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HERO

# POTENTIAL WARSAW PACT INVASION OF SWITZERLAND QUANTIFIED JUDGMENT MODEL ANALYSIS

Preliminary Report
November 1980

**HISTORICAL EVALUATION AND RESEARCH ORGANIZATION**

A DIVISION OF T. N. DUPUY ASSOCIATES, INC.

# POTENTIAL WARSAW PACT INVASION OF SWITZERLAND
# QUANTIFIED JUDGEMENT MODEL ANALYSIS

PRELIMINARY REPORT

November 1980

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# POTENTIAL WARSAW PACT INVASION OF SWITZERLAND
# QUANTIFIED JUDGMENT MODEL ANALYSIS

## PRELIMINARY REPORT

As prescribed in the Historical Evaluation and Research Organization (HERO) proposal to undertake an analysis, by means of the Quantified Judgment Model (QJM), of possible conventional combat operations in the event of a Warsaw Pact invasion of Switzerland from southwest Germany, this preliminary report is prepared for the Swiss Government in order to:

- Furnish a hypothetical background for the causes that would lead to an invasion of Switzerland;
- Display the plan of attack;
- Array the forces that would most likely be employed by the Warsaw Pact for such an operation;
- Provide a scheme of maneuver for the Warsaw Pact forces that would be suitable for the area selected for the QJM analysis;
- Furnish preliminary data on the designated Warsaw Pact forces;
- Furnish historical background in the form of the German Army Group "C" plan, codenamed CASE TANNENBAUM, prepared for a similar exigency in 1940.

The study proposed by HERO has been tentatively designated TANNENBAUM II. The final designation will be as desired by the Swiss Government.

This report furnishes data that will facilitate the accomplishment of the prescribed preliminary conference and can be used as a basis upon which to continue the study effort. The Soviet/Warsaw Pact forces structures and strengths, and their associated OLIs illustrated in this report, conform to present-day, unclassified knowledge of the subject held by HERO. The plan

of attack conforms to established Soviet/Warsaw Pact doctrine and tactics found in unclassified US sources. Thus, while the Soviet/Warsaw Pact organization, strengths, doctrine, and OLIs should be maintained as they are stated, the plan of attack itself may, if the Swiss Government so desires, be modified.

Operation Tannenbaum II

The purpose of this study is to measure the effectiveness of Swiss military planning and preparation against a Soviet/Warsaw Pact attack to seize the country.

To accomplish this analysis a scenario has been prepared that approximates a situation that could logically lead to a Soviet decision to attack Switzerland. In this scenario, Soviet/Warsaw Pact forces have attacked the west and have pushed NATO forces back along a continuous front to a relatively straight line running generally along the traces of a line Hamburg-Hannover-Frankfurt-Karlsruhe-Waldshut. The southern end of the NATO line is anchored in the vicinity of Waldshut, in the Black Forest, on the FRG/Swiss border. The NATO forces are able to hold this line and prevent further penetration of western Europe by the Soviet/WP invaders.

This creates an unacceptable situation for the Soviets as it militates against their basic timetable for completion of the final objective against NATO in the 15-21 days allocated for such an operation in Soviet doctrine. Logically, a number of alternatives would be open to the Soviets in their attempt to break the stalemate. One of these alternatives would be a sweep around the NATO right flank, through Swiss territory, with the intent of securing sufficient terrain to enable them to turn northeast into the Mulhouse area, thereby securing turning the NATO flank. Understanding the Swiss concept of maintenance of territorial integrity as the key to the defense of the state (Neutrality Protection Ca...)*, the Soviet/WP planners would rightly assume that the only way to carry out this operation would be through the destruction of, or reduction to a negligible level of

* As outlined in "General Defense, Report of the Federal Council to the Federal Assembly on the Security Policy of Switzerland." Bern, August 1976.

the Swiss will and ability to fight in order to permit the seizure of Swiss territory to the extent necessary to allow continuation of the Soviet/WP main effort against NATO. The strategy, therefore, would be to capture the major communications centers in the country and to limit Swiss military activities to the mountainous regions to the east and southeast until after completion of the offensive against NATO, whereupon those areas of Switzerland still occupied by Swiss troops could be reduced at leisure.

In preparing this initial concept of operations for carrying out this attack it has been necessary to make a number of assumptions that may need to be modified or changed after consultation in Bern.

- As Soviet doctrine calls for certain levels of force ratio (3-5:1 Tanks, 6-8:1 Artillery, 4-5:1 Troops, etc.), an accurate determination of Swiss force levels is essential for determining the size of the Soviet force that would be used. For initial planning purposes a Soviet Front (Army Group) (designated Helvetia) has been determined to be the correct size unit for the attack.

- One important question, which must be answered by the Swiss client, is whether or not, given the situation described, and in accordance with Swiss defense doctrine announced in June 1973, the Swiss would "tie-in" to the NATO defensive line; whether or not they would coordinate their defense with NATO; or whether they would stick to their own, fundamentally defensive scenario. While this question is more political than military, it could affect a possible Swiss decision as to using already prepared positions or possibly using hasty defenses -- to be strengthened as time permits -- to prevent unoccupied gaps that could be of advantage to the enemy. (It is probable that, for the purposes of HERO's initial investigation, this data is not crucial, as will be shown below.) It is currently assumed however, that the Swiss will use their previously-prepared defenses.

- It is assumed that any attack on Switzerland will follow a period of combat between NATO and the Soviet/WP forces. Thus, at maximum, the Soviets should be able to achieve no more than minor surprise when they open their attack on Swiss territory. The manner in which warning is given to the Swiss is not relevant to this study. What is important is whether

the Swiss would begin mobilization in time to prepare and man their forward defensive positions and where these positions will be.

- It is assumed that the Soviets will have a relatively complete picture of the Swiss military structure, weapons, and dispositions. It goes without saying that they will also have a complete analysis of the terrain, demography, and other salient factors about the country.

- It is assumed that the makeup of the Soviet/WP forces that would be used against the Swiss would be directly related to the timing of the attack and the importance the enemy would place on the successful completion of the mission. Given the situation set forth in the basic scenario for this study, a Soviet Front (AG) would be used, as opposed to a non-Soviet WP unit. This has the advantage of presenting a "worst case" situation for the Swiss. It is also assumed that the Soviet Front (AG) chosen is a first line unit, most likely from the Theater of Military Operations (TVD) second echelon.

- The attack on Switzerland, given this scenario, will occur no later than 15 days after the attack on the west.

- Regardless of the situation in NATO, it is assumed that the Soviets will attack the Swiss without reliance on nuclear weapons because of political and geographical considerations. Given the situation, and even if the nuclear threshold has not been crossed, both chemical and biological weapons would be available to the Soviet forces. For the sake of this analysis, it is assumed that neither of these weapons will be employed.

- The attack will be accompanied by a series of surgical air strikes against known and suspected high-value targets. Key among these would be military $C^3$ centers, air defense centers, major supply and assembly points, and air and helicopter bases. All air assets of the Soviet Front are assumed to be available for this purpose.

- The Soviets will assign tactical, operational, and strategic objectives. Their tactical objective will be the penetration of the forward Swiss division's rear boundary. The operational objective will be penetration of the center of the country -- to include the seizure of Bern. They will have achieved their strategic objective when they secure the northern and southwestern quadrants of the country.

• The Soviets will probably consider no more than 5-7 days sufficient to achieve their objectives.

• It is assumed that, during this phase of the attack on Switzerland, no outside reinforcement will be expected. Possible internal reinforcement will be based on Swiss doctrine and plan. It is also assumed that the Swiss will not receive fire support from NATO forces close to the border. For purposes of this initial study this will not be an important consideration.

• The use of airborne troops by the attacking force is a distinct possibility. The Soviet Front (AG) has, as a part of its augmented organization, both airborne and special purpose troops who are capable of being inserted into almost any area in Switzerland, given certain conditions. The 8,500 man type Soviet airborne division has considerable organic firepower and could probably sustain itself for two-three days without resupply or link-up. The actual objectives of the airborne division in such an operation would be major communication centers or communications "choke points." Soviet doctrine calls for a link-up within 48 hours so, if normalized operations are conducted, airborne objectives will be predicated on the Soviet assessment of the attacking force line of departure to link-up time. In the German CASE TANNENBAUM airborne forces were to be alerted for employment but were not to be used in the initial phase of the operation. Part of the rationale for this as stated in other German documents (Appended) was that the Swiss would probably have all possible drop zones (DZ) zeroed with artillery concentrations and other means. Hence, any air drop might be too costly.

• The Soviet Front (AG) also has a considerable helicopter lift capability that can be augmented by special units for TND assets. With this capability, airborne or special purpose operations may not be necessary except against highly-sophisticated targets.

The Soviet Plan for Tannenbaum II

The Soviets will move the designated Front (AG) into position in assembly areas well to the rear of the line of departure no more than 48-72 hours in advance of the attack. (See Overlay A) From these assembly areas, a march to contact will be carried out along existing, well-reconnoitered roads. The Front will have road priority through the rear area of the Soviet forces in contact with NATO.

At H-hour, or before, the Soviet/WP forces in contact with the NATO line will begin a series of limited attacks, either on the ground or by fire, to pin down NATO forces and prevent their interference in the Swiss operation. The attack against Switzerland will be made from the march in order to make the maximum possible penetration before it becomes necessary to deploy.

The main effort will be made by two Soviet Combined Arms Armies (CAA) attacking abreast in a zone between the NATO line and the west ends of the Überlingen See and the Untersee. This will be a tricky maneuver as the attacking columns will present their right flanks to the NATO forces. Hence, the necessity for the NATO forces to be pinned down. The attacking columns will also have to transit the occupied rear area of the Soviet/WP forces in contact with the NATO line. (See Overlay B)

Each lead CAA will attack with two motorized rifle divisions (MRD) abreast, with another MRD following the right leading division, and the tank division (TD) following the left leading division.

The general line of departure for the attack will be a line connecting the northernmost segments of the Swiss-German border. (See Overlay B)

A second CAA will follow the right leading CAA with the mission of exploiting success against the NATO flank. The tank army (TA) will be echeloned to the left rear on this CAA.

Once the 100th CAA has gained the Waldshut-Baden line ($P_2$), it will begin a sweep westward with the 103d CAA and the 101st TA echeloned to its rear to seize Basel. Thereafter the 103d CAA and the 101st TA will pass through the 103d to seize Mulhouse, thereby turning the NATO flank.

The Plan for the 101st CAA (See Organization Chart and Data)

The 101st CAA(-) will attack in a zone limited by Thayngen-Moos at the line of departure, with two divisions abreast. Divisions will be in march columns at the outset. The 101st CAA zone will widen past Shaffhausen-Stein a. Rhein once this line is secured.

The 4th MRD(Reinf) of the 101st CAA will attack to the east of the Bodensee along a general axis Dornbirn-St. Gallen to pin down Swiss units in this region to prevent interference with the main effort. After the

main effort to the west of the Bodensee has seized the Nettenbach-Winterthur line ($P_1$), the 3d MRD will shift left (eastward) and attack along a general axis Frauenfeld-Gossen to link up with the 4th MRD west of St. Gallen. The 3d and 4th MRDs will then attack south to clear the area to the Zurichsee-Walensee line.

The 101st CAA main effort (1st and 2d MRDs leading) will continue to attack south to seize the Wettingen-Zurich line ($P_2$) and be prepared to continue the attack southwestward on order.

The gap between the left boundary of the 100th CAA and the right boundary of the 101st CAA will be covered by the Front's independent motorized rifle regiment (reinf).

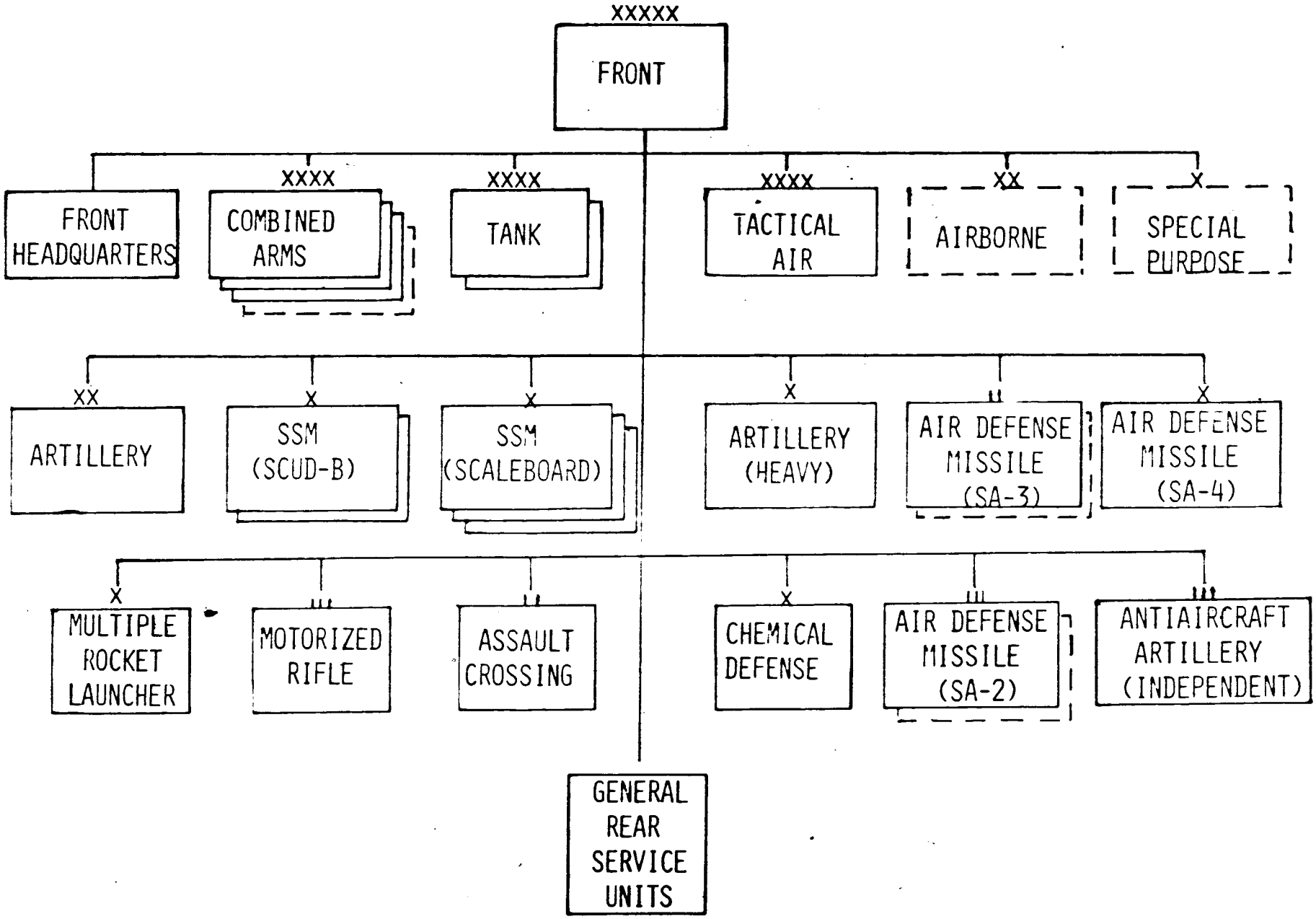
* * *

For the purpose of this study, only the main effort of the 101st CAA will be studied in detail, as it conforms to the area of Swiss military deployment under consideration.

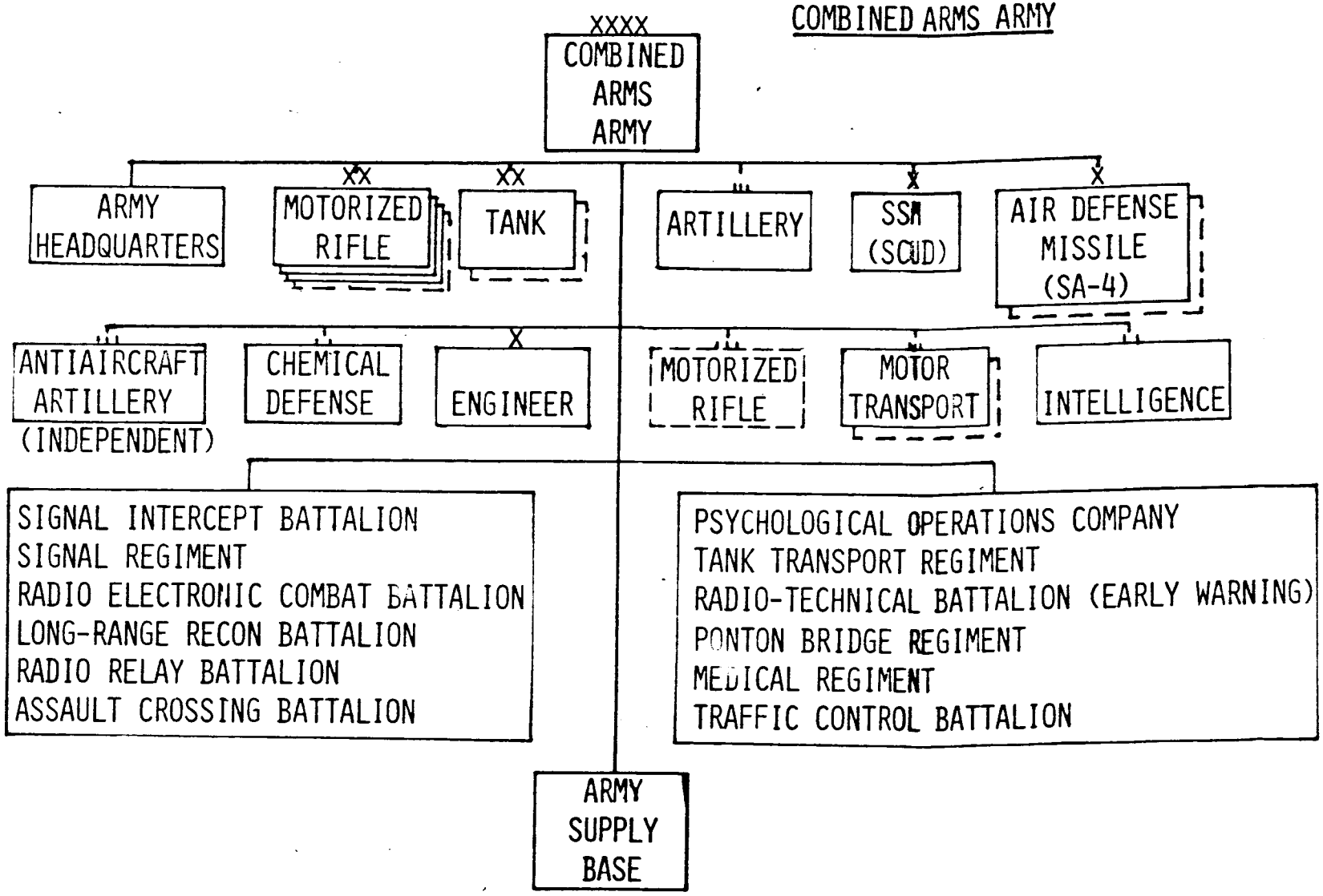
BASIC DATA ON SELECTED SOVIET WEAPONS
WITH OLI's

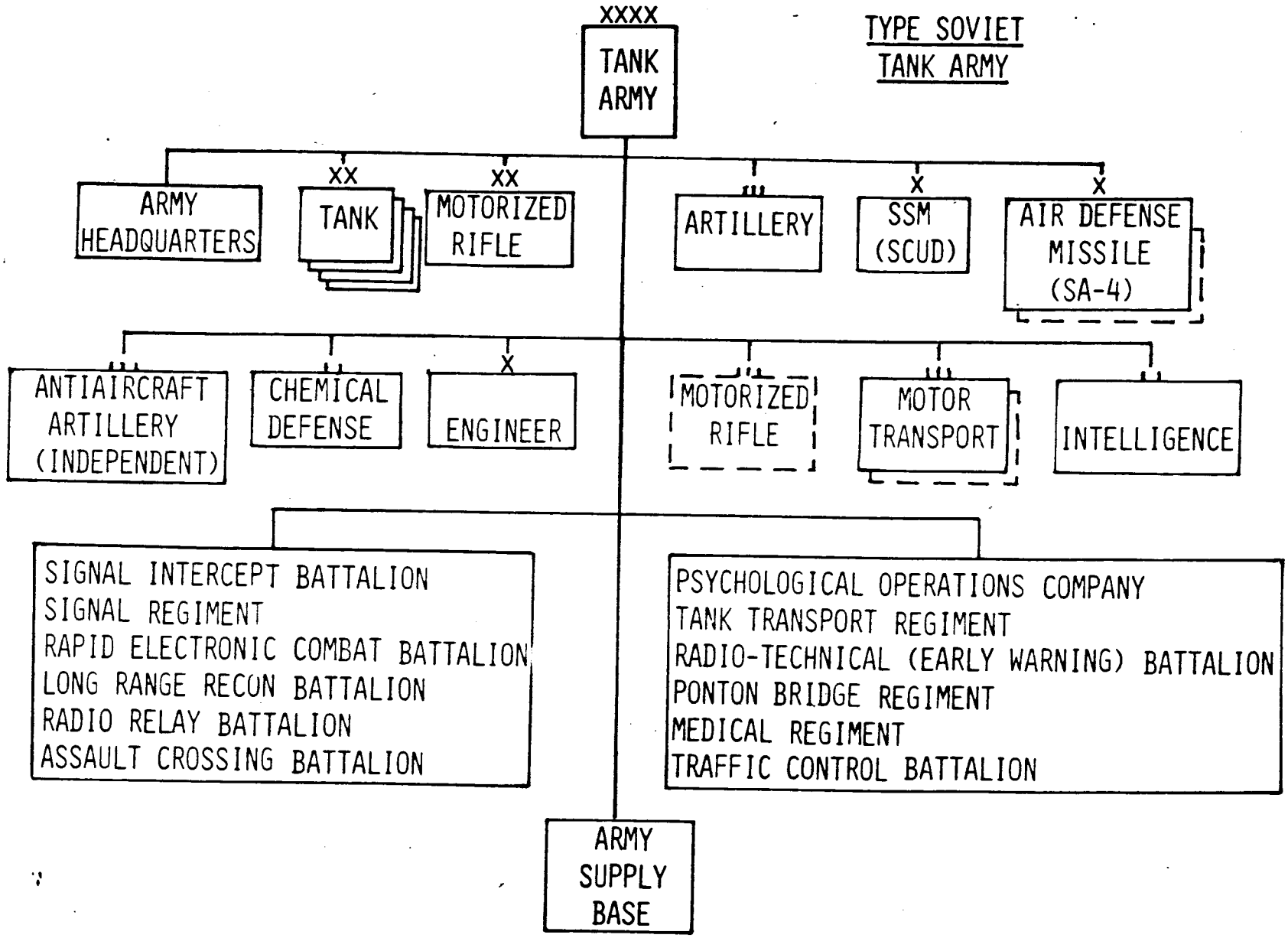
SOVIET FORCE ORGANIZATION
AND AGGREGATE OLI's

# TYPE SOVIET FRONT

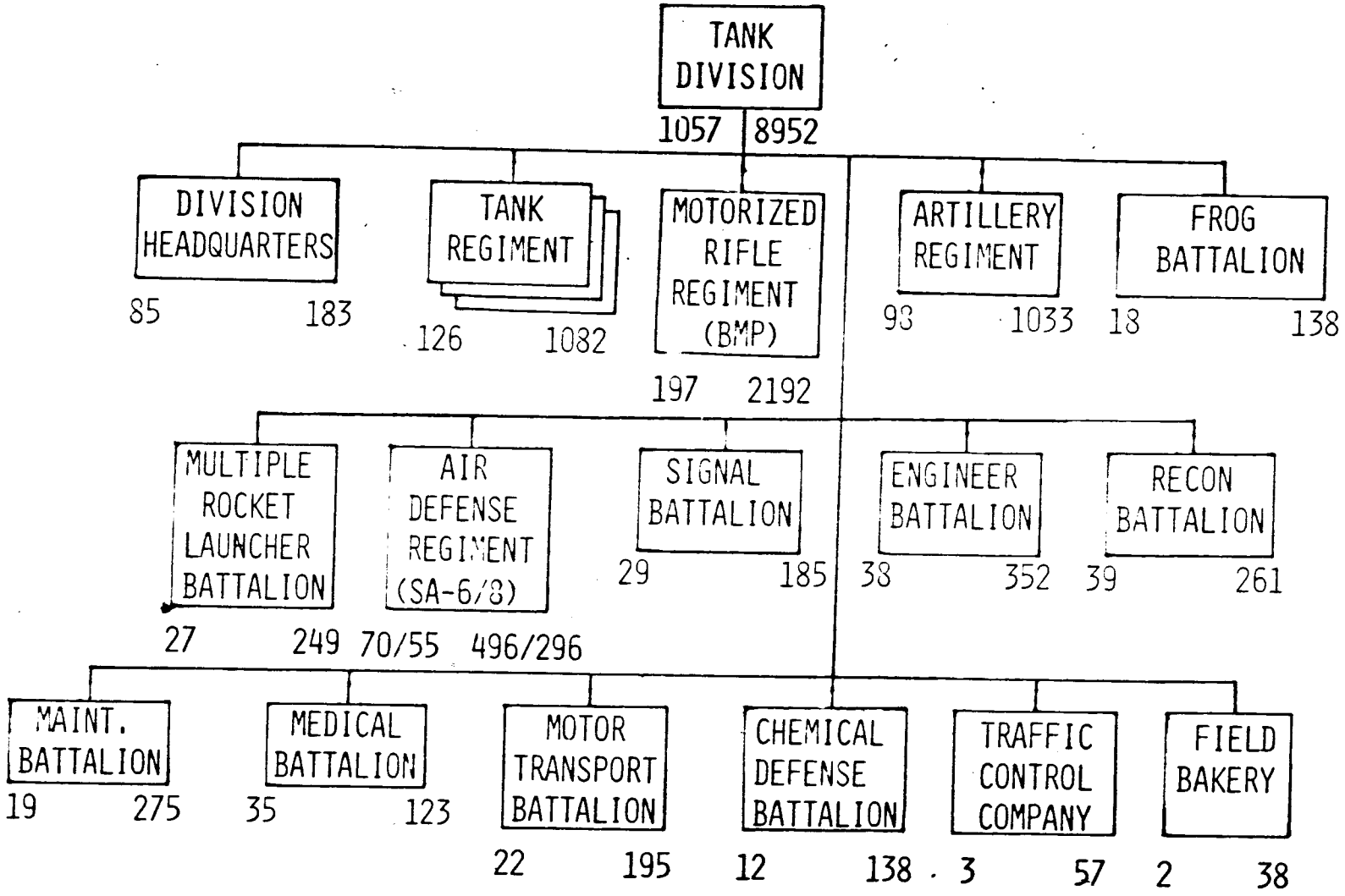


## TYPE SOVIET COMBINED ARMS ARMY

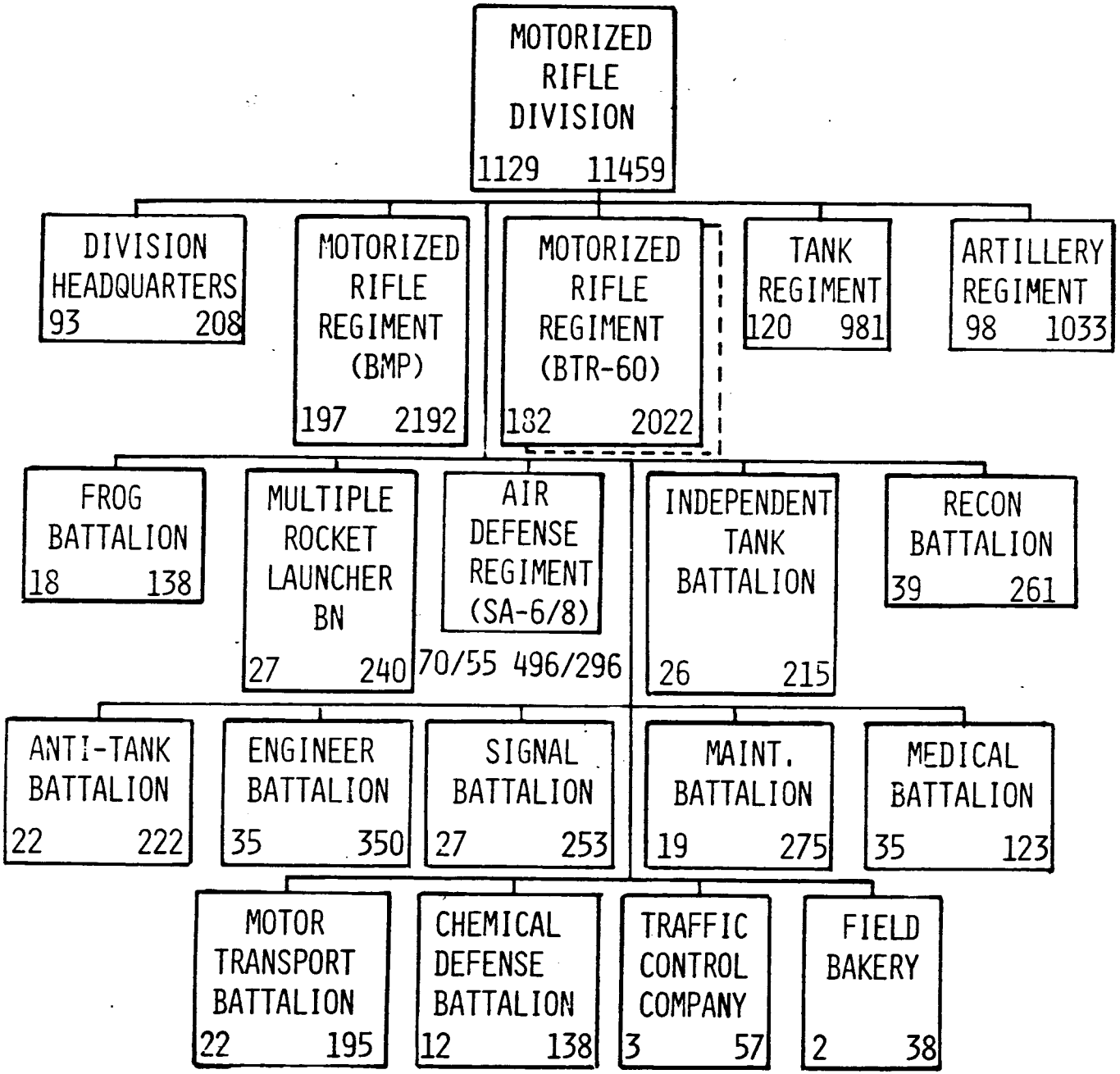



TYPE SOVIET
TANK ARMY
XXXX
TANK ARMY
ARMY HEADQUARTERS
XX
TANK
XX
MOTORIZED RIFLE
ARTILLERY
X
SSM (SCUD)
X
AIR DEFENSE MISSILE (SA-4)
ANTIAIRCRAFT ARTILLERY (INDEPENDENT)
CHEMICAL DEFENSE
X
ENGINEER
MOTORIZED RIFLE
MOTOR TRANSPORT
INTELLIGENCE
SIGNAL INTERCEPT BATTALION
SIGNAL REGIMENT
RAPID ELECTRONIC COMBAT BATTALION
LONG RANGE RECON BATTALION
RADIO RELAY BATTALION
ASSAULT CROSSING BATTALION
PSYCHOLOGICAL OPERATIONS COMPANY
TANK TRANSPORT REGIMENT
RADIO-TECHNICAL (EARLY WARNING) BATTALION
PONTON BRIDGE REGIMENT
MEDICAL REGIMENT
TRAFFIC CONTROL BATTALION
ARMY SUPPLY BASE

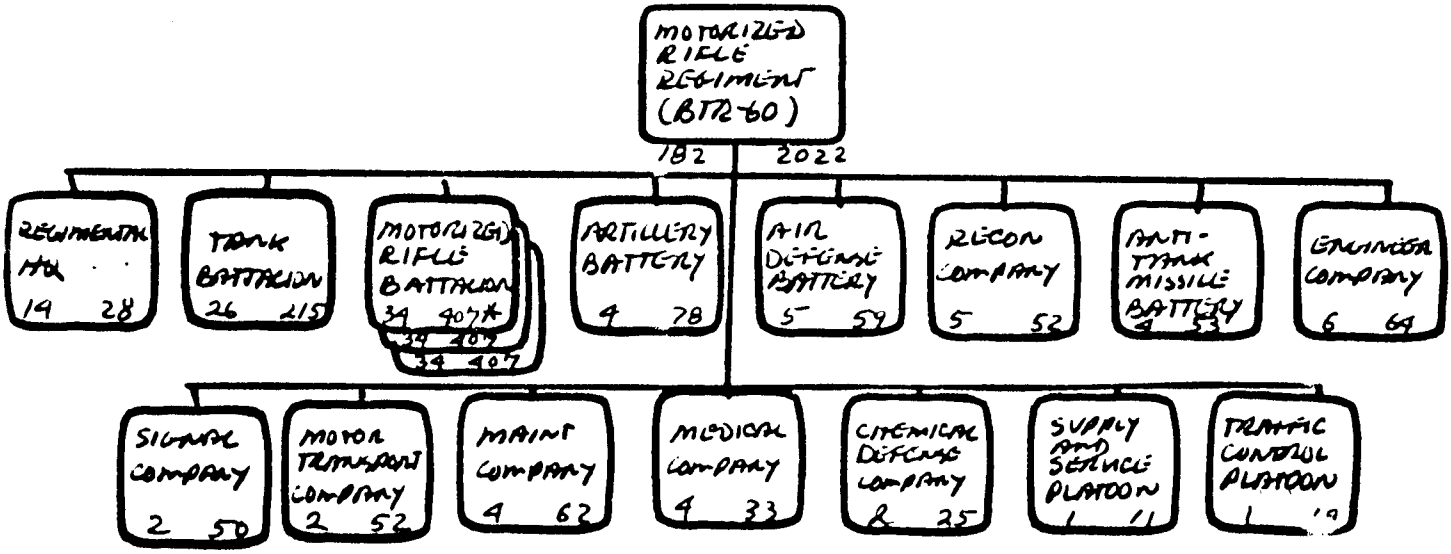
# SOVIET TANK DIVISION (TD)



# SOVIET MOTORIZED RIFLE DIVISION (MRD)



# SOVIET
# MOTORIZED RIFLE REGIMENT (BTR 60) (MRR-BTR60)



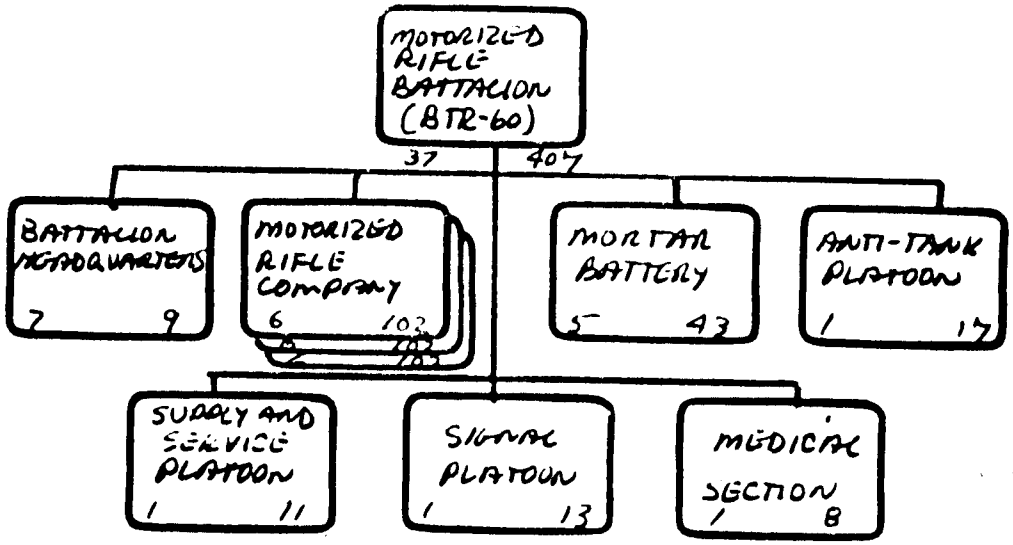

**SUBORDINATION:** Organic to Motorized Rifle Division

**MISSION:** To conduct offensive and defensive operations on a nuclear and non-nuclear battlefield as a part of a Motorized Rifle Division

* NOTE: ONE BN TRAINED IN HELICOPTER ASSAULT

| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | T-54/55/62 tanks (MED) | PT-76/BMP RECON VEH | BMP | BTR-60 | BRDM-2 | MOTORCYCLE | 7.62-mm PKM MG | ZSU-23-4 | BRDM-2 ATGM | SAGGER/FAGOT ATGM LAUNCHER | SAG-9 RL | RPG-7 GRENADE LAUNCHER | 120-mm MORTAR | 122-mm TOWED GUN | SA-7 GRAIL STOCK | SA-9 F.V. VEH | GROUND SURV RADAR, MANPACK | MTU BRIDGE TANK | TMM BRIDGE | TRUCKS |
| REGIMENTAL HQ | 14 | 28 | 42 | | | | 5 | | 1 | | | | | | | | | | | | | | 6 |
| TANK BN | 26 | 215 | 241 | 40 | | | | 3 | | | | | | | | | | 9 | | | | | 18 |
| MOTORIZED RIFLE BN 3 | 102 | 1221 | 1323 | | | | 93 | | | 171 | | | 6 | 6 | 81 | 18 | | 27 | | | | | 48 |
| ARTILLERY BTRY | 4 | 78 | 82 | | | | | | | | | | | | | | 6 | | | | | | 37 |
| AIR DEF. BTRY | 5 | 59 | 69 | | | | 1 | | | | 4 | | | | | | | | 4 | | | | 11 |
| RECON CO | 5 | 52 | 57 | | 3 | | | | 5 | | | | | | 5 | | | | | 1 | | | 3 |
| AT MSL BTRY | 4 | 53 | 57 | | | | | 3 | | | | 9 | | | | | | | | | | | 3 |
| ENGINEER CO | 6 | 69 | 70 | | | | 3 | | | | | | | | | | | | | | 4 | 4 | 14 |
| SIGNAL CO | 2 | 50 | 52 | | | | 2 | | | | | | | | | | | | | | | | 11 |
| MOTOR TRANSP. CO | 2 | 52 | 54 | | | | | | | | | | | | | | | | | | | | 26 |
| MAINT CO | 4 | 62 | 66 | | | | | | | | | | | | | | | | | | | | 11 |
| MEDICAL CO | 4 | 33 | 37 | | | | | | | | | | | | | | | | | | | | 8 |
| CHEM DEF. CO | 2 | 25 | 27 | | | | | 2 | | | | | | | | | | | | | | | 3 |
| SUPPLY AND SERVICE PLATOON | 1 | 11 | 12 | | | | | | | | | | | | | | | | | | | | 3 |
| TRAFFIC CONTROL PLT | 1 | 19 | 20 | | | | | | | | | | | | | | | | | | | | 3 |
| **TOTAL** | 182 | 2022 | 2204 | 40 | 3 | 0 | 104 | 8 | 9 | 171 | 4 | 9 | 6 | 6 | 86 | 18 | 6 | 36 | 4 | 1 | 4 | 4 | 205 |

# SOVIET
# MOTORIZED RIFLE BATTALION (BTR-60) (MRB-BTR60)



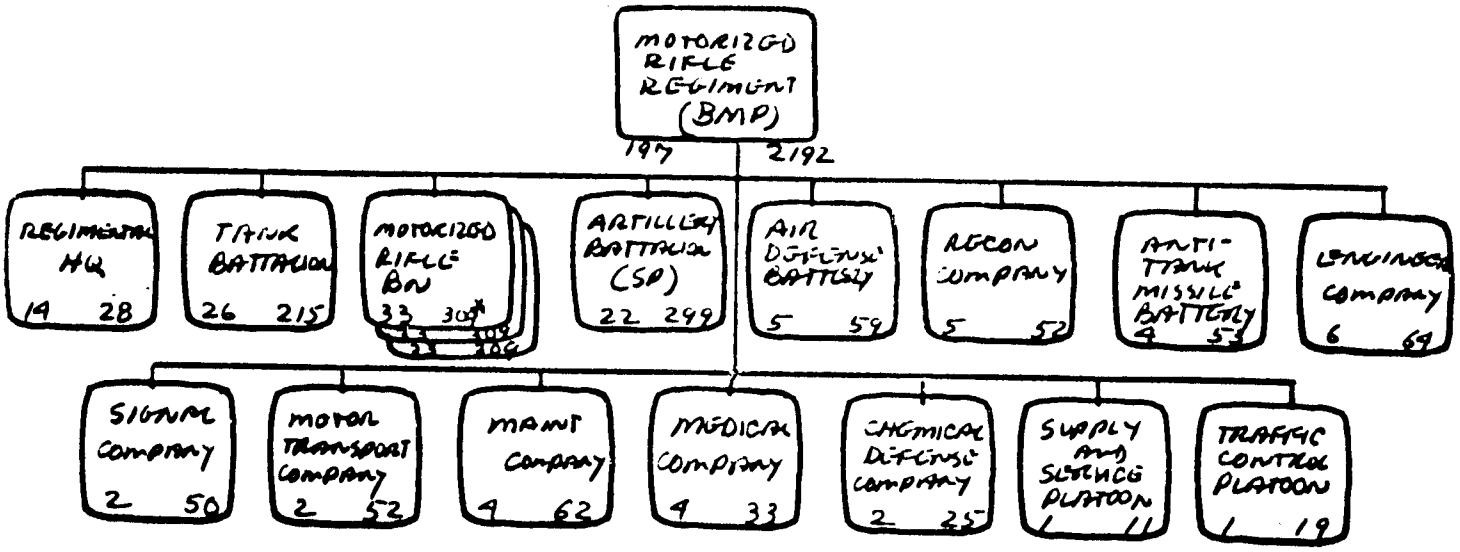

**SUBORDINATION:** Organic to Motorized Rifle Regiment (BTR-60) of Motorized Rifle Division

**MISSION:** To conduct offensive and defensive operations as a basic maneuver element of the Motorized Rifle Regiment.

| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | BTR-60 | SAGGER / FAGOT ATGM, MAN PACK | SPG-9 RECOILLESS RIFLE | 7.62-mm PKM MG | 7.62-mm AKMS RIFLE | 7.62-mm SVD RIFLE | 9-mm PM PISTOL | RPG-7 GRN LAUNCHER | 120-mm MORTAR | SA-7 GRAIL STRICK | TRUCK | |
| BATTALION HQ | 7 | 9 | 16 | 1 | | | | 9 | | 7 | | | | 1 | |
| MOTORIZED RIFLE CO. 3 | 18 | 306 | 329 | 30 | | | 57 | 198 | 9 | 48 | 27 | | 9 | | |
| MORTAR BTRY | 5 | 43 | 48 | | | | | 38 | | 10 | | 6 | | 7 | |
| ANTI-TANK PLT | 1 | 17 | 18 | | 2 | 2 | | 17 | | 1 | | | | 2 | |
| SUPPLY & SVC PLT | 1 | 11 | 12 | | | | | 11 | | 1 | | | | 3 | |
| SIGNAL PLT | 1 | 13 | 14 | | | | | 13 | | 1 | | | | 2 | |
| MEDICAL SECT | 1 | 8 | 9 | | | | | | | | | | | 1 | |
| TOTAL | 34 | 407 | 441 | 31 | 2 | 2 | 57 | 266 | 9 | 68 | 27 | 6 | 9 | 16 | |

SOVIET

# MOTORIZED RIFLE REGIMENT (BMP) (MRR-BMP)




**SUBORDINATION:** Organic to Motorized Rifle Division and Tank Division

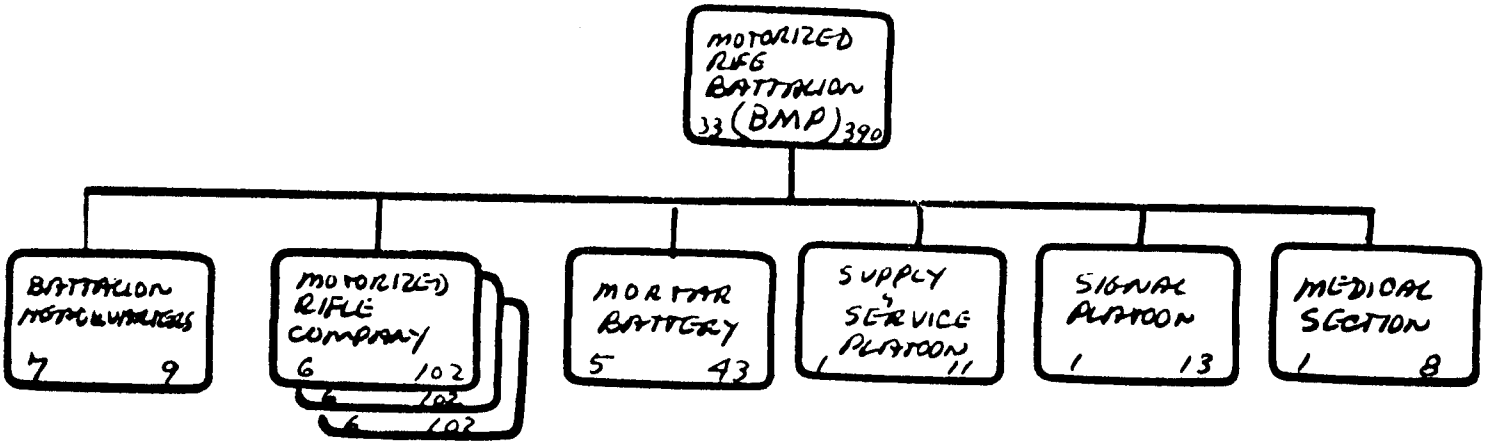
**MISSION:** To conduct offensive and defensive operations on a nuclear and non-nuclear battlefield as a part of a division.

*NOTE: ONE BN TRAINED IN HELICOPTER ASSAULT

| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | T-54/55/62 MED TANK | PT-76/BMP AIR ECON VEH | BMP | BTR-60 | BRDM-2 | MOTORCYCLE PKM 7.62mm MG | ZSU-23-4 | BRDM-2 ATGM | SAGGER/FAGOT MANPACK ATGM | SPG-9 RR | RPG-7 | 120mm MORTAR | 122mm SP GUN 2S1 | SA-7 STRICK | SA-9 &/U, VEH GROUND SURV RADAR, MANPACK | MTV TANK BARR | 1MM FOLDING BR | TRUCKS |
| REGIMENTAL HQ | 14 | 28 | 42 | | | 3 | 4 | | 4 | | | | | | | | | | | | | 6 |
| TANK BN | 26 | 215 | 241 | 40 | | | | 3 | | | | | | | | | 9 | | | | | 18 |
| MOTORIZED RIFLE BN 3 | 99 | 1170 | 1209 | | | 99 | | | 171 | | | | | 81 | 18 | | 27 | | | | | 42 |
| ARTY BN (SP) | 22 | 299 | 321 | | | | | | | | | | | | | 18 | | | | | | 37 |
| AIR DEF BTRY | 5 | 59 | 64 | | | | 1 | | | 4 | | | | | | | | 4 | | | | 11 |
| RECON COMPANY | 5 | 52 | 67 | | 5 | | | 5 | | | | | | | | | | | 1 | | | 3 |
| AT MSL BTRY | 4 | 53 | 57 | | | | | | | | 9 | | | | | | | | | | | 2 |
| ENGINEER CO | 6 | 64 | 70 | | | | 3 | | | | | | | | | | | | | 4 | 4 | 19 |
| SIGNAL CO | 2 | 50 | 52 | | | | 2 | | | | | | | | | | | | | | | 11 |
| MOTOR TRANSP CO | 2 | 52 | 54 | | | | | | | | | | | | | | | | | | | 26 |
| MAINT CO | 4 | 62 | 66 | | | | | | | | | | | | | | | | | | | 11 |
| MEDICAL CO | 4 | 33 | 37 | | | | | | | | | | | | | | | | | | | 8 |
| CHEM DEF CO | 2 | 25 | 27 | | | | | 2 | | | | | | | | | | | | | | 3 |
| SUPPLY & SVC PLT | 1 | 11 | 12 | | | | | | | | | | | | | | | | | | | 3 |
| TRAFFIC CONT PLT | 1 | 19 | 20 | | | | 1 | | 3 | | | | | | | | | | | | | 3 |
| **TOTAL** | 197 | 2192 | 2389 | 40 | 5 | 102 | 11 | 5 | 12 | 171 | 9 | 0 | 0 | 81 | 18 | 18 | 36 | 9 | 1 | 4 | 4 | 197 |

SOVIET

# MOTORIZED RIFLE BATTALION (BMP) (MRB-BMP)



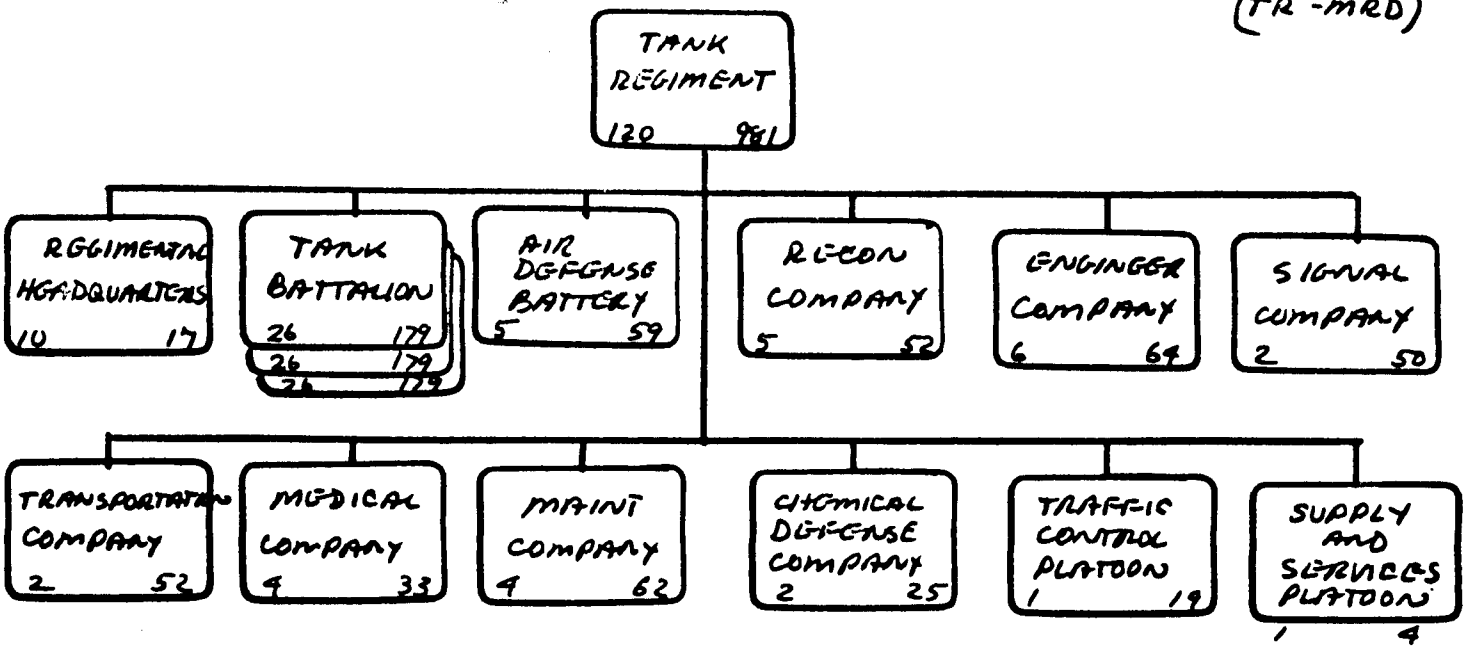

**SUBORDINATION:** Organic to Motorized Rifle Regiment (BMP) of the Motorized Rifle Division and Tank Division.

**MISSION:** To conduct offensive and defensive operations as the basic maneuver element of the Motorized Rifle Regiment (BMP)

| | PERSONNEL | | | SELECTED WEAPONS & EQUIPMENT | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | BMP | SAGGER/FAGOT ATGM MANPACK | SA-9 RECOILLESS RIFLE | 7.62-mm PKM MG | 7.62-mm AKMS RIFLE | 7.62mm SVD RIFLE | 9-mm PM PISTOL | RPG-7 GRN LAUNCHER | 120-mm MORTAR | SA-7 GRAIL STOCK | TRUCK |
| BATTALION HQ | 7 | 9 | 16 | 3 | | | | 9 | | 7 | | | | 1 |
| MOTORIZED RIFLE CO 3 | 18 | 306 | 324 | 30 | | | 57 | 148 | 9 | 48 | 27 | | 9 | |
| MORTAR BTRY | 5 | 43 | 48 | | | | | 38 | | 10 | | 6 | | 7 |
| SUPPLY AND SVC PLATOON | 1 | 11 | 12 | | | | | 11 | | 1 | | | | 3 |
| SIGNAL PLT | 1 | 13 | 14 | | | | | 13 | | 1 | | | | 2 |
| MEDICAL SECTION | 1 | 8 | 9 | | | | | | | | | | | 1 |
| TOTAL | 33 | 390 | 423 | 33 | 0 | 0 | 57 | 269 | 9 | 67 | 27 | 6 | 9 | 14 |

# SOVIET
# TANK REGIMENT (MRD)

(TR)
(TR-MRD)



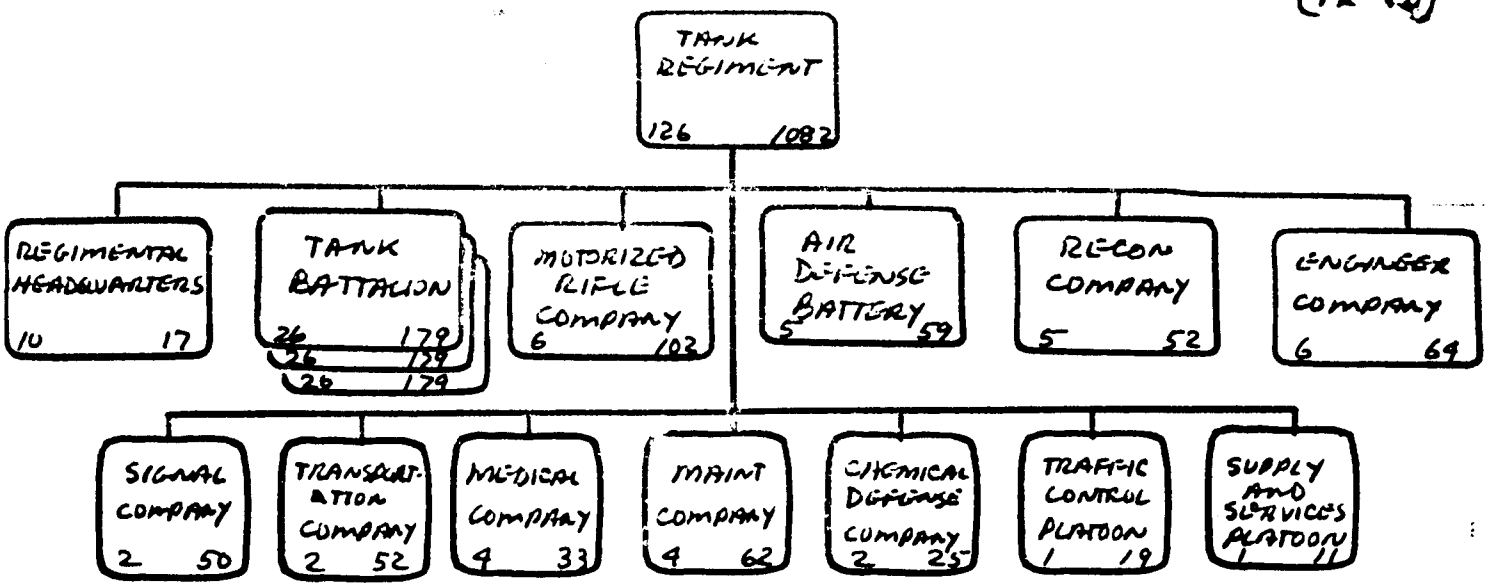

**SUBORDINATION:** Organic to Motorized Rifle Division.

**MISSION:** To conduct offensive and defensive operations on a nuclear and non-nuclear battlefield as part of a Motorized Rifle Division

NOTE: IF UNIT IS EQUIPPED WITH T 64/72 TANKS THEN DECREASE EM AND TOTAL PERSONNEL STRENGTH BY 95 PEOPLE

| | PERSONNEL | | | SELECTED WEAPONS & EQUIPMENT | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | T-54/55/62 MEDIUM TANK | PT-76/BMP-2 RECON VEH | BMP | BTR-60 (PA, PB & PU) | BRDM-2 | ZSU-23-4 | SA-9 F.U. VEH | SA-7 GRAIL STOCK | MOTORCYCLE | MTU TANK LAUNCH BRIDGE | TMM FOLDING BRIDGE | 762-mm PKM MG | GROUND SURV RADAR VEHICLE MOUNTED | TRUCKS | |
| REGIMENTAL HQ | 10 | 17 | 27 | 2 | | | 5 | | | | | | | | | | 8 | |
| TANK BN. 3 | 78 | 537 | 615 | 93 | | | | 9 | | | 27 | | | | | | 42 | |
| AIR DEF BTRY | 5 | 59 | 64 | | | | 1 | | 4 | 4 | | | | | | | 11 | |
| RECON COMPANY | 5 | 52 | 57 | | 3 | | | | | | | 5 | | | | 1 | 3 | |
| ENGINEER CO | 6 | 64 | 70 | | | | | | | | | | 6 | 4 | | | 14 | |
| SIGNAL CO | 2 | 50 | 52 | | | | 2 | | | | | | | | | | 11 | |
| TRANSPORT CO | 2 | 52 | 54 | | | | | | | | | | | | | | 26 | |
| MEDICAL CO | 4 | 33 | 37 | | | | | | | | | | | | | | 8 | |
| MAINT CO | 4 | 62 | 66 | | | | | | | | | | | | | | 28 | |
| CHEM DEF CO | 2 | 25 | 27 | | | | | 2 | | | | | | | | | 3 | |
| TRAFFIC CONT. PLT | 1 | 19 | 20 | | | | | | | | | | | | | | 3 | |
| SUPPLY & SVC PLT | 1 | 11 | 12 | | | | | | | | | | | | | | 3 | |
| **TOTAL** | 120 | 981 | 1101 | 95 | 3 | 0 | 8 | 11 | 4 | 4 | 27 | 5 | 6 | 4 | 0 | 1 | 147 | |

# SOVIET
# TANK REGIMENT (TD) (TR) (TR-TD)



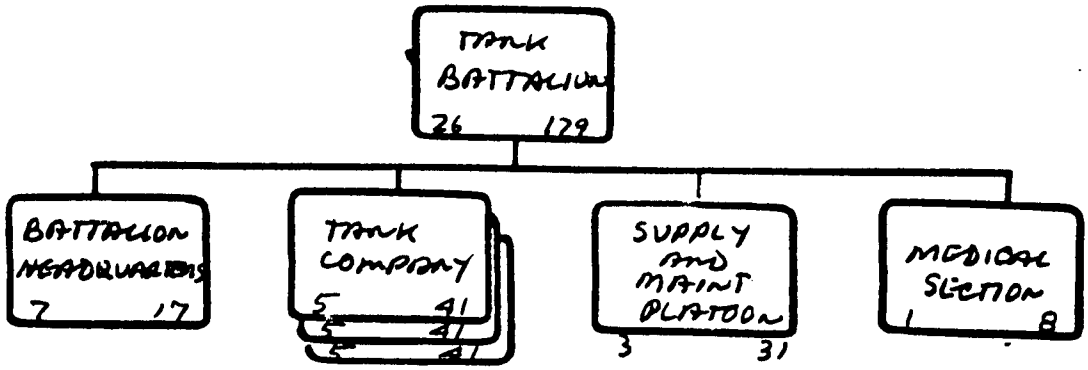

**SUBORDINATION:** Organic to Tank Division

**MISSION:** To conduct offensive and defensive operations on a nuclear and non-nuclear battlefield as part of a Tank Division

NOTE: IF UNIT IS EQUIPPED WITH T-64/72 TANKS THEN DECREASE EM AND TOTAL PERSONNEL STRENGTH BY 95 PER PLT

| | PERSONNEL | | | SELECTED WEAPONS & EQUIPMENT | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | T-54/55/62 MEDIUM TANK | PT-76/BMP-R RECON VEH. | BMP | BTR-60 (PA, PB & PU) | BRDM-2 | 2SU-23-4 | SA-9 F.V. VEH. | SA-7 GRAIL STICK | MOTORCYCLE | RPG-7 AT GREN LCHR | MTU LAUNCHED BRIDGE FOLDING | TMM BRIDGE | 7.62mm PKM MG | GROUND SURV RADAR VEHICLE MOUNTED | TRUCKS |
| REGIMENTAL HQ | 10 | 17 | 27 | 2 | | 1 | 9 | | | | | | | | | | | 8 |
| TANK BN 3 | 78 | 537 | 615 | 93 | | | | 9 | | | 27 | | | | | | | 42 |
| MOTORIZED RIFLE COMPANY | 6 | 102 | 108 | | | 10 | | | | | 3 | | 9 | | | 19 | | |
| AIR DEF. BTRY | 5 | 59 | 64 | | | | 1 | | 4 | 4 | | | | | | | | 11 |
| RECON CO | 5 | 52 | 57 | | 3 | | | | | | | 5 | | | | | 1 | 3 |
| ENGINEER CO | 6 | 69 | 70 | | | | | | | | | | | 6 | 4 | | | 19 |
| SIGNAL CO | 2 | 50 | 52 | | | | 2 | | | | | | | | | | | 11 |
| TRANSPORTATION CO | 2 | 52 | 54 | | | | | | | | | | | | | | | 26 |
| MEDICAL CO | 4 | 33 | 37 | | | | | | | | | | | | | | | 8 |
| MAINT CO | 4 | 62 | 66 | | | | | | | | | | | | | | | 15 |
| CHEMICAL DEF CO. | 2 | 25 | 27 | | | | | | | | | | | | | | | 3 |
| TRAFFIC CONTROL PLT | 1 | 19 | 20 | | | | | | | | | | | | | | | 3 |
| SUPPLY & SVC PLT | 1 | 11 | 12 | | | | | | | | | | | | | | | 3 |
| **TOTAL** | 126 | 1082 | 1209 | 95 | 3 | 11 | 7 | 11 | 4 | 4 | 30 | 5 | 9 | 6 | 4 | 19 | 1 | 147 |

# SOVIET
# TANK BATTALION (TB) (TB-TR)




**SUBORDINATION:** Organic to Tank Regiment of Motorized Rifle Division and Tank Division

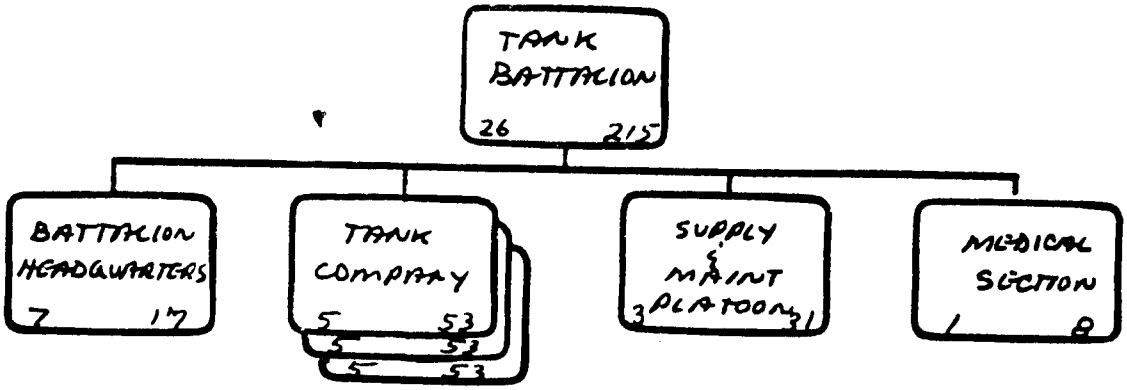
**MISSION:** To conduct offensive and defensive operations of the Tank Regiment by providing the firepower and armor protection to support the tactical doctrine of mobility, maneuverability and speed.

**NOTE: THIS BATTALION HAS 10-TANKS PER COMPANY**

| | PERSONNEL | | | SELECTED EQUIPMENT | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | T-54/55/62 MEDIUM TANK | 12.7-mm AA MG MOUNTED | BRDM-2 | 9-mm PISTOL PM | 7.62-mm RIFLE AKM | SA-7 GRAIL SPOTTER | TRUCK |
| BATTALION HQ | 7 | 17 | 24 | 1 | | 2 | 7 | 17 | | 3 |
| TANK CO 3 | 15 | 123 | 135 | 30 | 30 | | 15 | 123 | 9 | |
| SUPPLY & MAINT PLT | 3 | 31 | 34 | | | 1 | 3 | 31 | | 10 |
| MEDICAL SECT | 1 | 8 | 9 | | | | | | | 1 |
| **TOTAL** | 26 | 179 | 205 | 31 | 30 | 3 | 25 | 171 | 9 | 14 |

IF T-64/T-72 TANKS ARE USED, DECREASE TOTAL AND ENLISTED MEN BY 40, AS THIS TANK USE A 3 MAN CREW INSTEAD OF NORMAL 4 MAN CREW

# SOVIET
# INDEPENDENT TANK BATTALION (IND TB)




**SUBORDINATION:** Organic to Motorized Rifle Division

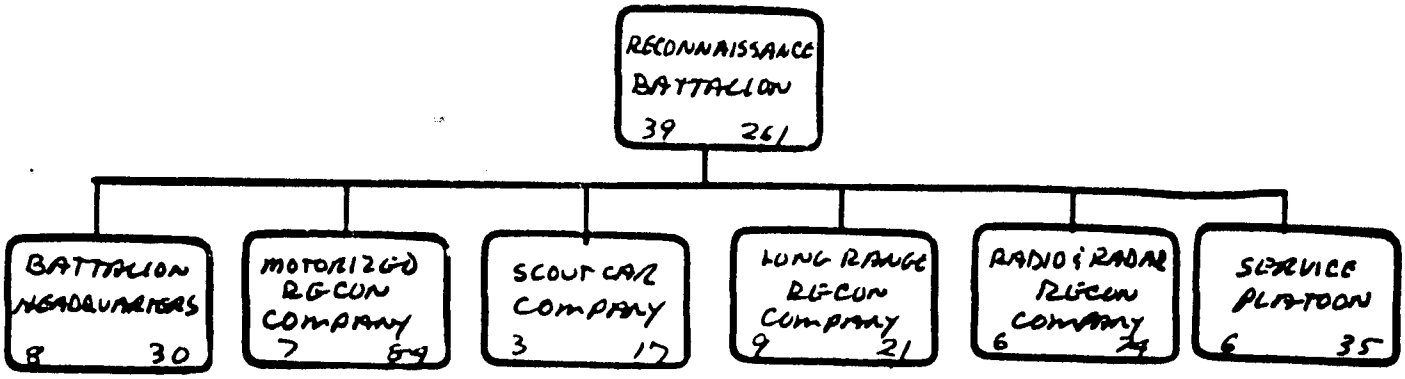
**MISSION:** To conduct offensive and defensive operations of the Motorized Rifle Division by providing the firepower and armor protection to support the tactical doctrine of mobility, maneuverability and speed.

**NOTE: THIS BATTALION HAS 13-TANKS PER COMPANY**

| | PERSONNEL | | | SELECTED WEAPONS SYSTEMS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | T-54/55/62 MEDIUM TANK | 12.7-mm AA MG MTD TANK | BRDM-2 | 9-mm PISTOL PM | 7.62-mm RIFLE AKM | SA-7 GRAIL STOCK | TRUCK | 7.62-mm MG PKM TANK MTD |
| BATTALION HQ | 7 | 17 | 29 | 1 | | 2 | 7 | 17 | | 3 | 1 |
| TANK CO 3 | 15 | 159 | 174 | 39 | 39 | | 15 | 159 | 9 | | 39 |
| SUPPLY & MAINT PLT | 3 | 31 | 34 | | | | | | | 10 | |
| MEDICAL SECTION | 1 | 8 | 9 | | | | | | | 1 | |
| **TOTAL** | 26 | 215 | 241 | 40 | 39 | 3 | 25 | 207 | 9 | 14 | 40 |

IF T-64/T-72 TANKS ARE USED, DECREASE ENLISTED MEN AND PERSONNEL TOTAL BY 40, AS THESE TANKS HAVE A 3-MAN CREW INSTEAD OF 4.

# SOVIET
# RECONNAISSANCE BATTALION (RECON B

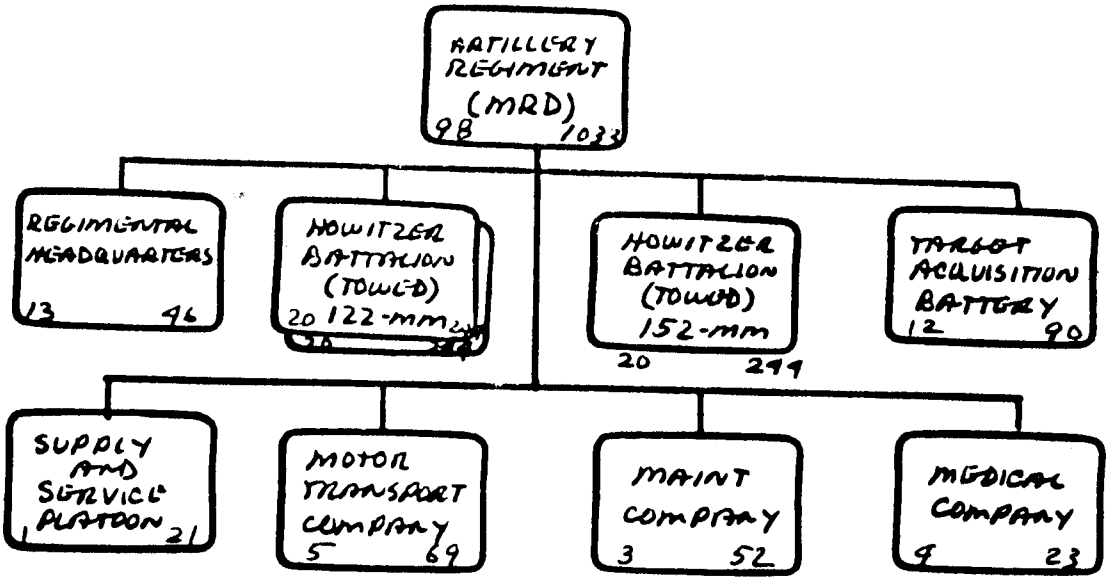



**SUBORDINATION:** Organic to Motorized Rifle Division and Tank Division

**MISSION:** To collect intelligence information on the location, disposition, composition, number, armament, combat preparedness and intentions of the enemy.

| | PERSONNEL | | | SELECTED WEAPONS & EQUIP | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | PT-76/BRDM RECON VEH. | BMP | MOTORCYCLES | 85mm ATGL RPG-7 | 7.62mm RIFLE AKM | 9.mm Pistol PM | SA-7 GRAIL STOCK | RADAR GROUND SURV VEHICLE MOUNTED | RADIO INTERCEPT VEHICLE MOUNTED | TRUCKS |
| BN HQ | 8 | 30 | 38 | | 3 | 1 | | 30 | 8 | | | | 9 |
| MOTORIZED RECON CO | 7 | 89 | 91 | | 14 | 32 | | 89 | 7 | 8 | | | |
| SCOUT CAR CO | 3 | 17 | 20 | 7 | | | | 17 | 3 | | | | |
| LONG RANGE RECON CO. | 9 | 21 | 30 | | 2 | | 5 | 21 | 9 | | | | |
| RADIO & RADAR RECON CO | 6 | 74 | 80 | | | | | 74 | 6 | | 8 | 8 | 20 |
| SERVICE PLT | 6 | 35 | 41 | | | | | 35 | 6 | | | | 2 |
| **TOTAL** | 39 | 261 | 300 | 7 | 19 | 33 | 5 | 261 | 39 | 8 | 8 | 8 | 36 |

# SOVIET
# ARTILLERY REGIMENT (MRD) (AR-MRD)




**SUBORDINATION:** Organic to Motorized Rifle Division (MRD)

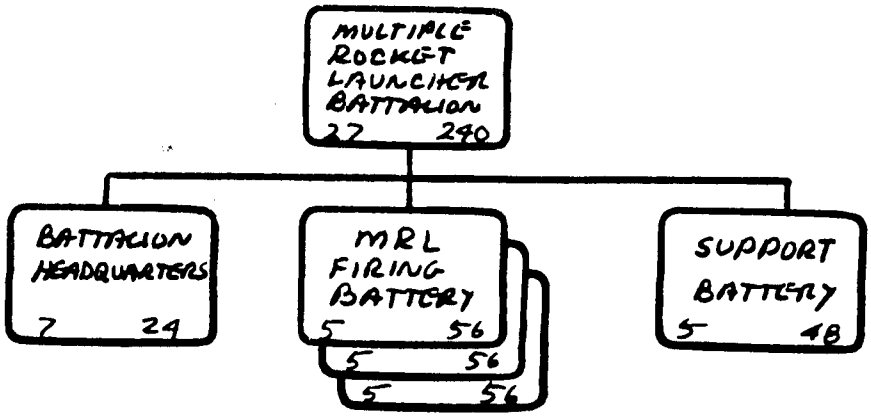
**MISSION:** To provide mid-range artillery fire in direct support of Motorized Rifle Division operations

| | PERSONNEL | | | SELECTED WPNS & EQUIP | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | 122-mm How D-30 | 152-mm How D-1 | TRUCK | BTR-60 | COUNTER BATTERY RADAR | SOUND RANGING SET | GROUND SURVL RADAR VEHICLE-MOUNTED | METEOROLOGICAL RADAR, LIND TRAY | |
| REGIMENTAL HQ | 13 | 46 | 59 | | | 8 | 5 | | | | | |
| HOW BN (122mm) 2 | 40 | 488 | 528 | 36 | | 82 | | | | | | |
| HOW BN (152-mm) | 20 | 294 | 264 | | 18 | 41 | | | | | | |
| TARGET ACQ BTRY | 12 | 90 | 102 | | | 7 | 1 | 1 | 1 | 1 | 1 | |
| SUPPLY & SVC PLT | 1 | 21 | 22 | | | 8 | | | | | | |
| MOTOR TRANSP. CO | 5 | 69 | 74 | | | 26 | | | | | | |
| MAINT CO | 3 | 52 | 55 | | | 17 | | | | | | |
| MEDICAL CO | 4 | 23 | 27 | | | 5 | | | | | | |
| TOTAL | 98 | 1033 | 1131 | 36 | 18 | 194 | 6 | 1 | 1 | 1 | 1 | |

NOTE: 152-mm D-1 Howitzers may be replaced by 152-mm SP, M 1973

# SOVIET
# MULTIPLE ROCKET LAUNCHER BATTALION (MRL)

(MRL)
(BM-21)



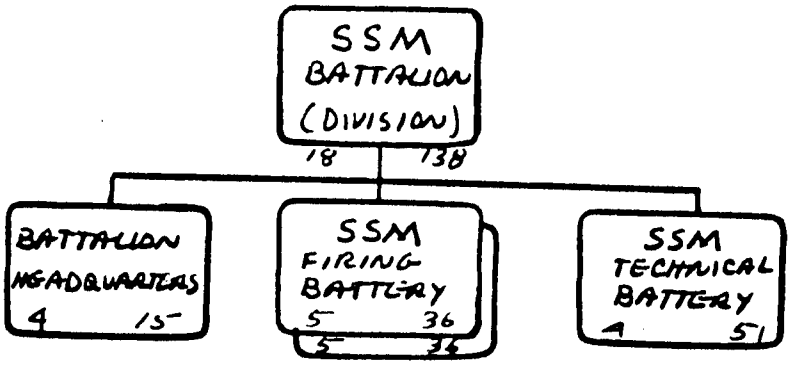

**SUBORDINATION:** Organic to Motorized Rifle Division and Tank Division
**MISSION:** To provide multi-barrelled rocket launcher capability in support of divisional operations.

| | PERSONNEL | | | SELECTED WPNS & EQUIP | | | |
|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | BM-21, MRL | BRDM-2 | TRUCKS | |
| BATTALION HQ | 7 | 24 | 31 | | 2 | 9 | |
| MRL FIRING BTRY 3 | 15 | 168 | 183 | 18 | | 12 | |
| SUPPORT BTRY | 5 | 48 | 53 | | | 28 | |
| TOTAL | 27 | 240 | 267 | 18 | 2 | 49 | |

| | USSR | U.S. | NATO |
|---|---|---|---|
| SYSTEM DESIGNATOR | BM-21 | BM-21 | BM-21 |
| MISSILE DESIGNATOR | M-21 OF | — | 122-mm RKT, Bm-21 |

# SOVIET
# SURFACE-TO-SURFACE MISSILE BATTALION (SSM) (FROG-7 on SS-21)

(FROG-7)
(SS-21)




**SUBORDINATION:** Organic to Motorized Rifle Division and Tank Division

**MISSION:** To provide the division with long range fire capability to engage critical targets in the enemy rear area

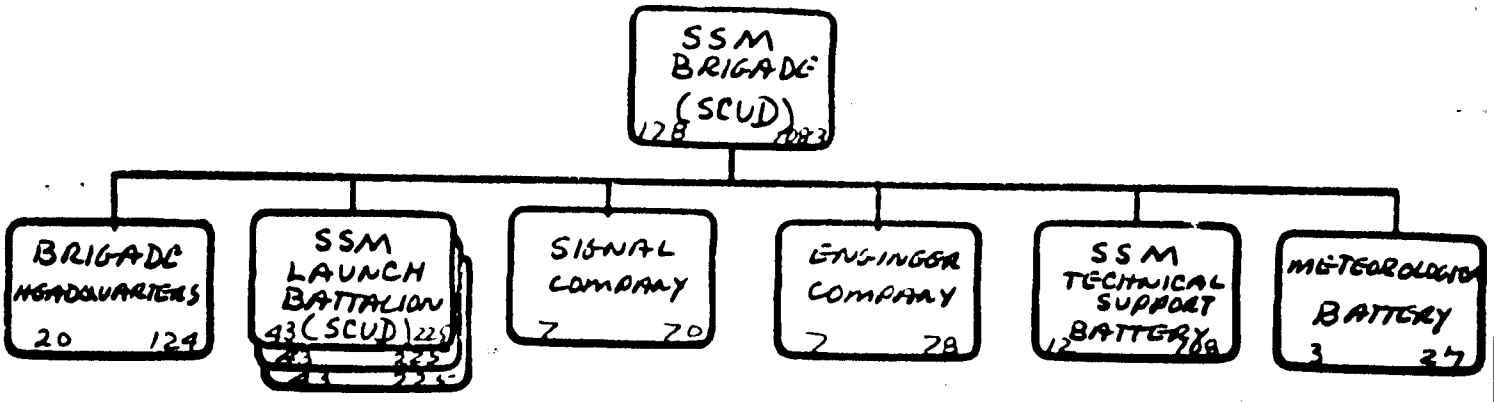
| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | SSM LAUNCHER | TRUCKS | METEOROLOGICAL RADAR (END TRAY) | METEOROLOGICAL RADAR (BREAD BIN) | BRDM-2 | RESUPPLY VEH MISSILE | COMMAND POST VEHICLE C.S.C. |
| BATTALION HQ | 4 | 15 | 19 | | 5 | | | 1 | | 1 |
| FIRING BTRY (2) | 10 | 72 | 82 | 4 | 8 | 2 | 2 | | 4 | 2 |
| TECHNICAL BTRY | 4 | 51 | 55 | | 29 | | | 1 | 4 | |
| TOTAL | 18 | 138 | 156 | 4 | 42 | 2 | 2 | 2 | 8 | 3 |

| | | USSR | US | NATO |
|---|---|---|---|---|
| SYSTEM DESIGNATION | a. | UNKNOWN | FROG-7 | — |
| | b. | UNKNOWN | SS-21 | — |
| MISSILE DESIGNATION | a. | LUNA | — | FROG-7 |
| | b. | UNKNOWN | — | |

NOTE: FROG = FREE ROCKET OVER GROUND

SS-21 IS DESIGNED TO REPLACE FROG-7 SYSTEM

# SOVIET
# SURFACE-TO-SURFACE MISSILE BRIGADE (SCU
# SS-1c / SCUD-B




**SUBORDINATION:** Front Commander, and organic to Army

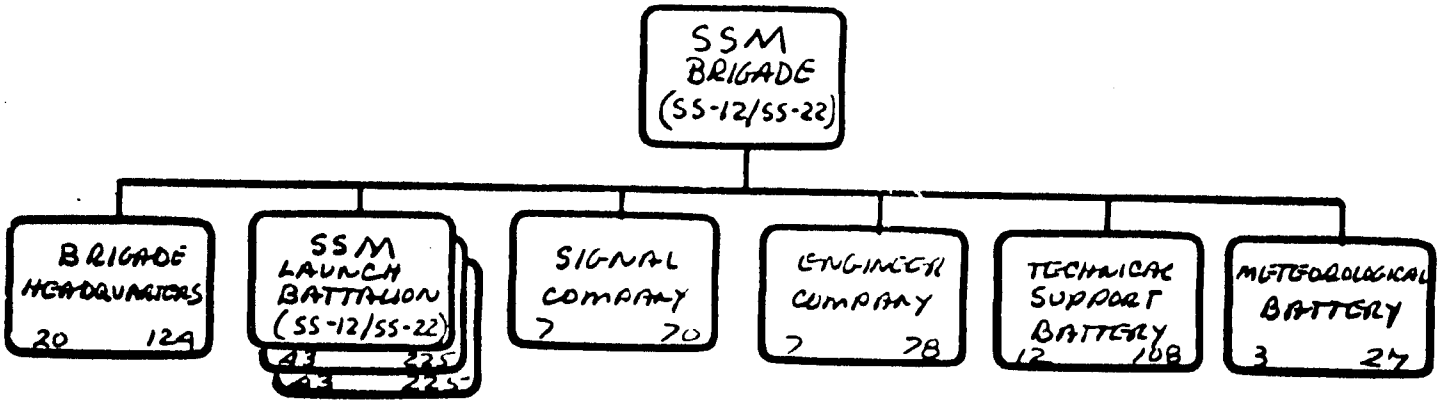
**MISSION:** Provide general fire support for Front and/or Army operations.

| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | SSM TEL, MAZ 543 | TRUCK | BAT DOZER | DITCHING MACHINE MDK-2 | MGT RADAR END TRAY | SSM RESUPPLY + TRAILER | CRANE, | COMMAND POST VEHICLE, CSC |
| BRIGADE HQ | 20 | 129 | 145 | | 75 | | | | | | 1 |
| SSM LAUNCH BATTALION 3 | 129 | 675 | 809 | 9 | 33 | | | | 9 | 6 | 12 |
| SIGNAL CO | 7 | 70 | 77 | | 20 | | | | | | |
| ENGINEER CO | 7 | 78 | 85 | | 26 | 15 | 5 | | | 5 | |
| TECH SAT BTRY | 12 | 108 | 120 | | 43 | | | | 9 | 4 | |
| MET BTRY | 3 | 27 | 30 | | 4 | | | 3 | | | |
| TOTAL | 178 | 1083 | 1261 | 9 | 201 | 15 | 5 | 3 | 18 | 15 | 13 |

| | USSR | U.S. | NATO |
|---|---|---|---|
| SYSTEM DESIGNATION | UNKNOWN | SS-1c | — |
| MISSILE DESIGNATION | UNKNOWN | — | SCUD-B |

NOTE: SCUD-B TRANSPORTER-ERECTOR-LAUNCHER (TEL) ARE MOUNTED ON A MAZ-543, 8x8 HIGH MOBILITY VEHICLE.

# SOVIET
## SURFACE-TO-SURFACE MISSILE BRIGADE (SS-12
## SS-12/SCALEBOARD OR SS-22 (SS-2



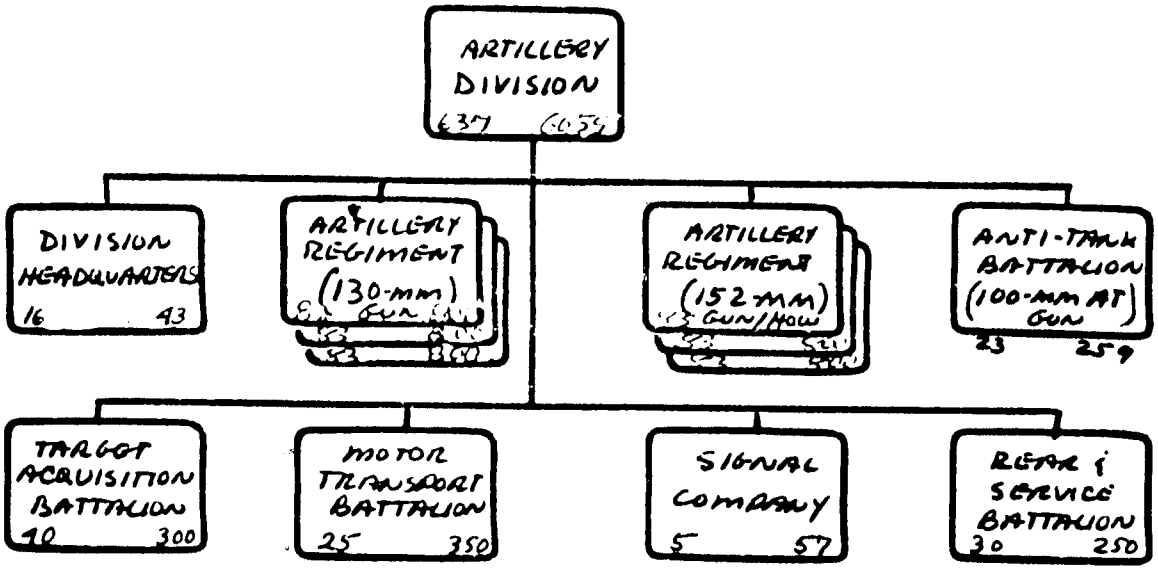

**SUBORDINATION:** FRONT Commander

**MISSION:** Provide ground fire support to FRONT operations

| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | SSM TEL, MAZ-543 | TRUCK | BAT DOZER | MDK-2 DITCHING MACHINE | MET IRADAR END-TRAY | SSM RESUPPLY VEH. | CRANE | COMMAND POST VEHICLE, ESC |
| BRIGADE HQ | 20 | 129 | 195 | | 75 | | | | | | 1 |
| SSM LAUNCH BN 3 | 129 | 675 | 809 | 9 | 33 | | | | 9 | 6 | 12 |
| SIGNAL CO | 7 | 70 | 77 | | 20 | | | | | | |
| ENGINEER CO | 7 | 78 | 85 | | 2 | 15 | 5 | | | 5 | |
| TECH SPT BTRY | 12 | 108 | 120 | | 43 | | | | 9 | 4 | |
| MET BTRY | 3 | 27 | 30 | | 4 | | | 3 | | | |
| **TOTAL** | 178 | 1083 | 1261 | 9 | 201 | 15 | 5 | 3 | 18 | 15 | 13 |

| | USSR | U.S. | NATO |
|---|---|---|---|
| SYSTEM DESIGNATION a. | UNKNOWN | SS-12 | — |
| b. | UNKNOWN | SS-22 | — |
| MISSILE DESIGNATION a. | UNKNOWN | — | SCALEBOARD |
| b. | UNKNOWN | — | |

# SOVIET
# ARTILLERY DIVISION (AD)




**SUBORDINATION:** Front Commander

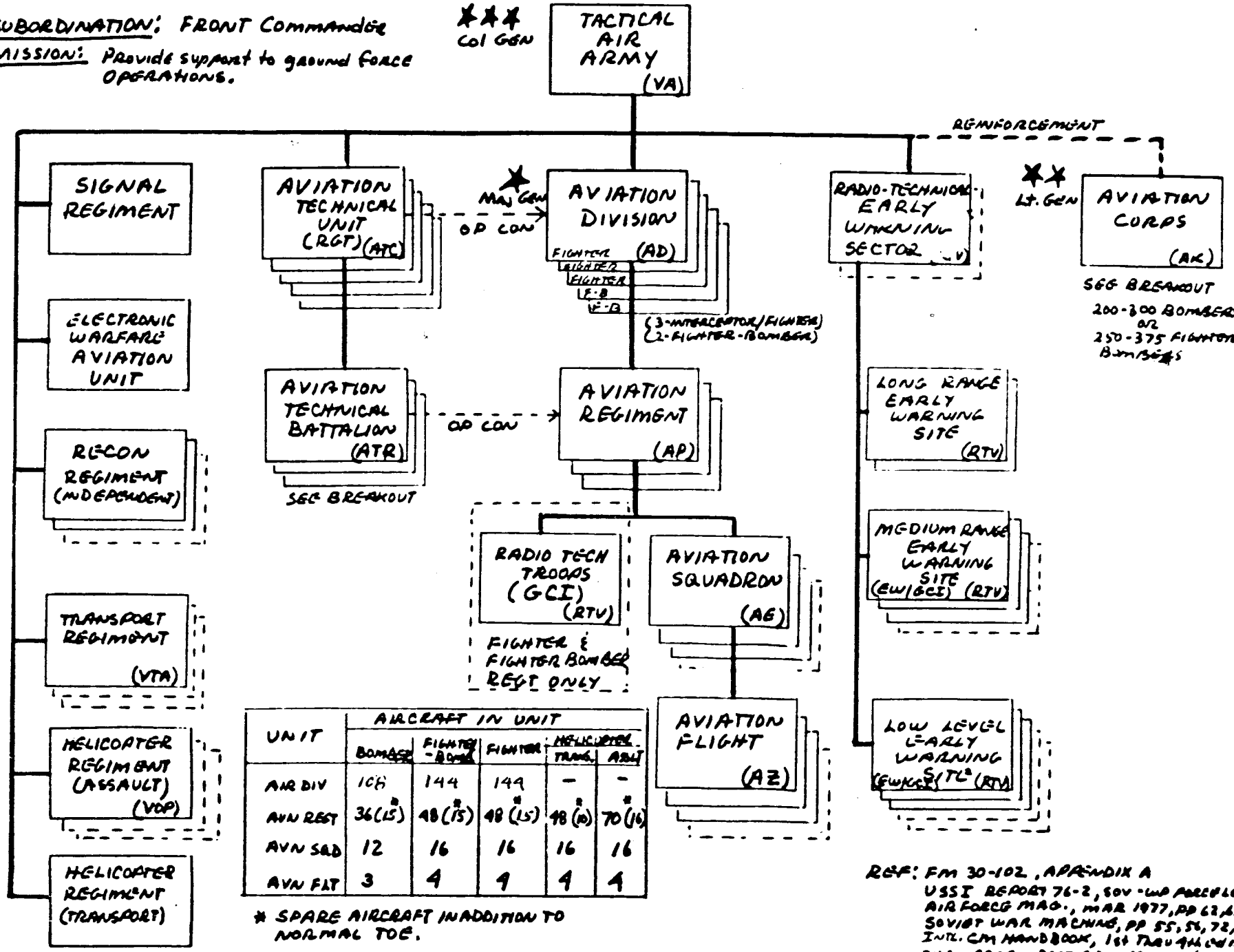
**MISSION:** Provide fire support to Armies making the main advance; assist in the defense of critical areas.

| | PERSONNEL | | | SELECTED WEAPONS & EQUIPMENT | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | | | | M-46 130-MM GUN TOWED | D-20 152 MM GUN/HOW (TOWED) | T-12, 100-MM AT GUN (TOWED) | BTR-60 PA/PB | MT-LB/AT-P ARTILLERY TRACTOR | ATS-59G ARTILLERY TRACTOR | COUNTER BATTERY RADAR | METEOROLOGICAL RADAR (END TRAJ) | GROUND SURVEILLANCE RADAR (VEHICLE MOUNTED) | SOUND RANGING SET | LASER RANGING SET | TRUCKS |
| DIVISION HQ | 16 | 43 | 59 | | | | | | | 10 | | | | | | | | 35 |
| ARTILLERY REGT (130-MM) (3) | 249 | 2400 | 2649 | | | | 162 | | | 18 | | 162 | 3 | 3 | 3 | 3 | | 351 |
| ARTILLERY REGT (152-MM) (3) | 249 | 2400 | 2649 | | | | | 162 | | 18 | | | 3 | 3 | 3 | 3 | | 513 |
| ANTI-TANK BN (100-MM AT GUN) | 23 | 259 | 282 | | | | | | 18 | | 18 | | | | | | | 50 |
| TARGET ACQUISITION BATTALION | 40 | 300 | 340 | | | | | | | 1 | | | 3 | 6 | 3 | 6 | 9 | 29 |
| MOTOR TRANSPORT BATTALION | 25 | 350 | 375 | | | | | | | | | | | | | | | 202 |
| SIGNAL COMPANY | 5 | 57 | 62 | | | | | | | 2 | | | | | | | | 15 |
| REAR & SERVICE BATTALION | 30 | 250 | 280 | | | | | | | | | | | | | | | 74 |
| TOTAL | 637 | 6059 | 6696 | | | | 162 | 162 | 18 | 49 | 18 | 162 | 9 | 12 | 9 | 12 | 9 | 1269 |

# TYPE SOVIET TACTICAL AIR ARMY

**SUBORDINATION:** FRONT Commander

**MISSION:** Provide support to ground force operations.

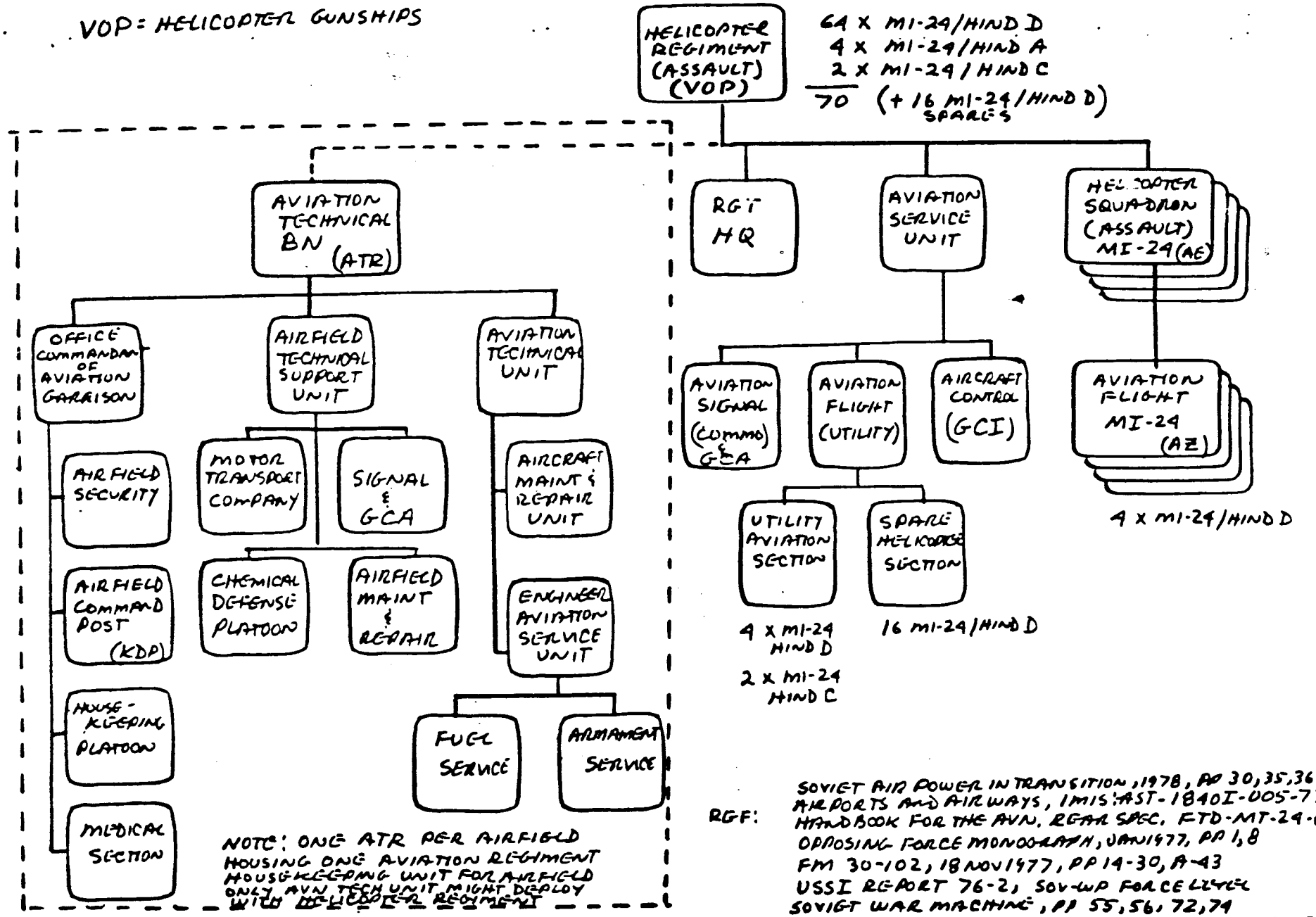



| UNIT | AIRCRAFT IN UNIT | | | | |
|---|---|---|---|---|---|
| | BOMBER | FIGHTER-BOMB | FIGHTER | HELICOPTER TRANS. | HELICOPTER ASLT |
| AIR DIV | 108 | 144 | 144 | — | — |
| AVN REGT | 36 (15)* | 48 (15)* | 48 (15)* | 48 (10)* | 70 (16)* |
| AVN SQD | 12 | 16 | 16 | 16 | 16 |
| AVN FLT | 3 | 4 | 4 | 4 | 4 |

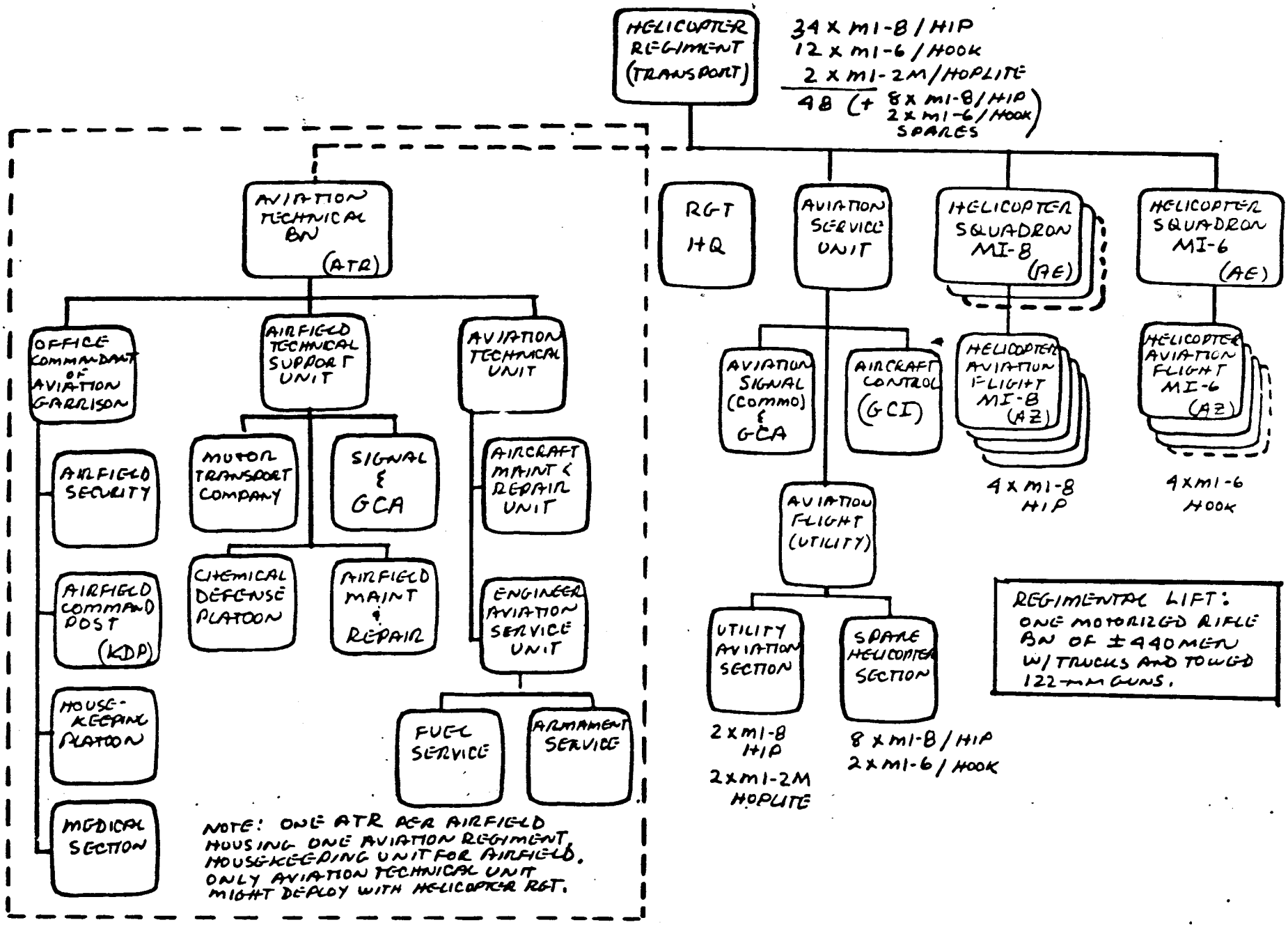
* SPARE AIRCRAFT INADDITION TO NORMAL TOE.

REF: FM 30-102, APPENDIX A
USSI REPORT 76-2, SOV-WP FORCE LEVEL
AIR FORCE MAG., MAR 1977, PP 62, 63, 107
SOVIET WAR MACHINE, PP 55, 56, 72, 79
INTL. CM HANDBOOK, 1st THRU 4th EDITIONS
THE WARSAW PACT ARMIES, 1977 (ENGLISH EDN)
IAG 13-U-78, APR 78, P. 2-21

VOP = HELICOPTER GUNSHIPS

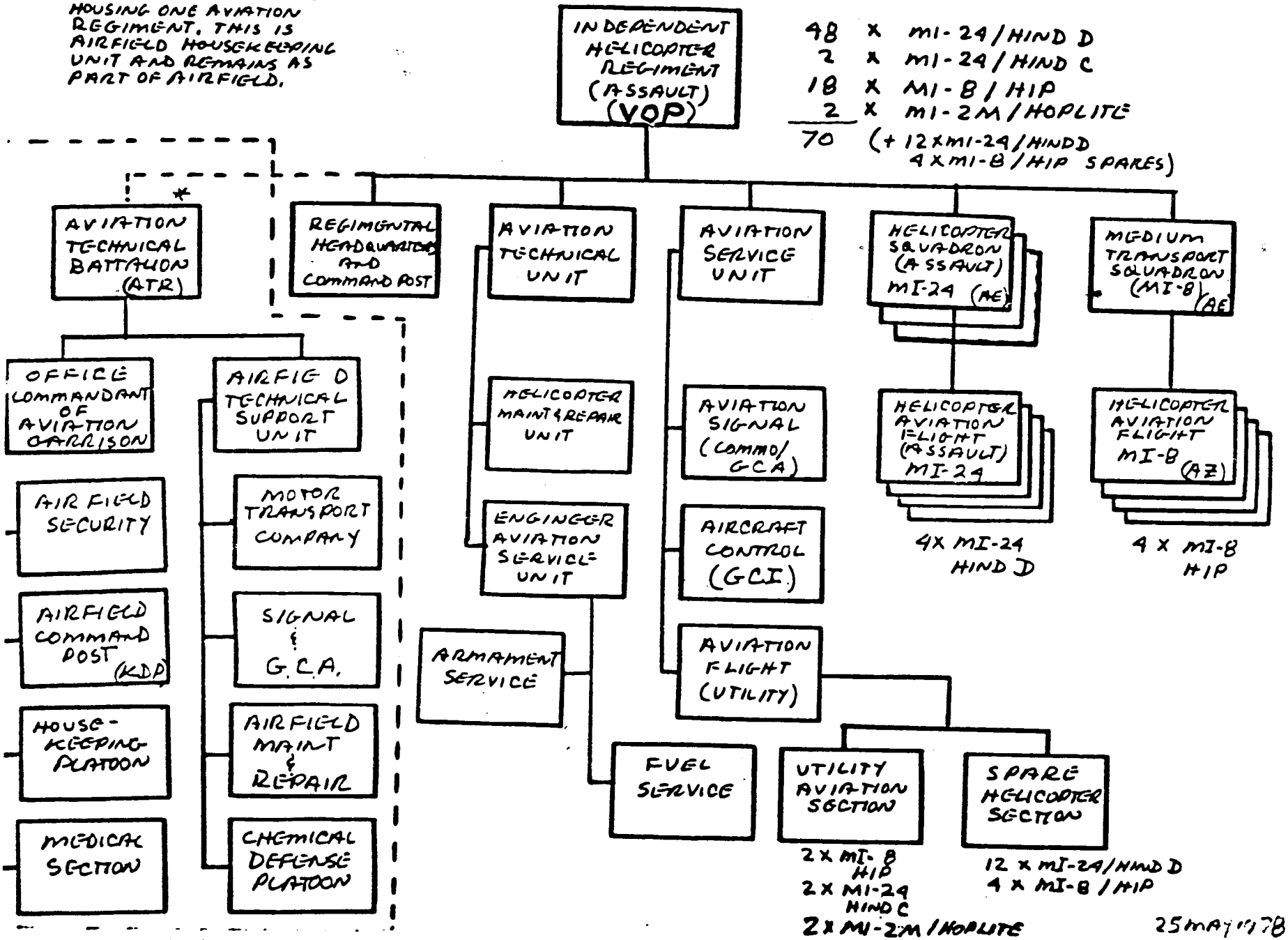



REF:
SOVIET AIR POWER IN TRANSITION, 1978, PP 30, 35, 36
AIRPORTS AND AIRWAYS, IMIS: AST-1840I-005-77
HANDBOOK FOR THE AVN. REGT SQDN. FTD-MT-24-604-7
OPPOSING FORCE MONOGRAPH, JAN 1977, PP 1, 8
FM 30-102, 18 NOV 1977, PP 14-30, A-43
USSI REPORT 76-2, SOV-WP FORCE LEVEL
SOVIET WAR MACHINE, PP 55, 56, 72, 74
JPRS 70437, 9 JAN 1978, USSR MILAFF, NO 1321, PP 28-47
AIR DEF HERALD, NO 7, 1977, PP (T) 132-141


HELICOPTER REGIMENT (TRANSPORT)
34 x MI-8 / HIP
12 x MI-6 / HOOK
2 x MI-2M / HOPLITE
48 (+ 8 x MI-8/HIP 2 x MI-6/HOOK SPARES)
RGT HQ
AVIATION SERVICE UNIT
HELICOPTER SQUADRON MI-8 (AE)
HELICOPTER SQUADRON MI-6 (AE)
AVIATION SIGNAL (COMMO) & GCA
AIRCRAFT CONTROL (GCI)
HELICOPTER AVIATION FLIGHT MI-8 (AZ)
HELICOPTER AVIATION FLIGHT MI-6 (AZ)
4 x MI-8 HIP
4 x MI-6 HOOK
AVIATION FLIGHT (UTILITY)
UTILITY AVIATION SECTION
SPARE HELICOPTER SECTION
2 x MI-8 HIP
2 x MI-2M HOPLITE
8 x MI-8 / HIP
2 x MI-6 / HOOK
REGIMENTAL LIFT: ONE MOTORIZED RIFLE BN OF ± 440 MEN W/ TRUCKS AND TOWED 122-MM GUNS.
AVIATION TECHNICAL BN (ATR)
OFFICE COMMANDANT OF AVIATION GARRISON
AIRFIELD SECURITY
AIRFIELD COMMAND POST (KDP)
HOUSE-KEEPING PLATOON
MEDICAL SECTION
AIRFIELD TECHNICAL SUPPORT UNIT
MOTOR TRANSPORT COMPANY
SIGNAL & GCA
CHEMICAL DEFENSE PLATOON
AIRFIELD MAINT & REPAIR
AVIATION TECHNICAL UNIT
AIRCRAFT MAINT & REPAIR UNIT
ENGINEER AVIATION SERVICE UNIT
FUEL SERVICE
ARMAMENT SERVICE
NOTE: ONE ATR PER AIRFIELD HOUSING ONE AVIATION REGIMENT. HOUSEKEEPING UNIT FOR AIRFIELD. ONLY AVIATION TECHNICAL UNIT MIGHT DEPLOY WITH HELICOPTER RGT.

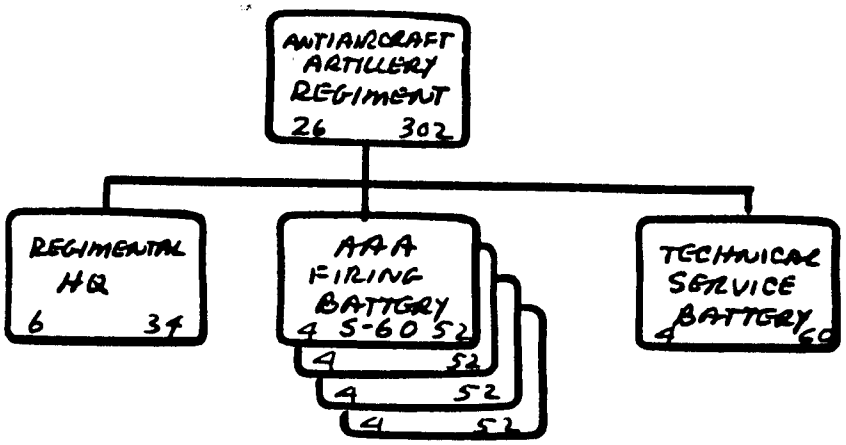
# 10P - HELICOPTER GUNSHIP

NOTE: ONE ATR PER AIRFIELD HOUSING ONE AVIATION REGIMENT. THIS IS AIRFIELD HOUSEKEEPING UNIT AND REMAINS AS PART OF AIRFIELD.




25 MAY 1978

# SOVIET
# ANTIAIRCRAFT ARTILLERY REGIMENT (AAA REGT)




**SUBORDINATION:** Organic to Motorized Rifle Divisions and Tank Divisions

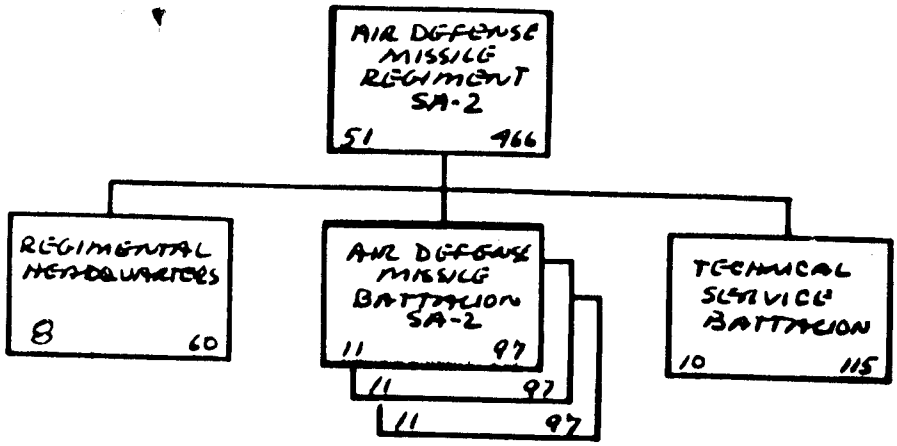
**MISSION:** Provide point air defense protection to division Headquarters, FROG/SS-21 battalion and maneuver regiments.

**NOTE:** This organization is being replaced by SA-6 or SA-8 SAM Regiment

| | PERSONNEL | | | SELECTED WEAPONS & EQUIP. | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | BTR-60 PA/PU (C&C) | 57-mm AA Gun S-60 | FLAT FACE E W/ACQ RADAR | FLAP WHEEL FIRE CONTROL RADAR | TRUCKS | |
| REGIMENTAL HQ | 6 | 34 | 40 | 2 | | 1 | | 8 | |
| AAA BTRY (4) | 16 | 208 | 224 | | 24 | | 4 | 48 | |
| TECHNICAL SVC BATTERY | 4 | 60 | 64 | | | | | 28 | |
| TOTAL | 26 | 302 | 328 | 2 | 24 | 1 | 4 | 84 | |

| | USSR | U.S. | NATO |
|---|---|---|---|
| GUN DESIGNATOR | S-60, 57mm Gun | S-60, 57mm Gun | S-60, 57mm Gun |
| RADAR DESIGNATOR a. | P-15 | - | FLAT FACE |
| b. | UNKNOWN | - | FLAP WHEEL |

# SOVIET
# AIR DEFENSE MISSILE REGIMENT SA-2 (SA 2 R




**SUBORDINATION:** Assigned to Army and Front as required

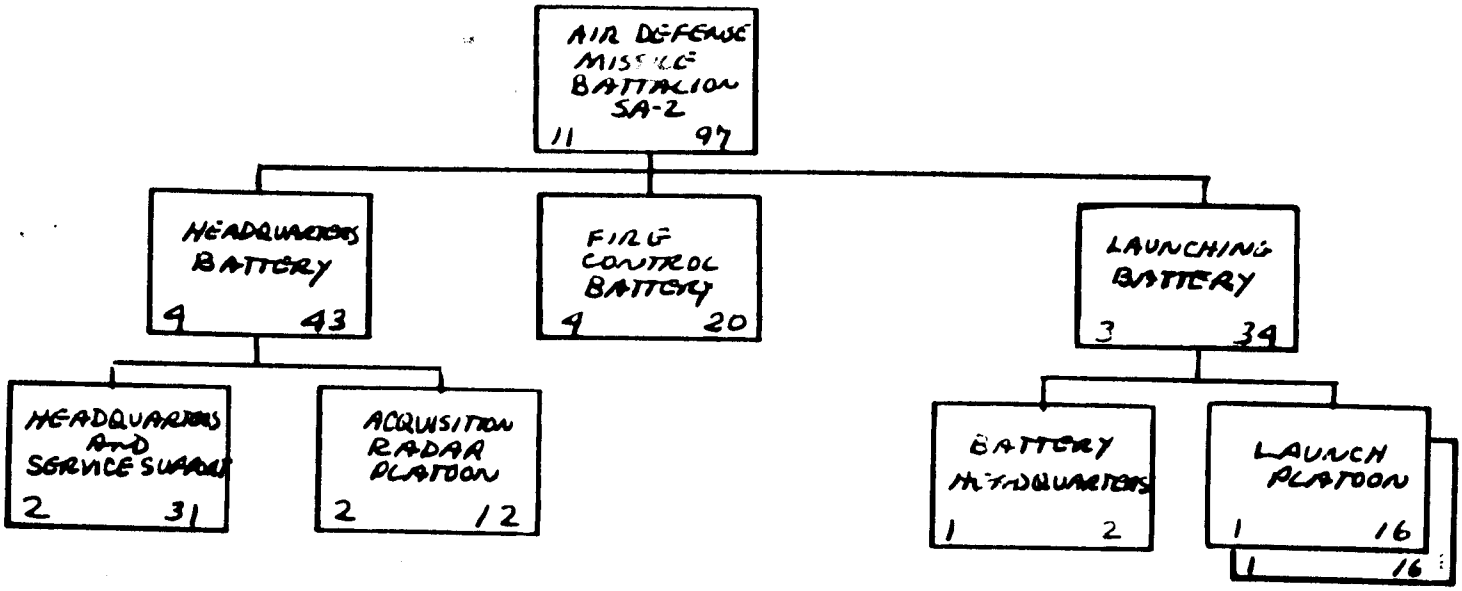
**MISSION:** Provide medium-to-high altitude air defense protection on an area basis to Army and Front

NOTE: SA-2 REGT NOW CONSIDERED SUB-STANDARD FOR CAT-I UNITS. REPLACED BY SA-4 BRIGADES

| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | SPOON REST ACQ RADAR | FLAT FACE EW RADAR | TRUCK, RADAR CONTROL | FAN SONG E F.C. RADAR | SEMI-TLR, ELECTRONIC YAN COMMO | TRUCK, MERCURY GRASS COMMO | TRAILER, 2-AXLE COMMO | TLR, 2-AXLE GENERATOR | TLR, MSL LAUNCHER SA-2 | SEMI-TLR, MSL TRANSPORT | SEMI-TLR, MSL CANISTER | CRANE, TRUCK MTD | TRUCK, TRACTOR, 6X6 21/2 TON | ARTY TRACTOR, MOD AT-S | TRUCK, MSL CHECKOUT | TRUCK, TANK PROPELLANT | TRUCK, KITCHEN | TRUCK, AMBULANCE | TRUCK, CARGO |
| REGIMENTAL HQ | 8 | 60 | 68 | 1 | 1 | 2 | | 3 | 1 | 1 | 2 | | | | | 3 | | | | 1 | 2 | 8 |
| AD MSL BN | 11 | 97 | 108 | 1 | | 1 | 1 | 4 | 1 | 1 | 5 | 6 | 6 | | | 10 | 6 | | | 1 | | 11 |
| AD MSL BN | 11 | 97 | 108 | 1 | | 1 | 1 | 4 | 1 | 1 | 5 | 6 | 6 | | | 10 | 6 | | | 1 | | 11 |
| AD MSL BN | 11 | 97 | 108 | 1 | | 1 | 1 | 4 | 1 | 1 | 5 | 6 | 6 | | | 10 | 6 | | | 1 | | 11 |
| TECH SVC BN | 10 | 115 | 125 | | | | | 2 | | | 2 | | 12 | 12 | 2 | 26 | | 2 | 6 | 1 | | 12 |
| TOTAL | 51 | 466 | 517 | 4 | 1 | 5 | 3 | 17 | 4 | 4 | 19 | 18 | 30 | 12 | 2 | 59 | 18 | 2 | 6 | 5 | 2 | 53 |

| | USSR | US | NATO |
|---|---|---|---|
| SYSTEM DESIGNATION | V75SM | SA-2 | - |
| MISSILE DESIGNATION | V750K | - | GUIDELINE |
| RADAR DESIGNATION a | UNKNOWN | - | FAN SONG E |
| b | P-12 | - | SPOON REST |
| c | P-15 | - | FLAT FACE |

# SOVIET
# AIR DEFENSE MISSILE BATTALION SA-2 (SA-2 Bi

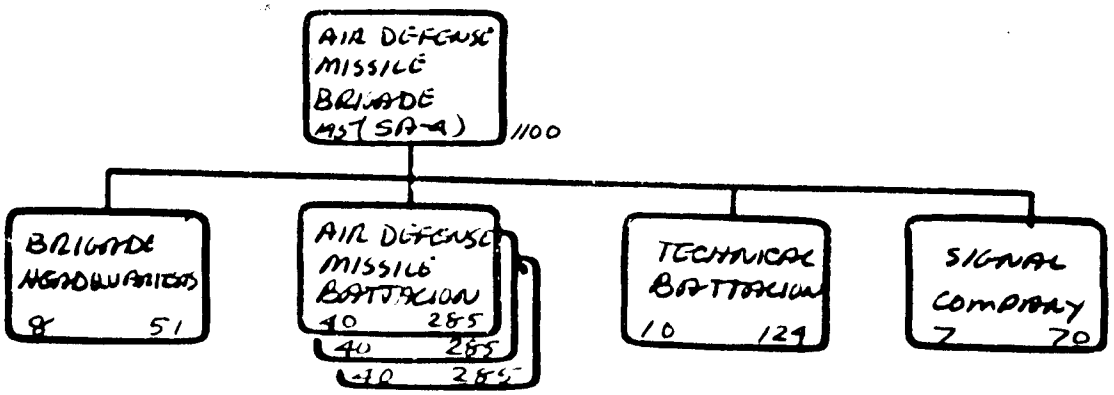



**SUBORDINATION:** Organic to Air Defense Missile Regiment, SA-

**MISSION:** Provide medium-to-high altitude air defense protection on an area basis to Army and Front as part of a SA-2 Regiment.

| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | SPOON REST ACQ RADAR | TRUCK, RADAR CONTROL | FAN SONG G F.C. RADAR | SEMI-TLR, ELECTRONIC VAN | TRUCK, MEASURING GLASS COMMO | TRAILER, 2-AXLE COMMO | TLR, 2-AXLE GENERATOR | TLR, MSL LAUNCHER SA-2 | SEMI-TLR, MSL TRANSPORT | TRUCK, TRACTOR, UNS E/L-131 | ARTY TRACTOR, MED AT-S | TRUCK, KITCHEN | TRUCKS, CARGO |
| HEADQUARTERS BATTERY | 4 | 43 | 47 | 1 | 1 | | | 1 | 1 | 1 | | | | | 1 | 3 |
| FIRE CONTROL BATTERY | 4 | 20 | 24 | | | 1 | 4 | | | 3 | | | 4 | | | 5 |
| LAUNCHING BATTERY | 3 | 34 | 37 | | | | | | | 1 | 6 | 6 | 6 | 6 | | 3 |
| TOTAL | 11 | 97 | 108 | 1 | 1 | 1 | 4 | 1 | 1 | 5 | 6 | 6 | 10 | 6 | 1 | 11 |

# SOVIET
# AIR DEFENSE MISSILE BRIGADE SA-9 (SA-4 B



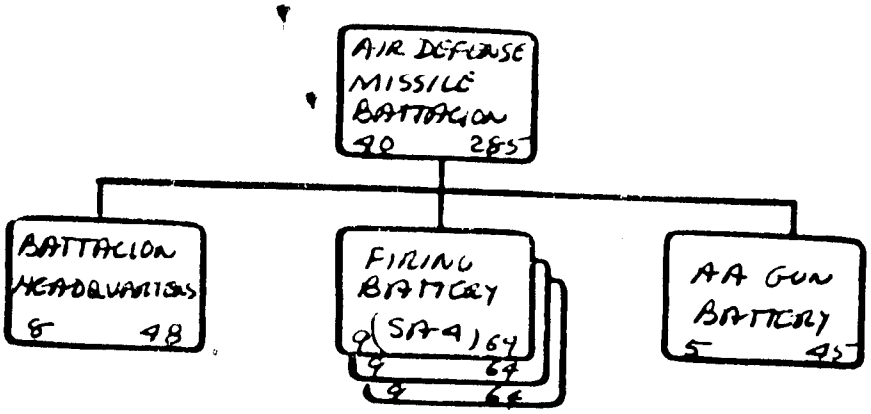

**SUBORDINATION:** Organic to Army and Front

**MISSION:** Provide medium-to-high altitude Air Defense protection on an area basis to the Army and its subordinate divisions.

| | PERSONNEL | | | SELECTED WEAPONS & EQUIP. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | RADAR, EW/ACQ LONG TRACK RADAR, FIRE CONTROL | RADAR, EW/ACQ PAT HAND RADAR, MF THIN SKIN | TEL, SA-9 | TRUCK, RESUPPLY SA-9 | ZU-23-2 AAA GUN | TRUCK, PRIME MOVER AA GUN, C&A 2½ | TRUCK, BOX BODY, C&C | TRUCK | |
| BRIGADE HQ | 8 | 51 | 59 | 1 | 1 | | | | | 2 | 8 | |
| AD MSL BN (3) | 120 | 855 | 975 | 3 | 9 | 27 | 27 | 24 | 24 | 12 | 51 | |
| TECHNICAL BN | 10 | 129 | 139 | | | | | | | | 42 | |
| SIGNAL CO. | 7 | 70 | 77 | | | | | | | | 20 | |
| TOTAL | 195 | 1100 | 1295 | 4 | 9 | 1 | 27 | 27 | 24 | 24 | 14 | 121 |

| | | USSR | U.S. | NATO | |
|---|---|---|---|---|---|
| SYSTEM DESIGNATOR | A. | UNKNOWN | SA-4a | — | |
| | B. | UNKNOWN | SA-4b | — | |
| | C. | ZU-23-2 | ZU-23-2 | ZU-23-2 | |
| MISSILE DESIGNATOR | A. | UNKNOWN | — | GANEF Mod 0 | LONG NOSE MSL |
| | B. | UNKNOWN | — | GANEF Mod 1 | SHORT NOSE MSL |
| | C. | N/A | N/A | N/A | |

# SOVIET
# AIR DEFENSE MISSILE BATTALION SA-4 (SA-4 Bn



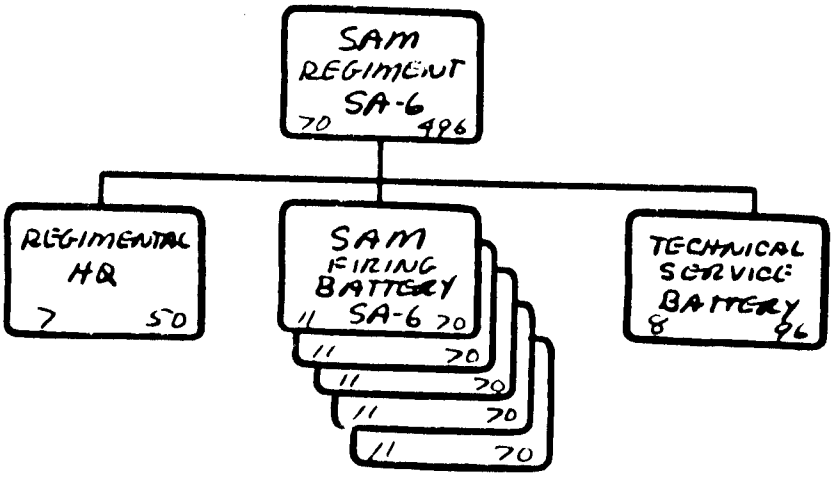

**SUBORDINATION:** Organic to Air Defense Missile Brigade, SA-4

**MISSION:** Provide medium-to-high altitude SAM protection on an area basis to the Army and its subordinate divisions as part of a SA-4 Brigade.

| | PERSONNEL | | | SELECTED ARMS & EQUIP | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | RADAR, EW/ACQ "LONG TRACK" | RADAR, FIRE CONTROL "FAT HEAD" | TEL, SA-4 | TRUCK, RESUPPLY SA-4 | ZU-23-2 AA GUN | TRUCK, PRIME MOVER AA GUN (ZIL-157) | TRUCK w/ BOX BODY C&C | TRUCK, CARGO |
| BATTALION HQ | 8 | 48 | 56 | 1 | | | | | | 1 | 7 |
| FIRING BTRY (3) | 27 | 192 | 219 | | 3 | 9 | 9 | | | 3 | 6 |
| AA GUN BATTERY | 5 | 45 | 50 | | | | | 8 | 8 | | 4 |
| TOTAL | 90 | 285 | 325 | 1 | 3 | 9 | 9 | 8 | 8 | 4 | 17 |

# SOVIET
# SURFACE-TO-AIR MISSILE
# REGIMENT SA-6

(SA-6)




**SUBORDINATION:** Organic to Motorized Rifle Division and Tank Division

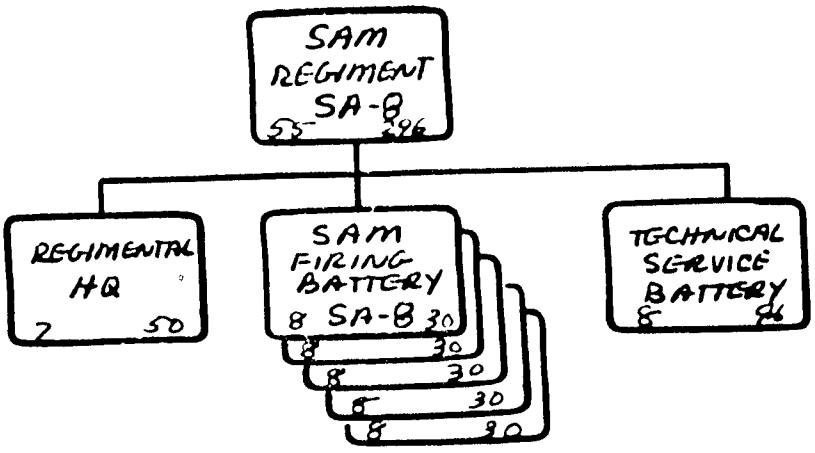
**MISSION:** Provide low to medium altitude air defense protection on an area basis to division and point protection to maneuver regiments, division headquarters and FROG/SS-21 battalion.

| | PERSONNEL | | | SELECTED WEAPONS & EQUIP | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | SA-6 TEL | STRAIGHT FLUSH ACQ/FIRE CONTROL RADAR | LONG TRACK ACQ/EW RADAR | THIN SKIN B HEIGHT FINDER 12 RADAR | SA-6 RESUPPLY TRUCKS, ZIL-131 | TRUCKS |
| REGIMENTAL HQ | 7 | 50 | 57 | | | 3 | 1 | | 7 |
| SAM FIRING BATTERY (5) | 55 | 350 | 405 | 20 | 5 | | | 20 | 5 |
| TECHNICAL SERVICE BATTERY | 8 | 96 | 104 | | | | | | 12 |
| TOTAL | 70 | 496 | 566 | 20 | 5 | 3 | 1 | 20 | 24 |

| | USSR | U.S. | NATO |
|---|---|---|---|
| SYSTEM DESIGNATOR | UNKNOWN | SA-6 | — |
| MISSILE DESIGNATOR | UNKNOWN | — | GAINFUL |
| RADAR DESIGNATOR a | UNKNOWN | — | LONG TRACK |
| b | UNKNOWN | — | THIN SKIN B |
| c | UNKNOWN | — | STRAIGHT FLUSH |

# SOVIET
# SURFACE-TO-AIR MISSILE REGIMENT SA-8

(SA-8)




**SUBORDINATION:** Organic to Motorized Rifle Division and Tank Division

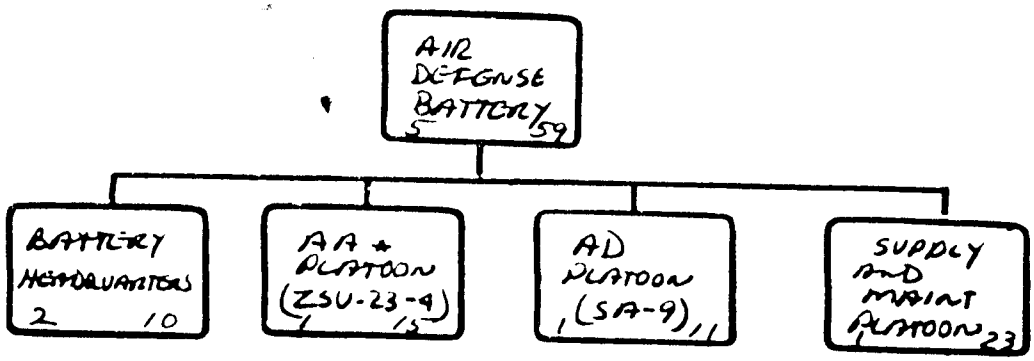
**MISSION:** Provide low to medium altitude air defense protection on an area basis to division and point protection to maneuver regiments, division headquarters and FROG/SS-21 battalion.

| | PERSONNEL | | | SELECTED WEAPONS & EQUIPMENT | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | SA-8 FIRE UNIT (LAND ROLL ACQ/FC RADAR W/ MSL & LCHR) | BTR-60 PA/PU C&C | LONG TRACK ACQ/FC RADAR | THIN SKIN B HEIGHT FINDER RADAR | SA-8 RESUPPLY VEHICLE | TRUCKS | |
| REGIMENTAL HQ | 7 | 50 | 57 | | 1 | 3 | 1 | | 7 | |
| SAM FIRING BATTERY (5) | 40 | 150 | 190 | 20 | 5 | | | 20 | 5 | |
| TECHNICAL SERVICE BATTERY | 8 | 96 | 104 | | | | | | 12 | |
| TOTAL | 55 | 296 | 351 | 20 | 6 | 3 | 1 | 20 | 29 | |

| | USSR | US. | NATO |
|---|---|---|---|
| SYSTEM DESIGNATOR | UNKNOWN | SA-8 | — |
| MISSILE DESIGNATOR | UNKNOWN | — | GGCKO |
| RADAR DESIGNATOR a | UNKNOWN | — | LONG TRACK |
| b | UNKNOWN | — | THIN SKIN B |
| c | UNKNOWN | — | LAND ROLL |

# SOVIET
# AIR DEFENSE BATTERY

(ZSU-23-4
SA-9)




**SUBORDINATION:** Organic to Motorized Rifle and Tank Regiments

**MISSION:** Provide close-in air defense protection to regiment by engaging targets at maximum operational ranges during offensive and defensive operations

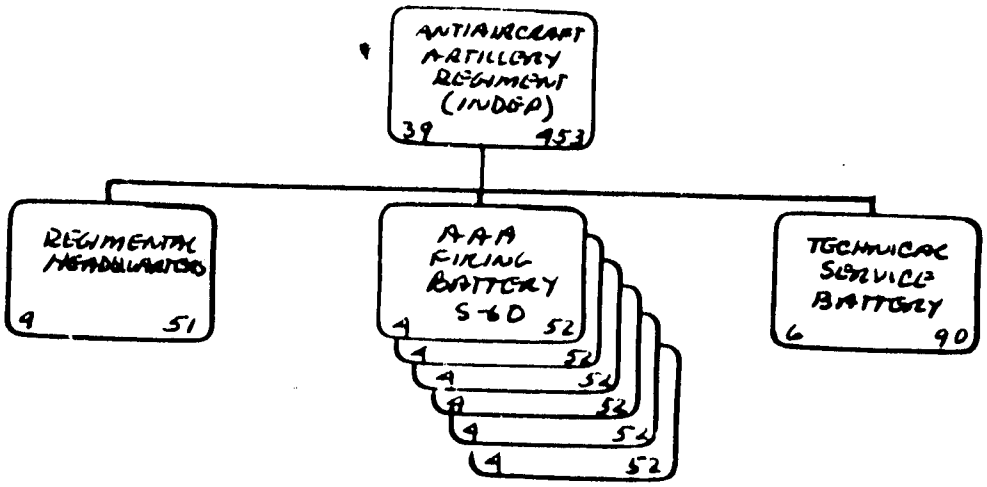
* IN OFFENSIVE OPERATIONS SUPPORT FIRST ECHELON BATTALION, OPERATE AS A SECTION OF TWO ZSU-23-4

| | PERSONNEL | | | SELECTED WEAPONS & EQUIP | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | BTR-60PU C&C | ZSU-23-4 | TRUCK, CARGO | GA 2766 MISSILE RESUPPLY | ZIL-131 AMMO RESUPPLY | MAINT BUS/BODY TRUCK ZIL-131 | GENERATOR | BRDM-2 & (1) SA-9 F.U. VEH | BRDM-2 & (2) SA-9 EQ. VEH |
| BATTERY HQ | 2 | 10 | 12 | 1 | | 1 | | | | | | |
| AA PLATOON | 1 | 15 | 16 | | 4 | | | | | | | |
| AD PLATOON | 1 | 11 | 12 | | | | | | | 1 | | 3 |
| SUPPLY & MAINT PLT | 1 | 23 | 29 | | | | 2 | 2 | 9 | 2 | 1 | |
| TOTAL | 5 | 59 | 69 | 1 | 4 | (1) | 2 | 4 | 9 | 2 | 1 | 3 |

| | USSR | U.S. | NATO |
|---|---|---|---|
| SYSTEM DESIGNATOR a | ZSU-23-4 | ZSU-23-4 | ZSU-23-4 |
| b | UNKNOWN | SA-9 | — |
| MISSILE DESIGNATOR a | N/A | N/A | N/A |
| b | UNKNOWN | — | GASKIN |

# SOVIET
# ANTIAIRCRAFT ARTILLERY REGIMENT (INDEPENDENT)

(AAA REGT) INDEP




**SUBORDINATION:** Organic to Army and Front

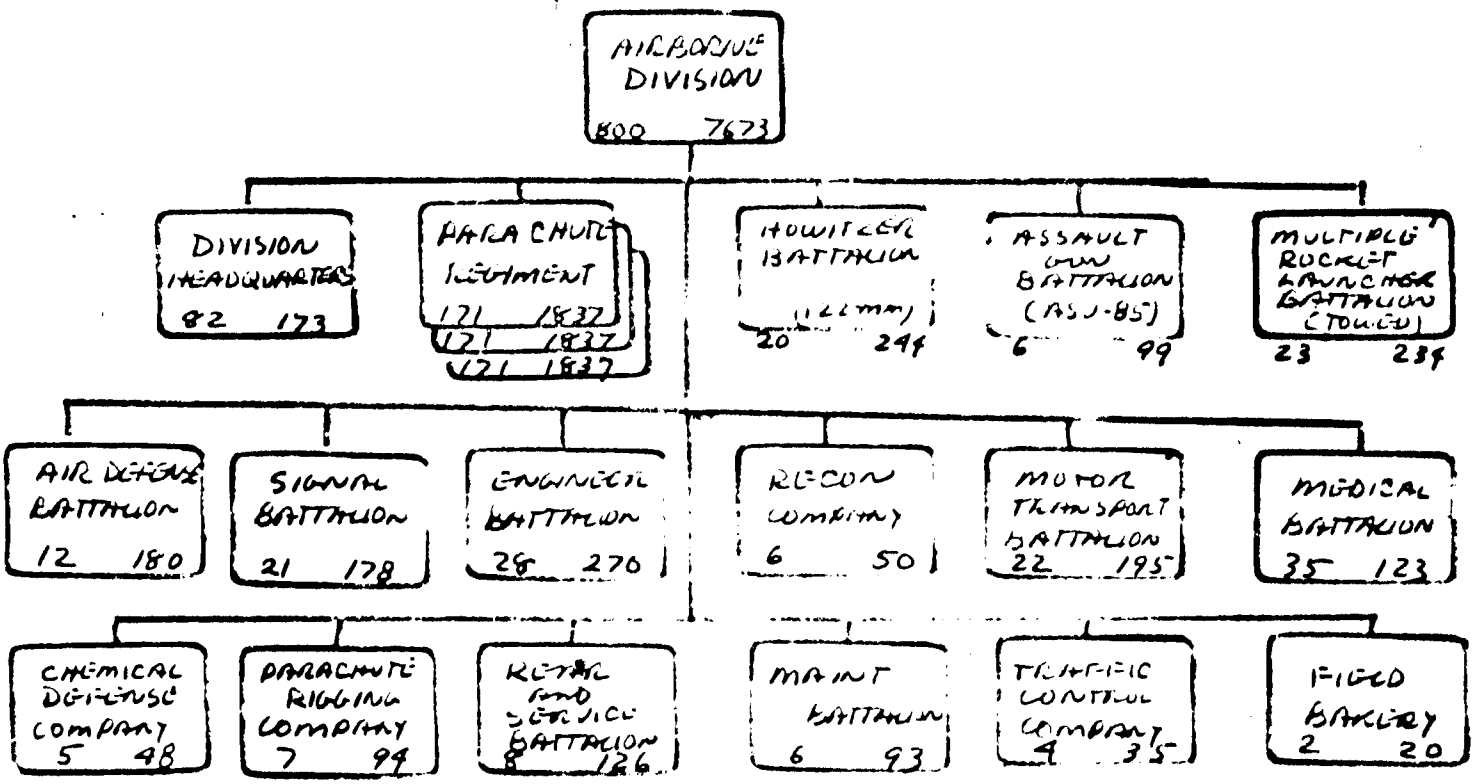
**MISSION:** Provide point air defense protection to critical Army and Front units, lines of communications, and other locations as directed.

PERS: 492
HV ARMOR: 0
LT ARMOR: 3
SOFT SKIN: 139
TOWED: 42

| | PERSONNEL | | | SELECTED WEAPONS & EQUIP | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | BTR-60 PA (APC) | 57-MM AA GUN S-60 (TOWED) | FLAT FACE E/W/ACQ RADAR (ZIL-131 6X6) | FLAP WHEEL FIRE CONTROL RADAR (URAL-375, 6X6) | TRUCKS | FIRE CONTROL DIRECTOR PUA 20-6 (TOWED) |
| REGIMENTAL HQ | 9 | 51 | 60 | 3 | | 2 | | 12 | |
| AAA FIRING BTRY (6) | 24 | 312 | 336 | | 36 | | 6 | 72 | 6 |
| TECH SVC BTRY | 6 | 90 | 96 | | | | | 42 | |
| TOTAL | 39 | 453 | 492 | 3 | 36 | 2 | 6 | 126 | 6 |

| | USSR | US | NATO |
|---|---|---|---|
| GUN DESIGNATION | S-60, 57-MM GUN | S-60, 57-MM GUN | S-60, 57-MM GUN |
| RADAR DESIGNATION a. | P-15 | – | FLAT FACE |
| b. | UNKNOWN | – | FLAP WHEEL |

# SOVIET AIRBORNE DIVISION




SUBORDINATION: During peacetime considered Strategic Force under direct control of the General Staff, Moscow. During wartime they will probably (85%) be placed under the command of the Theater Headquarters (TV)

MISSION: To conduct battalion, regimental, or division level airborne operations into the enemy rear areas to seize and hold or destroy designated key objectives

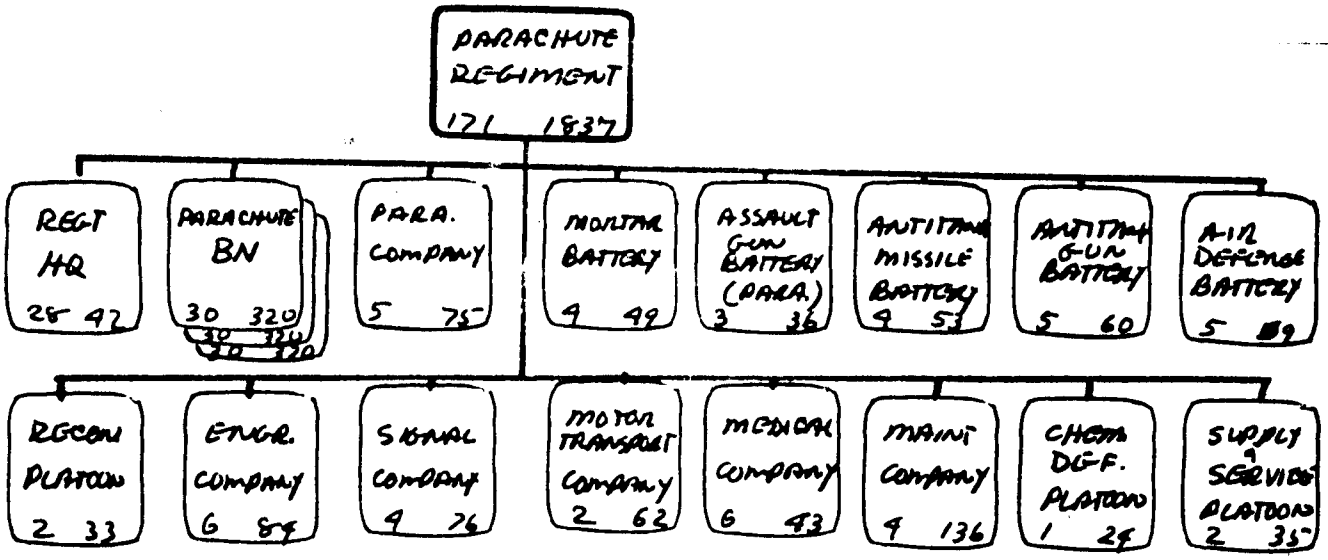
## OPERATIONAL CAPABILITIES:

- Seize important areas, routes and river crossings in advance of major ground force operations.
- Exploit nuclear strikes.
- Seize and hold enemy airfields for use by them forces, or to destroy them.
- Conduct sabotage operations against enemy nuclear delivery means, support units and radar guidance equipment
- Disrupt selected enemy headquarters, communication centers and rear area installations.
- Assist in partisan and guerrilla operations.

# AIRBORNE DIVISION

| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | BMD AIRBORNE ICV | BRDM-2 | MOTORCYCLES | ZU-23-2 (TOWED) | SA-9 FIRE UNIT | ASU-57 ASSAULT GUN | ASU-85 ASSAULT GUN | BRDM-2 ATGM | D-30 122mm HOW (TOWED) | IRPU-14 40-mm MRL (TOWED) | 82-mm Mortars | 120-mm Mortars | SD-44 85mm GUN W/AUX ARTR | SA-7 GRIP STOCK | ATGM SHOULDER/FROM MANPACK | SPG-9 73mm RR | RPG-7 ANTITANK ROCKET LAUNCHER | T-54-T ARMORED RECOVERY VEH | GROUND SURV. RADAR (MANPACK) | 7.62-mm LMG PKM | TRUCKS | |
| DIVISION HEADQUARTERS | 82 | 173 | 255 | 2 | 3 | 5 | | | | | | | | | | | 3 | | | | | | | 29 | |
| PARACHUTE REGT (3) | 513 | 5511 | 6029 | 354 | 63 | 27 | 18 | 12 | 18 | | 27 | | | 54 | 18 | 18 | 90 | 27 | 81 | 270 | 18 | | 570 | 495 | |
| HOWITZER BN (122mm) | 20 | 299 | 264 | | 4 | | | | | | | 18 | | | | | 9 | | | | | | | 41 | |
| ASSAULT GUN BN | 6 | 99 | 105 | | 4 | | | | | 18 | | | | | | | | | | | | | | 29 | |
| MULTIPLE ROCKET LCH. BN. | 23 | 239 | 257 | | 2 | | | | | | | | 18 | | | | 9 | | | | | | | 46 | |
| AIR DEFENSE BN | 12 | 180 | 192 | 6 | | | 18 | 12 | | | | | | | | | | | | | | | | 36 | |
| SIGNAL BATTALION | 21 | 178 | 199 | | | 3 | | | | | | | | | | | | | | | | | | 40 | |
| ENGINEER BATTALION | 28 | 270 | 298 | 13 | 6 | | | | | | | | | | | | 9 | | | | 2 | | | 28 | |
| RECON COMPANY | 6 | 50 | 56 | 3 | 9 | 5 | | | | | | | | | | | 3 | | | 9 | | 3 | | 1 | |
| MOTOR TRANSPORT BN. | 22 | 195 | 217 | | | | | | | | | | | | | | | | | | | | | 102 | |
| MEDICAL BATTALION | 35 | 123 | 158 | | | | | | | | | | | | | | | | | | | | | 22 | |
| CHEMICAL DEFENSE COMPANY | 5 | 48 | 53 | | 5 | | | | | | | | | | | | 3 | | | | | | | 17 | |
| PARACHUTE RIGGING COMPANY | 7 | 94 | 101 | | | 3 | | | | | | | | | | | | | | | | | | 16 | |
| REAR AND SERVICE BATTALION | 8 | 126 | 134 | | | | | | | | | | | | | | | | | | | | | 32 | |
| MAINTENANCE BATTALION | 6 | 93 | 99 | | | | | | | | | | | | | | | | | | 2 | | | 24 | |
| TRAFFIC CONTROL COMPANY | 4 | 35 | 39 | | | 10 | | | | | | | | | | | | | | | | | | 2 | |
| FIELD BAKERY | 2 | 20 | 22 | | | | | | | | | | | | | | | | | | | | | 3 | |
| TOTAL | 800 | 7673 | 8473 | 372 | 102 | 53 | 36 | 24 | 18 | 18 | 27 | 18 | 18 | 54 | 18 | 18 | 126 | 27 | 81 | 279 | 22 | 3 | 570 | 958 | |

# SOVIET
# PARACHUTE REGIMENT

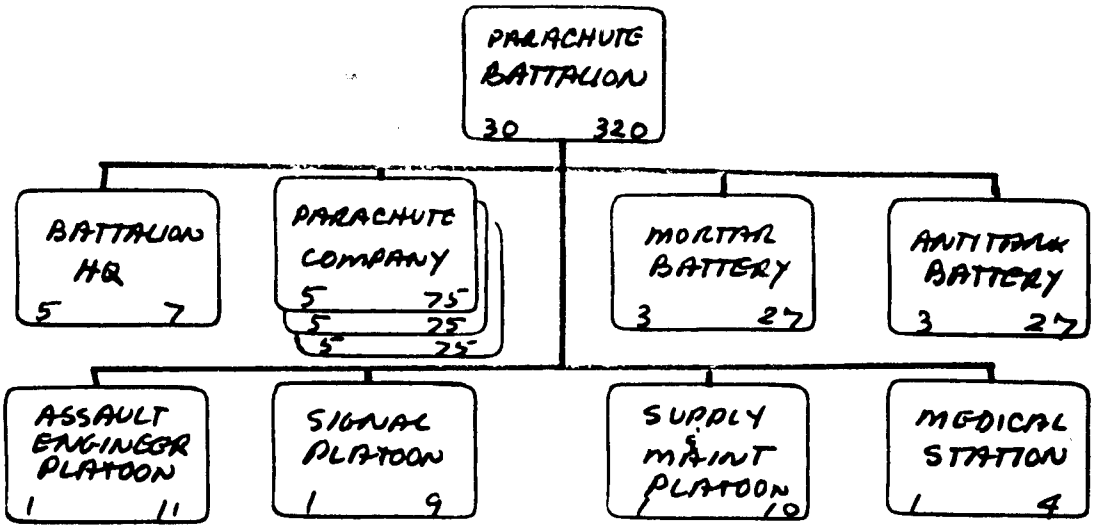



**SUBORDINATION:** Organic to Airborne Division

**MISSION:** To conduct airborne operation into the enemy rear areas to seize and hold or destroy designated key objective

| | PERSONNEL | | | SELECTED WEAPONS AND EQUIPMENT | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | BMD | BRDM-2 | BRDM-2 ATGM | MORTAR CARRIER | ASU-57/85 | ZU-23-2 (towed) | SA-9 | 82-mm Mortar | SA-7 GRAIL STRELA-2/MANPAD (FIM-43 REDEYE) | ATGM (MANPAD) | SPG-9, 73-mm RR | 7.62mm RIFLE/MG | 7.62mm MK PKM | 7.62mm Rifle SVD | 9-mm Pistol PM | RPG-7 ANTITANK GRENADE LAUNCHER | 120-mm Mortar | 85-mm AT (Also SD-44 AD GUN) | T-54-T ARMORED CARRIER | TRUCKS |
| REGIMENTAL HQ | 28 | 42 | 70 | 3 | 5 | | 2 | | | | | | | | 35 | | | 35 | | | | | 5 |
| PARACHUTE BATTALION (3) | 90 | 960 | 1050 | 105 | | | | | | | 18 | 27 | 9 | 27 | 840 | 171 | 27 | 168 | 81 | | | 3 | 45 |
| PARACHUTE COMPANY | 5 | 75 | 80 | 10 | | | | | | | | 3 | | | 63 | 19 | 3 | 14 | 9 | | | | |
| MORTAR BATTERY | 4 | 49 | 53 | | | | | | | | | | | | 44 | | | 9 | | 6 | | | 7 |
| ASSAULT GUN BATTERY | 3 | 36 | 39 | | 2 | | | 6 | | | | | | | 30 | | | 9 | | | 6 | | 5 |
| ANTI-TANK MISSILE BTRY | 4 | 53 | 57 | | 3 | 9 | | | | | | | | | 53 | | | 4 | | | | | 3 |
| ANTITANK GUN BATTERY | 5 | 60 | 65 | | | | | | | | | | | | 65 | | | 5 | | | | | 10 |
| AIR DEFENSE BATTERY | 5 | 69 | 74 | | 2 | | | | 6 | 3 | | | | | 69 | | | 5 | | | | | 12 |
| RECON PLATOON | 2 | 33 | 35 | | 3 | | 7 | | | | | | | | 33 | | | 2 | | | | | 1 |
| ENGINEER COMPANY | 6 | 84 | 90 | | 2 | | | | | | | | | | 84 | | | 6 | | | | | 10 |
| SIGNAL COMPANY | 4 | 76 | 80 | | 2 | | | | | | | | | | 76 | | | 9 | | | | | 11 |
| MOTOR TRANSPORT COMPANY | 2 | 62 | 64 | | | | | | | | | | | | 62 | | | 2 | | | | | 26 |
| MEDICAL COMPANY | 6 | 43 | 49 | | | | | | | | | | | | | | | | | | | | 8 |
| MAINT COMPANY | 4 | 136 | 140 | | | | | | | | | | | | 136 | | | 4 | | | | 3 | 11 |
| CHEM DEF PLATOON | 1 | 29 | 25 | | 2 | | | | | | | | | | 24 | | | 1 | | | | | 3 |
| SUPPLY & SVC PLATOON | 2 | 35 | 37 | | | | | | | | | | | | 35 | | | 2 | | | | | 8 |
| TOTAL | 171 | 1837 | 2008 | 118 | 21 | 9 | 9 | 6 | 6 | 3 | 18 | 30 | 9 | 27 | 1699 | 190 | 30 | 270 | 90 | 6 | 6 | 6 | 165 |

# SOVIET
# PARACHUTE BATTALION

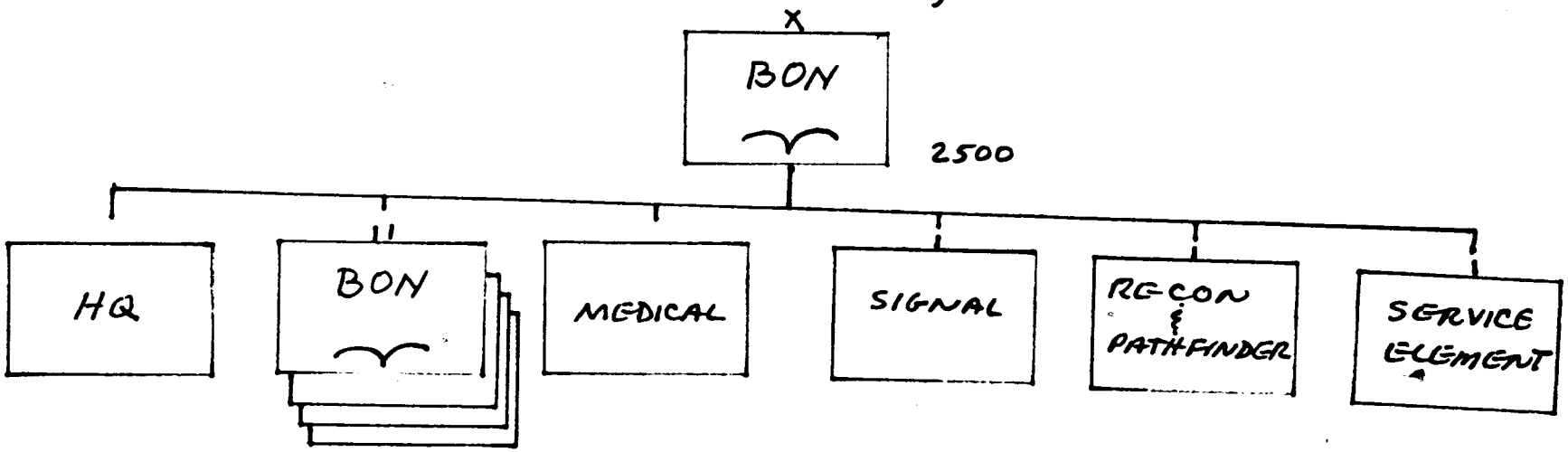



**SUBORDINATION**: Organic to Parachute Regiment

**MISSION**: To conduct battalion, regimental or division level airborne operations into the enemy rear areas to seize and hold or destroy designated key objectives.

| | PERSONNEL | | | SELECTED WEAPONS & EQUIP. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OFFICERS | ENLISTED MEN | TOTAL | BMD AIRBORNE ICV | 82-mm Mortar | SA-7 GRAIL SPOCK | ATGM FAGOT/ SWAT SAGGER BACK | SAG-9 73mm RR | 7.62-mm Rifle AKM | 7.62mm MG PKM | 7.62mm Rifle SVD | 9-mm Pistol PM | RPG-7 ANTI-TANK ROCKET/GRENADE | T-54-T ARMORED RECONNAISSANCE | TRUCKS |
| BN HQ | 5 | 7 | 12 | 3 | | | | | 7 | | | 5 | | | 1 |
| PARACHUTE CO (3) | 15 | 225 | 240 | 30 | | 9 | | | 189 | 57 | 9 | 42 | 27 | | |
| MORTAR BTRY | 3 | 27 | 30 | | 6 | | | | 27 | | | 3 | | | 6 |
| ANTI TANK BTRY | 3 | 27 | 30 | | | | 3 | 9 | 27 | | | 3 | | | 2 |
| ASSAULT ENGINEER COMPANY | 1 | 11 | 12 | 2 | | | | | 11 | | | 1 | | | 1 |
| SIGNAL PLATOON | 1 | 9 | 10 | | | | | | 9 | | | 1 | | | 2 |
| SUPPLY/MAINT PLT | 1 | 10 | 11 | | | | | | 10 | | | 1 | | 1 | 2 |
| MEDICAL STATION | 1 | 4 | 5 | | | | | | | | | | | | - |
| TOTAL | 30 | 320 | 350 | 35 | 6 | 9 | 3 | 9 | 280 | 57 | 9 | 56 | 27 | 1 | 15 |

# SPECIAL PURPOSE BRIGADE [1] (AIRBORNE)






MISSION: SEIZE AIRFIELDS AND LANDING ZONES AHEAD OF ADVANCING FORCE; CARRY OUT RAIDS AND DIVERSION IN ENEMY REAR, SABOTAGE; LINK UP WITH COMMUNIST INSURGENTS; PARALYSE COMMUNICATIONS.

AIR TRANSPORT / AIR LIFT REQUIREMENTS PROVIDED BY TACTICAL AIR ARMY AND/OR TRANSPORT AVIATION (VTA)

EQUIPMENT: [2]
- AUTOMATIC RIFLES
- LIGHT MACHINE GUNS
- 122-MM ROCKETS
- FLAMETHROWERS
- DEMOLITIONS (SATCHEL CHARGE, MINES, PLASTIC EXPLOSIVES)

NOTES:
1. BRIGADA OSOBOVO NAZNACHENIYA
2. NO ARMORED VEHICLES IN THIS UNIT

REF: AEROSPACE INTERNATIONAL MAR/APR 1973, P. 13

## SOVIET AGGREGATE OLI's

| Combined Arms Army | | | | | |
|---|---|---|---|---|---|
| Units | Inf OLI | AT OLI | Arty OLI | AA OLI | TK OLI |
| HQ | 62 | 13 | - | 216 | - |
| 4 x MRD | 42,220 | 52,592 | 101,464 | 80,112 | 747,832 |
| 1 x TD | 4,345 | 4,711 | 19,744 | 18,408 | 274,954 |
| 1 x ARTY R | 294 | 260 | 8,592 | - | - |
| 1 x SCUD BG | 120 | - | 1,233 | - | - |
| 1 x SA-4 BG | 132 | - | - | 19,666 | - |
| 1 x AAA R | 86 | - | - | 3,391 | - |
| 1 x CHEM BN | 63 | 21 | - | - | - |
| 1 x ENGR BG | 84 | 34 | - | - | - |
| 1 x MRR | 2,464 | 2,217 | 3,648 | 3,992 | 50,248 |
| 1 x MTR R | 48 | 55 | - | - | - |
| Total | 49,856 | 59,903 | 134,681 | 125,785 | 1,073,034 |

CAA AGG. OLI = 1,443,259

| Tank Army | | | | | |
|---|---|---|---|---|---|
| Units | Inf OLI | AT OLI | Arty OLI | AA OLI | TK OLI |
| HQ | 62 | 13 | - | 216 | - |
| 4 x TD | 17,380 | 18,844 | 78,976 | 73,632 | 1,099,816 |
| 1 x MRD | 10,555 | 13,148 | 25,366 | 20,028 | 186,958 |
| 1 x ARTY R | 294 | 260 | 8,592 | - | - |
| 1 x SCUD BG | 120 | - | 1,233 | - | - |
| 1 x SA-4 BG | 132 | - | - | 19,666 | - |
| 1 x AAA R | 86 | - | - | 3,391 | - |
| 1 x CHEM BN | 63 | 21 | - | - | - |
| 1 x ENGR BG | 84 | 34 | - | - | - |
| 1 x MRR | 2,464 | 2,217 | 3,648 | 3,992 | 50,248 |
| 1 x MTR R | 48 | 55 | - | - | - |
| Total | 31,288 | 34,592 | 117,815 | 120,925 | 1,337,022 |

TA AGG. OLI = 1,641,642

AIR ARMY

Aggregate OLI = 1,438,112 (Total of all assets)
Aircraft are assumed to be 75% available for two sorties per day.
Helicopters are assumed to be 100% operational for two sorties per day.
Thus effective OLI is 1,438,112 - 5,700 (= of Helios) x .75 x 2 + (5,700 x 2) = 2,160,018. Again this OLI will be reduced by elimination of other classes of aircraft to include transports & Recon to 2,102,751.

Specifications and Characteristics of
Selected Soviet Weapons Systems*

## FIELD ARTILLERY

Guns--122mm How D-30 *(146)*
(Standard division artillery)

Characteristics

| | | |
|---|---|---|
| Caliber | . . . . | 122mm |
| Range | . . . . | 15,300 meters |
| Rate of fire | . . . . | 7-8 rds/min |
| Ammunition | . . . . | Separate loading, round weighs 39 kg |
| | . . . . | Shell--HE, Smoke Illuminating, APHE shell weighs 21.7 kg |
| Muzzle velocity | . . . | 807 m/sec |

Crew

| | | |
|---|---|---|
| Men | . . . . | 7 |

Also found in self-propelled model: SAU-122 *(192)*

Guns--152mm Gun/how D-20 *(160)*
(Standard division artillery)

Characteristics

| | | |
|---|---|---|
| Caliber | . . . . | 152mm |
| Range | . . . . | 17,000 meters |
| Rate of fire | . . . . | 4 rds/min |
| Ammunition | . . . . | Separate loading, round weighs 48 kg |
| | . . . . | Shell--HE, AP-T Chemical* |
| | . . . . | Armor Penetration 100mm (est) |
| Muzzle velocity | . . . | 655 m/sec |

Crew

| | | |
|---|---|---|
| Men | . . . . | 8 |

*one report states nuclear ammunition

Also found in self-propelled model: SAU-152 *(165)*

Guns--130mm Fld Gun M-46 towed *(217)*
(Naval gun in field mounting--effective antitank weapon, also used for coastal defense) Found in army level artillery units)

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* All data was collected from Unclassified Sources

Characteristics

| | |
|---|---|
| Caliber . . . . | 150mm |
| Barrel length. . . . | 55 caliber |
| Range . . . . | 27,490 meters |
| Rate of fire . . . . | 5-6 rds/min |
| Ammunition . . . . | HE, AP-T |
| . . . . | Shell--HE, AP-T weighs 53.5 kg |
| . . . . | Armor Penetration 170mm |
| Muzzle velocity. . . | 930 m/sec |
| Weight . . . . | 7,500 kg |

Crew

| | |
|---|---|
| Men . . . . | 1 |

Guns--180mm Gun/how S-23 towed *(170)*
(Towed by heavy artillery tractor; reports of new SP version)

Characteristics

| | |
|---|---|
| Caliber . . . . | 180mm |
| Range . . . . | 30,000 meters |
| Rate of fire . . . . | 3rds/min |
| Ammunition . . . . | Shell--HE, Nuclear, chemical |
| Muzzle velocity. . . | 850 m/sec (est) |

Multiple Rocket Launchers--122mm BM-21 (40) *(318)*
(Mounted on Ural 375 truck)

Characteristics

| | |
|---|---|
| Tubes . . . . | 40 |
| Caliber . . . . | 122mm |
| Range . . . . | 10,500 meters |
| Reload time . . . . | 10 minutes |
| Ammunition . . . . | Rockets 46 kg |
| Muzzle velocity. . . | 400 m/sec (est) |

Crew

| | |
|---|---|
| Men . . . . | 5 (est) |

Multiple Rocket Launchers--140mm BM-14 M 1965 (16), BM-14 (17) *(300)*
(Old--M 1965--towed by GAZ 63 truck
New--(17)--mounted on GAZ 63 truck)

Characteristics

| | |
|---|---|
| Tubes . . . . | 16 (Newer model 17--mounted 9 on top row, 8 on second row) |
| Caliber . . . . | 140mm |

| | | |
|---|---|---|
| Range | . . . . | 9,810 meters |
| Reload time | . . . . | 3-4 minutes |
| Ammunition | . . . . | Rockets 37.1 kg |

Crew
Men . . . . 4 (est)

## SURFACE-TO-SURFACE MISSILES (TACTICAL) SSM

Frog 3/7, Battlefield Support *(80)*
(Organic to tank and motorized rifle divisions Frog 3 is being replaced by Frog 7) (Frog 3 still found in airborne division)

Characteristics (Frog 3/Frog 7)

| | | |
|---|---|---|
| Range | . . . . | 40,000/60,000 meters 9 |
| Warhead | . . . . | Nuclear, chemical, HE-weighs 250 kg/same, weighs 450 kg |
| Missile | . . . . | Length 10.5 meters/9.1 meters, diameter 550mm/550mm, launch weight 2,000 kg/ 2,300 kg |
| *Propulsion | . . . . | Two stage solid propellant/single stage solid propellant |
| Guidance | . . . . | Spin stabilized unguided/spin stabilized unguided |
| Mounted on PT-76 type tracked vehicle/ZIL-135 wheeled, erector, launcher | | |
| Vehicle | . . . . | (Frog 7) weighs 18,144 kg |
| | . . . . | Speed 65 km/hr |
| | . . . . | Cruise range 500 km |

Crew
Men . . . . 4

*Janes, US Army FM says both rockets identical except for warheads

Scud A/B, Battlefield Support Missile: SS-1c *(188)*
(Assigned to a front or army)

Characteristics (Scud A/Scud B)

| | | |
|---|---|---|
| Range | . . . . | 180,000 meters/280,000 meters |
| Warhead | . . . . | Nuclear, chemical, HE/same, weighs 680 kg/ 770-860 kg |
| Missile | . . . . | Length 10.7 meters/11.4 meters, diameter 840mm/840mm, launch weight 4,500 kg/ 6,370 kg |
| Propulsion | . . . . | Liquid propellant sustainer, single stage/ same |

Guidance . . . . Radio command, movable tailfins/simplified inertial, movable tailfins

Mounted on JS III chassis vehicle/same and later model MAZ wheeled launcher

Vehicle . . . . (Scud A--JS III) weighs 31,800 kg
. . . . Speed 35 km/hr
. . . . Cruise range 145 km
. . . . (Scud B--MAZ 543) weighs 25,400 kg
. . . . Speed 55 km/hr
. . . . Cruise range 500 km

Scaleboard, Battlefield Support Missile SS-12 *(OLI Not Included)*
(Assigned to a front or army)

Characteristics
Range . . . . 7-800,000 meters
Warhead . . . . Nuclear (megaton range)
Missile . . . . Length over 11 meters, diameter over 840mm
Guidance . . . . estimated to be inertial
Mounted on MAZ 543 type vehicle (see Scud B)

AA GUNS

14.5mm ZPU-4 Quadruple Mount MG *(27)*
(This gun also appears in double ZPU-2 or single ZPU mounts)

Characteristics
Caliber . . . . 14.5mm
Range . . . . 1,400 meters (tactical AA range)
Rate of fire . . . . 2,400 rds/min (6000 rds/min each gun)
Ammunition . . . . Projectile weight .056 kg
Muzzle velocity. . . 1,000 m/sec
Fire Control . . . . optical
Mounted on 4 wheel carriage--towed

57mm Gun Single Mount S-60 *(45)*
(Standard AA weapon in AA Artillery division regiment)

Characteristics
Caliber . . . . 57mm
Range . . . . 6,000 meters (tactical
Rate of fire . . . . 120 rds/min (cyclic)
Ammunition . . . . Projectile weight 2.79 kg
Muzzle velocity. . . 985 m/sec
Fire control . . . . Radar or optical
Mounted on 4 wheel carriage--towed

23mm ZSU-23-4 Quadruple Mount SP *(388)*
(Regimental AA weapon)

Characteristics

| | | |
|---|---|---|
| Caliber | . . . . | 23mm |
| Range | . . . . | 3,000 meters (tactical AA range) |
| *Rate of fire | . . . . | 1,200 rds/min (cyclic)(each gun)(liquid cooled gun |
| Ammunition | . . . . | Projectile weight.2 kg |
| Muzzle velocity | . . . | 970 m/sec |
| Fire control | . . . . | Radar (target acquisition and fire control), optical |

Mounted on armored, tracked vehicle (chassis uses components of PT-76)(Radar can be retracted)

| | | |
|---|---|---|
| Vehicle | . . . . | Weighs 12,700 kg |
| | . . . . | Speed 44 km/hr |
| | . . . . | Cruise range 260 km |

Crew

| | | |
|---|---|---|
| Men | . . . . | 4 |

*Janes says 4,000 rds/min, US Army FM says 1,200 rds/min

57mm ZSU-57-2 Dual Mount SP *(45)*

Characteristics

| | | |
|---|---|---|
| Caliber | . . . . | 57mm (S-68) |
| Range | . . . . | 4,000 meters |
| Rate of fire | . . . . | 240 rds/min (cyclic) (both guns) |
| Ammunition | . . . . | Projectile weight 2.79 kg |
| | . . . . | Basic load 316 rounds |
| Muzzle velocity | . . . | 985 m/sec |
| Fire control | . . . . | Optical |

Mounted on armored tracked vehicle (chassis is a highly modified T-54, 4 wheels)

| | | |
|---|---|---|
| Vehicle | . . . . | Weighs 25,500 kg |
| | . . . . | Speed 48,km/hr |
| | . . . . | Cruise range 400 km |

Crew

| | | |
|---|---|---|
| Men | . . . . | 6 |

## SURFACE-TO-AIR MISSILES SAM

SA-2 Guideline
(Standard SAM in Soviet Air defenses) *(192)*

Characteristics

| | |
|---|---|
| Type | Medium range, high altitude, surface-to-air tactical guided missile |
| Warhead | HE, weighs 131 kg |
| Missile | Length 10.7 meters, diameter booster 700mm, sustainer (2nd stage) 500mm, weighs 2,300 kg |
| Propulsion | Solid propellant booster |
| | Liquid propellant sustainer (nitric acid and hydrocarbon) |
| Guidance | Automatic radio command, movable tail surfaces, radar tracking of target |
| Performance | Maximum speed M3.5 |
| | Slant range 40-50 km |
| | Effective ceiling 18,000 meters |

SA-3 Goa *(317)*

(Similar to US Hawk--used by USSR Army and Navy & in PVO-Strany)

Characteristics

| | |
|---|---|
| Type | Short range, low altitude, surface-to-air tactical guided missile |
| Warhead | HE |
| Missile | Length 6.7 meters, diameter booster 600mm, sustainer (2nd stage) 450mm, span 1.2 meters |
| Propulsion | Two stage solid propellant |
| Guidance | Radio command, movable surfaces, radar terminal homing |
| Performance | Maximum speed M2-2.5 |
| | Slant range 30 km |
| | Effectiveneeiling 12,200 meters |

SA-4 Ganef *(326)*

Characteristics

| | |
|---|---|
| Type | Land mobile, long range, high altitude, surface-to-air tactical guided missile |
| Warhead | HE |
| Missile | Length 9 meters, diameter 800mm, span 2.3 meters, weighs 1,000 kg |
| Propulsion | Solid propellant booster |
| | Ramjet sustainer |
| Guidance | Radio command, movable wings |
| Performance | Maximum speed M2.5 |
| | Slant range 69 km |
| | Effective ceiling 24,300 meters |

SA-6 Gainful *(203)*

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Land mobile, long range, medium/low altitude, surface-to-air tactical guided missile |
| Warhead | . . . . | HE, weighs 80 kg |
| Missile | . . . . | Length 6.2 meters, diameter 335mm, span 12.4 meters, weight 550 kg |
| Propulsion | . . . . | Solid propellant booster |
| | . . . . | Ramjet sustainer (casing of booster and solid propellant exhaust) |
| Guidance | . . . . | Radio command, semi-active radar terminal homing |
| Performance | . . . . | Maximum speed M2.8 |
| | . . . . | Range--maximum high altitude 60 km, maximum low altitude 30 km |
| | . . . . | Maximum altitude 18 km |
| | . . . . | Mimimum engagement 4 km |
| | . . . . | Mimimum altitude 100 meters radar, 50 meters optical |

SA-7 Grail* *(36)*

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Man portable antiaircraft missile** |
| Warhead | . . . . | HE weighs 2.5 kg |
| Missile | . . . . | Length 1.35 meters, diameter 70mm |
| Propulsion | . . . . | Solid propellant booster/sustainer |
| Guidance | . . . . | Passive infrared homing |
| Performance | . . . . | Maximum speed M1.5 |
| | . . . . | Slant range 4,000 meters |
| | . . . . | Effective ceiling 1,500 meters |

*Russian term Strella (arrow)
**Also seen mounted on BRDM-2 recn vehicle

SA-8 Gecko *(500)*
(First seen 1975, much in common with European Roland)

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Land mobile, short range, all terrain, all weather, surface-to-air tactical guided missile |
| Warhead | . . . . | HE, weighs 50 kg |
| Missile | . . . . | Length 3.2 meters, diameter 210mm |
| Propulsion | . . . . | Probably solid propellant |

| | | |
|---|---|---|
| Guidance | . . . . | Command guidance by proportional navigation |
| Performance | . . . . | Maximum speed, supersonic |
| | . . . . | Slant range 12,100 meters |

Mounted on new three axle six-wheeled amphibious vehicle
Quadruple launcher on rotating turret

SA-9 Gaskin *(340)*

(Uprated Grail (SA-7) mounted in two four missile boxes, mounted on amphibious reconnaissance vehicle BRDM-2)

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Land mobile, short range, low altitude antiaircraft missile |
| Performance | . . . . | Slant range 5,000 meters |
| | . . . . | Effective altitude 4,600 meters |

## ANTITANK GUNS & ROCKETS

RPG-7 Antitank Rocket *(4)*

(Standard squad antitank weapon)

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Antitank, man carried, shoulder fire, rocket assisted grenade launcher |
| Caliber | . . . . | Launcher 40mm |
| | . . . . | Grenade 85mm |
| Weight | . . . . | Launcher 5 kg |
| | . . . . | Grenade 2.5 kg |
| Rate of fire | . . . . | 4-6 rds/min |
| Muzzle velocity | . . . | 300 m/sec |
| Effective range | . . . | 500 meters |
| | . . . . | Maximum range 900 meters |
| Armor penetration | . . | 356mm |

73mm Antitank Recoilless Gun SPG-9 *(57)*

(Standard Battalion antitank weapon)

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Antitank, tripod mounted rocket assisted recoilless gun |
| Caliber | . . . . | 73mm |
| Projectile | . . . . | Rocket assisted, fin stabalized |
| Length of Gun | . . . | 2.1 meters |
| Weight of Gun | . . . | 45 kg |
| Tripod mount | | |
| Rate of fire | . . . . | 6 rds/min |

| | | |
|---|---|---|
| Muzzle velocity | . . | 700 m/sec |
| Effective range | . . | 900 meters |
| | . . . . | Maximum range 1,960 meters |
| Armor penetration | . . | 300mm |

Crew

| | | |
|---|---|---|
| Men | . . . . | 5 |

57mm Assault Gun ASU-57 *(39)*

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Light airborne assault gun, air droppable |
| Caliber | . . . . | 57mm |
| Basic load | . . . . | 30 rounds |
| Vehicle | . . . . | Weight 3.35 tons (lt armor, no roof) |
| | . . . . | Cruise range 250 km |
| | . . . . | Ford 700mm (deep) |

Crew

| | | |
|---|---|---|
| Men | . . . . | 3 |

85mm Assault Gun ASU-85 *(99)*

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Airborne assault gun, air transportable (An-12) |
| Caliber | . . . . | 85mm |
| Basic load | . . . . | 40 rounds |
| Vehicle | . . . . | Weight 14 tons |
| | . . . . | Speed 44 km/hr |
| | . . . . | Cruise range 260 km |

Crew

| | | |
|---|---|---|
| Men | . . . . | 4 |

## ANTITANK MISSILES

AT-1 Snapper (Shmel1-Bumblebee) *(64)*

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Surface-to-surface guided Antitank Missile |
| Warhead | . . . . | Hollow charge 5.2 kg |
| Missile | . . . . | Length 1.13 meters, diameter 140mm, span 813mm, weighs 22.5 kg |
| Propulsion | . . . . | Solid propellant |

| | | |
|---|---|---|
| Guidance | . . . . | Wire guided command to line of sight, optical tracking, trailing edge spoilers |
| Performance | . . . . | Cruise speed 53.6 m/sec |
| | . . . . | Range 370-2,300 meters |

Mounted on BRDM, Triple launcher

AT-2 Swatter *(36)*

Characteristics

| | | |
|---|---|---|
| Type | . . . . | Surface-to-surface, guided Antitank missile |
| Warhead | . . . . | HEAT |
| Missile | . . . . | Length 1.14 meters, diameter 132mm, span 660mm, weighs 25 kg |
| Propulsion | . . . . | Solid propellant |
| Guidance | . . . . | Radio, infra-red homing, optical tracking |
| Performance | . . . . | Cruise speed,subsonic 150 meters/sec. |
| | . . . . | Range 500-2,500 meters |

Mounted on BRDM, Quadruple launcher and Mi-24 (HIND) helicopter

AT-3 Sagger *(Manpack-47)*

(Man carried, single mount on many vehicles (BMP, BMD) sextuple mount on BRDM, BRDM-2 & an helicopter

Charateristics

| | | |
|---|---|---|
| Type | . . . . | Surface-to-surface guided, Antitank Missile |
| Warhead | . . . . | Hollow charge 3 kg |
| Missile length | . . . | .82 meters, diameter 120mm, span 457mm, weighs 11 kg |
| Propulsion | . . . . | Solid propellant |
| Guidance | . . . . | Wire guided command to line of sight, optical tracking |
| Performance | . . . . | Cruise speed 120 meters/sec (est) |
| | . . . . | Range 500-3,000 meters |
| | | Armor penetration 400mm + |

Light Tank PT-76 Amphibious *(81)*

Characteristics

| | |
|---|---|
| Weight | 14 metric tons |
| Gun | Caliber 76mm |
| | Model D-56T or D-56 TM |
| Basic load | 40 rounds |
| Rate of fire | 6-8 rds/min |
| Secondary Armament | AA |
| Coaxial | 7.62mm MG |
| Basic load | 1,000 rounds |
| Speed | Land 44 km/hr |
| | Water 10 km/hr |
| Cruising range | 260 km |

Crew

| | |
|---|---|
| Men | 3 |

*Medium Tank T-54/55 *(274)*

Characteristics (T-54/T-55)

| | |
|---|---|
| Weight | 40 metric tons/same |
| Gun | Caliber 100mm/same |
| | Model D-10T/D-10T25 |
| Basic load | 34 rounds/43 rounds |
| Rate of fire | 3-5 rds/min/same |
| Effective range | 5,000 meters/same |
| Secondary Armament | AA |
| Bow | 7.62 MG/same |
| Coaxial | 7.62 MG/same |
| Basic load | 3,000 rounds/3,500 rounds |
| Snorkel depth | 5.5 meters/same |

Crew

| | |
|---|---|
| Men | 4/4 |

* Although obsolescent this tank is still found in some Soviet units and in Satellite organization.

Medium Tank T-62 *(362)*
(Standard main battle tank)

Characteristics

| | |
|---|---|
| Weight | 36.5 metric tons |
| Gun | Caliber 115mm (smooth bore) |
| | Model D-5TS |

| | | |
|---|---|---|
| Basic load | . . . . | 40 rounds |
| Rate of fire | . . . . | 4-6 rds/min |
| Effective range | . . . | 2,000 meters |
| Secondary Armament | . | AA |
| | . | 12.7mm AAMG |
| Snorkel depth | . . . . | 5.5 meters |

Crew
Men . . . . 4

Medium Tank T-64 T-72 *(600)*
(Replacement for T-62)

Characteristics
Weight . . . . 40 metric tons/41 metric tons
Gun Caliber . . . . 125mm Automatic loader smoothbore

## ARMORED VEHICLES

Airborne Reconnaissance Vehicle BMD *(168)*

Characteristics
Weight . . . . 10 tons, airborne, amphibious tracked vehicle
Gun Caliber . . . . 73mm (smooth bore)
AT-3 Sagger
Effective range . . . Gun 700 meters
. . . Sagger 1,500 meters
Secondary Armament . Bow 7.62mm MG
. Coaxial 7.62mm M
. Maximum armor 20mm
Speed . . . . Land 55 km/hr (est)
. . . . Water 8 km/hr (est)
Cruise range . . . . 400 km (est)

Crew
Men . . . . 2

Troops
Men . . . . 5-6

Amphibious Armored Infantry Combat Vehicle BMP *(208)*

Characteristics

| | | |
|---|---|---|
| Weight | . . . . | 12.5 tons/tracked |
| Weapons | . . . . | Caliber 73mm (smooth bore) |
| | | AT-3 Sagger |
| Basic load | . . . . | Gun 30 rounds |
| | . . . . | Sagger 4 rounds |
| Secondary Armament | . | 7.62mm MG |
| Basic load | . . . . | 1,000 rounds |
| Maximum armor | . . . . | 14mm |
| Speed | . . . . | Land 55 km/hr |
| | . . . . | Water 8 km/hr |
| Cruise range | . . . . | 300 km |

Crew

| | | |
|---|---|---|
| Men | . . . . | 3 |

Troops

| | | |
|---|---|---|
| Men | . . . . | 8 |

Armored Personnel Carrier, Wheeled BTR-152 *(7)*

Characteristics

| | | |
|---|---|---|
| Weight | . . . . | 8.95 tons |
| *Gun | . . . . | Caliber 7.62mm MG |
| | . . . . | Model SGMB |
| Basic load | . . . . | 1,250 rounds |
| Maximum armor | . . . . | 12mm |
| Speed | . . . . | Land 65 km/hr |
| Cruise range | . . . . | 650 km |

Crew

| | | |
|---|---|---|
| Men | . . . . | 2 |

Troops

| | | |
|---|---|---|
| Men | . . . . | 17 |

*Other versions have twin 14.5mm AAMG, some have overhead cover, some are modified to command vehicles. Vehicle is obsolescent.

Armored Personnel Carrier, Wheeled BTR-60 *(10)*

Characteristics (BTR-60 PA, or PB)

| | | |
|---|---|---|
| *Weight | . . . . | 9.98/10.3 tons |
| Gun | . . . . | Caliber 7.62mm/14.5mm |
| | . . . . | Model SGMB/KPVT |
| Basic load | . . . . | 2,000 rounds/500 rounds |
| Secondary Armament | . | 7nk/7.62mm MG PKT |

| | | |
|---|---|---|
| Basic load | . . . . | unk/2,000 rounds |
| Maximum armor | . . . . | 10mm/14mm |
| Speed | . . . . | Land 80 km/hr/same |
| | . . . . | Water 10 km/hr/same |
| Cruise range | . . . . | 500 km/same |
| **Crew** | | |
| Men | . . . . | 2/2 |
| **Troops** | | |
| Men | . . . . | 16/14 |

*Various models have different configurations, e.g.,,armored roof, turret, etc.

Armored Personnel Carrier--Tracked BTR-50 *(7)*

| | | |
|---|---|---|
| **Characteristics** | | |
| Weight | . . . . | 14.2 tons |
| *Gun | . . . . | Caliber 7.62mm MG |
| | . . . . | Model SGMB |
| Basic load | . . . . | 1,250 rounds |
| Maximum armor | . . . . | 10mm |
| Speed | . . . . | Land 44 km/hr |
| | . . . . | Water 11 km/hr |
| Cruise range | . . . . | 260 km |
| **Crew** | | |
| Men | . . . . | 2 |
| **Troops** | | |
| Men | . . . . | 20 |

*There are various models--some have Antitank Recoilless guns

Armored Reconnaissance Vehicle BRDM *(4)*

| | | |
|---|---|---|
| **Characteristics** | | |
| Weight | . . . . | 5.6 tons |
| Gun | . . . . | Caliber 7.62mm MG |
| | . . . . | Model SGMB + ATGM |
| Basic load | . . . . | 1,250 rounds |
| Maximum armor | . . . . | 10mm |
| Speed | . . . . | Land 80 km/hr |
| | . . . . | Water 9 km/hr |
| Cruise range | . . . . | 500 km |
| **Crew** | | |
| Men | . . . . | 5 |

*Characteristics

| | | |
|---|---|---|
| Engine | . . . . | One unidentified Turbojet |
| | . . . . | 11,000 kg static thrust with afterburner |
| Span | . . . . | 14.25 meters spread, 8.17 meters swept, length 16.8 meters |
| Maximum gross weight | | 12,700-15,000 kg |
| Maximum speed. . . . | | Mach 2.3 @ 11,000 meters with external stores |
| Maximum ferry range. | | (3 tanks) 2,500 km |
| Combat radius. . . . | | 960 km |
| Service ceiling. . . | | 15,250 meters |

Armament

One six barrel 23mm Gatling type gun
Five pylons for unidentified external stores known to include tactical nuclear weapons

Crew

Men . . . . Pilot

*All of these figures are estimates

Fighter Bomber Su-19 Fencer *(947)*

(Two-seat, variable sweep, ground attack fighter)

*Characteristics

| | | |
|---|---|---|
| Engine | . . . . | Two unidentified turbojets |
| Variable sweep back of wings from 23° to 70° | | |
| Span | . . . . | 17.1 meters spread, 9.45 meters swept, length 21.33 meters |
| Maximum gross weight | | 30,850 kg |
| Combat radius. . . . | | 322 km |

Armament

One 23mm GSh-23 twin-barrel gun in belly
Six pylons under fuselage to wing roots for more than 4,500 kg of guided and unguided air-to-surface weapons

Crew

Men . . . . Two, side-by-side seating

*All of these figures are estimates

Transport An-12 Cub *(OLI Not included)*

(Medium/Long-range transport/Electronic warfare aircraft)

Characteristics

Engine . . . . Four 4,000 hp each, Ivchenko Al-20 turboprops

Armored Reconnaissance Vehicle BRDM-2 *(6)*

Characteristics

| | | |
|---|---|---|
| Weight | . . . . | 7.0 tons |
| Gun | . . . . | Caliber 14.5mm MG, Model KPVT + Sagger |
| Basic load | . . . . | 500 rounds |
| Secondary Armament | . | 7.62mm MG, Model PKT |
| Basic load | . . . . | 2,000 rounds |
| Maximum armor | . . . . | 10mm |
| Speed | . . . . | Land 100km/hr |
| | . . . . | Water 10 km/hr |
| Cruise range | . . . . | 750 km |

Crew

| | | |
|---|---|---|
| Men | . . . . | 4 |

There is also BRDM-3 model seen only so far with AT-5 AT missile

AIRCRAFT

Fighter Bomber Su-7 Fitter A/Su-17 Fitter C *(723)*
(Single-seat ground attack fighter/variable sweep later development)

Characteristics

| | | |
|---|---|---|
| Engine | . . . . | Lyulka AL-7F Turbojet |
| | . . . . | 10,000 kg static thrust with afterburner/ more powerful engine |
| Span | . . . . | 8.93 meters, length 17.37 meters/span 12.5 meters spread, 9.00 meters swept, length 17.0 meters |
| Maximum gross weight | | 13,500 kg/unk |
| Maximum speed | . . . . | Mach 1.6 @ 11,000 meters/unk |
| Maximum range | . . . . | 1,450 km/unk |
| Combat radius | . . . | 460 km/unk |
| Service ceiling | . . | 15,150 meters/unk |

Armament

Two x 30mm NR-30 guns in wing roots; 70 rounds each gun
Two x 750 kg bombs
Two x 500 kg bombs or rocket pods/Two attachments under wing fences for external stores

Crew

| | | |
|---|---|---|
| Men | . . . . | Pilot |

Fighter Bomber MiG-23 Flogger D *(4,611)*
(Single-seat, variable sweep, ground attack fighter)

| | | |
|---|---|---|
| Span | . . . . | 38 meters, length 33 meters |
| Empty weight | . . . . | 28,000 kg |
| Gross weight | . . . . | 61,000 kg |
| Maximum speed | . . . . | 776 km/hr |
| Maximum cruising speed | | 600 km/hr |
| Range | . . . . | 3,400 km @ 550 km/hr with 10,000 kg payload |
| Service ceiling | . . . | 10,210 meters |

Armament
Two 23mm NK-23 guns in manned tail turret

Crew
Men . . . . 6

Troops
Men . . . . 100 paratroops or freight--Gantry can handle 2,300 kg load

Transport An-22 Cock *(OLI Not included)*
(Long-range heavy strategic transport)

Characteristics

| | | |
|---|---|---|
| Engines | . . . . | Four 15,000 shp each, Kuznetsov NK-12 MA turboprops |
| Span | . . . . | 64.4 meters, length 57.8 meters |
| Empty weight | . . . . | 114,000 kg |
| Gross weight | . . . . | 250,000 kg |
| Maximum speed | . . . . | 740 km/hr |
| Range | . . . . | 10,950 km with max fuel and 45,000 kg payload |
| | . . . . | 5,000 km with max payload |

Crew
Men . . . . 5-6

Troops
Men . . . . 28-29 in cabin forward of main freight hold
. . . . 4 travelling gantries and 2 winches to speed freight handling

Helicopter Mi-8 Hip *(89)*
(General purpose and assault transport helicopter)

Characteristics

| | | |
|---|---|---|
| Engines | . . . . | Two 1,500 shp each, Isotov TV2-117A turboshaft engines |
| Rotor diameter | . . . | 21.29 meters |
| Fuselage length | . . . | 18.31 meters |
| Empty weight | . . . . | 7.261 kg |
| Maximum gross weight | | 12,000 kg |

Maximum speed. . . . 260 km/hr @ 1,000 meters
Service ceiling. . . 4,500 meters
Range . . . . 425 km with 28 troops

Armament
Eight external stores points each capable of pods carrying 16 57mm rockets

Crew
Men . . . . 2-3

Troops
Men . . . . 28-32, 12 stretchers and medical attendant
4,000 kg of internal freight or 3,000 kg externally stored freight

Helicopter Mi-24 Hind *(92)*
(Armed assault helicopter)

Characteristics
Engines . . . . Two unidentified turboshaft engines each est 1,500 shp
Rotor diameter . . . 17.0 meters
Fuselage length. . . 17.0 meters

Armament
One 12.7mm MG in nose
Mountings for four AT-2 Swatter Antitank Missiles and four other stores including pods each carrying 32 57mm rockets

Crew
Men . . . . 2

Troops
Men . . . . 8 (combat equipped)

GERMAN ARMY GROUP "C"

CASE TANNENBAUM

AND ASSOCIATED PAPERS

~~RESTRICTED~~

T78 Roll 649
Frames 25

OKH
Op. Abt.(IIa)
25 June 1940- 21 July 1941 SCHWEIZ (Unternehmen "Tannenbaum")

H22/397
(Photostat)

| TYPE | SUBJECT | SENDER | ADDRESSEE | DATE | PAGE |
|---|---|---|---|---|---|
| Directive (Memo) | Plan for the invasion of Switzerland. A surprise attack to be carried out against Swiss defense units located in fortifications. Number of German forces required and necessary preparations for the attack. | OKH/Gen St d H/ Op Abt (I) | | 25 Jun '40 | 1-5 |
| Memo | Regrouping of the Swiss Army. | " | | 25 Jun '40 | 6 |
| Memo | A description of fortifications on the Swiss border and in Switzerland proper:<br>(1) general description<br>(2) northern and north-eastern borders.<br>(3) Western and north-western borders.<br>(4) southern border.<br>(5) detailed description of types of fortress constructions. | OKH/Gen St d H/ Abt Fremde H. West | OKH/Gen St d H/ Op Abt (I) | 1 Jul '40 | 7-30 |
| Report (Memo) | The over-all strength of the Swiss Army; troop dispositions. | Gruppe I | | 3 Aug '40 | 31-32 |
| Memo | Study for an aggressive operation and subsequent occupation of Switzerland by the German and Italian forces.<br>Part I: objectives of the German attack; a description of the Swiss terrain; the strength and location of Swiss units.<br>Part II: missions of the Italian army; liaison to be maintained with German forces for combined operations. | OKH/Gen St d H/ Op Abt (I) | | 6 Aug '40 | 33-44 |



~~RESTRICTED~~ Unclassified

| TYPE | SUBJECT | SENDER | ADDRESSEE | DATE | PAGE |
|---|---|---|---|---|---|
| Memo | A revision of the operational study of an attack against Switzerland. It contains the same outline of preparations as the study dated 5 Aug 1940. It is a revised version prepared after new information had been received on changes in the Swiss army. | OKH/Gen St d H/Op Abt (I) | | 12 Aug 40 | 46-72 |
| Letter | Request for information on the closing of the Swiss-German border. | OKH/Gen St d H/Gen Qu | OKW/Abw Op Abt | 15 Jul 40 | 73 |
| Report | Daily situation report of 20 Jul ~~1950~~ 1940 | OKH/Gen St d H/ Abt Fremde H. West | OKH/Gen St d H/ Op Abt (I) | 20 Jul 40 | 74 |
| Report | Daily situation reports for period from 24 July to 30 July 1940. | " | " | 30 Jul 40 | 75-77 |
| Report | Daily situation reports for period from 5 August to 16 August 1940. | " | " | 16 Aug 40 | 78-79 |
| Memo | Correspondence between France and Switzerland, Octoker 1939-February 1940; contains information on Swiss plans for the defense of Switzerland against a possible German attack. | " | " | | 80-85 |
| Notes | Pencil notes on preparations for an offensive against Switzerland. 5 Sep 1940 | | | | 86-89 |

| TYPE | SUBJECT | SENDER | ADDRESSEE | DATE | PAGE |
|---|---|---|---|---|---|
| Report | Daily situation report of 25 August 1940. | OKH/Gen St d H/ Abt. Fremde H. West | OKH/Gen St d H/ Op Abt (I) | 25 Aug '40 | 90-91 |
| Maps | Photostatic copies of maps showing the disposition of the Swiss army, as of 25 August 1940. | " | " | 25 Aug '40 | 92-96 |
| Memo | Captured French documents; description of Swiss military roads in the area southwest of Basle; defense preparations in the Basle area against impending German invasion. | " | " | 3 Sep '40 | 97-106 |
| Maps | 40 photostatic copies of maps of Switzerland; show each canton(administrative area) in detail; defense systems and probable disposition of Swiss units; scale 1:100 000 and 1: 300 000. | " | " | | 107-146 |
| Report | Daily situation reports for the period from 25 August to 9 September 1940. | OKH/Gen St d H/ Abt. Fremde Heere West/ IV | OKH/Gen St d H/ Op Abt (I) | 9 Sep '40 | 147-148 |
| Letter | Report from an agent that the Swiss expect a German invasion. Information that American planes are being delivered to England. | Abt. Abt III | OKH/Gen St, d H/ Heerewesen | 31 Aug '40 | 149 |
| Report | Daily situation reports for period from 16 September to 21 September 1940. | OKH/Gen St d H/Abt Fremde Heere West | OKH/Gen St d H/ Op Abt (I) | 22 Sep '40 | 150-151 |
| Letter | Suggestions on the command assignments for the invasion of Switzerland. | OKH/Gen St d H/ Op Abt (IIa) | Fremde Heere West | 30 Dec '40 | 152 |

| TYPE | SUBJECT | SENDER | ADDRESSEE | DATE | PAGE |
|---|---|---|---|---|---|
| Memo | General Halder's (Army Chief of Staff) idea for carrying out the offensive against Switzerland. | OKH/Gen St/ d H/ Op Abt (IIa) | Fremde Heere West | 9 Oct '40 | 153-15 |
| Memo | Ditto | Op. Abt (L) | H. Gr. C. | 26 Aug '40 | 156-1 |
| Operation Orders | Complete operation plan for the invasion of Switzerland; Includes O/B and 25 maps showing the lines of action of German and Italian forces. The attack codes as operation "Tannenbaum"(Fir-tree). | H. Gruppenkdo. C. (Ia) | OKH/Gen St d H/Abt. (IIa) | 4 Oct '40 | 159-2 |
| Memo | A revision of the operational study for the invasion of Switzerland. | Major Wiest Gruppenleiter I | " | 14 Jul '41 | 206-220 |
| Letter | Discontinuation of preparations for the invasion of Switzerland. OKH statement that Switzerland would not be invaded. | OKH/Gen St d H/ Op. Abt (IIa) | Major Wiest Gruppenleiter | 21 Jul '41 | 205 |

~~RESTRICTED~~ Unclassified