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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 OLI's 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 OLI's 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 Call)*, 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 C³ 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 (P₂), 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 Neftenbach-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).

* * *

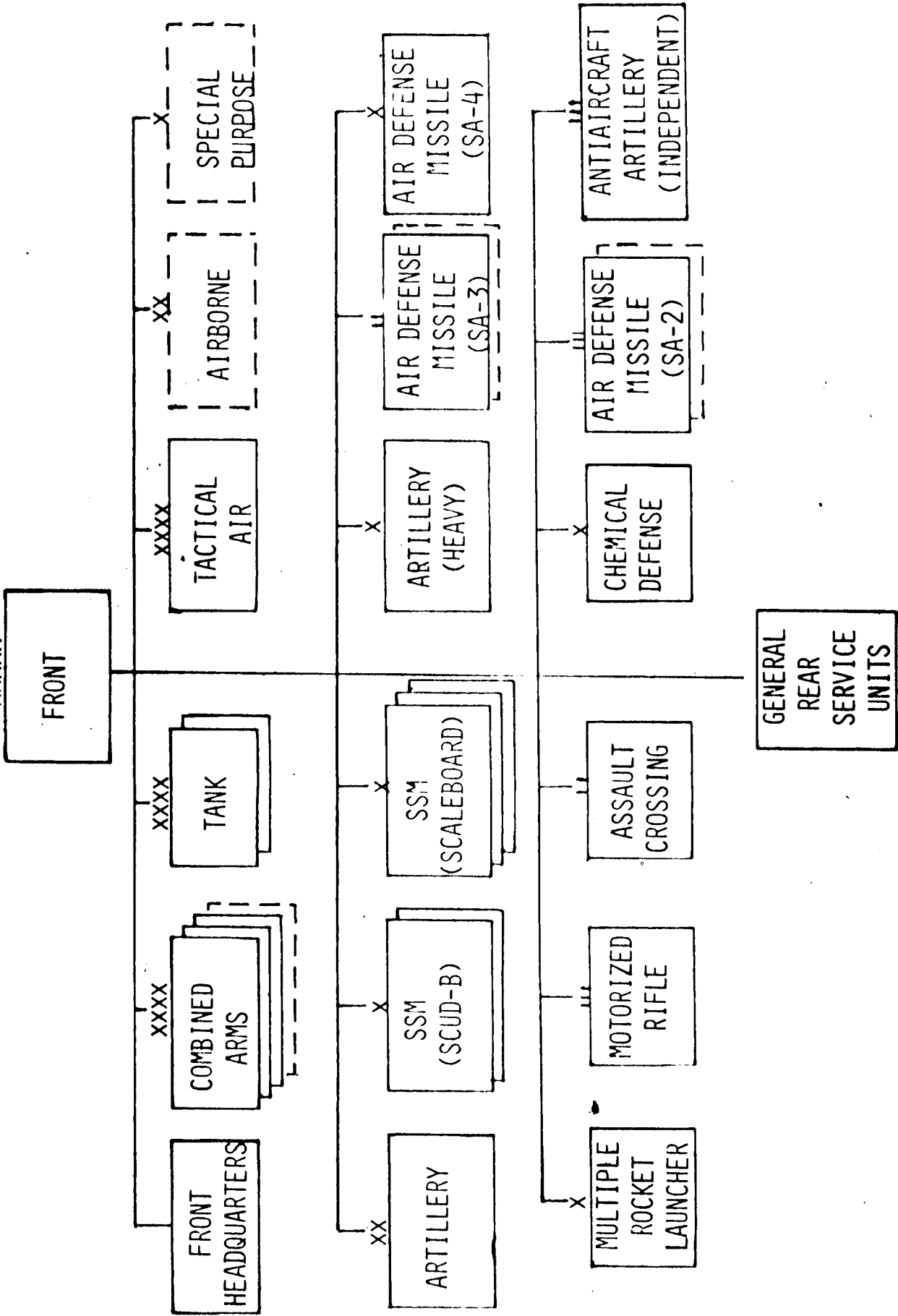
For the purpose of this study, only the main effort of the 101st CAA will be studied in detail, as it conforms to the area of Swiss military deployment under consideration.

BASIC DATA ON SELECTED SOVIET WEAPONS
WITH OLI's

SOVIET FORCE ORGANIZATION
AND AGGREGATE OLI's

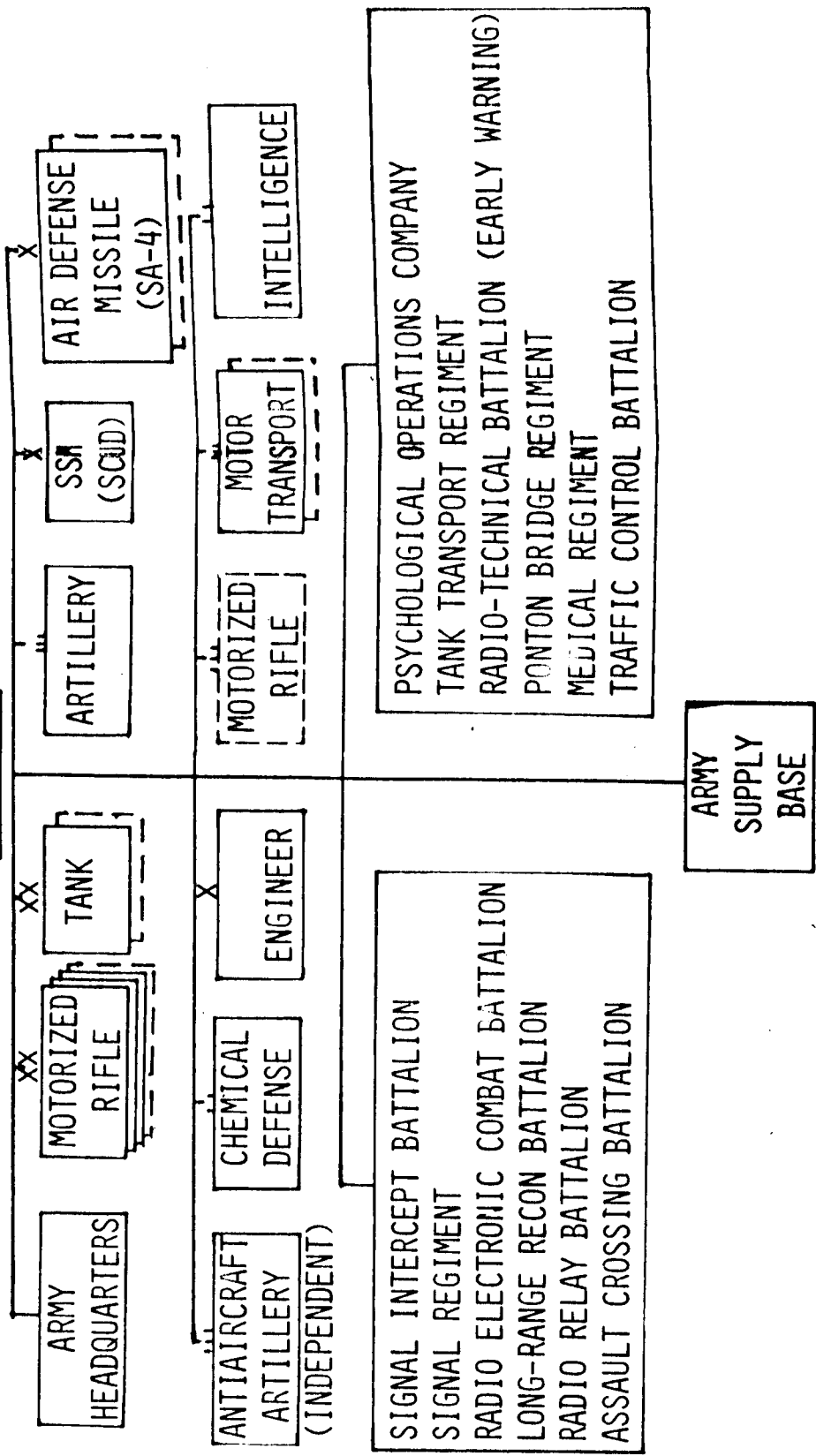
TYPE SOVIET FRONT

XXXXXX



TYPE SOVIET
COMBINED ARMS ARMY

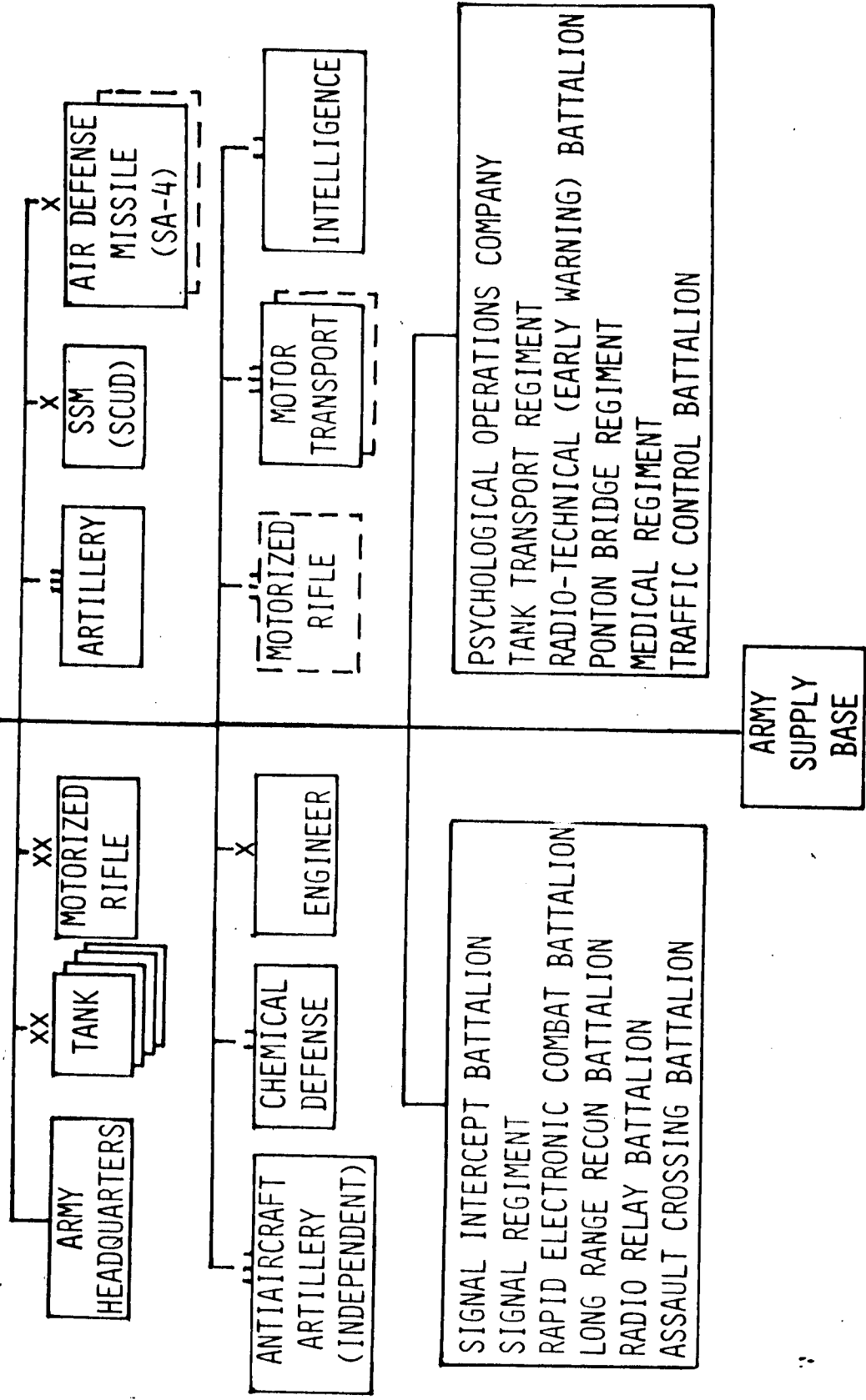
XXXX
COMBINED
ARMS
ARMY



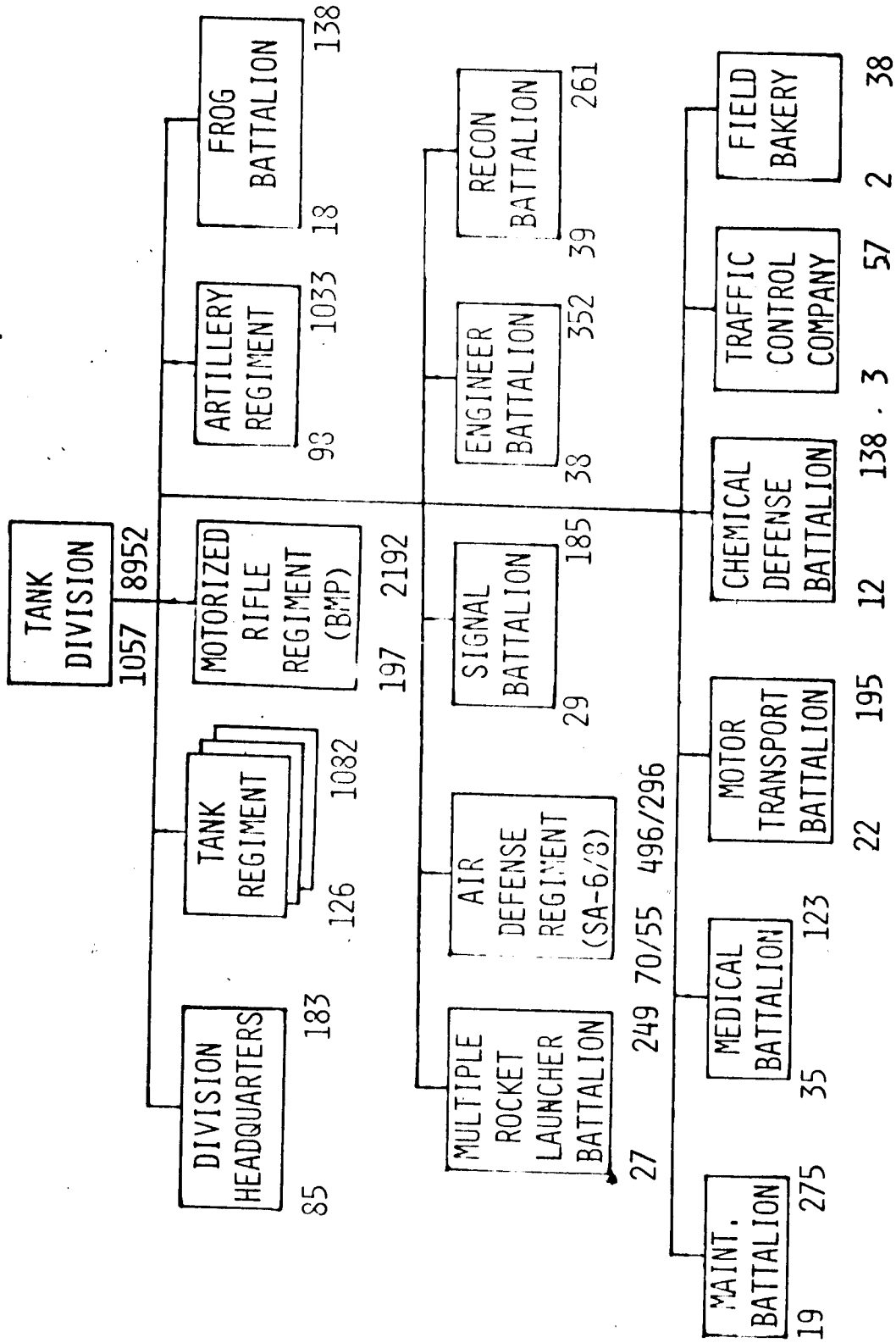
TYPE SOVIET
TANK ARMY

XXXX

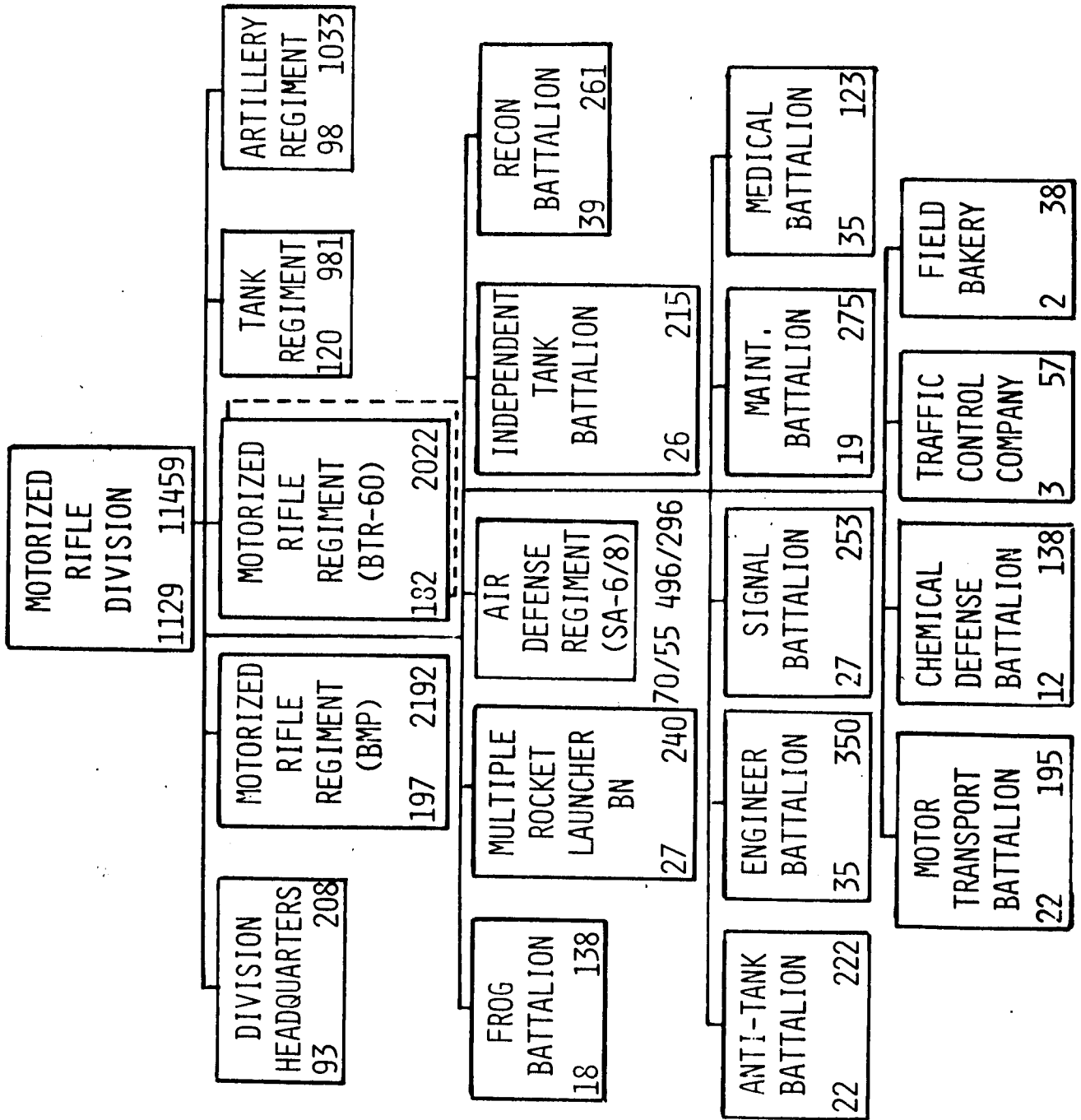
TANK
ARMY



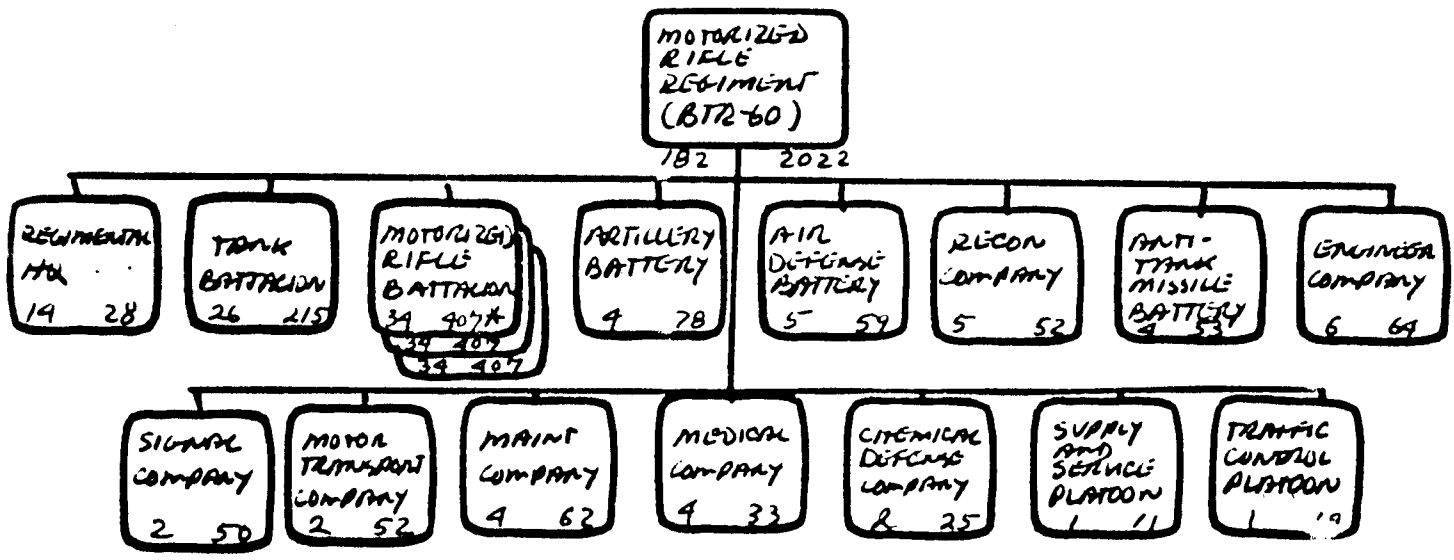
SOVIET TANK DIVISION (TD)



SOVIET MOTORIZED RIFLE DIVISION (MRD)



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



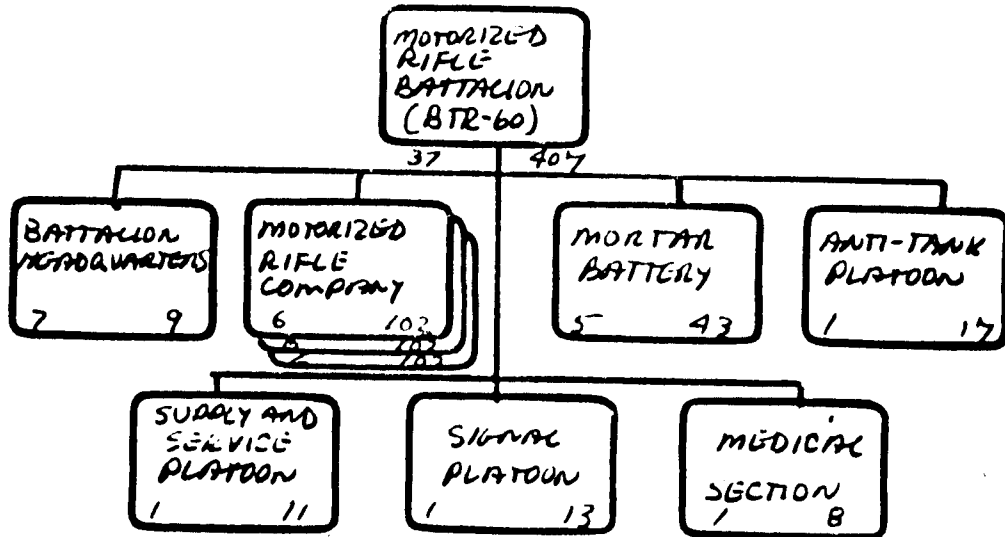
SUBORDINATION: Organic to Motorized Rifle Division

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 TRK	PT-76/BMP R VEH	BMP	BTR-60	BTRM-2	MOTORCYCLE	7.62mm AKM	ZSU-23-4	BRDM-2/ATM	SAIGER/PALOT AT-100, MANPADS	SAG-4 RR	RPG-7 GRAB	120mm Mortar	122mm TOW/SP	SA-7 ATAC	SA-9 F.V. VEH	GROUND SURV REPAIR, MANPADS	MTU BTR-60	TRM HOLDING 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	64				1			4									9					11
RECON CO	5	52	57		3				5						5					1				3
AT MSL BTRY	4	53	57					3				9												3
ENGINEER CO	6	64	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	109	8	9	171	4	9	6	6	86	18	6	36	4	1	4	4	205	

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

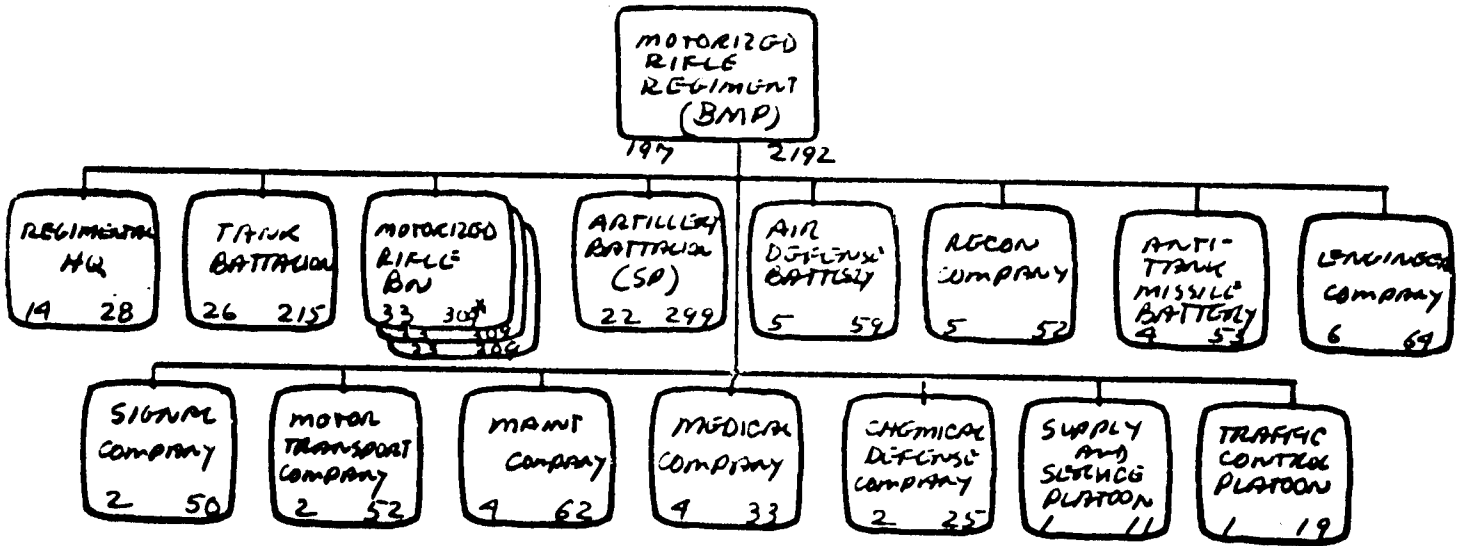


SUBORDINATION: Organic to Motorized Rifle Regiment (BTR-60) of Motorized Rifle Division

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 / FRAGOT ATUM, MANPACK	SPG-9 RIFLE	7.62mm PKM Mt	7.62mm AKMS rifle	7.62mm SVD rifle	9mm PM pistol	RPG-7 Gren launcher	120mm Mortar	SA-7 GUID MISSILE	TRUCK
BATTALION HQ	7	9	16	1				9	7					1
MOTORIZED CO. 3	18	306	324	30			57	198	9	48	27	9		
MORTAR BTRY	5	43	48					33		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	286	9	68	27	6	9	16

MOTORIZED RIFLE REGIMENT (BMP) (MRR-BMP)



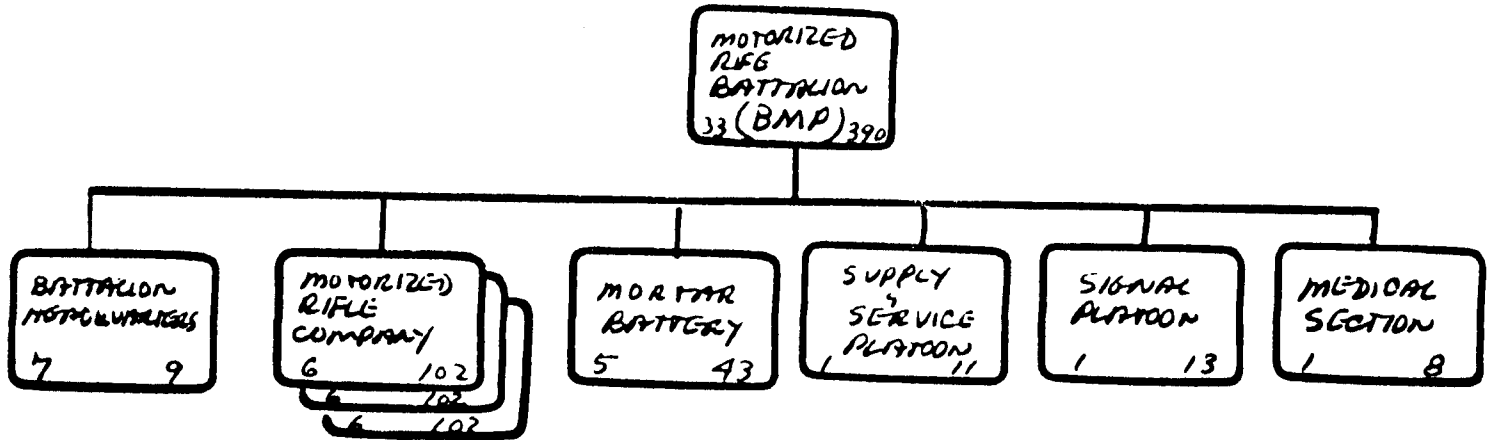
SUBORDINATION: Organic to Motorized Rifle Division and Tank Division
MISSION: To conduct offensive and defensive operations on a nuclear and non-nuclear battlefield as a part of a division.

*NOTE: ONE BN TRAINED IN HELICOPTER ASSAULT

	PERSONNEL			SELECTED WEAPONS AND EQUIPMENT																						
	OFFICERS	ENLISTED MEN	TOTAL	T-54/55/62 TANK	PT-71/BMP/AVEN	BMP	BTR-60	BTR-2	MOTORCYCLE	PKM 7.62mm	ZSU-23-4	BTR-2 ATUM	SAG-67/HAVOT	MAN PROX ATUM	SPG-9 RR	RPG-7	120mm mortar	122mm SP Gun	SA-7 S-125	SA-9 EU. VEH	G-ROUND SURV	RADAR, MAPS, etc	MTV TANK BRIDGE	TANK 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																							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		11
SIGNAL CO	2	50	52				2																			11
MOTOR TRANSPORT 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	4	9	0	0	81	18	18	36	4	1	4	4	4	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	SERGEANT/PLATOON LEADER	SPG-9 RECOILLESS RIFLE	7.62mm PKM MG.	7.62mm AKMS Rifle	7.62mm SVD Rifle	9mm PM Pistol	RPG-7 Gren Launcher	120mm Mortar	SA-7 GRIP 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	19