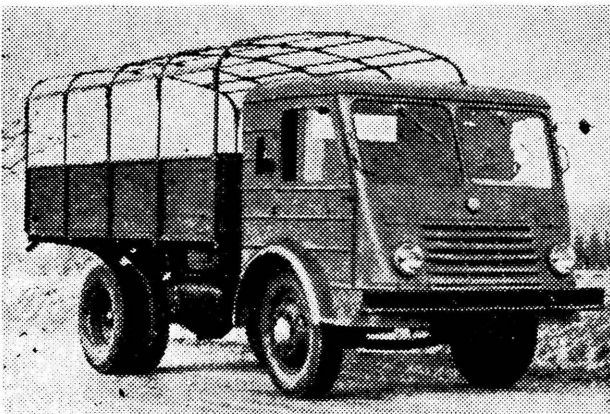


Figure 107. Polish Star 21 4 1/2-ton Truck.



Figure 108. Soviet K-61 Tracked Amphibian.

from other Satellite states. The equipment in use is of good quality, some of high-standard postwar type.

Soviet doctrine is followed for the operation and tactical employment of Polish signal equipment. Teleprinters are used at division and higher echelons, telephones at all levels. Radio equipment also is available, and in increasing quantities, at all echelons down to the smaller units.

165. ENGINEER

Engineer equipment in the Polish Army is generally of good quality. Virtually all of it is of Soviet type and much has been provided directly from the U.S.S.R.

Soviet mine equipment is standard in the Army. Mine fuzes are also Soviet, including the MUV and MV-5 pressure fuzes. The Soviet VIM-203 mine detector is used, although the Poles themselves produce a version of the German Wien 41.

Poland produces many items of construction equipment, some of original design, others copied from Soviet types. Produced items include tractors, crane-shovels, concrete mixers, dump trucks,

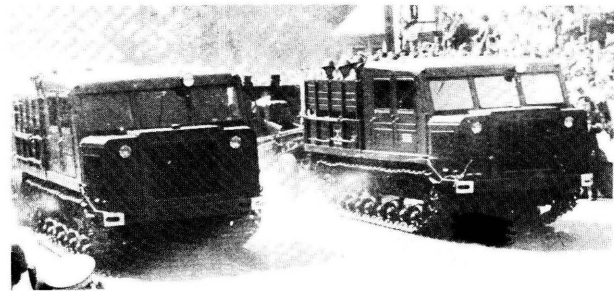


Figure 109. Soviet AT-S Medium Tracked Prime Mover.

and pneumatic hand tools. Continued progress in the quantity, quality, and variety of produced items is expected. A degree of dependence upon Soviet and East German sources will probably remain, however.

The Polish Army is believed to employ chiefly Soviet bridging and stream-crossing equipment, although a limited amount of Polish-designed and -produced materiel is available.

166. CHEMICAL

Chemical warfare equipment in the Polish Army is generally similar to that standard in the Soviet Army during World War II, although some post-war items are available. Polish chemical units are adequately equipped for taking defensive measures against a chemical attack, and the ground troops have been issued quantities of protective clothing. Special flamethrower units exist, and smoke for screening is regularly used in training exercises.

The Army employs Soviet portable and stationary flamethrowers. The stationary flamethrower is used for defensive purposes. Tank-mounted throwers are also employed.

The Polish Army possesses a variety of smoke munitions. These include the Soviet smoke barrel, as well as smoke candles, pots, and grenades.

The most commonly used protective mask is the ShM-1, although several others, including wartime German, French, and Polish masks, are also available. Protective clothing includes capes,

boots, gloves, and suits, probably all of Soviet type, although some may be produced locally. Most items are of World War II types, but modern protective garments are being introduced.

Most Polish decontamination equipment is of Soviet type and origin. Portable individual-pack sprayers are available, and these can be used for decontamination. Cart and trailer decontamination apparatus and motorized sprinkling equipment are also held, as are Soviet decontamination chests. Antigas fluids and powders are issued for personal use.

The Soviet reconnaissance kit and its Polish version are used for detecting, sampling, and identifying war gases and smoke.

167. MEDICAL

Medical conditions in Poland, while still unfavorable, are improving. The quality of microscopes and electronic medical equipment produced appears to be good. Poland is apparently able to produce these in sufficient quantity to permit some export. Antibiotics and certain vaccines are in production in limited quantities but are not sufficient to meet all the demands of Poland. Continuing efforts are being made to increase the output of pharmaceuticals. These efforts are meeting with some degree of success, but production is still short of meeting requirements. As a whole, the medical economy of Poland is not capable of providing the necessary support for that nation in a national emergency.

Section VI. UNIFORMS, INSIGNIA, AND DECORATIONS

168. UNIFORMS

a. General. Changes in the design of Polish Army uniforms recently have been proposed. The basic considerations reportedly given to these changes include: a return to the traditional Polish Army dress; a need for more versatile-type clothing for military duty under varying climatic and operational conditions; and the need for more stylish uniforms.

Various summer and winter models of uniforms have been introduced for officers and enlisted men for field-service, dress, and off-duty wear. The most significant change in headgear concerns the more widespread use of the traditional four-pointed service cap for all ranks. The design of

the coats is similar to the type currently worn, but they will be made of better quality material. For summer duty, green shirts with shoulder loops have been introduced for officers and NCO's in lieu of coats. The old-style collar tabs with V-shaped metallic ornamentation will continue to be worn on the closed collar of the dress coat.

New-style ski-type trousers have been proposed for NCO's. Impermeable boots with synthetic soles have been designed for field duty for all ranks. Prototypes of raincoats have been made to replace officers' raincoats. All winter overcoats will have a lining for additional warmth, and new-style camouflage uniforms have been proposed.

According to a recent statement by the Ministry

of Defense, there will be no general change in uniforms in the immediate future, in view of the current stock of uniforms. In all probability, officers will receive new clothing by approximately 1961.

Uniforms currently worn by Polish Army personnel consist of two principal types: field-service and dress. The basic uniform color is brownish olive drab. However, uniforms varying from brown to olive green have been reported. Winter uniforms are made of heavy wool or wool composition, and summer uniforms are of lightweight wool or cotton. The national emblem (silver eagle and shield) is displayed on all headgear and on uniform buttons.

These uniforms are discussed below and are illustrated in figure 110.

b. Field-Service.

- (1) *General.* Known as the training uniform, this uniform is worn for daily training duties, maneuvers, guard duty, office duty, or whenever ordered.
- (2) *Officers.* The winter uniform consists of: service cap, garrison cap, or fur cap; coat; shirt and tie; trousers or breeches; and shoes or boots. An overcoat and brown gloves are worn with this uniform. The summer uniform is similar in design to that worn in winter, except that a garrison cap is usually worn in lieu of the service or fur cap and a raincape is substituted for the overcoat.
- (3) *Enlisted men.* The winter uniform consists of: fur cap; coat; trousers; brown belt; leggings and high shoes; and overcoat. The overcoat is similar in design to that worn by officers. The summer uniform is similar in design to the winter uniform, except that a garrison cap is worn in lieu of the fur cap.

c. Dress.

- (1) *General.* The dress uniform is worn when first reporting for duty, on official occasions and ceremonies, when appearing in public off duty, and whenever ordered.
- (2) *Officers.* This uniform, winter and summer, consists of: service cap; coat; blue trousers or breeches; brown or white belt; shoes or boots; and white gloves. In winter, the field-service overcoat is worn.

- (3) *Enlisted men.* Enlisted men's dress uniform is the same as the field-service uniform, except that the service cap is worn. Career noncommissioned officers normally wear uniforms similar to those worn by officers, except that the breeches or trousers are olive drab instead of blue, and piping is not displayed on the outer seams.

d. Cadets. Cadets wear uniforms similar in design and color to regular Army personnel. In addition, they wear distinctive metallic devices on shoulder loops and on collar tabs. Length of service is indicated on the sleeve cuffs by white stripes: one wide stripe for the first year and one wide stripe with one, two, or three narrow stripes for the second, third, and fourth year, respectively.

e. Special.

- (1) *Camouflage.* The summer camouflage uniform consists of a hooded tunic and long loose trousers of mottled green and tan color and is worn over the field-service uniform. The winter camouflage uniform is the same style in white. Hoods have drawstrings that can be tightened around the face. The regulation waist belt is worn.
- (2) *Paratroopers.* The uniform which has been observed worn by paratroopers consists of a bluish-green coverall, high laced boots, and a cloth or leather jump helmet or a beret. The helmet has a white lining which extends under the chin strap. A new-type airborne uniform reportedly has been in general use since June 1958. This uniform consists of a red beret, three-quarter length jacket, ski trousers, and boots.
- (3) *Mountain.* Mountain troops were first observed wearing distinctive new uniforms in the Polish National Day Parade, July 1957. While the basic uniform is similar in design to the regular Army uniform, the significant features of this uniform are the helmet-shaped hat with plume and feather and a long cloak.

f. Militarized Security Forces.

- (1) *Frontier Guard (WOP).* This uniform is similar to that of the regular Army. Collar tabs are light green with black



FIELD-SERVICE UNIFORM, OFFICERS
Senior Lieutenant, Armored shown



SUMMER FIELD-SERVICE UNIFORM,
ENLISTED MEN
Corporal shown



WINTER FIELD-SERVICE UNIFORM WITH OVERCOAT,
ALL RANKS
Lieutenant, Artillery shown



DRESS UNIFORM, OFFICERS
Major, Infantry shown



DRESS UNIFORM,
CAREER NONCOMMISSIONED OFFICERS
Sergeant 1st Class, 1st Mechanized Division shown



NEW UNIFORM FOR MOUNTAIN TROOPS
Enlisted man shown

Figure 110. Polish Army Uniforms.

pipings. A green shirt and tie are reported to be worn with the field-service coat, and the service cap has a light green band with the eagle emblem. Shoes and belt are black.

- (2) *Internal Security Corps (KBW)*. This uniform is similar to the regular Army uniform. The service cap has a blue band with the eagle emblem. Collar tabs on the coat and overcoat are blue. Either black or brown shoes are worn, with footwraps in lieu of socks.

169. INSIGNIA

a. Grade.

- (1) *General*. Insignia of grade in the Polish Army are displayed on the headgear (*i.e.*, service cap and garrison cap), the coat collar, shoulder loops, and, for marshals and general officers, on the sleeves of the coat and overcoat.
- (2) *Officers*. Service cap bands of marshals and general officers are ornamented with a wide scrolled silver braid and silver stars or crossed batons. Other officers display narrow silver braid and silver stars. When officers wear the garrison cap, grade insignia are worn on the left side of the cap. The manner of indicating grade on the service cap is as follows:

Marshal----	1 broad stripe of scrolled silver braid and 2 crossed batons.
Lieutenant General.	Similar braid and 3 stars.
Major General.	As above, with 2 stars.
Brigadier General.	As above, with 1 star.
Colonel----	2 narrow stripes of silver braid around upper edge of band, and 3 stars.
Lieutenant Colonel.	As above, with 2 stars.
Major-----	As above, with 1 star.
Captain----	1 narrow stripe of silver braid around upper edge of band, and 4 stars.
Lieutenant Junior.	As above, with 3 stars.
Lieutenant.	As above, with 2 stars.

Devices denoting branch of service are worn on the collar tabs of field-service

uniforms. On the dress uniform, marshals and general officers are distinguished by a scrolled silver braid in the form of a V and by a silver eagle device on the collar tabs. Field and company-grade officers wear similar braid but without device. The manner of indicating grade on shoulder loops is shown in figure 111. Marshals and general officers wear a silver scroll on the upper part of both sleeve cuffs.

- (3) *Enlisted men*. Grade for enlisted men is denoted on headgear and shoulder loops. Insignia in both cases consist of silver chevrons or bars as follows:

Master Sergeant.....	2 chevrons
Sergeant 1st Class.....	1 chevron
Sergeant.....	3 bars
Corporal.....	2 bars
Private 1st Class.....	1 bar

On the collar tabs of the dress coat, career NCO's are designated by a scrolled silver braid in the form of a V, similar to that worn by field and company-grade officers.

b. Branch.

- (1) *General*. Branch is indicated by metallic devices and by the use of color.
- (2) *Metallic devices*. Metallic devices denoting branch of service are worn on the collar tabs of officers' field-service uniforms and on the overcoat lapels by all personnel. These devices are silver-colored except for medical, which is gold. Metallic devices are illustrated in figure 112.
- (3) *Color*. Branch of service is designated by piping on the uniform and by colored cap bands and collar tabs. The collar tabs usually are red, except for the following: black with red piping for Armored; medium blue for the Internal Security Corps (KBW); green for the Frontier Guard (WOP); and yellow for members of the 1st Infantry Division. Cap bands and uniform piping follow the same pattern as for collar tabs.

c. Specialist. Specialist badges are similar in design to those of the Soviet Army, and are worn on the right pocket of the coat. They are made of metal and are rectangular in shape, but with a rounded base in the form of a half-cogged wheel.

OFFICERS



MARSHAL



LIEUTENANT GENERAL



MAJOR GENERAL



BRIGADIER GENERAL



COLONEL



LIEUTENANT COLONEL



MAJOR



CAPTAIN



LIEUTENANT



JUNIOR LIEUTENANT



ENSIGN*

ENLISTED MEN



MASTER SERGEANT



SERGEANT 1st CLASS



SERGEANT



CORPORAL



PRIVATE 1st CLASS



PRIVATE

*Grade of ensign was abolished during 1958. Remaining company grades will reportedly be indicated by one less star than shown, but introduction of this change has been delayed indefinitely.

Figure 111. Polish Insignia of Grade.

BRANCH DEVICES



INFANTRY



ARMORED TROOPS



ARTILLERY



ORDNANCE SERVICE



SIGNAL TROOPS



ENGINEER TROOPS



PONTON UNITS



CONSTRUCTION UNITS



CHEMICAL TROOPS



MOTOR TRANSPORT TROOPS



MEDICAL SERVICE



VETERINARY SERVICE



QUARTERMASTER SERVICE*



REAR SERVICES*



RAILWAY TROOPS



JUSTICE



ADMINISTRATIVE



MILITARY BAND



MILITARY SCHOOL

SPECIALIST INSIGNIA



PARATROOPERS' BADGE

*The Quartermaster Service device is superseding the Rear Services device, following organizational redesignation.

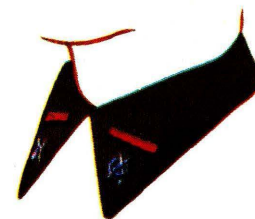
COLLAR TABS



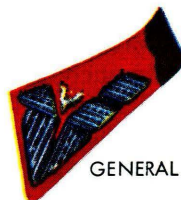
Collar Tab for Field Service Uniform (Infantry shown)



MARSHAL



Collar Tab for Overcoat Lapels (Infantry shown)



GENERAL



Field and Company Grade Officers, and Career NCO'S (Armored Troops shown)

Collar Tabs worn on Dress Uniform

Figure 112. Polish Branch Devices, Specialist Insignia, and Collar Tabs.

At each side is a gold head of grain symbol. In the center of the badge is a symbol of the specialty superimposed on an enameled background in the branch color. Above the symbol, inscribed in Polish, is the name of the specialty: *e.g.*, "Model Rifleman," "Model Machine Gunner," etc.

170. DECORATIONS

a. General. Decorations of the Polish Democratic Republic are awarded to military personnel, civilians, units, and institutions for outstanding merit in the following fields: development of the national economy, education, science, culture, and art; public service and the work of building up the armed forces; victorious conduct of military operations and personal heroism in the field, or for outstanding deeds contributing to the strengthening of the country's defense; and the improvement of methods of work and the raising of standards of health and physical culture. Top military decorations are discussed below and are illustrated in figure 113.

- (1) *Order of "Virtuti Militari."* This order has five classes and is awarded for outstanding achievements. Class I is granted to top commanders. It is worn on a sash over the right shoulder. With this class only, a silver eight-pointed star, superimposed with a small black cross, is worn on the left breast. Class II is granted to army commanders. It is smaller than class I and is worn on the ribbon around the neck. Class III is similar to Class II and is awarded to commanders below army level for outstanding service in the field. Class IV is awarded to commanders below division level and enlisted men. It is a gold cross and is worn suspended from a ribbon on the left breast. Class V is the same as Class IV, except that it is made of silver.
- (2) *Order of "Polonia Restituta."* This order has five classes and is awarded for outstanding service to the Polish Republic. Class I consists of a badge and star. It is worn on a sash over the right shoulder. The star is worn on the left breast. Class II also consists of a cross and a star. The cross is smaller than that of class I and is worn on a ribbon around

the neck. The star is the same as that of Class I but is worn on the right breast. Class III consists of the same cross as Class II, and is worn on a ribbon around the neck, but without the star. Class IV is a cross worn on the left breast suspended from a ribbon with a rosette. Class V is a cross smaller than that of Class IV, and is worn on the left breast.

- (3) *Order of the Cross of Grunwald.* This order, created 10 February 1944, is awarded for outstanding service in the field. It has three classes. The medals of the classes are of the same design but differ in size and color; first class is gold; second class is silver trimmed in gold; and third class is silver.
- (4) *Cross for Valor.* This decoration is awarded for distinguished conduct in battle.
- (5) *Medal for Meritorious Service on the Field of Glory.* This medal is awarded to officers and noncommissioned officers for outstanding performance in the battle of Lenino. It consists of three classes: first class is gold; second class is silver; and third class is bronze. A medal similar in design but without flags is awarded to officers and noncommissioned officers for other deeds of bravery.
- (6) *Cross of Merit.* This decoration consists of three classes: first class is red and gold; second class red and silver; third class bronze.
- (7) *Armed Forces in the Service of the Fatherland Medal.* This medal was instituted in 1951 to distinguish soldiers for long and irreproachable service in the Armed Forces. The gold medal is awarded for 15 or more years of service; the silver medal for 10-14 years, and the bronze medal for 5-10 years.
- (8) *Partisan's Cross.* This medal is awarded to partisans and to partisan units for outstanding achievement. It is awarded only once to individuals.

b. Other Awards. Regular Army personnel are presented service chevrons which are worn on the left sleeve between the shoulder and the elbow. One chevron is given for each 3 years of service. A broad chevron represents 9 years.



ORDER OF VIRTUTI MILITARI
(2d Class Commander's Cross Shown)



ORDER OF POLONIA RESTITUTA
(Grand Cross and Star of 1st Class Shown)



ORDER OF THE CROSS OF GRUNWALD
(1st Class Shown)



CROSS FOR VALOR



MEDAL FOR MERITORIOUS SERVICE
ON THE FIELD OF GLORY
(3d Class Shown)



CROSS OF MERIT
(2d Class Shown)



ARMED FORCES IN THE SERVICE
OF THE FATHERLAND MEDAL



PARTISANS' CROSS

Figure 113. Polish Military Decorations and Awards.

Section VII. GLOSSARY OF MILITARY TERMS

The Polish language is closely akin to Russian but is written in Latin characters. Military terms, however, are often based on different roots from the Russian, although there has been a recent tendency to adopt the Russian-type nomenclature.

Polish words are highly inflected and will often be encountered with endings considerably different from those shown here because a different case, number, gender, person, tense, voice, or aspect is being used. For pronunciation, the following letters and letter-combinations require special attention:

a	<i>a</i> in father
ą	similar to <i>an</i> in want, but nasalized as in French <i>on</i>
c	<i>ts</i> in hats
ć	<i>ch</i> in chin (tongue forward)
ch	<i>ch</i> in Scottish loch or German <i>ach</i>
cz	<i>ch</i> in choose (tongue back)
dź	<i>j</i> in jig (tongue forward)
dż	<i>j</i> in judge (tongue back)
e	<i>e</i> in set
ę	similar to <i>an</i> in ant, but nasalized like French <i>in</i> in <i>fin</i>
h	like Polish <i>ch</i>
i	<i>i</i> in machine
j	<i>y</i> in yard or boy
l	<i>l</i> in hilly (tongue forward)
ł	<i>w</i> in wall
ń	<i>ny</i> in canyon
o	<i>o</i> in on
ó	<i>u</i> in rule
r	<i>r</i> harshly trilled
rz	<i>z</i> in azure (tongue back); but at end of word or after a voiceless consonant, like <i>sh</i> in shoe.
ś	<i>sh</i> in shin (tongue forward)
śc	<i>sh</i> and <i>ch</i> in plush chair (tongue forward)
sz	<i>sh</i> in shoe (tongue back)
szcz	<i>sh</i> and <i>ch</i> in plush chair (tongue back)
u	<i>u</i> in rule
w	<i>v</i> in very
y	<i>y</i> in rhythm
z	<i>z</i> in azure (tongue forward)
ż	<i>z</i> in azure (tongue back)

A

Adjutant	adjutant
administracja	administration
admiral	admiral
akademia wojskowa	military academy
ambulans	ambulance
amunicja	ammunition
amunicja bojowa	live ammunition

apel	roll call
apteczka podręczna	first aid kit
armata	gun
armia	army (field)
artyleria	artillery
artyleria ciężka	heavy artillery
artyleria góraska	mountain artillery
artyleria konna	horse artillery
artyleria lekka	light artillery
artyleria nadbrzeżna	coast artillery
artyleria przeciw-pancerna	antitank artillery
artyleria przeciw-lotnicza	antiaircraft artillery
artyleria szturmowa	assault artillery
artyleria zmotoryzowana	motorized artillery
artylerzysta	artilleryman, gunner
atak	attack
automatyczna broń	automatic weapon
automatyczny pistolet	automatic pistol

B

baczność!	attention!
bagnet	bayonet
batalion	battalion
bateria	battery
baza	base
benzyna	gasoline
bitwa	battle
bomba	bomb
bomba dymna	smoke bomb
bomba odłamkowa	fragmentation bomb
bomba zapalająca	incendiary bomb
broń	weapons, arms, branch of service.
broń atomowa	atomic weapon
broń jądrowa	nuclear weapon
broń pancerna	armored force
brygada	brigade

C

cel	aim, target
chemiczny	chemical
choraży	warrant officer; junior lieutenant.
ciąg silnika	thrust (jet engine)
ciekły materiał pędny	liquid propellant
ciężar startowy	firing weight (missiles).
ciężki karabin maszynowy	heavy machinegun
ccfać się	to retreat
ćwiczenie	training, exercise
ćwiczenie szkieletowe	command post exercise.
część przednia	frontline sector
czołg	tank

D

depesza	dispatch, message
donośność	range of gun
dowódca	commander, leader

dowódca garnizonu	garrison commander
dowództwo	command
dowóz	supply
dozorca	leader
drut	wire
drut kolczasty	barbed wire
drużyna	squad
drużynowy	squad leader
duszpasterstwo	chaplains corps
dywizja	division
dywizjon	battalion (of artillery)
dział	section
działo	gun, cannon
działo szturmowe	assault gun
działon	gun crew, gun section

E

etap	military supply station.
------	--------------------------

F

flankowy	flank, side (adj)
fortyfikacja	fortification

G

gaz	gas
generał	general
generał broni	lieutenant general
generał brygady	brigadier general
generał dywizji	major general
głowica bojowa	warhead
gospodarczy	economic; administrative.
granat	grenade, shell
granica	boundary, border
grupa	group

H

hasło	password, command of execution.
haubica	howitzer
hełm	helmet

I

intendentura	supply section
inżynier	engineer
inżynieryjno-saperska służba	engineer service

J

jaszcz	caisson
jazda	drive on!
jednostka	unit
jeniec	prisoner of war

K

kapitan	captain
kapral	corporal
karabin	rifle
karabinek	carbine
karabin maszynowy	machinegun
kawaleria	cavalry

komenda	command
kompania	company
komunikacja	transportation
konnica	cavalry
korpus	corps
Korpus Bezpieczeństwa Wewnętrznego (KBW).	Internal Security Corps.
koszary	barracks
króćca	pistol
kryj się!	take cover!
kula	bullet
kwatery	billet
kwaterymistrz	supply officer

L

łączność	signal troops; communications.
ładownica	cartridge box
ładowy	land, ground (adj)
laweta	gun carriage, gun mount.
lekarz	physician
leże	quarters, camp (pl.)
lekki	light
lotnictwo	air force
lotnictwo morskie	naval air arm
lotnisko	airport
łże strzelby	gun stock
lufa	gun barrel

M

major	major
manewr	maneuver
marsz	march
marszałek	marshal
marszruta	march route
marynarka wojenna	navy
maska przeciwgazowa	gas mask
materiał pędny	propellant
miotacz ognia	flame thrower
mobilizacja	mobilization
morski	naval, maritime
moździerz	mortar
mundur	uniform

N

najazd	raid
najcięższy	heaviest (adj)
napęd rakietowy	rocket propulsion
napęd turboodrzutowy	turbojet propulsion
natarcie	attack
nieprzyjaciół	enemy

O

obóz	camp
obrona	defense
obronny	fortified, defensive
oddział	section, detachment
odkażenie	decontamination
odroczenie	deferment
odzew	countersign

oficer	officer
ogień artylerii ześrodkowany	concentrated fire
ogień nękający	harassing fire
ogień obezwładniająca	neutralization fire
ognia!	fire!
okręg	district
ordynans	orderly
oreź	weapons, arms
osłona	cover, protection
P	
pancerny	armored
pancerz	armor
piechota	infantry
piechur	foot soldier
pierwsza pomoc	first aid
pistolet	pistol
pistolet maszynowy	submachinegun
pluton	platoon
plutonowy	sergeant
pobór	conscription
poborowy	conscript
pociąg	train
pocisk	shell, projectile
pocisk balistyczny dalekiego zasięgu.	intercontinental ballistic missile.
pocisk balistyczny średniego zasięgu.	intermediate range ballistic missile.
pocisk kierowany	guided missile
podchorąży	cadet, officer candidate.
poddać się	surrender
pododdział	subdivision; subunit
podjazd	reconnaissance
podoficer	noncommissioned officer.
podoficer nadterminowy	noncommissioned officer on extended service.
podporucznik	second lieutenant
podpułkownik	lieutenant colonel
pojazd	vehicle; carriage
pokój	peace
pole	field
polowy	field (adj)
Polska	Poland
Polski	Polish
pomoenic	assistant
pomocy!	help!
ponton	ponton
porucznik	first lieutenant
posterunek	outpost, post
postrzał	wound, gunshot
postrzegacz	observer
postrzelić	shoot, hit
posyłka	message
powoływanie	call to arms, call-up
pozycja	position
prędkość w momencie wyłączenia silnika.	speed at burnout
przebiecie	breakthrough
przeciwlotniczy	antiaircraft

przeciwpancerny	antitank
pułk	regiment
pułkownik	colonel
R	
radiopelengacja	radio direction finding
radiopelengator	radio direction finder
rakieta	rocket
ramieniec	semaphore
ręczny karabin maszynowy	light machinegun
reflektor	searchlight
rekrut	recruit
rewolwer	revolver
Rosjanin	Russian
rota	company, file
rozkaz	command
rozkaz dzienny	order of the day
rusznica przeciwpancerna	antitank rifle
ryszczunek	armor, equipment

S	
samochód	car, motor vehicle
samolot	airplane
samolot odrzutowy	jet airplane
samolot turboodrzutowy	turbojet airplane
samolot turbośmigłowy	turboprop airplane
samołowka	trap, snare
saper	engineer, sapper
sierżant	sergeant first class
silnik odrzutowy	jet engine
silnik startowy	booster (missiles)
siła	strength, force
służba	service
śmigłowiec	helicopter
soczewka	lens
spadochron	parachute
spis	roll list
sposrzegacz	observer
sprawiedliwość	justice
średni	medium
stały materiał pędny	solid propellant
starszy sierżant	master sergeant
starszy szeregowiec	private first class
stój!	halt!
stopień	grade, rank
straż	guard
strefa	zone
strefa ognia	zone of fire
strzelba	rifle
strzelec	rifleman; private (infantry).
szaniec	trench
szarża	attack, charge
szczebel	echelon
szef	chief
szef sztabu	chief of staff
szereg	row, rank
szeregowiec	private soldier; enlisted man.
szkolenie	training
sztab	staff
szturm	assault

1 April 1960

DA Pam 30-50-2

szwadron.....	squadron	wojsko.....	army; forces; troops
szyfr.....	code	wojskowy.....	military
szyk.....	formation	wolność.....	liberty, freedom
		wybuch.....	explosion, outbreak
	T	wypywanie.....	interrogation
tłumacz.....	interpreter	wyrzutnia raketowa.....	rocket launcher
	U	wystrzał.....	shot, discharge
umocnienie.....	fortification	wyszkolenie.....	training
umundurowanie.....	clothing, uniform		Z
uruchomić.....	mobilize	zadanie.....	mission, task; exercise
uzbrojenie.....	armament, ordnance	zakładnik.....	hostage
uzupełnienie.....	replacement	załoga.....	garrison; crew
	W	zarząd.....	directorate
walka.....	battle	zastępca.....	deputy
wartownik.....	sentinel, guard	zawieszenie broni.....	armistice
weterynaria.....	veterinary matters	żelazna kolej.....	railway
więzienie.....	jail	zbrojny.....	armed
wojak.....	warrior	zdrowie.....	health
wojenny.....	military	zmotoryzowany.....	motorized
wojna.....	war	zołnierz.....	soldier
Wojska Ochrony Pogranicza (WOP).....	Frontier Guard	zwiad.....	reconnaissance
		żywność.....	provisions

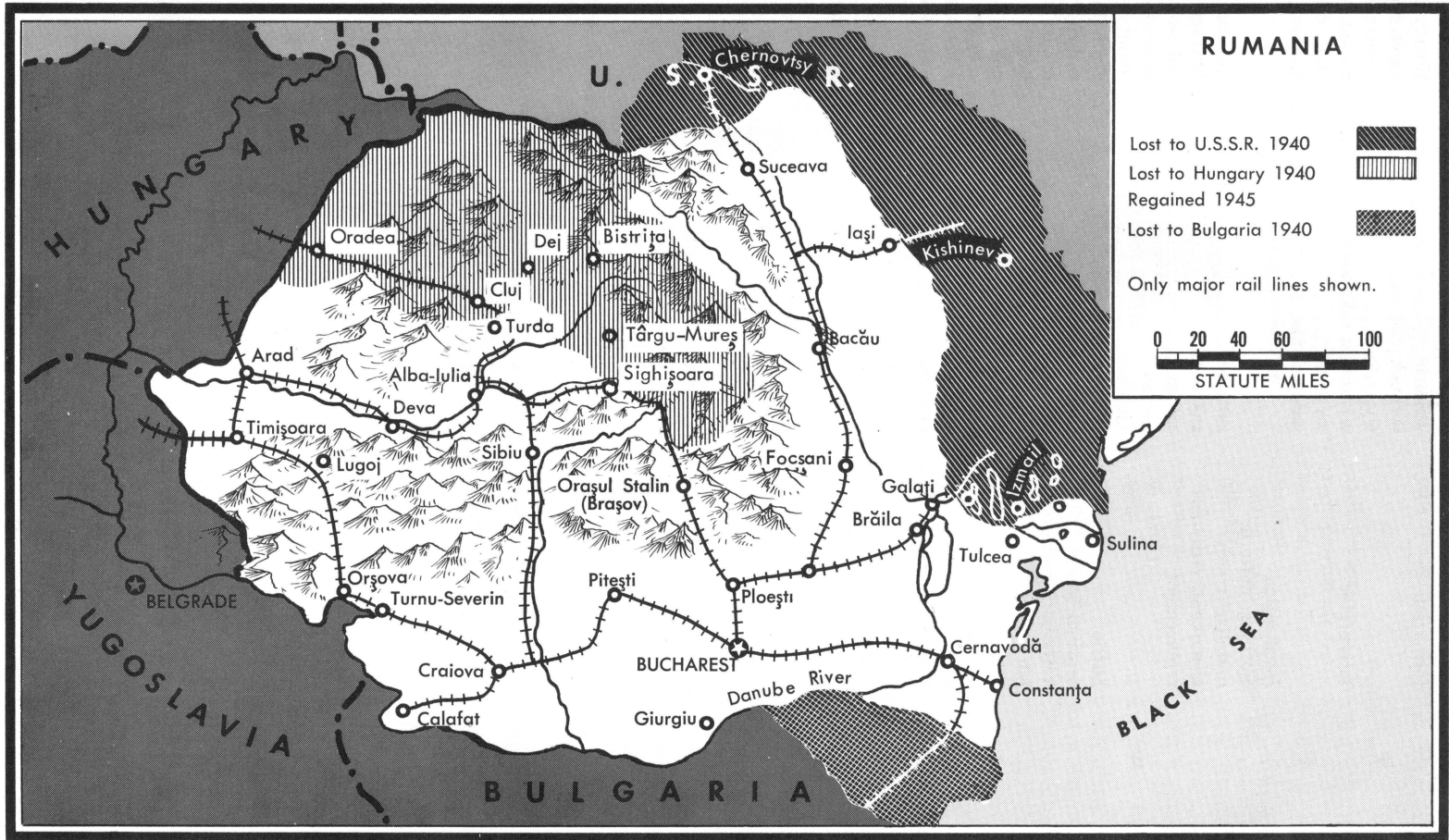


Figure 114. Rumania.

RUMANIA

CHAPTER 8

Section I. THE MILITARY SYSTEM

171. NATURE OF THE ARMED FORCES

a. Composition. The Rumanian Armed Forces consist of ground, naval, and air forces, subordinate to the Ministry of the Armed Forces. The militarized security forces, consisting of the Frontier Troops and the Security Troops, are organized and equipped much the same as infantry troops and their training includes small-unit combat tactics in addition to their more specialized security activities. Units of the militarized security forces could be attached or assigned to Army field commands in wartime to perform various essential security-type duties, such as military government, counterintelligence, traffic control, and line-of-communication protection. The militarized security forces are, thus, auxiliary ground forces and a factor to consider in assessing Rumania's war-making potential.

The Rumanian Navy is small and designed primarily for limited operations in coastal waters. Major units include several destroyers and submarines. The air forces are well equipped with jet fighter interceptors and, like those in other Satellite states, are almost exclusively intended for air defense of the country, although capable also of limited ground-support operations. The air units are subordinate to an "Air Forces and Territorial Defense" command that coordinates the operation of the fighter and antiaircraft artillery units assigned to territorial air defense. This command is similar to those of the other Bloc states and is tied in with them for combined defense of the Bloc territory.

b. Development. Rumania, as a member of the French-sponsored "Little Entente" before World War II, was subject to a substantial degree of French influence over her Armed Forces. In 1939 and 1940, the government shifted to a pro-German policy and came under the domination of local Fascists and Fascist sympathizers. When the Germans invaded the Balkans, Rumania welcomed them. Although Rumanian troops did not take part in the attack on Yugoslavia in April 1941,

they did participate in the German campaign against the U.S.S.R., launched in June 1941. Rumanian troops fought reasonably well, making a major contribution to some of the early successes, as in the seizure of Odessa and Sevastopol. A large Rumanian force on the southern flank of the German line at Stalingrad in early 1943, however, bore the brunt of the initial Soviet breakthrough and was virtually destroyed. In August 1944, after Soviet forces had forced the Iași Gap and entered Rumania, King Michael overthrew the pro-Nazi government of Marshal Antonescu and switched sides in the war. Several Rumanian divisions actually joined the Soviet force and fought against their erstwhile German allies during the closing months of the war.

The Rumanian Workers' (Communist) Party seized control of the government early in 1945. Between 1945 and 1947, under this government, the Army was allowed to deteriorate. It went through the familiar purgings to eliminate all officers and noncommissioned officers who might have remained loyal to a previous Rumanian regime, regardless of their military proficiency. Army strength was also reduced, in accordance with the terms of the Rumanian peace treaty.

A program for revitalizing the Army was first announced in December 1947, following the appointment of Emil Bodnaras as Minister of the Armed Forces. Progress was slow for some years, however. It was particularly difficult to raise an officer corps that was politically reliable and at the same time possessed some degree of military experience and leadership ability. A newly intensified effort to improve the forces was made after a severe purge in the spring of 1950. This effort was carried out under the scrutiny of a relatively large and influential Soviet Military Mission. Some Rumanian officers were sent to the U.S.S.R. for training, Soviet equipment arrived in ever-larger quantities, strength was increased, and the training program was regularized.

By about 1955, the Army had reached a reasonable degree of proficiency, but it was not among the best organized, trained, or equipped Satellite forces. Moreover, its reliability was considered to be as low as that of any other Satellite force.

In 1955, the force consisted of more than 200,000 men, organized into about 15 Soviet-type line divisions, mostly of rifle type. The troops were intensively indoctrinated and special efforts were made to insure conformance to Communist ideology in both thought and action.

c. Status. The chief developments since 1955 have included a small reduction in strength to about 200,000 men—largely for economic reasons. There have been continued efforts to improve the organization of the tactical units, but adoption of the latest Soviet concepts—such as converting rifle divisions to motorized rifle—has not yet been observed in Rumania. Training has improved somewhat and division and higher-level maneuvers have been held. The Army has also conducted some combined training with Soviet units. Soviet confidence in the stability of the force is indicated to some extent by a willingness to continue equipment shipments into Rumania: during 1958 two

new types of Soviet equipment appeared in Rumania before they were known to be in any other Satellite Army. Standardization on equipment of Soviet design—and largely of Soviet manufacture—is almost complete.

Rumania employs a form of universal conscription. In most Army branches, the term of service is 2 years. Approximately 80,000 young men are brought into the Army each year. Those who agree to continue their active duty for a third year, drawn largely from specialized branches, probably number no greater than 15,000. The permanent cadre of officers and noncommissioned officers constitutes approximately an additional 25,000.

Rumanian troops probably would not fight enthusiastically in the Soviet cause, unless the Soviets could clearly demonstrate that basic Rumanian national interests were at stake in the war. So long as the Bloc appeared to be winning, the troops probably would remain reliable, but morale would almost certainly be low.

172. THE HIGH COMMAND

Top control of the Rumanian Armed Forces generally follows the familiar Bloc pattern (ch. 1).



Figure 115. Rumanian Troops on Training Maneuvers.

173. TERRITORIAL ORGANIZATION

Rumania is divided into 2 military districts for purposes of territorial administration. The district headquarters are similar to those in other Bloc states, having a basic responsibility for the administrative and logistical support of the units in their respective areas. They are in the operational command line between the Ministry and the tactical units, but are not, strictly speaking, tactical headquarters. They exercise general supervision over training activities and have a responsibility for the combat readiness of the combat units. In wartime, or for peacetime training purposes, the district headquarters can provide the cadres for field commands of corps or higher level.

174. ORGANIZATION OF THE ARMY FOR WAR

The wartime organization of the Army will depend on the nature of its intended employment and the scale of its mobilization. The present force

could be organized into several corps or field army commands of combined-arms type. The existence of only a few armored-type divisions would preclude the formation of a tank army until additional divisions were raised by mobilization.

Rumania has a substantial mobilization potential, although the bulk of the necessary materiel would have to be provided by the U.S.S.R. if additional units were to be formed. Available manpower and administrative machinery are believed adequate for raising a force of about 1,000,000 men and some 40 divisions within several months of M-Day. Raising such a force would virtually exhaust the number of trained ground reserves who have served on active duty or who have received extensive refresher training since the Army adopted Soviet organization, tactics, and equipment. Additional mobilization would be possible from the remainder of the approximately 3,000,000 fit males of military age. Many of these have had prior military experience, but they would require a significant amount of additional training before they could be considered effective.

Section II. ORGANIZATION OF THE FIELD FORCES

175. ARMS AND SERVICES

The basic combat arms in the Rumanian Army include Infantry (*Infanterie*), Armor (*Blindată*), Artillery (*Artilerie*), Engineers (*Geniu*), Signal (*Transmisiune*), Chemical (*Arma Chimică*), and Cavalry (*Cavalerie*). The infantry arm includes mountain infantry troops.

The rear services include Quartermaster (*Intendența*), Medical (*Medici Umani*), Veterinary (*Medici Veterinari*), Administrative (*Administrata*), Technical (*Technic*), and rail and motor transport.

Other branches are Justice (*Magistrati*) and Military Music (*Muzici Militare*).

176. PRINCIPLES OF TACTICAL ORGANIZATION

The tactical organization of the Rumanian Army generally follows that employed in the Soviet Army between about 1947 and 1955, although certain modifications are made in order to account for the local situation. These, however, are not of great significance from an organizational standpoint. There is little evidence that the Rumanians are adopting the latest changes in Soviet

tactical organization, as are several other Satellite armies, although they may do so before 1961 or 1962.

177. HIGHER HEADQUARTERS

The highest level of tactical command is the division. Corps existed until a few years ago, but were abolished in accordance with the trend throughout the Bloc. Their absence is not believed to have special importance, and they could be quickly reestablished if desired.

178. TACTICAL UNITS

a. Line Divisions. Rumanian line divisions include infantry, armored, mechanized, and mountain-infantry types. By far the greatest number are infantry. The infantry divisions are organized basically much the same as the pre-1955 Soviet rifle division. Only one of the two artillery regiments of the rifle division has been identified in most Rumanian infantry divisions. Both may actually exist, or the second may be represented in some cases at battalion strength. Similarly, in some divisions the antiaircraft or signal elements may be at company strength rather than battalion.

Such deficiencies are probably no more than peacetime expedients.

The armored division compares with the Soviet tank division, although not incorporating some of the more recent changes in that unit. The Rumanian mechanized division also follows the pattern of its Soviet counterpart of several years ago. The mountain infantry division is essentially a scaled-down "rifle" division; support ele-

ments are generally smaller and weapons lighter.

b. Other Units. The Army contains a substantial number of other separate units. These are chiefly of artillery and antiaircraft artillery type, although there are a few regimental units of line type: infantry, mechanized, and parachute.

Artillery units consist of brigades and regiments. These include howitzer, mortar, gun, and rocket launcher units.

Section III. MILITARIZED SECURITY FORCES

179. GENERAL

The Rumanian militarized security forces, subordinate to the Ministry of Internal Affairs, consist of the Security Troops (*Securitate*) and the Frontier Troops (*Granicieri*). These forces are, in effect, auxiliary ground forces, although in peacetime their functions are restricted to maintaining internal and frontier security. They wear military uniforms and are armed with infantry weapons. Their training includes firing practice and small-unit combat exercises, as well as instruction in their specialized security duties. In time of war, units of the militarized security forces could be attached to Army field commands to perform specialized functions. They could also be used as line troops if the occasion demanded.

180. FRONTIER TROOPS

The Rumanian Frontier Troops have a strength of nearly 25,000 men. The largest operating unit is the regiment. The typical regiment is organized like an Army unit although somewhat smaller. Each regiment is responsible for a border sector, which is suballotted to battalions, companies, and platoons. The platoons maintain actual foot patrols along the border. Patrols are assisted by watchtower observers and dogs. Cleared and

plowed strips and barbed-wire fences (often electrically charged or armed with trip-flares) are located along most of the border. The densest concentration of Rumanian Frontier Troops, towers, and obstacles, is along the Yugoslav frontier.

The Frontier Troops are so trained, organized, and equipped that they could serve as a defense screening force in the event of armed attack from outside the country. They could not hold out long, however, unless rapidly reinforced and ultimately replaced by Army units.

181. SECURITY TROOPS

The Security Troops comprise a force roughly twice as large as that of the Frontier Troops. The basic operating unit is the battalion. Units of this size are dispersed generally throughout the country with concentrations in every important population, industrial, or other strategic center. They are responsible for suppressing all forms of internal opposition or resistance to the Communist regime.

The respective units are organized generally as are Army units, but are smaller. Each battalion is responsible for security operations within a specified region of the country. A regiment, with four subordinate battalions, is located in Bucharest.

Section IV. WEAPONS

182. INTRODUCTION

The Rumanian Army has generally standardized on weapons and equipment of Soviet type. Some equipment is of Czechoslovak manufacture, although the bulk is from the U.S.S.R. Local production is limited to small quantities of small arms, mortars, ammunition, and explosives, and certain types of specialized equipment. There is no known weapon of recent domestic Rumanian de-

sign, and all items produced are copies of Soviet models.

183. INFANTRY

a. General. Soviet-type infantry weapons are generally standard, although some non-Soviet small arms of World War II vintage have not yet been replaced. Moreover, a few items in use are of recent Czechoslovak design and manufacture

and several Soviet-type items are of Czechoslovak as well as Rumanian manufacture.

b. Pistols. The Rumanian Army is receiving the Soviet TT-33 pistol, but it is not believed yet in general use. German, Austrian, and Italian pistols are in service, with the German 7.65-mm H. Sc. Mauser existing in the greatest quantity.

c. Submachineguns. The principal submachinegun in service is the World War II Soviet 7.62-mm PPSH-41 (fig. 6, p. 14). The modern Soviet submachinegun, the 7.62-mm AK (fig. 31, p. 47), is being acquired in ever greater numbers.

d. Rifles. The Army has both the Soviet 7.62-mm M1891/30 rifle and its shorter version, the M44 carbine (fig. 7, p. 14). These weapons replaced the Czechoslovak Mauser and Austrian Mannlicher rifles which were formerly standard. The modern Soviet 7.62-mm carbine SKS (fig. 79, p. 117) is now appearing in Rumanian units.

e. Machineguns. Soviet machineguns are gradually replacing older types produced by both Czechoslovakia and Rumania. Soviet weapons, all of 7.62-mm caliber, include the DP light (fig. 20, p. 29), DT tank, Goryunov SG-43 heavy (fig. 8, p. 15), and the DShK M38 heavy (fig. 116) machineguns. The new Soviet 14.5-mm heavy antiaircraft machinegun is also available in both the ZPU-2 dual-mount (fig. 117) and ZPU-4 quadruple-mount (fig. 98, p. 140) versions.

f. Infantry Antitank Weapons. Rumania has sizable quantities of the obsolete Soviet 14.5-mm AT rifle PTRS and PTRD. In addition, the Army employs more modern equipment, such as



Figure 116. Soviet 12.7-mm DShK Heavy Machinegun M38.



Figure 117. Soviet 14.5-mm Twin-Mount Antiaircraft Machinegun ZPU-2 with GAZ-69 Light Truck.

the Czechoslovak grenade launcher P-27 and 82-mm recoilless gun T-21 (figs. 46 and 47, p. 70), the Soviet 82-mm recoilless gun B-10 (fig. 118), and the Soviet 107-mm recoilless gun B-11 (fig. 95, p. 139).

g. Grenades. The Army employs most or all of the more familiar types of Soviet offensive and defensive hand grenades.

h. Mortars. The Rumanian Army has all standard types of Soviet mortars: the 82-mm (fig. 21, p. 29), 107-mm, 120-mm (fig. 9, p. 15), and 160-mm (fig. 80, p. 118). In addition, the modern super-heavy Soviet 240-mm mortar (fig. 119) has been seen in limited quantities in the hands of Rumanian troops. There are probably some old Rumanian 60-mm and 81-mm mortars of French design in reserve. The 81-mm pieces could be used to fire Soviet 82-mm ammunition.

184. ARTILLERY

a. General. The Rumanian Army possesses a conglomeration of artillery equipment of various national origins. Soviet-designed and manufactured equipment is steadily becoming standard in all calibers, however, and the great bulk of the heterogeneous weapons are now in reserve. Present holdings include all the basic, older Soviet weapons and several of the more modern pieces.

b. Field. The Soviet 85-mm field gun D-44 (fig. 10, p. 16) is gradually replacing the 76-mm field gun M42 (fig. 81, p. 118) as the standard light field piece. Soviet 76-mm howitzers and mountain howitzers are also held, but are little used. Limited numbers of the Soviet 100-mm field gun are



Figure 118. Soviet 82-mm Recoilless Gun B-10.

available in both the M44 (fig. 23, p. 30) and M55 (fig. 120) versions. Other standard Soviet field pieces include the 122-mm M38 howitzer (fig. 11, p. 16), the M31/37 gun (fig. 82, p. 119), the 152-mm M37 gun-howitzer (fig. 96, p. 139), and the 152-mm M43 howitzer (fig. 121). There are small numbers of the Soviet 203-mm M31 howitzer (fig. 33, p. 49) available as well. Other weapons that may still be employed in a few units include French 75- and 105-mm guns and Czechoslovak 100-mm

and 150-mm howitzers and 100-mm mountain howitzers.

c. Antitank. The standard AT artillery weapon is the Soviet 57-mm M43 (fig. 12, p. 17), which has largely replaced the 45-mm M42 gun (fig. 24, p. 31). There are some German 75-mm Pak 40 AT guns available, but they are not in significant use. The Soviet 76-mm, 85-mm and 100-mm field guns are also used in the antitank role.

d. Antiaircraft. The standard Rumanian anti-aircraft weapons are the Soviet 37-mm M39 (fig.



Figure 119. Soviet 240-mm Mortar with AT-L Light Tracked Prime Mover.



Figure 120. Soviet 100-mm Field Gun M55.

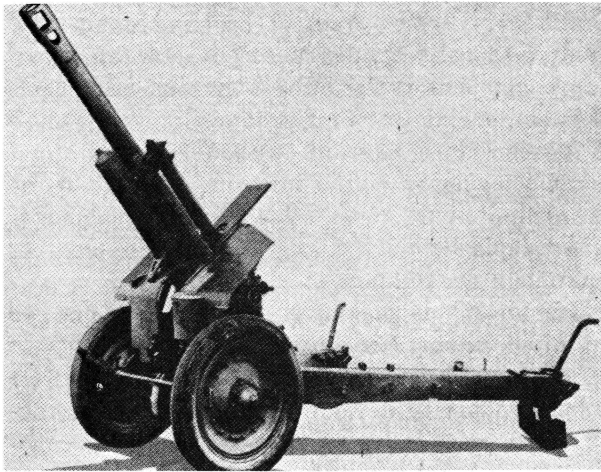


Figure 121. Soviet 152-mm Howitzer M43.

25, p. 31) and 85-mm M39 (fig. 13, p. 17) guns. Small but increasing numbers of the Soviet 57-mm S-60 (fig. 64, p. 96) and 100-mm KS-19 (fig. 99, p. 140) guns are being received to replace the older and smaller-caliber weapons. There are also several non-Soviet AA weapons, including German 88-mm, that are held in reserve.

e. Field Rocket Launcher. The Army has a quantity of the Czechoslovak 130-mm, 32-round rocket launcher RM-130 (fig. 52, p. 72). There are also growing numbers of the Soviet 132-mm, 16-round launcher BM-13 (fig. 83, p. 119). Both weapons have a significant area saturation capability at relatively short ranges.

185. ARMOR

a. Tanks. The Soviet T-34 (85) medium tank (fig. 102, p. 141) is standard in the Rumanian Army, although small numbers of T-54 tanks (fig. 14, p. 18) have been seen. Reports of JS-series heavy tanks have been received but are discounted.

b. Assault Guns. The Soviet SU-76 support gun (fig. 122) is available in significant numbers. The Soviet SU-100 (for a Czechoslovak version of which see fig. 54, p. 73) and JSU-152 (fig. 104, p. 142) assault guns are also available, but the other standard Soviet assault gun, the JSU-122, has not been reliably reported.

c. Armored Personnel Carriers. The Rumanian Army possesses significant numbers of both standard types of Soviet armored personnel carriers: the BTR-40 (fig. 101, p. 141) and the BTR-152 (fig. 16, p. 19).

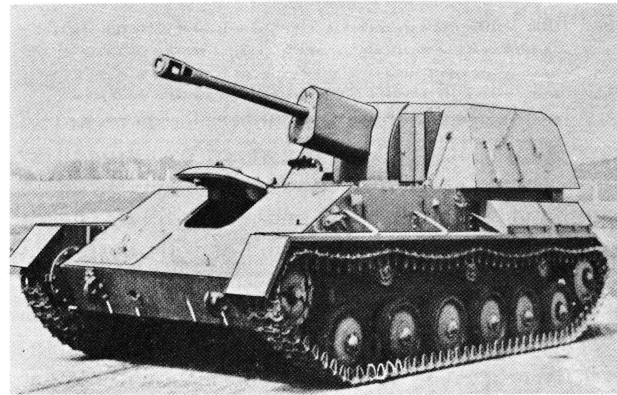


Figure 122. Soviet SU-76 Support Gun.

Section V. EQUIPMENT

186. TRANSPORTATION

The Rumanian Army has acquired considerable quantities of trucks in recent years from postwar Soviet and Satellite production. Meantime, significant numbers of wornout World War II types have been retired. Poor road conditions and inferior loading and driving techniques reduce the operational life of most vehicles.

Soviet cargo trucks of from 3 to 5½ tons are standard. These include ZIS-5, ZIS-150, and ZIS-151 (fig. 17, p. 19) models. New vehicles of undetermined type are also believed to have been received from other Bloc countries, such as Hungary, East Germany, and Czechoslovakia.

Military cars include Czechoslovak, East

German, and Soviet vehicles. The Soviet Pobeda and GAZ-67B light vehicles are in standard use for staff, command, and reconnaissance purposes.

The Rumanians have been provided with Soviet amphibious equipment, namely the GAZ-46 amphibious jeep (MAV) (fig. 123) and the 6 x 6 amphibious truck (BAV) (fig. 124).

187. SIGNAL

a. General. The Army uses primarily Soviet-type signal equipment, but full standardization probably has not been achieved. Until fairly recently, some signal equipment was being manufactured in Rumania itself that was different from that used by other Bloc countries. This produc-



Figure 123. Soviet GAZ-46 Amphibious Jeep MAV.

tion has been stopped in favor of the local manufacture of items of Soviet design. The U.S.S.R. remains the main source of supply, however.

Wire is the principal and most reliable means of communications in the Rumanian Army. All or most normal communications between the high command in Bucharest and subordinate headquarters are by wire. In time of war, both field wire and cable, as well as the civilian net, will be used.

b. Wire. Most field telephones are German-type World War II equipment although Soviet models are being received in increasing quantities. Similarly, Soviet-type field wire and cable is gradually replacing the German materiel that has long been in use.

c. Radio. The use of radio as a medium of military communication has been relatively low in the past. It is increasing now as improved types and additional quantities of radio equipment are received, chiefly from the U.S.S.R.

188. ENGINEER

Rumanian Army engineer equipment is of Soviet design and almost entirely of Soviet manufacture. Local production facilities are not known to be used to any significant extent. The quality of available equipment is good, although much of it is of World War II standard.

All mine-warfare equipment in the Army is of Soviet design and manufacture. It is used in accordance with Soviet doctrine.

The only known item of bridging equipment produced locally that is in use by the Rumanian Army engineers is the "C-35" ponton bridge set. This equipment was first produced and allocated to the engineer troops during 1950-1951. Normal carrying capacity of the bridge is believed to be approximately 13 tons. The types and amounts of available Soviet bridging and stream-crossing equipment are unknown.

Rumania is dependent on the U.S.S.R. and, to a limited extent, Czechoslovakia, for the bulk of its construction equipment. Although an effort is being made to develop a substantial construction-equipment industry, only tractors are known to have been produced in significant quantities.

189. CHEMICAL

The Rumanian chemical warfare capability, though limited, is improving. Most of the heterogeneous types of equipment left over from World War II are being phased out in favor of those received from the U.S.S.R. In the past, the Rumanian CW capability was almost exclusively defensive, but in recent years, the offensive position has been strengthened by the inclusion of limited quantities of flame weapons and smoke munitions.

The offensive chemical equipment now on hand includes Soviet gas-fragmentation bombs of various types, smoke hand grenades, and smoke pots. Wartime German flame throwers and a postwar Soviet flame thrower are known to be in use.

Defensive equipment includes several types of protective masks, although the Soviet ShM-1 is becoming standard. The Soviet protective cape



Figure 124. Soviet Amphibious Truck BAV, 6 x 6.

and suit are issued for individual protection. There is also oxygen-breathing equipment, protective clothing, and decontamination and detection equipment in service.

190. MEDICAL

Rumania has an embryonic medical industry and has many deficiencies in its medical economy.

Certain antibiotics are being produced, and some of these are being exported to the Soviet Union. A small amount of medical equipment is produced, but the quantity is far short of needs. The medical profession is short of trained personnel. The greater part of the medical supplies and equipment available to the military forces is of foreign make, primarily Soviet.

Section VI. UNIFORMS, INSIGNIA, AND DECORATIONS

191. UNIFORMS

a. General. The Rumanian Army uniforms have remained substantially the same since 1948. However, a Western-style coat is being introduced for dress wear. Major changes have been made in insignia to bring them into closer conformity with those of the Soviet Union. Since 1956, there has been a trend toward nationalism in reported changes in cap devices and in the belt and button emblem to reflect the Rumanian national crest and colors. Generally, Rumanian Army uniforms are well cut and both officers and enlisted men are distinguished by the neat tailoring of their breeches. Uniforms fall into two categories, field-service and dress. Winter uniforms are of brownish OD woolen material and the summer uniform of greenish OD cotton.

Uniforms are illustrated in figure 125.

b. Field-Service.

- (1) *Officers.* The winter field-service uniform consists of coat, Sam Browne belt, breeches or trousers, boots or shoes, and overcoat. Headgear may be the service cap, garrison cap, fur cap, or helmet. A raincoat made of water-resistant cloth or leather, with hood, is an optional item of wear. A short heavy overcoat with concealed buttons may also be worn. The summer field-service uniform consists of the service cap or garrison cap, tunic (*gymnastyorka*), breeches, boots, and belt.
- (2) *Enlisted men.* The field-service uniforms are worn by enlisted men for all occasions. They have the same components as the officers' summer and winter field-service uniforms except that breeches and short boots are worn by enlisted men at all times.

c. Dress. A dress uniform is authorized for wear by Rumanian officers for formal occasions and receptions. The uniform consists of a coat similar to that of the field-service uniform, blue trousers, brown shoes, service cap, and brown gloves. A Western-style coat with shirt and tie is being introduced. A gold belt may be worn with this uniform. In addition, general officers have been observed wearing blue, lavender, and white coats in lieu of olive drab with this uniform.

d. Women. No information is available concerning the uniforms worn by female personnel of the Rumanian Army.

e. Special.

- (1) *Armored.* Armored personnel wear khaki or dark-blue coveralls over the regular Army uniform. A leather crash helmet completes this uniform.
- (2) *Mountain Infantry.* These troops are distinguished by their long ski trousers, ski boots, and white ski socks. A beret or fur cap is worn with this uniform.
- (3) *Cold Weather.* A two-piece olive-green quilted uniform, closely resembling the Soviet padded assembly is worn by Rumanian troops in extreme cold weather.
- (4) *Camouflage.* A one- or two-piece white coverall with hood, or a brown mottled jacket may be worn over the regular Army field-service uniform for winter and summer camouflage.

f. Militarized Security Forces. Frontier Troops and Security Troops wear regular Army uniforms. A colored cloth triangle, worn on the cap directly beneath the cap badge, and a lozenge-shaped collar tab in the basic branch color are distinguishing characteristics of security force uniforms.



WINTER FIELD-SERVICE UNIFORM,
OFFICERS
Lieutenant, Engineers Shown



SUMMER FIELD-SERVICE UNIFORM,
ENLISTED MEN
Sergeant, Infantry Shown



DRESS UNIFORM, OFFICERS
Colonel, Infantry Shown

COLLAR TABS



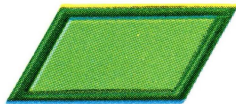
GENERALS, ARMS



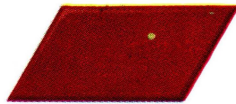
MEDICAL AND VETERINARY



GENERALS, SERVICES



FRONTIER TROOPS



INFANTRY AND QUARTERMASTER



SECURITY TROOPS



MOUNTAIN INFANTRY



SUPERIOR SCHOOLS



CAVALRY



MILITARY SCHOOLS



ARMORED, ARTILLERY, SIGNAL,
ENGINEERS, AND TECHNICAL



ALTERNATE COLLAR TAB



DRESS UNIFORM, OFFICERS
Colonel General, Infantry Shown

Figure 125. Rumanian Army Uniforms.

192. INSIGNIA

a. Grade.

- (1) *General.* In May 1952, the insignia of the Rumanian Armed Forces were revised to bring them into closer conformity with those of the U.S.S.R. Grades of officers and enlisted men are determined from the shoulderboards worn with all uniforms. Shoulderboards are illustrated in figure 126.
- (2) *Officers.* General officers' grades are indicated by the number of stars worn on patterned shoulderboards. Field-grade officers wear shoulderboards with two longitudinal stripes, company grade officers wear one longitudinal stripe. Gold-colored shoulderboards are worn by officers of combat arms, silver-colored by officers of the technical and administrative services.
- (3) *Enlisted men.* Normally, enlisted men's shoulderboards have background in the branch of service color with rank bars in gold for Army personnel and silver for militarized security forces. Service stripes which indicate the number of enlistments are worn on the left sleeve above the elbow.

b. Branch.

- (1) *General.* Branch of service is indicated by means of metallic devices and by the use of color.
- (2) *Metallic devices.* Devices are worn on shoulderboards of officers and enlisted men except infantry troops frequently wear no device.
- (3) *Color.* Distinctive colors of the arms and services of the Rumanian Army are shown on items of uniform as follows: on the service cap band and piping of the crown; on coat and overcoat collar tabs; on piping of coat sleeve cuffs and on outer seams of trousers; on stripes and piping of the officers' shoulderboards and on the background color of the enlisted men's shoulderboards. Sleeve piping is not universal and may be phasing out. General officers of the combat arms wear collar tabs bearing laurel leaf ornamentation on bright red

backgrounds, with gold piping. General officers of the technical and administrative services wear these tabs with silver laurel leaves and silver piping. The distinguishing colors of the branches which have been identified are listed below:

Armored, Artillery, Engineers,	Black
neers, Signal, and Technical.	
Infantry and Quartermaster	Red
Cavalry	Magenta
Mountain Infantry	Dark Green
Medical and Veterinary	Maroon
Frontier Troops	Light Green
Security Troops	Bright Blue
Superior Schools	Yellow
Military Schools	White

Note. An alternate pointed collar tab in the basic branch color has been observed being worn by Army troops.

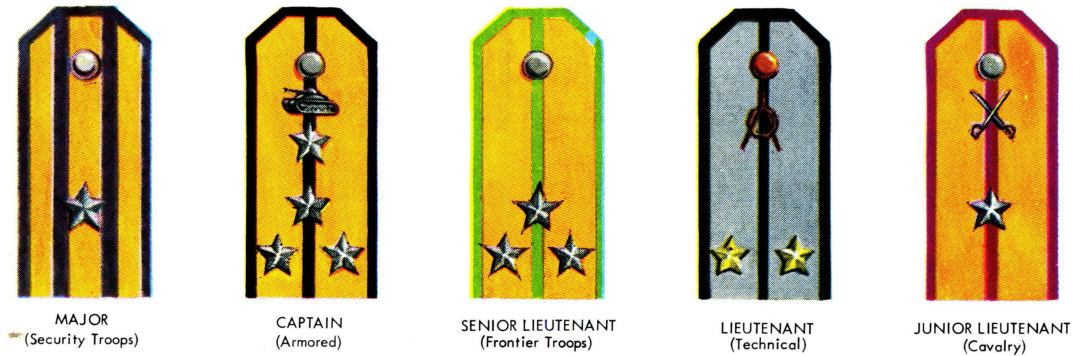
- (4) *Headgear insignia.* Cap insignia devices do not vary with the arm or service. The pattern was fixed by Decree #21 dated 15 February 1951. These insignia are worn on caps, berets, and fur caps, but not on steel helmets (fig. 126, p. 168).
- (5) *Specialist.* The only shoulder sleeve insignia identified is that of the elite *Tudor Viadimirescu Debrețin* (TV) Division. The insignia is a Rumanian flag on which the letters "TV" are superimposed. It is usually a printed cloth, but officers have been seen wearing a slightly smaller embroidered version. It is worn on the upper part of the right sleeve and may continue to be worn by military personnel even after transfers to new units are effected.

193. DECORATIONS

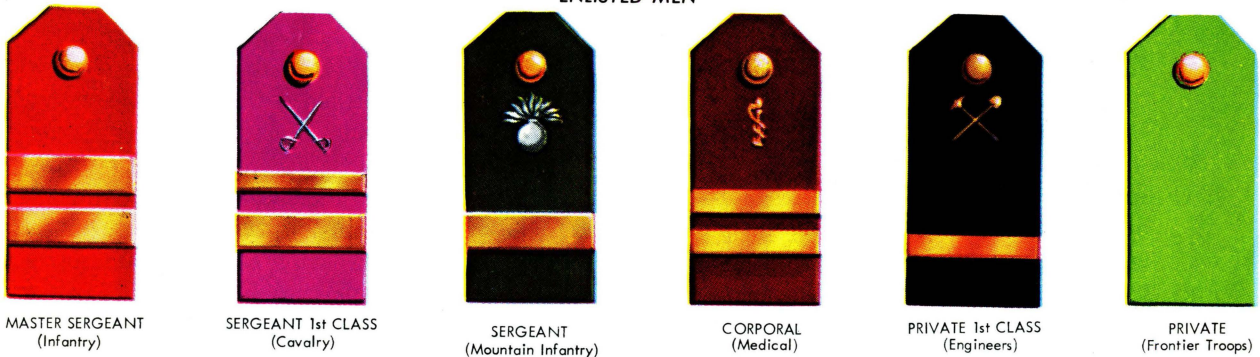
The Rumanian awards available to military personnel are listed below in what is believed to be the accepted order of precedence. The only foreign decorations that the Rumanian military may wear are those awarded by the U.S.S.R. and by her Satellites.

a. The Star of RPR (Five Classes). The star is awarded to Rumanian military and civilian personnel and to foreigners. The medal is a reward for special achievements in political, cultural, or social fields.

OFFICERS



ENLISTED MEN



BRANCH DEVICES



HEADGEAR INSIGNIA



Figure 126. Rumanian Grade, Branch, and Other Insignia.

The first class consists of a five-pointed gold star with rays. A red-enameled star surrounded by a gold laurel wreath and bearing the inscription "30 December 1947" (the date of King Michael's abdication) is mounted on the gold star.

The second class is the same as the first, except that the star is silver.

The third class is a five-pointed red-enameled star with gold rays. The front of the medal bears the inscription "RPR" on a small red-enameled plaque. A similar plaque on the reverse side bears the inscription "30 December 1947."

The fourth class is the same as the third, except the rays of the star are silver.

The fifth class is the same as the third, except that the rays of the star are bronze.

b. The Order of Labor (Three Classes). This order is awarded to those who distinguish themselves in labor, contributing by their activity to the prosperity of the Rumanian People's Republic and to the material and cultural welfare and freedom of the people.

The order represents the sun with a central disc of yellow enamel, from which rise ten rays. The lower part of the sun's disc is covered by branches of laurel and ears of corn arranged in a semicircle. Between the two branches are a hammer and sickle which partly cover the central disc of the sun. In the free space between the hammer and sickle and the ears of corn is a small five-pointed star in red enamel. A red-enameled ribbon circles the lower half of the sun without covering it. This ribbon, the central fold of which is inscribed "RPR", binds the laurel to the ears of corn.

In the first class of the order, the sun is in gold and the laurel, corn, and hammer and sickle in silver; in the second class, the sun is silver and the laurel, corn, and hammer and sickle are gold; in the third class, the sun, laurel, corn, and hammer and sickle are all in bronze.

The ribbon of the order is of red watered-silk, of a slightly lighter shade than the ribbon of the "Star of the RPR," and has a gold stripe on each side.

c. The Order of the Defense of the Fatherland (Three Classes). The order is awarded to Rumanian military and civilian personnel, and to foreigners for outstanding contributions to political or scientific activities and for the conception and planning of military operations. An individual may be awarded the same class of the Order

several times. The Order may be conferred posthumously.

The first class consists of a gold-edged silver star covered with red enamel. The emblem of the Republic is centered on the star. The star is superimposed on a gold plaque adorned with rays and two crossed swords.

The second class is the same as the first but is silver instead of gold. The third class is similar to the second but somewhat smaller and is worn on a yellow-red-blue ribbon.

d. The Medal "Liberation from the Fascist Yoke" (One Class). The medal is awarded to Rumanian military and civilian personnel and to foreigners for participation in the struggle against Fascism. The front of the medal shows two heads in profile, one partly superimposed on the other. The profiles represent a Soviet soldier and a Rumanian soldier in their respective helmets and uniforms. The inscription "*Eliberarea de sub Jugal Fascist*" (Liberation from the Fascist Yoke) and a star also are on the front of the medal. The reverse side of the medal shows a laurel crown bound by ribbon and bears the initials "RPR" and a wreath with the inscription "*In slujba popurului muncitor*" (In the service of the workers). The medal is suspended from a ribbon of four scarlet and three white stripes.

e. Order and Medal of Military Merit (Meritul Militar). A decree published on 10 June 1954, set up the Order and Medal of Military Merit to be conferred on servicemen for length of service in the Armed Forces or the Ministry of the Interior.

The order has three classes, the medal two. The order is awarded for 25, 20, and 15 years' service, respectively; the medal is awarded for 10 and 5 years' service, respectively.

The insignia of the order is a five-pointed, red-enameled star, set in a wreath of laurel leaves. A blue-enameled emblem of the Rumanian People's Republic is centered on the star over two crossed swords. The emblem is surrounded by a yellow-enameled ring in which the letters "MERITUL MILITAR" are inscribed.

The medal is circular and is made of silver-plated brass for the first class and of brass for the second class. The face of the medal carries two laurel wreaths around the edge joined at the base by a five-pointed star of red enamel. In relief, in the center are the letters "RPR" on two crossed swords. The reverse of the medal is the same

except that the letters "RPR" are not placed over the swords.

Both the order and the medal are worn on a light-blue moire-silk ribbon bordered in a darker blue. The center stripe of the ribbon on which the order is worn carries a red center stripe, while the ribbon on which the medal is worn carries a white stripe.

f. Jubilee Medal—1953. A government decree dated 18 January 1954 defined the establishment of a Jubilee Medal for Ten Years From the Formation of the Rumanian People's Army.

The medal is circular and made of silver-plated bronze. The obverse carries an oak leaf in relief on the left side of the lower part, and a laurel leaf in relief on the right side joined by a ribbon on which 1943-1953 is printed in relief. On the upper part is the emblem of the Armed Forces of the Rumanian People's Republic printed in relief between the two leaves.

The reverse carries "FORTELE ARMATE ALE RPR" inscribed in a semicircle on the upper part. In the middle is inscribed "AX—A ANNI-VERSARE" in relief underneath a five-pointed star (printed).

Section VII. GLOSSARY OF MILITARY TERMS

A

acoperi.....	to screen
act de identitate.....	identification
activitate simulată.....	deception
acțiune de întârziere.....	delaying action
acțiune de șoc.....	shock action
adăpost.....	shelter, cover
adăpost întărit.....	bunker
adăpost subteran.....	dugout
adâncime.....	depth
adunare.....	assembly
afet.....	carriage (gun)
ajustarea tragerii.....	fire adjustment
ajutorul comandantului.....	executive officer
alergător.....	runner
alocație.....	allocation
ambrasă.....	embrasure
amestec incendiar.....	napalm
amfibiu.....	amphibious
amorsă.....	primer
amplasament.....	emplacement
anfiladă.....	enfilade
antena.....	antenna
aparat de recepție.....	receiver
apăra.....	to defend
apărare antiaeriană.....	air defense
apărare antitanc.....	antitank defense
apărare improvizată.....	hasty defense
apărare mobilă.....	mobile defense
apărare susținută.....	sustained defense
apel.....	rollcall
apreciere a situației.....	estimate of the situation.
aprovizionare aeriană.....	aerial supply
arici de sîrmă ghimpată.....	hedghog
ariergardă.....	rear guard
arma chimică.....	chemical corps
armament.....	ordnance
armată.....	army
armă.....	branch of service; rifle.

armă de foc.....	gun
armă fără recul.....	recoilless rifle
arme grele.....	crew-served weapons
arme individuale.....	individual weapons
arme ușoare.....	small arms
armistițiu.....	truce
artificii.....	pyrotechnics
artilerie.....	artillery
artilerie de calibru mijlociu.....	medium artillery
artilerie de câmp.....	field artillery
artilerie de munte.....	mountain artillery
artilerie grea.....	heavy artillery
aruncător de flăcări.....	flamethrower
aruncător de grenade.....	mortar
aruncător de rachete.....	rocket launcher
ascundere.....	concealment
așternut.....	bedding roll
atac aerian.....	air raid
atac de imobilizare.....	holding attack
atașa.....	to attach
autenticare.....	authentication
autogară de aprovizionare.....	truckhead
automat.....	submachinegun
avangardă.....	advance guard
avansare.....	advance
aviație.....	aviation
avion.....	aircraft
avion de bombardament.....	bomber
avion de vînătoare.....	fighter
avion reactor.....	jet aircraft
ax.....	axis
ax de evacuare.....	evacuation axis
ax de aprovizionare.....	supply axis
ax de transmisiuni.....	communication axis

B

baionetă.....	bayonet
baraj.....	barrage
barcă.....	boat
baricadă.....	road block
barieră.....	barrier

batalion	battalion
baterie	battery
bază aeriană	air base
bază de foc	base of fire
bază de lansare a rachete	rocket-launching site
bază pentru rachete atomice	atomic rocket site
bătaie	range
bidon	canteen
bivuac	bivouac
blindat	armored
bombă	bomb
bombarda	to bomb
bombardament	bombardment
bombardare	bombing
bombă incendiară	incendiary bomb
brigadă	brigade
busolă	compass (magnetic)
bucătărie mobilă	field kitchen
butoi	barrel (container)

C

cablu	cable
cablu de campanie	field wire
cadență de tragere	rate of fire
calc	overlay
cale	route
cale ierarhică	chain of command
calibru	caliber
camion	truck; carrier
camion-tractor	prime mover
campanie	campaign
camuflaj	camouflage
camuflarea luminilor	blackout
canal	channel
cap de pod	beachhead; bridge-head.
cap de pod aerian	airhead
caporal	corporal
captura	to capture
captură	capture
carabină	carbine
car de luptă	combat vehicle
cartier general	headquarters
cartuș	cartridge
cartuș filtrant	cannister (of gas mask).
cartușieră	cartridge belt
casă	helmet
casă receptoare	headset (head-phones).
cazarmament	property
cazamată	pillbox
căpitan	captain
centru de adunare	collecting point
centru de aprovizionare	supply point
centru de distribuire a muniției	ammunition supply point.
centru de grupare	depot
centru de transmisiuni	communication center; message center.
cenzură	censorship

cercetaș	scout
circuit	circuit
cîmp de mine	mine field
cîmp de tragere	field of fire
chimic	chemical
clasificare	classification; rating
clar	clear
cod	code
coloană	column
colonel	colonel
comandament	headquarters
comandant	commander
comandant de operații	chief of staff
comandantul comendurii pieței	provost marshal
comandantul miliției	provost marshal
comanduirea pieței	military police
companie	company
concediu	furlough
concentra	to mass
concentrare	concentration
concentrare de forțe	build up
conducerea focului	fire control
conductă de petrol	pipeline
consiliu de războiu	court martial
contraatac	counterattack
contra-pantă	reverse slope
conține	contain
cooperativă militară	commissary
coordonat	coordinate
cordiță	lanyard
corecție de vînt	windage
corp de armată	corps
corvoadă	fatigue duty
creastă	ridge
creastă militară	military crest
crucișător	cruiser
cuprinde	to contain; to hold
curier	courier; messenger
cursă	booby trap
curs de apă	river line
curte marțială	court martial

D

dărîmătură	demolition
debarcare	debarkation
decolaj	takeoff (of aircraft)
demilitarizare	demilitarization
demobilizare	demobilization
depassi	to bypass
depesa	message
depou de automobile	motor pool
depozit	depot
descifra	to decode
desfășura	to deploy
desființa	to inactivate
desinfecța	to decontaminate
detașament	detachment
detașament de acoperire	covering force
detașat	detached
dezerta	to desert

directive tehnice de transmisiuni	signal operation instructions.
disciplină	discipline
disciplină de tragere	fire discipline
distanță acoperită	coverage
distribuire	distribution
distrugere	demolition
divizie	division
divizion	battalion (of artillery)
dos	rear
dotatie reglementară	basic load
drept	right (direction)
drum principal de aprovizionare	main supply road (M.S.R.).
drumuri de apropiere	avenue of approach
dușman	enemy

E

echipament	equipment
echipa de gropari	burial party
echipaj	crew (of a tank, aircraft, etc.).
ecran	screen
efectiv	complement
eșalon	echelon
exercițiu tactic	tactical exercise
exploatare	exploitation; follow up.
explozie aeriană	air burst
expus	exposed

F

face o recunoaștere	to scout
făse de luptă	phase of action
fir telefonic de campanie	assault wire
flanc	flank
flotă	fleet
foc din mers	marching fire; assault fire.
foc încrucișat	crossfire
foc și mișcare	fire and maneuver
formație	formation
fortele armate	armed forces
fotografie aeriană	aerial photograph
frecvență	frequency
fruntaș	private first class
fum	screen

G

gară de aprovizionare	railhead
garnizoană	garrison
gaz	gas (chemical)
genist	engineer (combat)
gherilă	guerilla
glonț	bullet
goniometru	quadrant
grad	rank
grănicer	frontier guard
grenadă antisubmarină	depth charge
grenadă de armă	rifle grenade
grenadă de mână	hand grenade
greu	heavy

gropă individuală	foxhole; slit trench
grosul trupelor	main body
grup	group
grupă	squad
grupare mixtă divizionară	regimental combat team.
grupare strategică	task force
grupare tactică	task force
grup de armată	army group; regimental combat team.
grup de comandă	staff

H

hartă de operații	operation map
hartă	map
hartă fotografică	photo map

I

identificare	identification
identificarea și înmormântarea militarilor căzuți.	graves registration
ieși la pensie	to retire
imobiliza	to immobilize
impraștiere	dispersion
inamic	enemy
înarmare	armament; arming
încărtiruire	billet
încetare ostilităților	truce, armistice
indicativ de apel	call sign
infanterie	infantry
infiltra	to infiltrate
infirmieră	nurse
influența vântului	windage
informații	intelligence
înrolare	enlistment
insignă	badge
inspecție	inspection
instalație	installation
insubordonare	insubordination
întăritură	fortification
intendență	quartermaster
intercepție	interception
interferență	interference
interzice	to interdict
întrînd	salient
itinerariu	route
îmbarca	to embark
îmbrăcăminte specială de protecție.	protective clothing
împacheta	to pack
împrăștia	to disperse
înainta	to advance
înaintare	advance
încărcător	clip (cartridge)
încărcătură	cargo
încercuire	encirclement
închizător	breech (breechblock)
înființa	to activate
înghețare	icing (conditions)
îngropa în teren	to entrench
înlocuire	replacement; relief

înălțime	elevation
înrola	to enlist
întări	to fortify; to reinforce
întăritură	fortification
întreținere	maintenance
învălu	to outflank; to envelop
	op
învăluire	envelopment

J

jurnal de bord	log (report of events, journal).
----------------	----------------------------------

L

lagăr	camp
lansare	launching
legătură	liaison
limită	boundary
linie de cadrilaj	grid line
linie de plecare	line of departure
linie de reper	thrust line; phase line
linia principală de rezistență	main line of resistance (M.L.R.).
linia de rezistență a posturilor înaintate	outpost line of resistance (O.P.L.R.).
locotenent	lieutenant
locotenent colonel	lieutenant colonel
logistică	logistics
lot	lot (specific group)
lovitură principală	main attack
lunetist	sniper
lungime de unda	wave lengths
luptă	battle
luptă angajată	engagement
luptă apropiată	close combat
luzincă	password

M

maior	major
mal	bank
manevră	maneuver
manevră de retragere	retrograde movement.
marinar	sailor
marină	navy
mars de apropiere	approach march
masă	table, meal
masca	to screen
mască de gaze	gas mask
matroz	sailor
măsurile contra recunoașterii inamicului	counterreconnaissance.
medalie	medal
menținere	maintenance
merș (also marș)	march
mesaj	message
microfon	microphone
militar	military; soldier
miliție	police; military police
mină	mine
misiune militară	military mission
mişcare de învăluire	turning movement
mitralia	to strafe

mitralie	cannister (shell)
mitralieră	machinegun
mitralior	gunner
mobilizare	mobilization
mondir	uniform
mortieră	mortar
motorizat	mechanized; self-propelled.
muniție	munitions

N

navigador	navigator
necifrat	in the clear (uncoded)
nedisciplină	misbehavior
neutraliza	to neutralize

O

oaste	host; horde; army
obiectiv	objective
oblic	oblique
observator înaintat	forward observer
obstacol de sîrmă	barbed wire
obuz	shell
obuz explosiv	high explosive
obuzier	howitzer
ochitor	gun layer
ocupa	to occupy
ofițer de serviciu	officer on duty
ofițer cu debarcarea	beachmaster
operatie mixta	joint operations
ordin de operații	operation order
ordinea de bătaie	manning table; order of battle.
organizare	organization
organizație	organization
orificiu	port (of weapon)

P

panou	panel
parașuta	to parachute
parașută	parachute
parolă	password; parole
parte sedentară	rear echelon
partizan	guerrilla
pas	pass (terrain)
pasaj	corridor (terrain)
pat de pușcă	butt (of rifle, gun)
patrulă	patrol
pauză de ascultare	listening silence
pauză de radio	radio silence
pătrundere	penetration
păzi	to guard
perdea	screen
perforant	armor-piercing
perimetru	perimeter
permisie	leave
permite publicarea	to declassify
pierderi	casualties
piesă	gun, gunner
pionier	engineer (combat)
pistă	airstrip
plajă	beach

1 April 1960

DA Pam 30-50-2

telefon de campanie..... field telephone;
handset.
telegraf de campanie..... field telegraph
teleimprimator..... teletype
telemetru..... range finder
tempo de aprovizionare..... supply discipline
teren..... terrain
terestre..... ground
termen..... deadline; suspense
date.
toc..... scabbard
tragere de contrabaterie..... counterbattery fire
tragere de hărțuire..... harassing fire
tragere de incadrare..... bracketing (artillery)
fire.
tragere finală de protecție..... final protective fire
tragere pe deasupra trupelor..... overhead fire
tragere razantă..... grazing fire
tragere verticală..... plunging fire
transmisiuni..... communiations
transmițător..... transmitter
transportat pe cale aeriană..... airborne
tranșee..... trench
trasor..... tracer (ammunition)
trecere..... passage, crossing
trecătoare..... pass (terrain)
tren de muniții..... ammunition train
trupe..... troops
tun..... cannon; gun
tunar..... gunner

țârm..... shore
țeava tunului..... gun tube
țintă..... target

U

unitate..... unit
unitate combatanta..... combat command
unitate de debarcare..... landing force
Uniunea Sovietică..... Soviet Union
urmărire..... pursued
uzură de războiu..... battle fatigue

V

vas..... boat; ship
vas de linie..... battleship
vas purtator de avioane..... aircraft carrier;
carrier.
vinator..... rifleman
virf de atac..... spearhead

Z

zbor..... flight
zonă..... zone; belt (terrain)
zonă contaminată..... contaminated area
zonă de adunare..... assembly area
zonă de concentrare și redistribuire..... staging area
zonă de luptă..... zone of action
zonă de parașutare..... drop zone
zonă de suflu..... blast area
zonă moartă..... dead space

[AG 353 (5 Oct 59)]

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

L. L. LEMNITZER,
General, United States Army,
Chief of Staff.

Official:

R. V. LEE,
Major General, United States Army,
The Adjutant General.

Distribution:

Active Army:

USASA (1)	MDW (5)	USAIS (250)
OSD (1)	Armies (10) except First US Army (12)	USA Ord Sch (5)
ACSI (300)	Corps (3) except XVIII Corps (5)	USASCS (5)
DCSOPS (2)	Div (3)	USATSCH (5)
DCSLOG (2)	Bde (3)	USARIS (4)
CINFO (25)	Regt/Gp/bg (2)	TAGSUSA (5)
CNGB (1)	Bn (1) except MI Bn (5)	USA CmlC Sch (5)
CRD (2)	Co/Btry (1) except MI Co (5)	PMGS (5)
TPMG (5)	GENDEP (2)	USA QM SCH (5)
Tech Stf, DA (10) except CofOrd (20)	Sup Sec, GENDEP (2)	AMSS (5)
USCONARC (40)	Depot (2)	USA JAG SCH (5)
USAR Arty Bd (2)	RTC (1)	FSUSA (5)
USA Armor Bd (2)	Aggressor Cen (50)	USAAVNS (5)
USA Inf Bd (2)	Mil Dist (1)	PMST Sr Div Units (1)
USA AD Bd (2)	USA Corps (Res) (1)	AMS (20)
USA Abn & Elct Bd (2)	Sector Comd, USA Corps (Res) (1)	WSEG (1)
USA Avn Bd (2)	USA INTC (500)	Ports of Emb (OS) (5)
ATB (2)	USMA (5)	Trans Terminal Comd (5)
OS Maj Comd (5) except	NWC (10)	Army Terminals (5)
USAREUR (25)	AFIS (1)	PG (1)
USARPAC (50)	USAWC (50)	Arsenals (1)
USARAL (6)	USACGSC (1100)	MAAG (2)
SHAPE (1)	USAARMS (250)	Mil Msn (2)
Log Comd (2)	USAAMS (100)	ARMA (3)
US ARADCOM (1)	US ARADSCH (100)	JAMMAT (2)
US ARADCOM Rgn (1)	USA ES (CONUS) (5)	

NG: State AG (3); units—same as Active Army except allowance is one copy to each unit.

USAR: Same as Active Army except allowance is one copy per unit.

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