

Expanded Game Rules

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[19.0] INTRODUCTION

The Expanded Game modifies and builds on the Standard Tank! Game. The standard rules covering basic game functions, such as combat and movement, remain in force. Standard Tank! places the Player in the position of a company or platoon commander operating with his forces in a somewhat autonomous fashion bereft of any supporting arms. The Expanded game gives the Player more tools to work with. In most scenarios he will be able to use an off-map artillery capability, either planned or on call, and, in some cases, supplement this with air strikes. Some scenarios provide for mounted infantry to accompany the tank force. Tanks usually operate in formation (platoons). The Expanded game provides for formation (platoon) movement. At the expense of some flexibility in individual movement, this device lessens the effect of any panic on the tank force as a whole.

The heart of the Expanded Game lies in the Historical Period Chart and the greatly increased Weapons Characteristics Chart. The use of these two charts combined with the Expanded Scenarios and the notes on Tables of Organization permit the Players to create literally hundreds of individual scenarios featuring the major armored weapons systems from 1937 until the 1970's.

In essence the Player in the Expanded Game commands a tank company supported by one or two platoons of infantry (and sometimes AT guns) with a liason of sorts to artillery and/or air support. The successful Player is one who not only can fight his individual pieces well, but can also use all the instruments given him in a successful orchestration.

[20.0] ADDITIONAL PLAYING PIECES



Turretless Armored Fighting Vehicle (assault gun or tank destroyer)



Transport Vehicle (armored personnel carrier or truck)



Impact Marker (both artillery and air strikes)



Smoke Marker (artillery)



Vehicle Smoke Marker



Mine



AT Ditch



Panic Chit

[21.0] EXPANDED SEQUENCE OF PLAY

The sequence of play remains basically the same with certain new segments inserted to reflect the execution of additional tasks which the playing pieces are now capable of, or the application of, off-map artillery and air power.

[21.1] SEQUENCE OF PLAY OUTLINE

A. Plotting Phase

Remains the same as Standard Tank! In addition, the Players plot the application of artillery or air strikes at least five Game-Turns in advance.

B. Execution Phase

- 1. Off-Map Artillery and Air Strike Segment: Players place impact markers on the hexes where they ordered artillery and air strikes (five or more turns previously), calculating the impact zone. The effect of Air Strikes and HE artillery remains constant throughout the Game-Turn.
- 2. Panic Segment: Same as in Standard Tank!
- 3. Initial Facing Segment: Same as in Standard Tank!
- 4. Direct Fire Segment: Same as in Standard Tank!
- 5. Movement and Opportunity Fire Segment: Same as in Standard Tank!
- **6. Mounting and Dismounting Segment:** Players execute mounting and dismounting tasks for units that were plotted to do so.
- 7. Final Facing Segment: Same as in Standard Tank!
- 8. Smoke Removal Segment: Players remove smoke markers that were placed during the previous Game-Turn.
- 9. Smoke Creation and Impact Marker Removal Segment: Players place smoke markers which are to be in effect for the next Game-Turn, and remove artillery/air impact markers that were in effect during the present Game-Turn.
- C. Record the passage of one Game-Turn as in Standard Tank!

[22.0] ADDITIONAL CAPABILITIES AND TASKS

In addition to the tasks noted in (5.0), the following tasks and codes apply to Expanded Tank.

CODE DESCRIPTION

- RF Reconnaissance Fire: The unit fires at a suspected target hex in hopes of discovering a hidden Enemy position*.
- SF Smoke Fire: The unit fires into an adjacent hex creating a one hex smoke screen*.
- MT Mounting: A limited form of movement in which a vehicle picks up a "passenger" unit.
- DT Dismounting: A limited form of movement whereby the transporting vehicle drops off, "dismounts", its passenger unit.
- * Optional Rule

[23.0] R&L COMBAT RESULTS TABLE

(See page 16)

[24.0] ADDITIONAL COMBAT RULES

[24.1] HEAT ROUNDS AND SPACED ARMOR

HEAT (High Explosive Anti-Tank) Round represents a wide range of shaped charge explosive shells specifically designed to penetrate armor plate. Since HEAT Rounds do not depend on velocity or weight for effectiveness certain modifications must be made in the Attack Differential when using them. Spaced Armor again illustrates the fact that if you build a better mousetrap the mice are likely to get smarter. In short, Spaced Armor was (and is) designed to dissipate the effects of HEAT Rounds by detonating them prematurely against the first of two layers or armor plate (sometimes with a material such as styrofoam placed in the space between the two plates).

[24.11] HEAT Rounds are used only against armored targets. All attacks with HEAT Rounds are made on the +5 column. The attacks are calculated in the usual manner (adjust for terrain and target movement). If the Attack Differential is (+1) or greater, the attack is executed at (+5) Attack Differential regardless of the actual "normal" Differential. Note that it is neccessary for HEAT Rounds to have at least a (+1) Attack Differential for HEAT Rounds to have any effect at all. Units which shoot HEAT Rounds are noted on the WCC and must use HEAT Round when using their AP Attack Strength.

[24.12] Spaced Armor halves the AP Attack Strength of units using HEAT Rounds (round fractions down). For example, a T-62 firing HEAT Round at the front aspect of a M60A3 (with Spaced Armor) would result in no possibility of an attack (10-18=-8 Attack Differential). However, if the attack was on the side aspect of the M60A3 an attack would be made on the +5 column (10-8=+2 Attack Differential which becomes +5 due to the use of HEAT Round). Units which have spaced armor are noted as such on the WCC. If a unit with spaced armor is attacked by non-HEAT AP, then the spaced armor is treated just as normal armor.

[24.2] FIRE CONTROL AND COMBAT RESULTS TABLES

Just as in the Standard game the Fire Control System (and where applicable, the Panic Level) of the firing unit determines what Combat Result Table is to be used to execute an attack.

Following are two additional Combat Results Tables, the ranging machine gun and the laser, (R and L in the FC column of the WCC), which combine with the three CRT's provided with the standard game. These five CRT's cover all units with the following Fire Control Systems.

- 1. N(nominal) or SR(Stadia Reticule) and a panic level of 2 or below.
- 2. N or SR and a panic level of 3 or above.
- 3. SC(Stereo Coincidence) all panic levels.
- 4. R(Ranging Machine Gun) all panic levels
- 5. L(Laser) all panic levels.

How to use these tables is outlines in Section 8.9 and modified by the HEAT rules in 24.1.

[24.3] GUIDED ANTI-TANK GUN DEVICE COMBAT RESULTS TABLE

For the most part AT guns and devices listed on the WCC have orthodox Fire Control Systems similar to AFV's: i.e., N, SC, or R. These units use the orthodox Combat Results Tables when resolving their attacks. However, some of the most modern AT "guns" and devices (historical periods 11 and 12) such as the MILAN, ENTAC, SNAPPER etc., are really guided missiles mounting a massive HEAT warhead. They have tactical characteristics which differ from the orthodox AT weapon. First, they are guided from launch to impact by a human operator. This guidance is transmitted to the missile either by wire or by more sophisticated laser-electronic-radar beam control. In either case, the operator flies the missile into the target. Assuming the operator is accurate, the warhead is sufficient to penetrate and destroy most normal armor. There is, however, a stand-off minimum range which varies from 50 to 500 meters during which the missile accelerates, the operator zeros it in on the target, and the warhead arms itself. The given system cannot hit a target closer than its minimum range. Beyond the minimum range there is an interval where the missile builds up to maximum speed and the operator locks the missile in. In other words, these AT guided missile systems are ineffective at close quarters, moderately effective at ranges below 1000 meters and extremely deadly at ranges from 1000 meters to the limits of visibility (3000 plus meters). These characteristics are almost exactly opposite those of orthodox guns and inertial rockets which (all things being equal) decline in effectiveness with increasing range. The following table is used when resolving attacks by the modern AT missile systems. These systems are those labeled on the WCC with either the CLS (Clear Line of Sight) or TH (Target Homing) Fire Control System.

[24.31] MODERN GUIDED MISSILE ANTITANK COMBAT RESULTS TABLE

Range	CLS Panic Level 3 or more	CLS Panic Level 2 or less	TH [all panic levels]
M-10	1	1	1-2
11-20	1	1-2	1-3
21-30	1-2	1-3	1-4
31-40	1-3	1-4	1-5
41-50	1-3	1-5	1-5

Explanation:

- 1. M=minimum range system (as noted for each system on the WCC).
- 2. Cross reference the range between target and the firing unit with the Fire Control of the particular weapon (and where applicable, the panic level of the firing unit). Roll the die. If the result falls within the series of numbers shown, the target is destroyed; otherwise, the attack has no effect. Do not add to the die roll for target movement since the guidance mechanism eliminates the need to lead the target.

[24.32] Opportunity Fire is not triggered if a target passes through the line of fire within the minimum range of a guided system. (The operator is presumed to have the brains and training to withhold shooting at a target he cannot destroy.)

[24.33] All guided systems have an AP strength listed. This is a HEAT strength and it is neccessary that this HEAT strength give an Attack Differential of at least plus one after adjustment (for terrain and spaced armor) for the attack to be effective.

[24.34] A guided weapon AT unit may only fire on alternate Game-Turns though it may perform any other task in the intervening Game-Turns.

[24.35] All guided AT weapons are presumed to have a 360 degree field of fire even though they are represented by the AT symbol gun unit.

[24.4] ADJUSTMENT FOR TARGET MOVEMENT

To reflect the greater accuracy of modern fire control systems make the following adjustment to the Combat Results die roll, (depending on the FC system being utilized) for target movement.

FC System Adjustment for Target Speed

 $\textbf{N or SR} \quad \text{add 1 for every 2 MP expended or plotted}$

R add 1 for every 3 MP expended or plotted

SC add 2 for every 5 MP expended or plotted

L add 1 for every 6 MP expended or plotted

No adjustment is made when using the guided AT weapons (CLS and TH systems).

[24.5] EFFECT OF PRESERVATION LEVEL ON COMBAT STRENGTH

When a force reaches its preservation level, increase its panic level by 20% (i.e., draw two additional chits each Game-Turn). This effect replaces and supplants the effect of reaching Preservation noted in rule (15.11) of the Standard game, which was to arbitrarily halve the Attack Strength of Surviving Units.

[24.6] ARMORED PERSONNEL CARRIERS AS COMBAT UNITS

In addition to their primary purpose of transporting men and equipment on a battlefield, the most recent APC's may also be used as AFV's in their own right, either while carrying or when empty.

You may also create an AT missile-firing APC by grafting on to a modern APC the characteristics of a modern AT missile. Such a hybrid should be considered an Assault Gun for purposes of Movement, Combat, Preservation and Victory Conditions.

APC's (and trucks) which have zero Attack Strength (AP or HE) do not count as combat units for purposes of calculating or triggering Preservation.

[25.0] PLATOON OPERATIONS

COMMENTARY AND DEFINITIONS

Except for certain specialized situations, Armored Fighting Vehicles operate in tactical formations. The normal tactical unit is the platoon or troop of 3-6 tanks (varying with nationality). Two to four platoons combine to form a company or squadron. The platoon unit moves and fights as a formation and the company commander can control his operations by issuing orders to 2-4 platoon leaders rather than 10-20 autonomous tanks. The platoon tries to move and fight as an integral unit. The actual geometric formation a platoon uses depends on the tactical situation. All platoon formations are variations of three basic formations. These are: 1)The column: The column is the normal march formation. It is easy to control since one tank follows another in single file. It is normally a bad formation to fight from since only the first tank has a clear field of fire toward the front. 2) The line: The line abreast or line in echelon to the right or left is a good combat formation since it allows maximum firepower to bear to the front. It is,

however, the most difficult formation to control. 3) **The wedge:** The wedge combines the advantages and disadvantages of line and column. It is an all-purpose formation to move and fight from. It is a Vee with the apex either pointed toward the front or inverted away from the front.

A reasonably well trained platoon is able to keep formation or change formation during movement with facility. This is a result of training and the fact that the formation lends itself to control by keeping the formation members within visual contact of one another (radio is the preferred method of communication, if it is working).

This is not to say that platoons always execute properly the orders of higher command. They don't. Orders are misunderstood or aren't received by the platoon commander for a myriad of reasons. But the platoon itself will usually hang together and if the platoon leader orders an action the entire platoon will comply. In Standard Tank! we made no provision for formation operations. The Player is cast in the role of a company commander in charge of an amorphous force with no provision for subordinate leaders. The effect is obvious. Tanks panic at random and, after a few Game-Turns, are scattered over the map. Expanded Tank! permits platoon-formation operations.

GENERAL RULE:

Each Player's "tank" force is to be divided into platoons before the beginning of any Scenario. Each platoon must be at least three tanks in strength to begin with. Each platoon must have a designated platoon leader tank. For example, a force of 13 tanks could be divided into two platoons (7 plus 6) or three platoons (4-4-5,6-4-3) or whatever. (Note: It is strongly suggested that Players adopt the platoon strengths outlined in 33.0.) Thereafter during the course of play the entire platoon shall guide on and in essence parrot the actions of the platoon leader tank. In order to maintain a formation and the benefits thereof, a given tank must be either adjacent to, or at most two hexes distance from, at least one other tank in the given platoon at all times.

PROCEDURE:

Tank operations basically divide into various types of either movement (MV,FC,MT,DT,OV) or fire (DF, OF). Just as an individual tank may only perform one given operation (task) in a given Game-Turn, so too is a given formation (platoon) limited to one mode of operation for a given Game-Turn. This is called Conformity. Normally, this task is plotted for the leader tank of the platoon only, and then executed by the entire platoon guiding on the leader tank. Certain operations require that definite plots be written for each individual tank of a platoon. Examples: 1)The operation of Direct Fire requires that each individual tank be given a specific target hex. 2)A platoon of five tanks is to mount two infantry squads, it requires that two of the five tanks have a specific mounting (MT) plot written and that the other three either remain stationary or move one or two hexes.

Execution of formation movement requires that the Player move the platoon tanks in formation in conformity with the plot of the platoon leader. In formation means in the same formation that the platoon began the Game-Turn with, unless a formation change is indicated on the plot.

[25.1] LIMITATIONS AND RESTRICTIONS ON FORMATION MOVEMENT

Individual tanks moving in platoon formation may not exceed their individual Movement Allowances. Basically, a formation **should** move at the speed of its slowest member in order to preserve the formation.

[25.2] EFFECTS OF PANIC ON FORMATION OPERATIONS

[25.21] EFFECT ON MOVEMENT, FC, OV, MT, and DT

A platoon is only affected by Panic if the leader tank is subject to panic (on a panicked hex). In this case a Panicked movement plot is created for the leader tank and the entire platoon moves in conformity to this plot. For movement purposes, platoons are less vulnerable to panic. They (the leader) are subject to two levels less than their given panic level. Thus, the leader of a platoon with a Panic Level of 40%, as given by the Historical Period Chart, is subject to the 20% Panic Level when executing a movement operation. Additionally, the Panic Movement Plot of the Platoon Leader is determined differntly from that of other units. When rolling the die to determine the direction of the Panic Movement a die roll of 1 or 2 means that the unit moves straight ahead. A die roll of 3 or 4 and the unit deviates one hexside to the right. A die roll of 5 or 6 and the unit deviates one hexside to the left. In effect, units in a platoon formation will never Panic "backwards".

[25.22] EFFECT ON FIRE (DF, OF)

If the platoon is plotted to fire either DF or OF, it is subject to its original historical given panic level. As in movement, the leader tank serves as the panic trigger. If it is not panicked, then the entire platoon is exempt from panic irrespective of what hexes the individual tanks lie on. If the leader tank panics, then the entire platoon becomes subject to panic and it is assessed tank by tank, hex by hex. This is different from the panic effect on movement in which all units follow the leader. If the leader panics on a DF or OF execution, then the remainder will panic depending upon what hexes they lie on. Some may also panic and some may not, depending.

[25.3] CREATION OF REPLACEMENT LEADERS

If the leader tank is destroyed, the Player may appoint any surviving tank in the formation the new leader. This occurs on the Game-Turn following the turn in which the leader was destroyed. On this creation-turn the entire formation must remain stationary and may not execute any operation. The Player may choose not to create a new leader. If he chooses not to do so, the formation is automatically dissolved and its surviving tanks are treated as individual units, as in the Basic Game.

[25.4] CONFORMITY AND EXECUTION OF FORMATION MOVEMENT

While physically displacing individual tanks to move a formation through the hex grid a Player may exercise some discretion in the paths these tanks follow so long as the path of any given tank does not stray more than two hexes from the path of some other formation member.

The Player may change any formation (from line to wedge, etc.) during movement by simply noting the change on his plot next to the described path of the leader. Example: MV.....(L-W). Then during the course of movement for that formation the Player moves some units less than others in relation to the leader in order to effect the change. In fact, the Player may write a Movement Plot in which the leader does not move at all while subordinate units wheel into a new geometry.

If a formation member strays more than two hexes from the formation (i.e., is three or more hexes from any other platoon member) at any time he is considered to have broken formation and is treated as an individual unit on all Game-Turns following the turn in which he broke formation. He may rejoin his old platoon by ending any Game-Turn within two hexes of any other unit of the platoon but he may not join another platoon.

[25.5] COMPANY HEADQUARTERS SECTION OR PLATOON

Section 31.1 describes the organization of various tank companies from 1940 till today. In most cases they include, in addition to the combat platoons, a headquarters section or platoon containing one or more tanks. This headquarters section is basically a command element and is usually not committed tactically. The Players may or may not deploy HQ sections when playing any Scenario at their option (they can assume the section is off-board directing operations via radio). If they do introduce the HQ section into the deployment the following rules are suggested.

[25.51] The HQ section is considered as one platoon even if it only contains one or two tanks initially. The unit designated as the leader of the HQ platoon is considered the company commander (You).

[25.52] The company commander, and subordinate units, never suffer panic when Moving or Facing. They are subject to the normal platoon panic rules when firing (DF or OF). The HQ section may not engage in overruns or in transporting.

[25.53] A destroyed subordinate member of the HQ section counts as two units destroyed in calculating the triggering of Preservation.

[25.54] If the company commander is destroyed, all of the remaining units in the entire company must remain stationary on the following Game-Turn and may not perform any operation. Thereafter the combat platoons may return to normal operations. The surviving HQ members become individual units. The destroyed company commander counts as three units toward Preservation. (Alternatively the game could end since one of the Players is now "dead".)

[25.6] ARMORED PERSONNEL CARRIER [and truck] MOVEMENT FORMATIONS

APC's, with or without passengers, may adopt the same rules, benefits, and restrictions for platoon operations as AFV's.

[26.0] EXPANDED INFANTRY RULES

In the Standard Game the role of an infantry squad is limited to that of a weak screen to protect anti-tank guns from being easily overrun by Enemy tanks. This role is such simply because there is no other purpose in a Standard Scenario for the infantry squad's existence.

In the expanded game there are Scenarios in which both Alpha and Bravo forces contain infantry squads. These squads may or may not be armed with AT devices and may or may not have transport vehicles detailed to aid their movement. In any event, they are expected to fulfill a much expanded role in the play of the game. They can be used to fire at opposing infantry, anti-tank guns, and soft vehicles (trucks). To the extent that they are armed with infantry AT devices they may fire at Enemy Armor. To the extent that they have a mounted capability, they can accompany their Friendly armored units assisting them in overcoming Enemy units and occupying ground.

[26.1] INFANTRY HE AND AP ATTACK STRENGTHS

[26.11] HE ATTACK STRENGTH

The Historical Period Chart lists the HE Attack Strengths of infantry units ("squads") by combatant nationality and by time period. Thus, in any Scenario set in Period 1 (1937-1940) a Russian infantry unit has an HE Attack Strength of 2; Period 6 the same unit has an HE Attack Strength of 4; in Period 7 (1946-1950) a strength of 6 and so on.

The HE Attack Strength of an infantry unit may be used to execute either an OF or DF mission in exactly the same fashion as a tank or anti-tank gun. The effective range of infantry HE fire is five hexes. The absolute range of infantry HE fire is ten hexes. The FC #1 CRT is used in all cases.

[26.12] AP ATTACK STRENGTH

In Expanded Tank!, the Standard Tank! rules dealing with infantry attacking AFV's are abolished and replaced as follows:

An infantry unit may **not** attack an AFV unless it is equipped with an infantry issue AT device (see WCC). An infantry unit so armed may fire either DF or OF against an AFV using the characteristics of the particular AT device with which it is presumed to be armed. In effect, the infantry unit functions as though it were an anti-tank gun except that its field of sighting/fire is 360°.

[26.2] HOW TO EQUIP INFANTRY UNITS WITH AN ANTI-TANK DEVICE

The Expanded Scenario Chart lists the Orders of Battle for the opposing forces. Each OB lists the number of infantry units available to each Player and the number of these units that may be equipped with an AT device prior to the game. You designate them as such during the course of play. (An asterisk next to the unit I.D.code on the Plot Chart does nicely). For example, in Meeting Engagement #2 (34.2), the Bravo Player is given three infantry units, each one armed with an AT device. Assume that the scenario is set in Period 8, and the Bravo Force simulates a U.S.Army Force. The Bravo Player would consult the WCC and select an infantry AT device for issue, either listed in that Period or some prior Period. (Players should use their own discretion.) He could pick the M-20A or the M-9. Assume that he chose the M-20A, then his three units would be presumed to be armed with this weapon and could execute either DF or OF missions against armored targets by using this weapon. In effect, each unit would have an AP Attack Strength (HEAT) of 14, and an absolute maximum range of three hexes.

[26.3] LIMITATIONS ON INFANTRY FIRE

[26.31] An infantry unit which has not been armed with an AT device has a zero AP Attack Strength and may not fire at an AFV. Such a unit only has an HE Attack Strength, and an infantry unit may fire at a soft target with its HE Attack Strength. [26.32] In any given Game-Turn an infantry unit may only use one of its Attack Strengths (HE or AP) in either an OF or DF mission. An infantry unit may not split its fire against two or more hexes.

Note: There is no counter or marker provided to indicate whether or not an infantry unit is armed with an AT device. This fact must be listed prior to the start of the Scenario.

[27.0] VEHICLE TRANSPORT OF INFANTRY AND ANTI-TANK GUNS

GENERAL RULE:

In the Standard Game, infantry units may move (displace) one hex per Game-Turn; Anti-Tank guns may not displace but they may face (turn within their hex). These basic rules stand in the

Expanded Game. In addition, these units may be transported by vehicle units. That is, they may ride on or be towed by a vehicle. This allows the gun or squad to move as though it were an integral part of the vehicle. The act of getting on (or hooking up) to a vehicle is called mounting. The act of getting off (or unhooking from) a vehicle is called dismounting. The action of mounted movement is called carrying. The entire procedure of mounting, carrying and then dismounting is called transporting.

Mounting or Dismounting is a special operation that is essentially a form of movement. The mission code for Mounting is "MT"; the code for dismounting is "DT". Either operation takes place in the Mounting/Dismounting segment of the Execution Phase. MT or DT is a plotted action. Both the unit mounting/dismounting and the vehicle being mounted/dismounted must have the appropriate plot written. The act of a vehicle carrying a "passenger" unit is co-equal with normal vehicle movement and a normal MV plot is sufficient to describe the movement of both the vehicle and the unit it is carrying.

PROCEDURE:

Mounting -- Assume that infantry (or anti-tank) unit X is to mount, move and dismount from vehicle A during the course of Play. On the Plot next to unit X write "MT (A)" and next to vehicle A write "MT (X)". During the Mounting/Dismounting execution segment place vehicle A on top of unit X. The unit X is now mounted on vehicle A.

Dismounting--On the plot next to unit X write "DT"; next to vehicle A write "DT" (hex #NNNN). During the MT/DT execution segment remove vehicle A from unit X and place vehicle A on the hex number written on the Plot.

[Transport Movement]

Carrying--Simply write a normal MV plot for vehicle A. During the Movement Execution Segment simply displace the vehicle and the transported unit underneath it through the hexgrid in accordance with the Movement Plot.

[27.1] PRECONDITIONS AND RESTRICTIONS ON MOUNTING AND DISMOUNTING

[27.12] In order to mount, the vehicle being mounted and the unit mounting must begin the Game-Turn in adjacent hexes.

[27.13] In order to dismount, the vehicle must displace to a hex adjacent to the one the mounted unit dismounted in.

[27.14] Units which Mount or Dismount may not plot or execute any other action in the Game-Turn in which they Mount or Dismount (except, of course, for the one hex movement of the vehicle onto or off of the transported unit). In essence, MT or DT takes an entire Game-Turn to execute and a vehicle may not move from some distant hex during the Movement Execution Segment and then, in the same Game-Turn, be used to mount a unit. The necessary adjacent juxtaposition for MT must have been accomplished on some previous Game-Turn. By the same token a vehicle may not transport a unit to a given hex and Dismount it on that hex in the same Game-Turn. For a unit to be transported from a given hex to another hex would take a minimum of three Game-Turns: One to Mount, one to be moved (carried), and one to Dismount.

[27.2] WHAT VEHICLES MAY TRANSPORT WHICH INFANTRY/ANTI-TANK UNITS

[27.21] One vehicle may transport either one infantry squad or one anti-tank gun at any one time. A vehicle may not transport another vehicle.

[27.22] Anti-Tank guns may only be transported by vehicles which have an anti-tank gun transport capability. Practically speaking, these are trucks, and APC's. Tanks and assault guns don't tow AT guns.

[27.23] Infantry units may be transported by any vehicle, tanks, and assault guns included. (Exception: In certain Scenarios some infantry squads are equipped with certain AT devices which preclude them being transported by tanks. See WCC).

[27.3] EFFECT OF PANIC ON TRANSPORT OPERATIONS

Vehicles and units engaged in Mounting or Dismounting are exempt from Panic. During the Game-Turn in which it is actually carrying a mounted unit, the vehicle is subject to normal Panic effects, just as though it did not have the unit on board. Obviously, a panicked vehicle simply carries the mounted unit with it wherever it panicks to.

[27.4] STACKING LIMITATIONS ON TRANSPORT

[27.41] While mounting, carrying, and dismounting a vehicle unit is stacking with, stacked with or unstacking from a non-vehicle unit. This is, of course, an inherent, permitted exception to the normal Stacking Rules. Other than this necessary exception, vehicles and units may not engage in transporting in violation of the Stacking Rules.

[27.42] A unit may not Mount or Dismount in a hex that contains any other unit. A vehicle which is carrying a Mounted unit may not stack with any other unit at the end of any given Movement or MT/DT Execution Segment. This limitation expressly prohibits a vehicle from Mounting one unit from a stack of two units or from Dismounting a unit onto another unit.

[27.5] OVERRUNS

In Scenarios set in certain historical periods, an infantry unit Mounted on an APC-type vehicle is allowed to Overrun an Enemy soft target. The combined APC and accompanying infantry unit are treated as though they were a single tank. This Overrun capability is a by-product of doctrine, training and equipment and only those specific combinations of particular APC and infantry listed in section (27.8) may execute an Overrun.

Units engaged in transporting may not be Overrun except that an unmounted infantry/anti-tank unit may be Overrun during the Movement Execution Segment immediately preceding its Mounting Segment. This is a permitted violation of simultaneity.

[27.6] VULNERABILITY OF TRANSPORT OPERATIONS TO ENEMY FIRE

Vehicle and non-vehicle units engaged in transporting operations are exposed to Enemy fire as follows.

Mounting--Both the vehicle and the passenger unit are exposed to normal Direct Fire separately in their separate hexes. If the passenger unit was in an improved position, it is presumed to have vacated the improved position in the Game-Turn in which it is plotted to mount. The vehicle unit may be exposed to Opportunity Fire when is crosses the hexside to mount the passenger unit. Obviously, if either the vehicle or the passenger unit is destroyed in combat, the mounting operation is abortive.

Carrying--When mounted the passenger unit assumes and accepts the vulnerability of the vehicle unit. It also assumes and accepts the fate of the vehicle unit. If the vehicle-cum-passenger are fired upon, the passenger unit is ignored while determining the outcome of the attack. If the vehicle is wrecked, then the passenger unit is eliminated.

Dismounting--The vehicle-cum-passenger are considered to remain in the carrying configuration throughout the movement execution segment of the Game-Turn in which they dismount. When, in the Mount/Dismount segment of the Game-Turn the vehicle unit is exposed to Opportunity Fire. If it is wrecked by such fire, the Dismounted Passenger unit is unaffected.

[27.61] EXCEPTION TO ABOVE RULES

Infantry being carried by tanks or assault guns are presumed to be hanging on to the exposed sides of the tank. As such they are vulnerable to HE fire from any Enemy unit. If fired on they have a Defense Strength of one point regardless of terrain. The carrying tank is unaffected by HE fire directed at a passenger infantry unit; it proceeds on its plotted path. Vehicles-cum-passengers are exposed to, and affected by, off-map artillery and air strike just as though they were vehicles only.

[27.7] TRUCKS

In addition to the various Armored Personnel Carriers listed on the Weapon's Characteristics Chart, we list one "truck" unit. This is a generic unit which represents all the common army trucks in use since 1937. In this game a truck is defined as a wheeled, unarmored vehicle which is able to transport an infantry squad or an anti-tank gun with crew.

[27.71] The truck has a movement allowance of 8 Movement Points. It is considered a vehicle, non-armored target with a basic Defense Strength of Zero. A truck expends one Movement Point to enter a clear terrain hex; otherwise, it expends twice the normal rate printed on the terrain effects charts to cross or enter other terrain. It may never enter a forest hex in the closed terrain mode.

[27.72] A truck may be attacked by either AP or HE fire. Where it applies, the truck receives the Defense Strength point bonuses for terrain (six for being behind a slope, three for being in woods (closed mode), etc.) just like any other vehicle. It also receives a die roll adjustment for target movement. The truck may be attacked by AP fire and HE fire on the same Game-Turn so long as each firing unit fires one kind of fire. AP fire attacks are resolved separately, HE fire attacks are combined into one attack.

[27.73] A given attacking unit may use either its AP or HE Attack Strength to attack a truck at the Attacking Player's option.

[27.74] Obviously, a Player will only use a truck for tactical transport as a last resort.

[27.75] Truck units attempting to enter the same hex at the same time as an AFV or an APC cease movement in the adjacent hex. The AFV or APC completes its plotted movement.

[27.8] MOUNTED COMBAT FROM APC'S

[27.81] Only the German PanzerGrenadiers in historical Period 12 (1961-mid 70's) mounted on Marder II APC's may execute Overruns.

[27.82] Infantry mounted on the following vehicles may fire HE at one half stength. (Round fraction up). They may only do so if the APC is stationary on the Game-Turn in which the fire task is executed:

SPW (Ger), HT (US), Marder II (Ger), MICV (US).

Infantry may not fire AT devices while mounted.

[28.0] OFF-MAP ARTILLERY

COMMENTARY:

By the middle of World War II all the major combatants had come to realize that tanks were only one part of the mechanized warfare team; accompanying infantry and supporting artillery

were absolutely necessary for battlefield success. The provision for infantry accompaniment was dealt with in the prior case. Artillery (and its surrogate; close air support) requires an abstract treatment since, on a battlefield of the scale represented by the map, the field pieces firing artillery support could be located two or three hundred hexes away from their targets. So for the sake of simplicity we will say that all of the artillery batteries and battalions used by either Player are located off the map. Where, we don't care, suffice it to say that the artillery of either side can fire at any hex on the map. This is indirect fire and the ability of a Player to use this indirect fire depends upon which nationality he is gaming and what historical period the game is set in. For example, a Russian Player in WWII just does not have the same capability to use artillery as a German Player. The Historical Period Chart reflects the artillery capability of every nation's army in any given Historical Period.

GENERAL RULE:

Artillery is allocated to each Player in terms of: type of fire, i.e., called fire or planned fire; number of battalions available; and the strength of the battalions (light, medium, or heavy). Planned fire is a rigid system of indirect fire control which limits the Player to firing on predetermined target hexes. Called fire is more flexible and allows the Player to select target hexes as the game progresses. A Player may only use battalion concentrations in planned fire. With called fire he may fire in batteries. A Player orders artillery fire at least five Game-Turns before it impacts. This fire affects soft and armored targets differently. An artillery battalion has three batteries. Artillery has unlimited ammunition and may fire on every Game-Turn.

PROCEDURE:

[28.1] PLANNED FIRE PROCEDURE

[28.11] Before the Scenario begins the Player allocates each of his artillery battalions one, and only one, hex as a target hex.

[28.12] As play progresses he may order a given battalion to fire on its given target hex. He must plot this order at least five Game-Turns in advance of the impact turn.

[28.13] An artillery battalion may not fire on any target hex except the one which it is registered on. [28.14] No hex may be the target of more than one battalion.

[28.2] CALLED FIRE PROCEDURE

[28.21] The Player allocates target hexes to each of his battalions at least five Game-Turns in advance of the impact turn. Each battalion may be used to fire on one hex (battalion concentration) or on three hexes (battery concentrations) at the Player's option. (You can fire on two hexes or even one hex with battery fire if you want. The remainder of the battalion is presumed to be silent.)

[28.22] You may shift the target hexes of each battalion as much as you wish so long as you do so at least five Game-Turns in advance of impact.

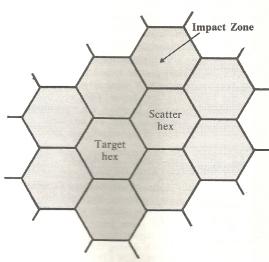
[28.23] No hex may be the target of more than one battalion on any one given Game-Turn. (You may fire at a given hex with a medium on a given turn and fire on it on some later turn with a different battalion.)

[28.3] ARTILLERY EFFECTS

The Game-Turn in which the artillery fire takes effect is called the **Impact** Turn. Artillery fire affects not only the target hex but also adjacent and nearby hexes which describe an area called the **Impact Zone**. This Zone is determined in the following fashion for each and every target hex upon impact.

- 1. During the Off-Map Artillery-Airstrike Segment, place an **impact marker** on the target hex. Then roll the die.
- 2. Using the Scatter diagram and the die roll place a second impact marker in a hex adjacent to the target hex.
- 3. The Impact Zone is then described as the target-impact hex plus the scatter-impact hex and all hexes adjacent to these two marked hexes. (see diagram)

[28.31] ARTILLERY IMPACT DIAGRAM



Artillery has an equal effect in all of the Impact Zone hexes. That is, the original target hex receives no greater weight of fire than any other hex within the Impact Zone. The effects of artillery simulate the detonation of multiple rounds of high explosives scattered throughout the Impact Zone. The effect of artillery on a unit caught within the Impact Zone depends on whether the unit is a "soft" target or an armored target.

[28.32] EFFECT ON SOFT TARGETS Artillery attacks soft targets with an He Attack Strength as follows:

LIGI	HT	MED	IUM	HEA	VY
BTY	BN	BTY	BN	BTY	BN
2	8	4	12	6	18

Bty=Battery BN=Battalion

Note that it is entirely possible that the Impact Zones of several battalions or batteries could overlap. A given hex could be within the Impact Zone of a Medium battalion and also within the Impact Zone of a Light battalion. Simply total the points to arrive at the cumulative effect of artillery on that particular hex. Subtract the Defense Strength of the soft targets from the cumulative artillery HE Attack Strength and use the Combat Results Table 8.91 (range 1-5 hexes) to determine the result. Do not make any adjustment for target movement. Obviously the target would never receive a bonus for being behind a hexside since the artillery is presumably coming down on top of it.

In addition to the above procedure, which determines whether or not a soft target is destroyed, any soft target which is attacked by eight or more artillery HE points has a fifty percent chance of panicking. Use the die: an odd number means panic. (If the unit panics normally ignore this effect.)

[28.33] EFFECT ON ARMORED (VEHICLE)

Artillery has a special effect on armored (vehicle) targets. (Trucks are considered in this category for purposes of resolving artillery effects.)

Total the cumulative artillery HE Attack Strength points impacting on each hex. Roll the die and use the Artillery Effects Chart to determine the fate of the target.

[28.34] ARTILLERY EFFECTS CHART

Artillery HE Attack Strength Points Die Roll

	2,3	4,5	6,7		12-17	
1	P	P	P	P	P/T	X
2	•	P	P	P	P	P/T
3	•		P	P	P	P
4	•	•	•	P	P	P
5	•	•	٠	•	•	P
6	•	•	•	•	•	P

Explanation of Results

X= All units (AFV, APC, or truck) destroyed.

T= Truck destroyed.

P= All units panic. Immediately institute the normal panic procedure and determine a panic direction and movement expenditure. If the vehicle has been caught in the Impact Zone as a result of Movement Execution simply subtract any movement points previously expended from the panic expenditure. If the target was not plotted to move it still must make a panic move.

No effect.

[28.4] EXTENT OF, AND RESTRICTIONS ON, ARTILLERY

[28.41] The effect of artillery extends through the entire Game-Turn of impact. Units which are initially caught in the Impact Zone and those which move into the zone are equally affected. Artillery may be targeted for a map-edge hex, but its effect does not extend off the map.

[28.42] A Player may plan, or call for, artillery fire on any hex he desires but he may not actually designate an impact turn until he has a Friendly unit which can "see" the target hex. That is, a clear, unobstructed line of sight from a Friendly unit to the target hex is a necessary precondition before you can order or plot the time of impact for artillery, (which must, of course, be for at least five Game-Turns in the future).

[28.43] Artillery fire is not merged or mixed in any way with normal HE fire emanating from on-map units nor is it merged with Air Strikes. In all cases it is treated and resolved separately.

[28.5] SMOKE

If permitted by the Historical Period Chart, artillery may fire Smoke instead of HE. Unless specifically ordered all Artillery fire is presumed to be HE.

[28.51] PROCEDURE OF PLACEMENT

Place impact markers as normal during the Off-Map Artilley and Air Strike Segment of the Game-Turn that the artillery fire would normally take effect. Under each impact marker place a Smoke marker. During the Smoke Creation-Impact Marker Removal Segment, remove the impact markers; thus revealing the smoke markers. The Smoke will remain in play until the Smoke Removal Segment of the following Game-Turn. Players should note that the Smoke does extend into eight hexes adjacent to the primary impact hexes even though only two Smoke markers are actually placed.

[28.52] EFFECTS OF SMOKE

Smoke obstructs the line of sight/fire of all units in the same fashion as a forest hex does in closed or mixed terrain. The Smoke is presumed to affect the entire impact zone. (The eight contiguous hexes described by ne original impact.) It costs one additional Movement Point to enter a Smoke hex.

[28.53] MAINTAINING A SMOKE SCREEN

If a Player wishes to maintain a smoke screen, he must maintain a constant Smoke shelling of the same impact hex(es). Obviously, the exact dimensions of the Smoke cloud will vary from turn to turn with the variance of the second impact hex being dictated by the scatter table. Light artillery (battery or battalion) may never fire Smoke. The Smoke effect described above may be achieved by any medium or heavy battery (or battalion for that matter, though the extra effort does not increase the resultant Smoke cloud or affect its duration).

[28.6] AIR STRIKES

An air strike is treated as an intensified artillery impact, with certain modifications. The impact hex is either planned or called, using the same manner as with artillery. However, air strike scatter is determined differently. Instead of placing the primary impact marker on the designated hex, roll the die to determine scatter. Place the primary impact marker in the hex, then roll the die again to determine scatter of the secondary impact hex and place the impact marker on the indicated hex. Only the primary and secondary impact hexes are affected by air strikes. Note that by using this system air strikes always scatter from the originally designated hex, but that it is possible for the secondary impact hex to scatter into the designated hex.

[28.61] EFFECTS OF AIR STRIKES

The weight of an air strike is equivalent to an artillery battalion of the appropriate size (either light, medium, or heavy as given in the Historical Period Chart). For determining the effect of an air strike on vehicles use the Artillery Effects Chart but subtract two from the die roll.* Against soft targets the HE Strength of an air strike is double that of the same size artillery battalion. Use CRT 8.91 at a range of 1-5 hexes to determine the effects of air strikes on soft targets.

*Treat a (zero) or (minus one) result as a (one)

[28.62] NUMBER OF STRIKES AVAILABLE

Players are given X amount of air strikes for Scenario played. Unlike artillery, each air strike is expended after one Game-Turn of use and may not be reused.

[28.63] Air strikes may not use Smoke. They are HE only.

[29.0] MINES

GENERAL RULE

Certain Scenarios allow the Bravo Player to deploy mines. These mines are presumed to be **strictly anti-vehicular** mines. The effect of mines is a function of their density in any given hex. The more mines in a hex the better the chance of their wrecking any vehicle entering the hex. The Bravo Player is given X amount of mine markers. Each mine counter has a 1/6th chance of wrecking a vehicle. The Bravo Player may deploy more than one mine marker in a hex, in which case the probability of mine effect goes up proportionately.

PROCEDURE:

The Bravo Player deploys his mine markers before the start of play. He does so secretly allocating mines to any hexes he chooses to. He places nothing on the map to indicate to the Alpha Player which are the mined hexes. When an Alpha vehicle enters a hex which has been mined, the Bravo Player announces this fact and rolls the die. If the roll is equal to, or less than, the number of mines in the hex, the Alpha vehicle is wrecked. Mine markers are issued for the convenience of the Alpha Player so that he may keep track of those hexes which the Bravo Player reveals to be mined. The Bravo Player writes down the hex numbers on which mines are placed before the game starts. CASES:

[29.1] OCCUPIED MINEFIELDS

The Bravo Player may deploy his infantry and AT guns on mined hexes with no effect on their abilities. If an Alpha AFV attempts to overrun such a hex it must first survive the mines.

[29.2] LONGEVITY OF MINES

Mines are **not** consumed when they wreck a vehicle. Mine units in a hex maintain a constant value irrespective of how many vehicles they wreck. Mines may not be cleared from their original hexes nor moved once deployed.

[29.3] NON-SELECTIVITY OF MINEFIELDS

Mines explode blindly. Bravo vehicles, if they are unlucky enough to enter their own minefield, are exposed to their own mines.

[30.0] ANTI-TANK DITCHES

GENERAL RULE:

Anti-tank ditches are provided to the Bravo Player in certain Scenarios. Essentially, they prevent vehicle units from entering a given hex.

[30.1] EFFECTS OF ANTI-TANK DITCHES

Vehicle units may not enter a hex containing an anti-tank ditch. Infantry units must spend one Game-Turn to cross an anti-tank ditch. The presence of an anti-tank ditch does not effect the Defense Strength of units which may be deployed in the same or adjacent hexes.

[30.2] ANTI-TANK DITCH DEPLOYMENT

Anti-tank ditches must be deployed at the beginning of the Scenario and they must be deployed in a straight (along the "grain" of the hexes) and continuous line.

[31.0] "FLESHING OUT" A SCENARIO

A glance at the various Scenarios reveals that the Orders of Battle (mix of forces) in each Scenario are in the most general form, particularly with respect to the opposing tank strengths. Opposing forces are described as one tank company versus one tank company; or one tank company versus two platoons, etc. The questions immediately arise. How many tanks in a company? In a platoon? The answers depend on whose army, which year and what equipment are being considered. The chart in 33.0 is a national chronological listing of the T.O. & E. (Table of Organization and Equipment) of various tank companies from 1940 to the present. This listing is by no means inclusive or exhaustive. In fact, its accuracy and authority are open to fair question. This list is merely a device which the Players may resort to in formulating their Scenarios.

The chart in 33.0 illustrates that the strength of almost all historical tank companies falls within the 10 to 20 unit range with 14 to 17 tanks being the most common range. The platoon strengths are commonly 3, 4, or 5 tanks, with 3 to 5 platoons plus a headquarters section forming a company.

How do you, the Player, use this information to arrive at an Order of Battle for any given Scenario? First, you and your opponent agree on a historical period (see 35.0). Let's assume you pick 1944 (period #6), the Eastern Front, and decide to try Meeting Engagement #2. Your opponent is the Soviets, and picks the Alpha force. You are the Germans with the Bravo force. Now you must agree on equipment. A look at the Weapons Systems Characteristics Chart (see 36.0) reveals the following AFV's are available:

1. To the Soviet Player: T 34/76c and T 34/85

SU 85 SU 76 JSU 152

JS II and JS III

SU 100

2. To the German Player:

STG III Pz VIa Pz IVh Pz V (Panther) JPz IV Hetzer (Jpz-38t) Pz VIb JPzV (J-Panther)

Assume that the Soviet Player chooses T34/85's and the German picks JPz IV's for their respective tank forces. If they choose to adhere to the historical company strengths and organization as listed, the Soviet Player will deploy ten tank counters (T34/85s) organized into three platoons of three tanks each plus a company HQ tank. The German Player will deploy ten assault gun counters (JP IVs) into two platoons of four AG's 'each' and an HQ section of two AG's. These two forces will now represent the two opposing tank companies called for by the Scenario.

To transport his infantry and AT guns the German Player opts for the ubiquitous SPW (APC). Being a nice guy, the German picks the 75/46 as his AT gun and announces that one of his three infantry squads is armed with the PF 44-1 infantry AT device.

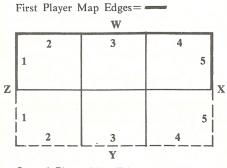
Taking advantage of the German's good nature, the Soviet Player announces that his force has had the good fortune to be the recipient of Lend Lease aid; and therefore is mounted on American HT's (APC). Otherwise, they would have had to ride on trucks, or worse, on the tanks. In the same vein, he announces that one of his "squads" (the Soviets) is armed with a captured PF-60 infantry AT device.

Each Player now has assembled his respective force and the Scenario may be initiated.

[32.0] OPTIONAL RULES

[32.1] VARIABLE ENTRY

Divide the mapedge into 10 different sections, 5 for each Player in the following manner:



Second Player Map Edges = - - -

Put five chits numbered 1 through 5 in a cup. Roll a die. If an odd number is rolled the Alpha Player is the First Player. If the number is even the Bravo Player becomes the First Player. The First Player picks a chit. His units enter from the map section corresponding to the number. The Second Player then picks a chit and enters from the corresponding section. Note that since the first chit removed is not placed back in the cup, the Players will never enter on the same numbered section. In Meeting Engagement (17.11) you must still plot a course through an opposite mapedge.

[32.2] VARIABLE EXIT

Repeat the procedure for Variable Entry (if Variable Entry is also being used once the First Player has been determined it is unnecessary to roll the die). The section corresponding to the number drawn by each Player is the only section that the Player's units may exit the map from. Units are still prohibited from exiting the map in Meeting Engagement Scenarios until the Preservation Level of one Force has been reached.

[32.3] REARGUARD SCENARIO VARIANT

Variable Exit for the Alpha Player's units should be determined in the following manner: place chits numbered 2 through 4 in a cup. The Alpha Player picks a chit, keeping the result secret from the Bravo Player and places the chit face-down for inspection after the completion of the game. The number drawn determines which map section the Alpha Force must attempt to exit units from.

[32.4] DELAYED ENTRY

Put three chits numbered 1, 2 and 3 in a cup. The Alpha Player picks a chit, secretly records the number and places the chit back in the cup. The Bravo Player repeats the process. The number drawn is the Game-Turn that the Player's units enter the map.

[32.5] VEHICLE SMOKE

Some AFV's have a limited ability to create a one hex-sized smoke concentration. The AFV's are equipped with Smoke projectors and such AFV's are identified on the WSCC. The AFV projects the Smoke into an adjacent hex during the Direct Fire Segment of a Game-Turn.

During the Smoke creation Segment of the same Game-Turn, replace the impact markers with Smoke markers. On the following Game-Turn, remove the Smoke markers.

[32.6] RECONNAISSANCE FIRE

COMMENTARY:

Tankers in some armies are allowed to shoot up the countryside on mere suspicion of hostile positions in hopes of revealing enemy forces in hidden locations. Tanks are not Hollywood sixshooters with an infinite supply of ammunition, but they do carry sufficient rounds to engage in the Scenarios presented in this game without worrying about resupply, so long as they are not wasteful. The following rule can be used in the infantry and anti-tank Scenarios. It simulates tanks firing at suspected Enemy positions.

GENERAL RULE:

A tank or assault gun may fire at any vacant hex within 20 hexes, which hex lies within the unobstructed line of sight of the firing unit. This fire is called Reconnaisance Fire (RF) and is a form of Direct Fire. The HE Attack Strength of the firing unit is used. Successful reconnaisance fire reveals any hidden Enemy unit within the target hex and instantly converts into a Direct Fire Task. Unsuccessful RF means a wasted turn for the firing unit.

PROCEDURE:

Plot RF into the target hex. In the Direct Fire execution segment of the Game-Turn announce that you are firing RF on said target hex. Roll the die. If the die roll is equal to or less than the numerical Panic Level of the Enemy Force, all Enemy units which may be hidden in that target hex are revealed on the map. They are, of course, unspotted, so you immediately resolve whether they are spotted (13.0). If they are spotted you proceed to execute a Direct Fire attack on them. If the die roll is greater than the Panic Level of the Enemy units then the Reconnaisance Fire is presumed to be unsuccessful.

[32.61] MULTIPLE RECONNAISSANCE

Several friendly units may fire RF on the same target hex. Each RF attack is resolved seperately, though if any one attack is successful in revealing hidden Enemy units, then all the attacks are considered to be successful, and all of the units firing on the target hex would combine into one Direct Fire attack.

[32.62] RESTRICTIONS AND LIMITATIONS

Reconnaisance Fire may only be plotted on a vacant hex. It may not be plotted through some known Enemy position (whether or not the units are spotted or unspotted).

Reconnaisance Fire is a Task and a unit may not combine RF with any other Task in the same Game-Turn (except, of course, to convert the RF into DF if the RF is successful).

[32.7] UNIQUE PRESERVATION

The orthodox Preservation Rules combine all the combat units of a force into one total for purposes of computing the Preservation trigger level. Thus a force composed of 14 tanks, 10 infantry squads and 4 Anti-Tank guns (APC's and trucks don't count) has 28 combat units. If its Preservation Level is 50%, the loss of 14 units triggers Preservation. Theoretically this force could lose all of its infantry and AT guns only (14 units) and thereby trigger Preservation on the intact tank constituent.

Unique Preservation requires that you treat each combat arm (infantry, tank, AT gun) as a separate force for Preservation purposes. Thus in the example noted above you would treat the tanks as a separate force which would not be subject to Preservation until at least 7 tanks were destroyed regardless of the fate of the infantry or AT guns and vice-versa.

[33.0] COMPANY ORGANIZATION AND COMPOSITION

Company Organization Notes

* In each of these HQ sections were two close-support tanks (modified Matildas or Crusaders) which carried a howitzer instead of a two-pounder. Give these tanks a 15 pt. HE Attack Strength and a zero AP Attack Strength.

** One "Firefly" in each platoon. When using a heterogeneous force of tanks (the early German companies or the British with the CS tanks) it is necessary that the different types in use be distinguished from each other, both for the convenience of the Owning Player and the targeting of the Enemy Player. The counter mix does not provide a range of tank types so it is left to the ingenuity of the Players to solve the identification problem. One method is to use the Assault Gun counters to represent the minority tank type.

Historical Period	Tank Company Description [and AFV type]	Number of Platoons [and number] of AFV's in platoon]	HQ Section	Total
	Britain			British and the second
1	Medium	4 (3)	4	16
1	Heavy (Matilda)	5 (3)	1	16
3-4	Light (Stuart)	3 (4)	4	16
3-5	Cruiser (Crusader, Sherman)	4 (3)	4*	16
3-5	Heavy (Matilda, Valentine)	5(3)	3*	18
6	Medium (Sherman)	4 (4)**	4	20
7-12	Standard (Centurion, Etc.)	4 (3)	3	15
	France			
1-3	Heavy (Char-B)	2 (5)	0	10
1-3	Medium (S-35)	4 (5)	0	20
6-12	Medium (AMX-30)	3 (5)	2	17
1 2	Germany	3 (FP. H)		
1-3	Light (mixed)	2 (5PzII)+ 2 (3PzIII)	2PzII	18
1-3	Medium (mixed)	1(5PzII)+ 3(4PzIV)	2PzIV	19
2-6	Medium (PzIII,PzIV,PzV)	3 (4)	2	14
5	Heavy	2 (5PzIV)+ 2 (4PzVI)	1PzVI	19
5-6	SS Medium (PzIV, PzV)	3 (5)	2	17
5-6	Pz Jagd (Hetzer)	3 (4)	1	13
2-6	Asslt.Gun (Marder, STG III)	3 (3)	1	10
6	JPzIV	2 (4)	2	10
6	JPzV (Jagd Panther)	3 (4)	2	14
6	Heavy (PzVIb)	3 (4)	2	14
8-12	Medium (M48, M60, Leopard)	3 (5)	2	17
	Italy		***************************************	
1-4	Medium	3 (4)	2	14
	Israel			
8-12	Medium	3 (3)	0	9
12	Medium	3 (3)	2	11
	USSR			
1-7	Medium (T-34)	3 (3)	1	10
6-8	Heavy (JS's)	2 (3)	1	7
6-8	Asslt.G.(Su's)	1 (5)	0	5
8	Medium (T34, T55)	3 (5)	1	16
9-12	Medium	3 (3)	1	10
	United States			
4-12	Standard	3 (5)	2	17
4-6	Tank Dest. (M10, M18)	3 (4)	0	12
7-8	Inf. Rgmntl.(M4/76)	4 (5)	1	21

[34.0] SCENARIOS

Every Scenario is a conflict between an Alpha Force and a Bravo Force. Within a grand tactical context the Alpha can be considered to represent the attacking side while the Bravo represents the defending side. This doesn't mean that the Bravo Player must play defensively but it is simply an explanation for the Scenario.

After deciding what historical period they want to play in, the Players must then pick which nationality they each wish to represent within that period. Then they can pick which of the following Scenarios they wish to play and decide between themselves which side will be the Alpha Force and which side the Bravo Force.

Each Scenario is described in terms of an Order of Battle, Rules of Engagement and Victory Conditions.

The Players must decide between themselves what Terrain Mode each Scenario will be played under.

[34.1] MEETING ENGAGEMENT #1

This Scenario postulates a purely tank versus tank action. Neither commander is given any recourse to supporting arms and must rely purely on the strength of his tank company. This situation was more frequent in the early years of armored warfare when either doctrine or material limitations militated against the formation and use of mechanized combined arms groups. This is not to say that a pure tank battle is not possible today, but it would be more a product of accident than design.

ORDERS OF BATTLE

Alpha Force
1 Tank Company
Bravo Force
1 Tank Company

RULES OF ENGAGEMENT

Initial Deployment And Map Entry and Subsequent Movement Until Spotting Occurs

The Alpha Player writes a plot for his force which introduces it in one column through mapedge X on Game-Turn One and, subsequently directs it through the map to exit through mapedge Z on some later Game-Turn. This column may only proceed through clear terrain. One platoon of the company may precede the main body of the column by up to ten hexes as a "point". Except for this, the entire formation, both point and main body, must be in "close" formation; i.e., each unit adjacent to at least one other unit in the formation.

The Bravo Player writes a similar plot for his company except they proceed from mapedge Z to mapedge X.

The Movement Plots may wander as the Players desire so long as the column does not double back on itself, entering the same hex twice. (This plot need only describe the course of the lead tank and the interval, if any, between the point platoon and the main body, since following tanks must play follow-the-leader.)

Movement must be continuous and must proceed at the maximum expenditure of Movement Allowance.

Both Players must execute their respective plots until the Game-Turn in which the opposing forces spot one another. At the moment that the opposing forces spot one another, each Player must decide whether to prematurely terminate the movement of his force. The Alpha force Player must announce his decision first.

Panic

Panic Rules are suspended until the Game-Turn following the Game-Turn in which the opposing forces spot one another. Then they apply for the remainder of the Game.

Off-Board Artillery and Air Strikes

Neither Player may use off-board artillery or air strikes.

Game Length

Prior to the contact Game-Turn (when both forces spot one another) the opposing forces may wander about for any number of Game-Turns depending upon the convergence of their respective Movement Plots. Thereafter, the Scenario lasts a maximum of 25 Game-Turns counting the contact Game-Turn as the first Game-Turn. The Scenario may terminate prior to the 25th Game-Turn, if either or both forces are totally destroyed, or if one force exits all its surviving units from the map.

Exit From the Map

Units may only exit from the map on the edge they entered from. Exited units may not return. Unlike the Meeting Engagement described in the Standard Game (17.11), a Player may exit his units on any Game-Turn he wishes subsequent to the contact Game-Turn, and he may withhold units which have not entered the map from entering the map. (Such units are considered to have automatically exited and may not appear on a later Game-Turn.)

Victory Conditions

Each Player receives two points for every Enemy unit destroyed and one point for every intact friendly unit on the map at the end of the Scenario. To this total is added one point for every enemy unit in the Enemy Player's Order of Battle. The winner is the Player with the higher point total.

[34.2] MEETING ENGAGEMENT #2

Here we have two combined arm forces meeting. Both sides are converging on a vital terrain objective. The Alpha army is presumed to have broken through the Bravo front and the Alpha force represents a detached combat group which has been sent to seize and hold a flanking road junction. The Bravo force is a scratch outfit hurriedly assembled to grab the same point.

ORDERS OF BATTLE

Alpha Force

- 1 Tank Company
- 1 Armored Infantry Company:
- 10 squads of infantry (one of which is armed with an AT device)
- 10 APC's (or mounted on trucks, if the army doesn't own APC's)

Bravo Force

- 1 Tank Company
- 1 Armored Infantry Platoon:
- 3 squads of infantry each armed with an AT device
- 3 APC's (or mounted on trucks)
- 1 AT gun battery:
- 4 AT guns mounted on 4 APC's

RULES OF ENGAGEMENT

Initial Deployment, Map Entry, and Subsequent Movement Until Spotting Occurs

The Alpha force enters through mapedge Z on Game-Turn One. The force may enter in 1, 2, 3 or 4 columns at the Alpha Player's discretion. Each column must be in close formation though tanks and mounted infantry may be contained in the same column. Each column must have a plot that brings the lead unit in the column adjacent to or through hex #3319 by Game-Turn 10 at the latest. Once a column has met this condition, it may then be plotted to move anywhere on the map and

deploy into position. (Infantry dismount, tanks lay on OF, etc.) Prior to meeting the condition each column must move through clear terrain only at the highest speed of the slowest unit in the column.

The Bravo force is deployed in exactly the same fashion except that it enters from mapedge X.

Neither force may use "point" formations for its column(s).

Each force must faithfully execute its plot until the Game-Turn in which contact occurs. (Contact being defined as mutual spotting or the execution of a fire task by one side on the other.) On the contact Game-Turn both Players may prematurely terminate Movement with the Alpha Player announcing his decision first.

Panic

The Panic Rules are suspended until the Game-Turn following the contact Game-Turn. Thereafter they apply for the remainder of the Scenario.

Off-Board Artillery and Air Strikes

Neither Player may use off-board artillery. The Bravo Player may not use air strikes. The Alpha Player may use air strikes. However, he may not plot/order the execution of air strikes until after the contact Game-Turn.

Game Length

A maximum of 25 Game-Turns after and including the contact Game-Turn; or until one side or the other is totally destroyed or exits the map.

Exit From The Map

Same as in Meeting Engagement #1.

Victory Conditions

Each Player receives two points for every Enemy tank, infantry squad, and AT gun destroyed, and one point for every Enemy unit in the initial Order of Battle. In addition, a Player receives 20 points if he is in undisputed possession of hex #3319 at the end of the Scenario. Undisputed possession is defined as having at least one friendly unit which can see hex #3319 while there is no Enemy unit which can see the hex. Smoke does not block vision for this purpose. The winner is the Player with the greater number of points.

[34.3] REAR GUARD [DELAYING ACTION] ENGAGEMENT

The Alpha Force has broken through on a wide front and is attempting to overrun a Bravo base camp. The Bravo tank force seeks to delay the Alpha thrust so that the Bravo base can be evacuated. You will use the Anti-Tank ditch markers to create a "river" and "bridge".

ORDERS OF BATTLE

Alpha Force

- 1 Tank Company (reinforced)=20 AFV's
- 1 Armored Infantry Company (reinforced): 12 squads of infantry mounted on APC's

Bravo Force

1 Tank Company (reduced)=10 AFV's Simulated Base Camp personnel and material:

10 infantry squads

1 Transportation Company: 10 APC's

Map Modification

Place AT ditch markers in hexes 6114, 6014, 5915, 5916, 5917, 5919, 5920, 5921, 6021 and 6122. This forms the loop of a "river" with hex 5918 as the "bridge" (or "ford") across the "river".

RULES OF ENGAGEMENT Initial Deployment, Map Entry and

Preliminary Movement

The Alpha Force enters through mapedge Z on Game-Turn One. This force may enter in as many

as eight (8) columns at the Alpha Player's discretion but each column must be either all AFV's or all mounted infantry (no mixed columns). The Alpha Force must have a plot written for the first three Game-Turns. From Game-Turn Four on, the Alpha Force may plot turn-by-turn at the Alpha Player's discretion. Or, if contact is made before Game-Turn Four, the Alpha Player may plot freely thereafter. Contact is defined as mutual sighting or the execution of a fire task by one side on the other.

The Bravo Player may deploy his tanks anyplace on the map more than ten hexes away from mapedge Z. (The area defined by mapedge Z and hexrow 1000 is called the **entry zone.**) The Bravo Player may plot turn-by-turn beginning with Game-Turn One except that his tanks may not enter the entry zone nor may they fire Opporunity Fire into the entry zone. The 10 infantry squads simulating the Bravo base are deployed on hexes 3016, 3017, 3018, 3116, 3117, 3118, 3119, 3217, 3216, 3218. Consider these as unarmed personnel (they can't shoot). They have a normal movement of one hex/turn and a normal soft target defense. The Bravo APC's enter through hex 6118 on Game-Turn One.

Set-up takes place in the following sequence.

- 1. Alpha Force plots its first three Turns.
- 2. Bravo are then deployed.

The Bravo Player may not use his tanks to carry his "infantry" until Game-Turn five.

Panio

The Panic Rules are suspended until the Game-Turn following the turn in which contact is made. The Bravo "infantry" squads and the Bravo APC's never panic. (In fact, these units can usually be moved without making a plot since their intentions are patently clear to both Players.)

Off-Board Artillery and Air Strikes

Both Players may use whatever off-map artillery capability the Historical Period Chart bestows on them, except that neither Player may order artillery fire on a hex which he does not have under observation by at least one Friendly unit. (Assume the Alpha Player has planned artillery capability. He could, for instance, plan an artillery battalion impact on the "bridge" (hex 5918) but he couldn't order fire on the bridge until he had a unit in position to see the bridge and then it would be five more turns before the fire actually impacted.) The Bravo Player may not fire artillery smoke. The Alpha Player only may use air strikes. He may strike unobserved hexes. He may not strike on Game-Turns One and Two. Bravo "infantry" and APC's which are caught in an artillery or air impact zone are subject to Panic.

Game Length

The Scenario ends when all surviving Bravo units have exited the map or when 25 Game-Turns have elapsed, whichever comes first.

Exit From The Map

Alpha Force may **not** exit from the Map. Bravo Force may only exit through mapedge X. (see Victory Conditions).

Victory Conditions

The Alpha Player receives two points for every Bravo AFV destroyed, three points for every Bravo "infantry" squad destroyed and five points for any intact Bravo "infantry" squad remaining on the map after Game-Turn 25. He receives no points for destroyed Bravo APC's. The Bravo Player receives one point for every Alpha AFV destroyed, four points for every Bravo "infantry" squad which exits through mapedge X, hexes 6116 to 6120 inclusive, and one point for every Bravo "infantry" squad which exits through some other hex along mapedge X. He receives no points for destroying Alpha infantry or APC units.

[34.4] ATTACK ON A DEFENDED POSITION

This Scenario portrays an armored-infantry assault on a defended locality. Unlike the three previous Scenarios, this one presumes considerable pre-battle reconnaisance for both forces. The assault is being made in concert with a general offensive all along the line and the Alpha Force is under time pressure to seize its objective. Within the context of the Scenario, both Players' forces are expendable though the casualties inflicted and incurred will have some bearing on Player performance.

Alpha Force

- 1 Tank Company (reinforced): 20 AFV's
- 1 Armored Infantry Company

12 infantry squads mounted on 12 APC's Bravo Force [Variant #1-infantry intensive]

- 1 Infantry Company:
 - 12 infantry squads issued with 9 AT devices
- 1 Anti-Tank Gun Section:
- 2 AT guns

Bravo Force [Variant #2-PAK front]

- 2 Infantry Platoons:
- 6 infantry squads issued with 2 AT devices
- 1 Anti-Tank Battalion (reduced):
 - 8 AT guns

In both variants the Bravo may deploy up to 20 mine units and 20 AT ditch hexes.

The Bravo Player secretly selects either variant #1 or variant #2 as his Order of Battle. Which variant he picks will determine the basic time limit of the Scenario. It is vitally important that the Alpha Player doesn't know which variant the Bravo Player has selected. (he will, of course, be able to deduce the true strength against him as play proceeds and as he indentifies what is shooting at him.)

Initial Set-Up and Deployment

The Bravo Player selects a specific hex (by number) as the **objective**. This is the hex he will seek to defend and which the Alpha Player will seek to seize and hold. The Bravo Player may select any clear terrain hex which is at least ten hexes from any map-edge as the **objective**. He will announce the hex number to the Alpha Player.

After the Bravo Player has selected the objective the Alpha Player selects and announces which map-edge his force will enter through.

Knowing what the **objective** is and from where the Alpha Force will be coming, the Bravo Player secretly deploys his units. All units are presumed to be deployed in hidden, Improved Positions. (Deployment involves writing down the hex number, AT gun Facing, and Opportunity Fire target.) He then secretly assigns his mine markers and openly deploys the AT ditch on the map. Mines may not be deployed on or within four hexes of the **objective**. The AT ditches may not be deployed on or within nine hexes of the **objective**. Neither mines nor the AT ditches may be deployed within ten hexes of a map-edge. NOTE: The amount of mining and ditch digging has a bearing on Game-length.

Now the Bravo Player picks at random five panic chits. He compares the numbers on the panic chits with the last numbers on the hexes his units are deployed on. If they match he places the units on the map face down. These units are **unspotted** as far as the Alpha units are concerned though the Alpha Player may use this knowledge of their location in plotting Movement and Artillery. (Do not reveal mines.)

Pre-Contact Game-Turns

Alpha Force enters the map on Game-Turn One. It may enter in up to five columns. The columns may be "mixed". Each column must move at the

maximum speed of the slowest vehicle in the column. The Alpha Player may plot the Movement of these columns turn by turn, but he must move in such a way that by the end of Game-Turn Seven at least one vehicle will have entered the **objective** hex, assuming no contact has been made. Contact is defined as; 1. An Alpha unit spotting a Bravo unit, 2. An Alpha unit being fired on by a Bravo unit. The action of mines or artillery have no effect on the onset of Contact. (The Bravo Player can deliberately withhold his fire and hope that he isn't Spotted and that his mines and artillery stop the Alpha Force from acheiving the **objective** by Game-Turn Seven.)

The Bravo Player may plot turn-by-turn. He may not use Opportunity Fire on Game-Turn One. REMINDER: if an AT gun changes its facing it is automatically spotted by any Enemy unit with an unobstructed LOS. If the Bravo Force has a Panic Level of 30% or less it may withhold its Opportunity Fire before Contact at the discretion of the Bravo Player. (Rather than triggering the OF at the instant of target acquisition the Bravo Player may let the situation progress in hopes that more Alpha units will enter his lines of fire.) After Contact occurs the normal OF triggering applies.

Game-Length

The length of any given Scenario will vary depending on the Bravo Force OB, the number of mine units deployed and the number of AT ditch hexes deployed, as follows:

Bravo OB variant #1: 14 Game-Turns Bravo OB variant #2: 20 Game-Turns ...and to either variant add:

For every 4 Mine units or fractions: 1 Game-Turn

For every 5 AT ditch hexes or fractions: 1 Game-Turn

For example, the Bravo Player selects variant #1, deploys 13 mine units and 6 AT ditch hexes. The Scenario would last:

- 14 Game-Turns for variant #1
- +2 Game-Turns for the 6 AT ditches
- +4 Game-Turns for the 13 mine units
- Total: 20 Game-Turns Scenario length

Only the Bravo Player knows exactly how long the Scenario will extend. The Alpha Player knows it will last a minimum of 14 Game-Turns plus whatever he can compute from the AT ditch deployment. However, he has no idea at the start of play which variant the Bravo Player has selected or how many mines have been sown.

Panic

The Panic Rules are suspended until the Game-Turn following the Game-Turn in which Contact is made, except that units may Panic as a result of Artillery or Air Strikes.

Artillery and Air Strikes

Both Player may use Planned Artillery Fire beginning with Game-Turn One. This fire may impact starting with Game-Turn One according to each Player's plot. (Pretend you began writing fire plots on Game-Turn Minus Four.) This fire may be directed at unobserved hexes simulating preplanned barrages. Both Players may begin using normal Called Fire on Game-Turn One (assuming they have the capability). Thus the Alpha Player may begin immediately to soften up those strongpoints he sees on the map and then switch his fire on to those he discovers in the course of play. While The Bravo Player can use his artillery to harass the obvious Alpha approach routes and then concentrate on the threatened points as they develop.

Only the Alpha Player may use Air Strikes.

The Bravo Player may not target Artillery on the **objective** or on any hex adjacent to the **objective**.

Victory Conditions

Victory Points are awarded on the following basis:

To the Bravo Player:

2 pts. for every Alpha tank destroyed 1 pt. for every Alpha inf. squad destroyed 1 pt. for every Alpha APC destroyed 10 pts. if no Alpha unit enters the objective hex by the end of the Scenario.

To the Alpha Player

1 pt. for every Bravo inf. squad destroyed 1 pt. for every Bravo AT-gun destroyed 10 pts. if there is at least one Alpha inf. squad in the objective hex at the end of the Scenario.

10 pts. for every Alpha tank or inf. squad which exits off the map through any map-edge after passing through the objective.

The Bravo Player wins automatically if the Alpha Force fails to enter the **objective** by Game-Turn Seven, assuming no contact is made. Otherwise the winner is the Player with the greatest number of points at the end of the Scenario.

[34.5] BUILDING YOUR OWN SCENARIO

Feel free to add or subtract elements from any of the Scenarios featured in Standard or Expanded Tank!. For example, you can turn 34.4 into a Mobile Defense situation by thinning out the initial Bravo defenders and then later comitting a counter-attack force with a couple of Bravo tank and mounted infantry platoons. This force could enter opposite to where Alpha originally entered with the goal of recovering the objective hex. Give the Alpha force a battery of AT guns to help him counter the counter-attack and you have a whole new ballgame.

[34.6] PLAYER'S NOTES

In almost all cases it is advantageous to enter the map in the maximum number of columns permitted. This gets all your forces on the board sooner than a single column. In the Rear Guard Scenario you have what amounts to a race between the fleeing Bravo units and the superior Alphas. If you pick slow Alpha tanks it won't be much of a contest unless you delay the entry of the Bravo APC's by two or three Game-Turns. Proper use of artillery requires a sense of anticipation. Defending against artillery takes common sense. If you have a platoon hull-down behind a slope which has been stopping an Enemy (who has called fire capability) you can expect to be hit on the fifth turn after he has spotted you. So get out of there before you're stonked.

Standard Tank Errata

The following errors and ommissions were discovered in the Standard Game Rules:

[9.13] (Correction)

Tank K Begins the turn in hex 4007. You order it to proceed to hex 3706 via hexes 4006, 3906, and 3805.

Tank L - Begins the turn in hex 3809. You order it to proceed to hex 3510 via hexes 3709 and 3609.

[16.0] (Omission)

Victory Conditions

The final sentence should read: Since the Preservation rule is not used, neither Players' units may exit from the map.

PERIOD	NATION	INF	ARTILLERY	AIR	AH. THA	4	A A A A A A A A A A A A A A A A A A A	PERIOD	NATION	HE	ARTILLERY	AIR	AL ZLA	THE STATE OF THE S	J. Car
						%	%							%	8
	Ger	9	Bc,Ap/M3	pM2	no, yes	20	40	F 1	Sn	Ŋ	Bc,Ac/M2 cl	cM3 in E, 6 in	K yes,yes	20	30
1937-	Fr	4	Bc,Ap/L,M2	none	ou,on	30	20	Korea	Br	2	Bc,Ac/M1	cM2	yes,yes	20	40
044	Br	Ŋ	Bc,Ap/M3	pL1	no,yes	30	9	1950	Sov	9	Bp,Ap/M7	pL4	yes,yes	30	25
	Sov	2	Bp/M4	none	00,00	09	20		NK	4	Bp/L,M1*	none	yes,no	30	09
	Ger	9	Bc,Ap/M3	pM6	no,yes	10	50	8	US	9	Bc,Ac/M2	cM3	yes, yes	28	30
Europe 1941	Sov	2	Bp/M4	none	ou'ou	20	70	1960	Sov	%	Bc,Ap/M6	pM2	yes, yes	30	20
									Br	9	Bc,Ac/M1	cM2	yes,yes	10	8
	R.	4	Rc An/M3	CMm	sen on	30	5		Fr	9	Bc,Ac/M1	cM1	yes,yes	20	30
N.Africa	1 1	. 2	Bb/L.M2	none	ou.on	200	20 20		Isr	5	none	cM3	no,yes	10	20
	Ger	5	Bc,Ap/M2*	pM2	no,yes	10	20		UAR	S	none	none	no,no	09	20
			- T W. E.			9	OF C	6	Sov	11	Bc,Ap/M6	pM3	yes,yes	30	55
rope &	30V (j	7	Bp/M3	none	ou'ou	04	0/ 0/	1961-	NATO	7	Bc,Ap/M2	cM5	yes,yes	20	30
N.Africa 1942	Ger (E) Ger (NA)	9 9	Bc,Ap/M3 Bc,Ap/M2*	pM4 pM2	no,yes no,yes	10	200	1969							
	#	2	Bp/L,M1*	none	no,yes	30	30								
	Br	4	Bc,Ap/M4	pM4	no,yes	20	40	100	Isr	5	Bp,Ap/M2*	cM6	yes, yes	10	20
							1	130	UAR	7	none	none	yes,no	40	40
rope &	Ger(E) Ger (NA)	95	Bc,Ap/M2 Bc,Ap/M2*	pM2 pM1	no,yes no,yes	20 20	500	111	us	S	Bc,Ac/M5	9Н2	yes,yes	20	98
N.AFrica 1943	Sov	3	Bp,Ap/M6	pL3	no,yes	30	70	Nam 1968	NV	S	Bp/L3*	none	no,no	20	09
	Br	4	Bc,Ap/M4	pM4	no,yes	20	40	1970							
	ns	8	Bc/Ap/M4	pM2	no,yeş	30	30								
								12	Sov	=	Bc,Ac/M6	pH2	yes,yes	30	25
900	Ger	S	Bc,Ap/M2	pM1	yes,yes	30	50	1970's	NATO	6	Bc,Ac/M4	сН3	yes,yes	20	30
1944-	Sov	4	Bp,Ap/M8	pL4	no,yes	30	09		Isr	9	Bc,Ac/M3	сНЗ	yes,yes	10	20
2	Br	4	Bc,Ap/M5	pM5	yes, yes	20	40		UAR	7	Bp/M3	none	yes,yes	40	40
	NS	4	Bc,Ac/M6	cM6	no, yes	20	30		G.	7	Bp/M1*	none	ou.on	20	09

[35.1] WHAT THE HISTORICAL PERIOD CHART DOES

The Chart gives you background information for major combatants within any significant military period. You will note that the World War II era is structured on a yearly basis, while the later periods contain information covering longer periods of time. The designated periods are keyed to the Weapons Characteristics Chart, so that by cross-referencing the WCC with this chart you can pick a national force and equip it with appropriate weapons.

When using this chart and the WCC you must use common sense and your own knowledge of the period under scrutiny. For example, there is no unique listing for the American Army in the ETO or the world at large for the 1960's and 70's. If you don't know or can't guess that the American Army is covered by the figures given under the "NATO" acronym for the period 1961-70's (except if you use a Vietnam Scenario) then you shouldn't have bought this game. By the same token don't look for information on specific Eastern European nations, look under the Soviet listing and modify the intangibles like Panic by whatever percentage your prejudices desire. Don't look for the Jordanian army in the 1967 war period. Instead, use the British data from the 1950's and equip the Jordanians with a mixture of British and American equipment from periods 8 and 9. If you wish to develop esoteric scenarios, you'll have to exercise a little judgment.

[35.2] HOW TO READ THE HISTORICAL PERIOD CHART

Abbreviations:

E= Eastern Front
NA= North Africa

K = Korea, VN = Vietnam

Nation: Ger= Germany, US= United States, Br= United Kingdom, Sov= Soviet Union, Is= Israel, UAR= United Arab Republic (Soviet equipment), Ch= China, NV= North Vietnam, It= Italy, Fr= France, NK= North Korea

*= may not use heavy artillery

See lines for period 4, Ger(E), Ger (NA).

This is period #4, describing the characteristics of German forces on the Eastern front and (where different) in the North African theatre.

Eastern Front; German infantry squads have an HE Attack Strength of 6 pts. When playing the Bravo Force the German Player may use Called Fire Procedure. When playing the Alpha Force he uses Planned Fire Procedure. In either case he may use up to three battalions of artillery, one of which could be heavy and the balance medium. The exception to this is when the Scenario is set in the North African Theatre; he does **not** have access to heavy artillery (as indicated by the asterisk) and he can use at most two battalions of medium artillery.

He may use up to four medium airstrikes (except in North Africa where he is limited to two strikes) under the Planned Fire Procedure.

His AFV's may not use Smoke. His artillery may use Smoke.

His forces have 10% Panic Level and a 50% Preservation Level.

[35.3] HOW TO DETERMINE EXACTLY WHAT YOUR ARTILLERY SUPPORT IS: ARTILLERY CAPABILITY

Example: "Bc,Ap/M3"

The "Bc,Ap" refers to the types of fire procedure which may be used depending upon whether the Player is the Alpha Player or the Bravo Player.

"M3" refers to the strength and maximum number of artillery battalions available: M= Medium, L=Light. And unless specifically prohibited (by an asterisk) the Player always has a 1/6th chance that one of the battalions available to him could be a Heavy battalion.

You always receive a minimum of at least one battalion of artillery (unless you are prohibited from any artillery whatsoever). The question to be imediately resolved is: Exactly how many artillery battalions does a Player receive? Does he receive the minimum, the maximum, or some number in between? A Player always has an even chance to receive any number in the range between the minimum and maximum number available. Thus in the example given above the Player would have an even chance to receive one, or two, or three battalions of medium artillery. In other words he has a range of one to three battalions available. You may roll the die or pick chits or use any random method you wish to determine exactly what number you receive. Once determined this number remains constant for the entire Scenario. Once you have determined the total number of battalions available to you, roll the die or pick a chit to determine if one of the battalions is a heavy battalion. Use a method which gives you a 1/6th chance of receiving a heavy battalion.

Except for the North Koreans, WW II Italians and French, all use medium artillery as their basic strength. The aforementioned three nations use both medium and light artillery and you should use a random method to determine the proportion of medium to light artillery, with a 50% probability of a given battalion being M or L. The purpose of this procedure is to insure that the number and strength of artillery allocated to each Player varies with the scenario. Of course the Players may agree between themselves on their artillery strengths and numbers without resorting to the die rolls or random methods so long as the agreed on numbers and totals fall within the range shown on the Historical Period Chart.

Once you have decided the number and strength of your artillery you use the **planned** fire procedure or the **called** fire procedure depending upon what the Historical Period Chart says and whether you are the Alpha Player or the Bravo Player. In many cases you can use the **called** fire if you are the Bravo Player and only the **planned** fire if you are the Alpha Player. Sometimes the Alpha Player has zero artillery period.

You plot artillery fire by noting the target hex, the strength of the artillery, the size of the firing unit (battalion or battery) and the Game-Turn in which you want the fire to impact (take effect). You should use a separate sheet of the simov Pad to do this.

[36.0] EXPANDED WEAPONS CHARACTERISTICS CHART

GENERAL EXPLANATION:

The weapons systems shown in this chart are grouped by nationality-of-manufacture. Within each nationality grouping they are placed in subgroups titled Main Battle Tanks, Assault Guns, Armored Personnel Carriers, Anti-Tank Guns and Missiles, and Infantry Anti-Tank

Devices. Within each subgroup the weapons systems are listed in rough chronological order. What follows is a column-by-column description of the information found on the chart.

Column One (extreme left): The name of the weapons system. Infantry Anti-Tank devices which can not be transported using tanks as carriers are coded "nt" for "non-transportable by tank".

Column Two, Period: The historical period in which the weapons system was employed. See 35.0, the Historical Period Chart.

Column Three, [vehicle groups only] Armor Defense Strength F/S/R: The Front, Side and Rear Defense Strengths of an armored vehicle. Defense Strengths in parentheses indicate spaced armor.

Column Four, Attack Strength AP/HE: A unit's Armor Piercing and High Explosive Attack Strengths. An AP attack Strength followed by an asterisk (*) indicates a HEAT firing weapon.

Column Five, [vehicle groups only] Movement Allowance: The maximum number of Movement Points available to a unit on a per-Game-Turn basis.

Column Six, Fire Control System: The fire control method used by that particular weapon system. This corresponds to a specific Combat Results Table: N=Nominal; SC=Stereo Coincidence; R=Ranging Machinegun; L=Laser Rangefinder. Anti-Tank missiles are characterized as being either CLS (Clear Line of Sight) or TH (Target Homing).

Column Seven, Range: The maximum effective range of the weapon.

Whenever the abbreviation "na" appears in a particular column it means that that characteristic is not applicable to that particular weapon.

Adding to the Weapons Characteristics Chart

Space limitations if nothing else prohibited our listing all the armored weapons systems that ever were or are or might be. You, the Player, are invited to add weapons of which you feel the lack. For example, the Israelis are known to have upgunned M48's that they captured from the Jordanians in 1967. 'simply graft on the 22/10 Attack Strength found on the other Israeli tanks to the other characteristics shown for the M48A2.

Using the Weapons Characteristics Chart

After you have selected various weapons systems you will find it convenient to note their characteristics on a piece of scratch paper. This will eliminate the need to constantly refer to the chart during the game. In fact, transcribing all the data from the WCC onto separate 3" x 5" file cards (one for each weapon) is an ideal way to have complete, handy access to all the chart data.

Note: The Expanded WCC completely supercedes the Standard WCC.

[36.11] British Main Battle Tanks [MBT]	APON SYS Period	TEMS Armor Defense Strength F/S/R	Attack Strength AP/HE	MA	FC	Range	[36.13]] Anti-Ta Guns		Attack Strength		
A-13	1-3	3-3-2	6/0	8	N	25	[ATG]	Period	AP/HE	FC	Rang
Matilda	1-3	9-8-7	6/0	2	N	25	2 lb.	1-5	6/0	N	30
Valentine	4-5	7-6-6	6/0	3	N	25	25 lb.	1-5	8/10	N	40
Crusader II	4	6-4-3	6/0	8	N	25	6 lb.	4-6	12/0	N	50
Crusader III	5	6-4-3	12/0	8	N	50	17 lb.	6-8	17/10	N	50
Firefly	6-7	6-3-2	17/10	5	N	50					
Centurion III	7-8	14-9-6	18/10	4	SC	50	[36.14] Infatry				
Centurion Centurion	9-12	16-9-6	22/10	5	R	35	Tank D				
Chieftain	12	28-9-6	24/10	6	R	35	ATR	1-4	1	N	F
36.12] British Armored Personnel				l x		30	PIAT	5-7	5*	N	5 2
Carrier [APC] Bren	1-8	1-1-1	na	8	na	na	Gustav (nt) 12	16*	N	8
[36.2] FRENCH WE. [36.21] French Main Battle Tanks [MBT]	Period	Armor Defense Strength F/S/R	Attack Strength AP/HE	MA	FC	Range	[36.22] Anti-Ta Gun [A	nk			
S-35	1	3-3-2	6/5	5	N	25	25	1	3/0	N	15
Char-B1	1	6-4-3	10/10	3	N	40	47/34	1	6/5	N	25
AMX-30	9-12	10-5-4	21*/10	9	SC	50					
[36.3] NAZI GERMA			WEAPON SYS	STEMS							
[36.31] German Main Battle Tanks [MBT]	Period	Armor Defense Strength F/S/R	Attack Strength AP/HE	MA	FC	Range					
Main Battle Tanks [MBT]		Strength	Strength	MA 5	FC N	Range					
Main Battle Tanks [MBT] Pz IVC	Period	Strength F/S/R	Strength AP/HE				[36.34] G Anti-Tan		Attack		
Main Battle Tanks [MBT] Pz IVC Pz II	Period	Strength F/S/R 4-4-4	Strength AP/HE 6/10	5	N	25	Anti-Tan Guns	ık	Strength	FC	Range
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID	Period 1	Strength F/S/R 4-4-4 4-2-1	Strength AP/HE 6/10 2/5	5	N N	25 10	Anti-Tan	Period	Strength AP/HE	FC N	
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE	Period 1 1 1	Strength F/S/R 4-4-4 4-2-1 4-4-4	Strength AP/HE 6/10 2/5 4/5	5 5 5	N N N	25 10 20	Anti-Tan Guns [ATG]	Period 1-2	Strength AP/HE	N	20
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH	Period 1 1 1 2-4	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4	Strength AP/HE 6/10 2/5 4/5 6/10	5 5 5 5	N N N	25 10 20 25	Anti-Tan Guns [ATG]	Period 1-2 1-6	Strength AP/HE 4/5 15/10	N N/SC	20 50
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ	Period 1 1 1 2-4 2-3	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5	Strength AP/HE 6/10 2/5 4/5 6/10 7/5	5 5 5 5 5	N N N N	25 10 20 25 30	Anti-Tan Guns [ATG] 37/45 88/56 50/60	Period 1-2 1-6 2-6	Strength AP/HE 4/5 15/10 8/5	N N/SC N	20 50 40
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz VIA	Period 1 1 1 2-4 2-3 4	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5	5 5 5 5 5 5	N N N N	25 10 20 25 30 40	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20	Period 1-2 1-6 2-6 2-4	Strength AP/HE 4/5 15/10 8/5 7/0	N N/SC N	20 50 40 35
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz IIIJ Pz VIA PzIVF2	Period 1 1 1 2-4 2-3 4 5-6	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10	5 5 5 5 5 5 5	N N N N N	25 10 20 25 30 40 50	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46	Period 1-2 1-6 2-6 2-4 4-6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10	N N/SC N N	50 40 35 50
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz VIA PzIVF2 Pz V	Period 1 1 1 2-4 2-3 4 5-6 4-5	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10	5 5 5 5 5 5 5 5	N N N N N N N N N N N N N N N N N N N	25 10 20 25 30 40 50 50	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71	Period 1-2 1-6 2-6 2-4 4-6 5-6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10	N N/SC N N N N N/SC	20 50 40 35 50 50
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz VIA PzIVF2 Pz VV	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10	5 5 5 5 5 5 5 5 7	N N N N N N	25 10 20 25 30 40 50	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46	Period 1-2 1-6 2-6 2-4 4-6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10	N N/SC N N	20 50 40 35 50
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz VIA PzIVF2 Pz V Pz IVH Pz IVH	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 5-6	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 14/10	5 5 5 5 5 5 5 5 7	N N N N N N N N N N N N N N N N N N N	25 10 20 25 30 40 50 50 50 50	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71	Period 1-2 1-6 2-6 2-4 4-6 5-6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10	N N/SC N N N N N/SC	20 50 40 35 50 50
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IIID Pz IIIH Pz IIII Pz VIA Pz IVF2 Pz IVH Pz VVB Leopard I Leopard II	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 5-6 9 12	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8)	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 14/10 21/10	5 5 5 5 5 5 5 7 5	N N N N N N N N N N N N N	25 10 20 25 30 40 50 50 50	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R	Period 1-2 1-6 2-6 2-4 4-6 5-6 6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10	N N/SC N N N N N/SC	20 50 40 35 50 50
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz VIA PzIVF2 Pz V Pz IVH Pz VIB Leopard II Leopard II	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 6 9 12 1t Guns Tu	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8) Irretless [AG]	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 21/10 21/10 22/10 26/10	5 5 5 5 5 5 5 5 7 5 4 9	N N N N N N N N SC L	25 10 20 25 30 40 50 50 50 50 50 60	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R	Period 1-2 1-6 2-6 2-4 4-6 5-6 6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10	N N/SC N N N N N/SC	20 50 40 35 50 50
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz VIA Pz IVF2 Pz VV Pz IVH Pz VIB Leopard I Leopard II 36.32] German Assau	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 5-6 6 9 12 11 Guns Tu 1-4	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8) urretless [AG] 6-4-5	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 21/10 22/10 26/10	5 5 5 5 5 5 5 5 7 5 4 9	N N N N N N N N N SC L	25 10 20 25 30 40 50 50 50 50 50 60	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R [36.35] G Infantry Tank De [IATD]	Period 1-2 1-6 2-6 2-4 4-6 5-6 6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10 5*/10	N N/SC N N N N N/SC N	20 50 40 35 50 50
Main Battle Tanks MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz IIIJ Pz IIIJ Pz IVIA Pz IVF2 Pz IVH Pz VIB eopard I eopard II eopard II fol.32] German Assau TG III A - E	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 6 9 12 11-4 5-6	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8) stretless [AG] 6-4-5 9-4-5	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 21/10 22/10 26/10 6/10 14/10	5 5 5 5 5 5 5 5 7 5 4 9	N N N N N N N N N N N N N N N N N N N	25 10 20 25 30 40 50 50 50 50 50 60 25 50	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R [36.35] G Infantry Tank De [IATD] ATR	Period 1-2 1-6 2-6 2-4 4-6 5-6 6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10 5*/10	N N/SC N N N N N/SC	20 50 40 35 50 50
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IIID Pz IIIH Pz IIII Pz IIII Pz IIII Pz IIII Pz VIA Pz IVF2 Pz V Pz IVH Pz VIB Leopard I Leopard II SG 32] German Assau STG III A - E StG III Marder	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 6 9 12 11-4 5-6 4-6	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8) stretless [AG] 6-4-5 9-4-5 2-1-1	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 14/10 21/10 22/10 26/10 6/10 14/10 14/10 14/10	5 5 5 5 5 5 5 5 7 5 4 9 9	N N N N N N N N N N N N N N N N N N N	25 10 20 25 30 40 50 50 50 50 50 60 25 50 50	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R [36.35] G Infantry Tank De [IATD] ATR	Period 1-2 1-6 2-6 2-4 4-6 5-6 6 German Anti-vices	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10 5*/10	N N/SC N N N N N/SC N	20 50 40 35 50 50
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz VIA PzIVF2 Pz V Pz IVH Pz VIB Leopard I Leopard II STG III A - E StG III Marder Pz IV	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 6 9 12 1t Guns Tu 1-4 5-6 4-6 5-6	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8) urretless [AG] 6-4-5 9-4-5 2-1-1 7-4-3	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 21/10 22/10 26/10 6/10 14/10 14/10 14/10 18/10	5 5 5 5 5 5 5 5 7 5 4 9 9	N N N N N N N N N N N N N N N N N N N	25 10 20 25 30 40 50 50 50 50 50 60 25 50 50 50 50 50 50 50 50 50 5	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R [36.35] G Infantry Tank De [IATD] ATR	Period 1-2 1-6 2-6 2-4 4-6 5-6 6 German Anti-vices 1 1-5 5-6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10 5*/10	N N/SC N N N N/SC N	20 50 40 35 50 50 10
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IIID Pz IIIH Pz IIII Pz IIII Pz VIA Pz IVF2 Pz V Pz IVH Pz VIB Leopard I Leopard II STG III A - E STG III Marder Pz IV Hetzer	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 6 9 12 1-4 5-6 4-6 5-6 6	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8) stretless [AG] 6-4-5 9-4-5 2-1-1 7-4-3 7-3-3	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 14/10 21/10 22/10 26/10 6/10 14/10 14/10 14/10 14/10 14/10	5 5 5 5 5 5 5 5 7 5 4 9 9 5 5 5 4 4	N N N N N N N N N N N N N N N N N N N	25 10 20 25 30 40 50 50 50 50 50 60 25 50 50 50 50 50 50 50 50 50 5	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R [36.35] G Infantry Tank De [IATD] ATR	Period 1-2 1-6 2-6 2-4 4-6 5-6 6 German Anti-vices	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10 5*/10	N N/SC N N N/SC N N N/SC N	20 50 40 35 50 50 10
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz VIA Pz IVF2 Pz V Pz IVH Pz VIB Leopard I Leopard II Assau STG III A - E StG III Marder Pz IV Hetzer agd Panther	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 6 9 12 1t Guns Tu 1-4 5-6 4-6 5-6 6	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8) urretless [AG] 6-4-5 9-4-5 2-1-1 7-4-3 7-3-3 11-4-4	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 21/10 22/10 26/10 6/10 14/10 14/10 14/10 14/10 14/10 14/10 21/10	5 5 5 5 5 5 5 5 7 5 4 9 9 5 5 5 4 4 7	N N N N N N N N N N N N N N N N N N N	25 10 20 25 30 40 50 50 50 50 50 60 25 50 50 50 50 50 50 50 50 50 5	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R [36.35] G Infantry Tank De [IATD] ATR 43 RG PzR 43	Period 1-2 1-6 2-6 2-4 4-6 5-6 6 German Anti-vices 1 1-5 5-6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10 5*/10	N N/SC N N N/SC N N N/SC N	20 50 40 35 50 50 10
Main Battle Tanks [MBT] Pz IVC Pz II Pz IIID Pz IVE Pz IIIH Pz IIIJ Pz VIA Pz IVF2 Pz VV Pz IVH Pz VIB Leopard I Leopard II Actor III A - E StG III Marder Pz IV Hetzer agd Panther agd Kanone	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 6 9 12 11-4 5-6 4-6 5-6 6 9	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8) urretless [AG] 6-4-5 9-4-5 2-1-1 7-4-3 7-3-3 11-4-4 9-5-5	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 21/10 22/10 26/10 6/10 14/10 14/10 14/10 14/10 14/10 14/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10	5 5 5 5 5 5 5 5 5 7 5 4 9 9 5 5 5 4 4	N N N N N N N N N N N N N N N N N N N	25 10 20 25 30 40 50 50 50 50 50 60 25 50 50 50 50 50 50 50 50 50 5	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R [36.35] G Infantry Tank De [IATD] ATR 43 RG PzR 43 PF44-1	Period 1-2 1-6 2-6 2-4 4-6 5-6 6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10 5*/10	N N/SC N N N N/SC N N N N N N	20 50 40 35 50 50 10 5 1
Main Battle Tanks	Period 1 1 1 2-4 2-3 4 5-6 4-5 5-6 6 9 12 11-4 5-6 4-6 5-6 6 9	Strength F/S/R 4-4-4 4-2-1 4-4-4 6-4-4 5-3-5 5-3-5 9-7-7 6-3-3 11-3-3 7-3-2 13-7-7 16-8-7 (18-9-8) urretless [AG] 6-4-5 9-4-5 2-1-1 7-4-3 7-3-3 11-4-4 9-5-5	Strength AP/HE 6/10 2/5 4/5 6/10 7/5 8/5 15/10 12/10 18/10 21/10 22/10 26/10 6/10 14/10 14/10 14/10 14/10 14/10 14/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10 11/10	5 5 5 5 5 5 5 5 7 5 4 9 9 5 5 5 4 4 7	N N N N N N N N N N N N N N N N N N N	25 10 20 25 30 40 50 50 50 50 50 60 25 50 50 50 50 50 50 50 50 50 5	Anti-Tan Guns [ATG] 37/45 88/56 50/60 28/20 75/46 88/71 75R [36.35] G Infantry Tank De [IATD] ATR 43 RG PzR 43 PF44-1	Period 1-2 1-6 2-6 2-4 4-6 5-6 6	Strength AP/HE 4/5 15/10 8/5 7/0 14/10 21/10 5*/10	N N/SC N N N N/SC N N N N N N	20 50 40 35 50 50 10 5 1

[36.41] Israeli Main Battle Tanks [MBT]	Period	Armor Defense Strength F/S/R	Attack Strength AP/HE	MA	FC	Range					
Centurion	10-12	16-9-6	22/10	7	SC	50					
Super Sherman	10-12	6-3-2	22/10		SC	50					
T-67	12	12-6-6	22/10	7	SC	60					
[36.5] ITALIAN WE	APON SYS	STEMS									
[36.51] Italian Main	Battle Tan	k [MBT]									
M-13/40	1-5	4-3-3	6/5	3	N	25					
[36.6] SWEDISH W	EAPON SY	STEMS									
[36.61] Swedish Mai	n Battle Ta	nk [MBT]									
STRV	12	20-8-6	24/10	9	N/L	50/60					
[36.7] ALL NATION	S TRUCK	TRANSPORT	[TR]								
TR		0-0-0	na	8	na	na					
[36.8] SOVIET RUS	SIAN WEA		S								
[36.81] Soviet Main Battle Tanks [MBT]	Period	Armor Defense Strength F/S/R	Attack Strength AP/HE	MA	FC	Range					
BT-7	1,2	2-1-1	6/5	9	N	30	[36.84] So Anti-Tan		Attack		
T34/76A	2	5-4-4	6/10	5	N	25	Guns/Mis [ATG/M]	ssiles	Strength AP/HE	FC	Range
T34/76C	4-6	8-5-5	8/10	8	N	30	45	1-6	6/5	N	30
T34/85	5-6	10-8-6	14/10	8	N	50	76/42	2-6	8/10	N	35
JS 11	6	11-9-6	15/10	4	N	50	57/73	5-6	9/5	N	45
JS III	6-9	13-9-7	15/10	4	N	50	85	6-11	14/10	N	50
KVI	4-5	11-8-8	8/10	4	N	30	100	7-12	17/10	N	50
T-55	8-12	12-6-6	20/10	7	N	50	122	7-8	15/12	N	50
T-10M	8-9	24-13-7	19/10	6	N	50	82R	8-12	12*/10	N	10
PT76	9-12	5-2-2	8/10	8	N	20	107R	8-12	19*/10	N	20
T-62	12	14-6-6	21*/10	7	N	30	Snapper	9-12	28*	CLS	10-40
T-70	12	(16-6-5)	23*/10	9	L	60	Swatter	12	30*	CLS	8-50
[36.82] Soviet Assault Guns Turretless [AG]							Slogger	12	36*	ТН	2-60
SU85	5-8	10-6-3	14/10	8	N	50					
SU76	4-7	4-3-2	7/10	8	N	30	[36.85] Sov Infantry A	viet			
JSU 152	5-8	12-9-5	14/20	4	N	50	Tank Devi	ices			
SU 100	6-12	10-6-3	17/10	6	N	50	PTRD	1-6		27	
ASU-85	9-12	6-3-3	14/10	7	N	50	RPG-2	8-11	2 10*	N	6
ASU-57	12	1-1-1	9/5	7	N	20	RPG-7	9-12	11*	N N	3
[26,921,6							Sagger(nt)		30*	CLS	6
[36.83] Soviet Armored Personnel Carriers [APC]						`	Slinger(nt)		24*	TH	10-50 2-40
BTR-60	8-12	1-1-1	na	8	na	na					

[36.9] UNITED STA	TES WEA	PON SYSTEMS Armor					[36.93] U and NAT Anti-Tanl Guns/Mis [ATG]	O	Attack Strength AP/HE	FC	Range
[36.91] United States Main Battle Tanks [MBT]	Period	Defense Strength F/S/R	Attack Strength AP/HE	MA	FC	D	76/50	4-6	13/10	N	50
	3-6	3-2-2				Range	37/50	4-5	5/5	N	25
Stuart			6/10	7	N	20	57/50	5-6	8/5	N	40
(M4)Sherman	4-6	6-3-2	10/10	5	N	50	105R	8-12	18*/10	N	20
M-10	5-6	6-3-2	13/10	6	N	50	75R	7-9	9*/10	N	15
M-18	6-7	2-1-1	13/10	8	N	50	106R	8-12	25*/10	N/R	25
Sherman 76	6-8	6-3-2	13/10	5	N	50	SS-10	8-12	20*	CLS	6-32
M-36	6-8	6-3-2	16/10	5	N	50	ENTAC	12	31*	CLS	8-40
M-24	6-8	3-2-1	10/10	6	N	50	TOW	12	30*	TH	1-70
M-26	6-7	9-6-4	16/10	6	N	50	SS 11	9-12	33*	CLS	10-60
M-48A2	8-11	16-8-5	19/10	7	SC	50	нот	12	27*	TH	2-80
M-60A1	9-12	17-8-5	22/10	7	SC	50	[36.94] U.	S.			
M60A2	12	17-8-5	30*/15	7	SC	30	and NATO Infantry Anti-				
Sheridan	12	4-1-1	30*/15	9	SC	30	Tank Dev	ices			
M60A3	12	(18-8-5)	24*/10	8	L	60	M-9	5-6	5*	N	2
[36.92] United States							57R	6-8	9*	N	8
Armored Personnel Carriers [APC]							M-20A1	8-12	14*	N	3
HT	1-12	1-1-1	na	8	na	na	M-67(nt)	10-12	15*	N	8
M-113	8-12	2-1-1	0/3	8	N	10	M-72 LAV	V 12	13*	N	4
MICV	12	3-1-1	6/10	8	N	30	NATO iss	ue			
							Milan(nt)	12	18*	TH	1-40
							Dragon(nt) 12	20*	TH	1-20

16-20 • 1 21-25 • 1 26-30 • •	• • • • • •	
1-2	• • • 1 1-2	• • • • 1 1-2
1-3	• • 1 1-2	1-3
1-3	 1-3 1-2 1 	• 1 1 1.2 1.4
1-3	1 1-2 1-3 1-4 1-5	1-5 1-4 1-3 1-2 1-2
1-6 1-5	1-2	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5
1-7 1-6 1-5	1-6 1-6 1-8 1-3	1.7 1.6 1.6 1.3 1.3
1-8 1-7 1-6	1-6 1-5 1-5	11.7
1-8	1-8 1-7 1-6 1-6	1.5
1-10 1-9 1-8	1-10 1-9 1-8 1-7 1-7	1-10 1-9 1-8 1-7 1-7 1-6

	Drag	on(nt	12	20*			TH	1-20
31-35	26-30	21-25	16-20	111-15	6-10	1-5	Range 0	[23.1]
•	•	•	•	•	1	1	0	RA
•	•	•	•	1	1-2	1-2	1	[23.1] RANGING MACHINE GUN [R] COMBAT RESULTS TABLE Attack Differential
•	•	•	1	1-2	1-3	1-3	2	MAC
•	•	<u>,</u>	1-2	1-3	1-4	1-4	ယ	A
•	<u> </u>	1-2	1-3	14	1-5	1-5	4	GUN ttack I
•	1-2	1-3	1-4	1-5	1-6	1-6 1-7	CI	E GUN [R] COM
•	1-3	1-4	1-5	1-6	1-7		6	OMB/
}	1-4	1-5	1-6	1-7	1-8	1-8	7	T RE
1-2	1-5	1-6	1-7	1-00	1-9	1-9	00	SULT
1-3	1-6	1-7 1-8	1-8	1-9	1-10	1-10	9	S TAB
1-4	1-7	-00	1-9	1-10	1-10	1-10	10 [+]	ILE