BATTLE FIELD OPS!

Modern Miniatures Tactical Game System

Rules Update 1.2-3

Errata and Update for:

BOX BATTLES
COLD WAR EVOLUTION

A game by:

5th Epoch

Modern Miniatures
Tactical Game System

Rules Update Version 1.2-3

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This Update supersedes Version 1.1

It also synchronizes with the Update 1.3: Air-to-Ground Combat PDF, as well as the Update 1.3W: Shoreline Watercraft PDF

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Table of Contents – Update 1.2-3

What to know about Box Battles: Cold War Evolution and the Battle Field Ops! Game System **Page 3**
What you need to utilize this PDF
Variations from Game Rules within Update Version 1.2-3
About the Information Within
The Rules vs the Unit Card
3.0. CORRECTION - Removing Front and Rear facing modifiers, change in combat tables **Page 5**
3.0 CORRECTION - Base of Fire is renamed Burst on Target; change in how rule is applied
3.0 REVISION – Target Selection
3.0. CLARIFICATION - Firing from within terrain
3.0. REVISION - Target Speed to Hit Modifier
3.0 EXPANSION (Veteran's Rule) – Selecting Suppressive Fire
3.1 CORRECTION (also 3.6.4) - The horizon line, main gun elevation, and maximum weapon ranges **Page 7**
3.1.2 CLARIFICATION – High Explosive and Armor-Piercing Ammunition Types
3.2.1. CORRECTION - Deploying Smoke in Reaction to Incoming ATGM Fire **Page 9**
3.2.1. REVISION - Deploying Smoke During the Weapon Priority Sequence
3.2.1. REVISION - Deploying Smoke via Mortars and Artillery
3.4. EXPANSION (Veteran's Rule) - Automatic Grenade Launcher Burst Fire
4.1. CLARIFICATION - Time Length of Unit Suppression
4.1.2. CLARIFICATION - Grenades vs. Tanks
4.2 CLARIFICATION - Tracks and Tires Armor Value
5.3 REVISION - Details about Preparing Defenses **Page 10**
6.0. CORRECTION - Moving in Reverse **Page 14**
6.0. CLARIFICATION – Tactically pausing movement while under any command
6.0. CORRECTION (Also 11.0) - Double-Time Movement under Advance Command
6.0. EXPANSION (Veteran's Rule) – Vehicular Close Quarter Battle - Running Over and Ramming Targets
6.1.1. REVISION - Terrain Effects, Spotting and Shooting – "Law of Cascading Doubles"
6.1.3. REVISION - Rough Ground, Extreme Ground, Fording Waters and Climbing Cliffs
6.1.3. EXPANSION (Veteran's Rule) - Effects of Environmental Conditions
Flood lands, Deep Snow, Iced Roads, Night Scenarios, Night Vision and Illumination Equipment
7.0. CLARIFICATION (also 7.1) - When Spot Checks Are Made **Page 17**
7.1 Spot Checks REVISION – Number of Targets Spotted
7.0. and 9.2 CLARIFICATION / REVISION – Spotting with Unbuttoned Units
7.0. REVISION - Conditions for Spotting Targets Automatically
8.0. REVISION - NEW Procedure and Unit Cards for Firing Mortars and Artillery **Page 17**
8.2.3 CLARIFICATION - Maximum reduction in die roll when Correcting Fire
9.0 REVISION – Standard Infantry Weapons for Strategic Play **Page 19**
9.3.1 CLARIFICATION – Infantry Riding, Mounting and Dismounting
9.3.1 CLARIFICATION – Riding Infantry Reaction When Their Vehicle is Hit
9.3.2 CORRECTION - Confined Infantry vs. Unconfined Infantry
9.3.5. CORRECTION - Infantry Spotting Ability
9.3.5. CLARIFICATION - Suppressed Infantry are considered Defilade
9.3.5. CORRECTION - Hits to Infantry based on Shell Size (Removed from Update 1.1)
9.3.5. REVISION - Infantry vulnerability to Machine Gun Fire - Raking
9.4. CLARIFICATION - Infantry CQB vs. Armored Units
9.4. EXPANSION (Veteran's Rule) – Infantry Clearing Buildings
10.0 CLARIFICATION – Unit Rating Details **Page 22**
10.1. CORRECTION - Proper Bailout Check Number
10.3. EXPANSION (Veteran's Rule) - Superior Unit Rating First-to-Fire
11.0. EXPANSION – The differences between WARPAC and NATO Use of Command Cards **Page 23**
13.0. EXPANSION (Veteran's Rule) – Using Specialized Units **Page 24**
14.0. CLARIFICATION - Firing Over Obstructions **Page 27**
14.0. EXPANSION (Veteran's Rule) - Firing Through Cover and Obstructions
14.0 EXPANSION (Veteran's Rule) - Destroying Buildings and Structures
General's Rules - Large Force Game Shortcuts **Page 30**
Command Card Draw, Infantry Take Priority, Spot Only on First Line of Sight
Standard Infantry Weapons Table
Additional Play Markers Sheet
Phase-by-Phase Turn Display Playing Aid
Update 1.2 Game Tables and Reference Notes

What to know about Box Battles: Cold War Evolution and the Battle Field Ops! Game System

Box Battles: Cold War Evolution was originally a boxed game set which contained all the essential game elements to begin a collection of 1/285 (6mm) scale miniatures. Set in the early 1970s Cold War era, components included miniatures forces one Company in size for both the United States and Soviet Union, a rule set, playing aids, unit data cards, a fabric play surface, terrain and a number of buildings. Additional two-sided conflict modular sets were originally sold as expansion packs to this basic set.

Battle Field Ops! is the rule system which was introduced in this box. However, since its release in 2017, players who were already collectors of small-scale modern miniatures desired this rule set and playing aids, as the rules had proven to be well-adaptable to both 6mm and 10mm scale collections. 5th Epoch shifted our approach; the game components had been sold on an item-by-item basis, so players can customize what they need for their games. All future releases will be directed towards the integration of individual **Battle Field Ops! Game System** components.

The original game set was to be played on coffee table-sized play surfaces. However, as collectors our interests nest a strong desire to play larger, robust games integrating the use of combined arms. As such, our company has made efforts to integrate the feedback from scores of customers and players at trade shows, with further assistance from a number of service men and women and combat veterans. Our goal continues to be making playing games at larger tables easier while more accurate, and all this is in service of that end.

What you need to utilize this PDF

You may already have a 1/285th or 6mm collection, and were introduced to our game at a convention, or by a friend, or maybe seen one of our YouTube videos. No matter; assuming you already have a miniatures collection as well as some terrain, here is what you will need to play the Battle Field Ops! system at your table:

• This FREE Battle Field Ops! Rules Update 1.2-3 PDF (of course, you are reading it now).

• The Box Battles/Battle Field Ops! Rule book (soft cover or PDF, 60+ pages).

• Unit Cards: These Unit Cards have information front and back for each combat unit you will need for NATO and Warsaw Pact forces. These can be ordered by downloading Order Forms from our website; you should review your desired combat units and order one card for each – **you cannot play the game without these**, as you will not have the combat data needed for each unit in the game.

• Dice: At least one 10-sided die, though the more of these you have, the better. If you are using mortars, artillery units, rocket pods or bombs in your game, you will need one 12-sided die.

• Rulers, with one-inch increments. A long one of 6' or more is recommended, as well several short ones 6" or less.

• Recommended: We strongly recommend you acquire our Command Card/Playing Aids sets from our website, which have both Command Cards for the draw deck (required for play) as well as a series of marker counters you will need at the play table to make game play easier. However, you can simply invent your own Command Cards if you so choose, as well as custom-make your own markers of course, if that is your preference.

As the original Box Battles: Cold War Evolution rules set was originally written for the boxed game, many examples or statements were made in this context, referring to components in the original box. You may need to apply the details presented to the specific units you may be using at your game table, should they differ. In the future, 5th Epoch will be releasing an entirely revised rule set which speaks to a wider variety of games. In the interim, keep an eye on our website for the various Rule Update PDFs which will add to our rule set and your play experience.

Variations from Game Rules within Update Version 1.2-3

Rule Update 1.2-3 supersedes Update 1.1, so the latter may be disregarded. At the same time, Update 1.2-3 will synchronize with Update 1.3 Air-to-Ground PDF, and is compatible with that supplement series, as well as with the upcoming Shoreline Watercraft PDF.

Be sure to download the FREE Update 1.2 Unit Card Overlay Errata PDF. This supplements provides compatible information in the form of cutouts which may be taped or glued to existing Unit Cards for corrections (stickers are also a fine option). This will keep your game current until revised edition materials are released at a later date.

About the Information Within

Rule Update 1.2-3 contains updates which fall into four essential categories: Corrections, Revisions, Clarifications, and Expansions. These are listed below in their order of importance.
• **Corrections** are essential to review for game play. These are items which modify errors made in the original rules.
• **Revisions** are important changes to review as they impact game play. These are items changed to make game play smoother, or include details which we overlooked previously.
• **Clarifications** note items which we have required further explanation, as they were not clear under certain play circumstances that could occur at the table.
• **Expansions** are optional items that include more guides, features, situations or even unit types that will be seen at the play table. Related to this are Veteran's and General Rules, noted for easy visual reference.

All items notes are listed by the general rule number, in numerical order. While some rules numbers are exact, most are generalized; they are there to simply give a player a proper reference on the rule group that is affected.

What are General's Rules? Large force game rule shortcuts

A small section of "large force" game rules has been presented in the rear of this PDF booklet. These are guidelines and changes that can be made to game play in order to accommodate large forces of opponents, usually for Regimental/Brigade-sized games. Much of the game system is kept intact, with some abbreviated procedures, scaling and balance adjustments, and rule modifications. Not every nuance of how the game plays on the coffee table needs to be kept. Players should feel free to use what they wish, and discard anything not suitable to their own style of play.

The Rules vs the Unit Card

If you are using Unit Card Versions 1.0 and 1.1, in most cases the data presented should be overridden by anything presented in this rule update. The exception to this is that there will be variations which represent special features or abilities of the unit over what is generally used within the rules; in these cases, the Unit Card should be treated as eminent. Good judgment will be needed by the players to determine the specifics of what is applicable on a case-by-case basis. Some time may be required to ensure both players are updated regarding more recent releases of any rule, so they may agree on their use prior to game play.

Playing Aids included

In the rear of this PDF just before the quick reference tables lies a page of temporary markers which may be used to make tracking easier during game play. We recommend printing this sheet on a light card stock for cut outs. Markers include countdowns for burning oil and smoke, tracking grenade bursts, minefield types and indicators for the status of certain obstructions. The most useful may be the Turn Marker to help indicate where players are in the Turn sequence, Fired markers to note which units have taken shots for counter-spotting, and Enemy Spotted markers to help keep track of key targets seen at the beginning of combat engagements. These last markers are presented with paired letters in the event players wish to more easily note the spotter and targets specifically.

3.0. CORRECTION - Removing Front and Rear facing modifiers, change in combat tables
The -1 modifier applied to Spot and Hit for front or rear facing as per the original rulebook has been removed, since in game play more often targets engage each other from a frontward direction. Instead, +1 should be added for any target which is side or oblique facing. In addition, respective charts have been adjusted in tandem with more refined weapon ballistics data. This change reduces the volume of additions and subtractions required during game play. Note that special modifiers for any unit's unique features should be kept (low or high profile, small target, etc.).

3.0 CORRECTION - Base of Fire is renamed Burst on Target; change in how rule is applied
In the original rulebook, page 12, one of the modifiers to Hit is explained - Base of Fire. The intention of the rule is to represent improved accuracy for cannons which have the ability to direct fire subsequently at targets which lie within the gunner's sights. This rule is renamed to Burst on Target (BoT); the rule applies only to main guns and cannons during direct fire and not other weapon types.

The rule application bonus varies based on the specific weapon system in use, and will be noted on revised Unit Cards 1.2 and later. The bonus will be +1 to +2 to Hit, either spelled out or noted as *BoT +1 or BoT +2* respectively. For these cards, if no Burst on Target is listed on the Unit Card, then no BoT is afforded that specific weapon.

Burst on Target may be used against the same target when there was a previous miss, or any target within the same element (attached units). Burst on Target cannot be used when there is a change from one target element to another, unless the two elements are intermixed on the play surface. Element proximities should be compared to the same terrain restrictions used when determining if they may operate under a single command or different commands. *For example, two platoons move to a similar location and are within 2" from each other in mixed terrain; the respective elements cannot be distinguished from one another based on their proximity (despite any platoon markings/paint) – they would therefore be within the same targeting solution for the shooter*.

For Unit Cards 1.0 and Update 1.1, BoT ability is not listed. When using these cards at the play table and consecutive fire against the same target element is desired, the following general guidelines should be used:
• If the gun/cannon does not require a change in angle in order to reload, a BoT of +2 is afforded. This applies to most NATO designs, with a few exceptions.
• If the cannon requires a change in angle in order to reload but has stabilization, a BoT of +1 is afforded. This applies to most Soviet designs of the 1970s which use autoloaders, with a few exceptions. Weapons of the era with a BoT +1 lose this bonus if the target is moving at a speed of 2" or more during the current Move Phase.
• Recoilless Rifles, Machine Guns, and Infantry weapons are not afforded any BoT, so this is no longer applied.

Until new Unit Cards are released, players may need to do a small amount of research as to the particular weapon in question – its treatment should be agreed upon by players prior to the scenario.

3.0 REVISION – Target Selection
In game play, there are limits to an attacker choosing specific units to target. This rule does not apply under the following circumstances: (1) Massive targets (such as buildings or medium watercraft) may always be specifically targeted, (2) Anti-Tank Guided Missiles always choose specific target units, and (3) Infantry which are Special Forces typically Unit Rating 7 and higher always choose specific target units.

Main guns, cannons and rockets firing up to their Short Range category may also select specific targeted units. At Medium Range and greater, firing units may identify a target element, but not the specific unit; *for example, "this Section", "that Platoon", etc*. In this situation, when targets are successfully Disabled, it is the choice of the target's controlling player which specific units are affected. The target player may choose units which are already Suppressed or not at his own behest, however, the target owner may not take Hits to an already-disabled unit. Similar applies to Suppressed units; the target owner may not take Suppressions to an already-suppressed unit, unless specifically desired by the shooter. Certain weapons systems note when they must concentrate their fire; *for example, when more than one rocket or ATGM must be used against the same target due to targeting system limitations, or when two units are required to fire on one single unit for a particular Suppressive Fire effect (see Veteran's Rule following)*.

There may be situations in which an element contains multiple types of units; this creates some decision-making since target units may be of a different size or have different Armor Values, changing calculations. Under these circumstances, if the attacker is a single unit, a die roll should be used to determine the target ('evens or odds', etc). If there are multiple attacking units, fire should be split between multiple unit types as evenly as is possible.

3.0. CLARIFICATION - Firing from within terrain

Clarified from the original rulebook page 12, units may fire out of a terrain edge with no penalty, provided the firing unit is situated 1" or less within the terrain edge. In turn, the unit is still offered the concealment and cover of 1" of terrain against Spotting and incoming weapons fire. Once the unit's depth within the terrain is greater than 1", terrain modifiers will apply normally to the firing unit for both Spotting and Hit numbers. In these cases, the full terrain depth is included, so the modifier, therefore, "jumps" to the appropriate number. *For example, if a unit is 1" within the terrain line, that unit is not imposed any modifiers to Spot and to Hit an enemy, but is afforded the benefits of the terrain when being targeted. However, if the unit is 2" within the terrain line, the unit will incur its own negative modifiers to Spot and Hit for the entire 2" by terrain type.*

In some cases the specific miniature used may be greater than 1" in length. In this case, this rule is applied by the front of the unit being within the terrain line up to 1"; firing from that unit out of terrain is treated as described above.

3.0. REVISION - Target Speed to Hit Modifier

Firing at moving targets can be more difficult if the target's speed is high enough. A modifier should be applied to the firing unit's chances based on the target's Movement.

Target's Movement that Phase	To Hit Modifier	In-Game Top-of-Mind Note
Up to 4"	No Modifier	Most land vehicles up to Cruise speed
5" +	-1 to Hit	Faster vehicles at Cruise, most at Full speed
11" +	-2 to Hit	Only fastest vehicles at Full speed, many air units
18" +	-3 to Hit	Air units

This information is already integrated into the revised Direct Fire table, modifiers, included within this document.

Air units will move substantially faster than the speeds noted above, and so the table for anti-air weapons have expanded penalties to Hit based on movement. See Update 1.3 Air-to-Ground Rules.

3.0 EXPANSION (Veteran's Rule) – Selecting Suppressive Fire

During most game play, it is assumed that most direct fire will take place with the shooter intending to Disable enemy targets. However, it is possible at times to shoot with the primary intention of reducing the target's ability to shoot back or move effectively – this is called Suppressive Fire. Suppressive Fire is afforded only for Small arms, rifles, guns and cannons. Machine guns, Auto-cannons, Gatling and Vulcanized guns already offer suppression due to their high rate of fire (*the Suppression Effect of +2/+3 where noted*), so no addition applies to these weapons.

Suppressive Fire is accomplished by a shooter bringing a higher volume of shots toward a target than it would normally. Cannons which are at a Fire Rate of 6 or less must be paired – two firing units are required for each target unit to be suppressed, therefore 1 die roll is made for each of these pairs.

During the Weapon Priority sequence, the player declares Suppressive Fire for the specific units in question. Those units are imposed a -2 To Hit any given target, and a +2 to the Hit number in order to suppress the target. *For example, if it is determined that a cannon's final chance To Hit a target is 4 or less, using Suppressive Fire the target would be hit on a 2 or less, but would be Suppressed on a 6 or less.* Note that these modifiers are applied with the effects of HE ammunition if it is used. *Extending the same example, this would make the target Suppressed on an 8 or less if it is an armored unit, and a 9 or less if it were against soft units.*

3.1 CORRECTION (also 3.6.4) - The horizon line, main gun elevation, and maximum weapon ranges
The presentation of cannon ranges noted on some Unit Cards causes confusion for players interested in scenarios requiring game tables over 6' in length This section clarifies treatment of these items, ensuring game continuity and proper weapon scaling over longer distances. Players should download the FREE Unit Card Overlays 1.2 PDF as to assist with ease of play regarding these subjects, as new data is presented properly within these updates. Some range category information is also changed for heavier cannons within these overlays, reducing required calculations.

Range Limitations
Most times on the modern battlefield, the adage of *"if you can see it, you can hit it"* stands true. But, at extremely long ranges, a unit may be able to see a target, but may not be able to hit it. Main cannons and anti-tank guns reach far, but there are three key factors about these weapon platforms that limit the ranges of direct fire. These are (1) the horizon line, (2) the weapon's ability to elevate (angle upwards), (3) the platform height the weapon system is initially fired from. These factors do not apply to field guns or self-propelled guns when used for indirect fire, as they raise to angles which overcome these limitations. They do not generally apply to anti-tank guided missiles, which in most cases do not reach far enough to the horizon line.

Low profile vehicles are those up to just over 2 meters in height, which often reduces the movement of main cannons on those platforms. In game terms, at ground level, cannons mounted on these vehicles can direct fire against targets up to 100" as a maximum. This general rule most often applies to Soviet-made weapon systems, but sometimes to those of other nations. Cannons of armored vehicles which are of common or high profile will be able direct fire against targets up to 120" as a maximum. This generally encompasses most western-made armored units within the game, with few exceptions (*i.e., Swedish S-tank, which is low-profile)*.

Treatment of limitations in relation information displayed on Unit Cards
Cannons are restricted to direct fire which is either the maximum range listed on the Unit Card, or the limit described above, whichever is the lesser distance. *For example, the M60A1 tank Unit Card lists the 105mm cannon with a maximum range of 82" when using AP ammunition, so the 120" limitation for its unit type (high profile, western-made tank), is discounted and does not apply. Conversely, the T-72A tank Unit Card 1.1 shows the 125mm cannon with a maximum range of 132", greater than the 100" limitation for its unit type (low profile, Soviet-made tank), so its maximum direct fire range is limited to 100", which will fall into its Very Long range category*.

EXPANSION - The Effect on Weapon Ranges by Elevating Position
If a unit is positioned at an elevated height such as a hill, cannon range restrictions are extended. This extension is based on either the maximum range listed on the Unit Card, or the 100"/120" limit for unit types, adding 10% of the weapon's maximum range or limitation for each inch of height. *For example, a 105mm cannon which has a maximum range of 82", when firing from atop a 1" hill, will add (82 x 10%), or +8" to its maximum range, making it 90". If the same cannon is fired from a 2" elevation, it will add (+10%, and then +10%), or +8 and +8", making it 98".* Range may be extended only three times (3" vertical height) in this manner, regardless of any further height adjustment. *Extending the example above, 106" would be the maximum range achievable in any direct fire situation for the 105mm cannon.* Range extensions will be calculated as being within the Extreme Range category, but then applied an additional -1 To Hit any targets at those ranges.

If a Unit Card displays cannon information with a maximum range longer than the range limitation imposed by its make/profile, this same rule is applied. *For example, a T-72A's 125mm cannon (Unit Card 1.1), which is normally subject to a range limitation of 100", when firing from atop a 1" hill, will add +10" to its maximum range, making it 110". If it were firing from a position 2" in height, the range of 120" may be achieved, etc.*

Dead Zone Increase by Elevating Position
A weapon's dead zone – the limit for targeting units imposed by its ability to depress - is increased when the weapon is positioned at certain elevation. Unit Cards already display dead zones for when the unit is elevated up to 1" in height. When elevated 2" or more in height, the dead zone is increased by that much. *For example, a T-62A which is noted as "115mm Cannon…depression 1" per 10" to target", may only shoot at a target 1" lower if it is 10" distant. If the T-62A is elevated 2", it may only shoot at targets which are 20" distant, etc.* This dead zone may be removed

if the player declares the firing unit will crest the terrain to pass over its top and fire downwards at the target – this will, however, remove the unit's defilade advantage and possibly expose it to incoming fire to its Top armor as well.

Firing upwards at targets - Main Gun Elevation Limitation
Unit Cards, indicate how far the weapon may reach vertically in comparison to the horizontal distance of the target. *For example, the T-62A indicates, "115mm Cannon raises .5" vertically per 2" distance to the target…".* So, if a target were at an elevated position which was 1" high, it would also need to be at least 4" distance to be fired upon by the T-62; if it were closer than this, the main cannon could not elevate high enough to acquire the target.

<u>These elevations will reach a maximum height at the weapon's Medium Range category</u>. *So, to extend the example above, if the T-62 were using HE ammunition at a range of 25" (its maximum for that ammunition in the Medium range category), it could acquire targets at elevations only up to 7" high.* At Long Range and further, the maximum height the firing unit may reach is then reduced from its maximum at the same rate initially noted, until it eventually may only strike at targets at its own elevation level. *So, for the same T-62 firing at a target at a range of 35", the calculation past 25" would be to drop .5" from that 7" for each additional 2" to the target, so it could only strike a target as high as 4.5". The T-62 at ground level may only acquire and fire upon targets at ground level once their distance is 51" or more.*

The height elevation a unit fires from is also added to the maximum height that any target may be. *If we were to extend again the previous example given regarding our T-62A, if it were upon a hill 1" in height, at its Medium range the highest target it could fire upon would not be 7", but rather 8".*

3.1.2 CLARIFICATION – High Explosive and Armor-Piercing Ammunition Types
Many types of ordinance are fired from cannons. Within the game system, however, only two categories of ammunition are typically illustrated – *High Explosive (HE)* and *Armor Piercing (AP)*. These general categories actually represent an array of ammunition types, grouped in this manner due to their tactical use and effect on the Battle Field Ops! play table. The primary differences between them are that HE ordinance generally uses a chemical explosive, and against lightly armored or softer targets produces greater suppression effects. Contrastingly, AP ordinance is based on the focused concentration of kinetic energy, for precision against heavily armored targets, producing a greater penetrating effect.

Each tank unit (or sometimes field gun or IFV), is often carrying several types of ammunition, interchanging their use based on the situation at hand. The unit will be judicious to select the ammunition most optimal to get the job done. In game terms, though a unit may be carrying 4 or 5 types of ammunition, these are grouped into the two categories noted. Weapon charts noted on the Unit Card actually may represent, *for example, one ammunition type within Point Blank, Short and Medium range bands, and another for the remaining range bands*, both having the same tactical purpose.

Exact ammunitions change over the era based on the evolving developments in technology. Below are examples of ammunition the two categories of presented in the game encompass. Players may research these further if they desire more technical or ballistics information on these shells:

<u>*Examples of the Category of High Explosive (HE) Ammunition:*</u>
- *High Explosive shells (HE)*
- *High Explosive Squash Head shells (HESH)*
- *Shrapnel, Canister or Anti-personnel shells*

<u>*Examples of the Category of Armor-Piercing (AP) Ammunition:*</u>
- *Kinetic Energy shells (KE)*
- *High Explosive Anti-Tank shells (HEAT)*
- *Armor Piercing High Explosive shells (APHE)*
- *Armor Piercing Discarding Sabot shells (APDS-) (includes -FS, -C, -BC, -CR, -DU variants)*

Players who have extensive knowledge about the subject may wish to modify the weapon performance noted on some unit cards, if they see this as a game benefit; this must be agreed to before each game scenario, of course.

3.2.1. CORRECTION - Deploying Smoke in Reaction to Incoming ATGM Fire
Smoke deployed in reaction to incoming ATGM fire occurs as described ('defensively'); it is effectively 1"x1" wide, set ½" away from the target in any direction, imposing a -3 To Hit the unit. For the duration of the smoke after that specific Weapon Priority, it imposes a -10 To Spot through, and a -3 To Hit if the target was successfully spotted.

3.2.1. REVISION - Deploying Smoke During the Weapon Priority Sequence
Units may deploy smoke proactively during Weapon Priority 1. The act of deploying smoke takes place in lieu of the weapon fire which would normally take place during its Weapon Priority sequence, so the unit will forfeit its attacks in exchange for the deployment of smoke.

Smoke will be fully deployed by Weapon Priority 2, but any simultaneous fire during Weapon Priority 1 will be unaffected; the smoke will impose no penalty to the attacker. Smoke will be placed ½" from the unit which deployed it in the direction of the player's choosing; the smoke nullifies the previous Spot, and imposes a -10 To Spot through, and a -3 To Hit if the target was successfully spotted.

3.2.1. REVISION - Deploying Smoke via Mortars and Artillery
When fired by mortar or artillery units, each tube/gun drops 1"x1" of smoke, with each drop adjacent to one another to form a continuous line. *For example, 2 tubes = 1x2 inches, 3 tubes = 1x3 inches, etc.* Artillery of 152mm and larger will drop 1.5"x1.5" per gun/tube. *For example, 2 guns = 1.5x3 inches, 3 guns = 1.5x4.5 inches, etc*. It is assumed that all batteries of any type will have a total of 4 bursts of smoke as ammunition unless specifically otherwise noted; attached supply units or positions at established camps or bases and such (scenario-determined by players) remove this limitation entirely. One burst is fired during one Weapon Priority phase, and smoke sits in place for the next two Phases (Move, Fire, Move, Fire). The location of smoke is determined in the same manner as any barrage - roll the normal barrage deviation, choose the center and direction of the smoke line which will form.

Note: Firing direct fire weapons through Mortar and Artillery barrages nullifies the previous Spot, and imposes a -10 to Spot and then a -3 to Hit to any targets within or behind the barrage which were successfully spotted.

3.4. EXPANSION (Veteran's Rule) - Automatic Grenade Launcher Burst Fire
There are several automatic grenade launchers which are brought to the battlefield during the Cold War Era; *examples are the Soviet's AGS-17 or the United States' MK 19 auto grenade launchers*. Weapon information presented on Unit Cards is intended for grenades in single-shot uses. However, these weapons have the ability to fire bursts of grenades. Players are required to use the weapon in burst mode for an entire game, and must track grenade bursts.

If a player elects to use automatic grenade launchers in burst mode, the player will roll to Hit using 3 dice, for each adding the +2/+3 HE suppression effect. Grenade launchers are allowed five (5) bursts and then require reload. Reloading requires 1 Weapon Priority opportunity to pass. Infantry systems will have only one (1) reload, while vehicular systems may have as many as five (5) or more.

4.1. CLARIFICATION - Time Length of Unit Suppression
A Suppressed element may not move or shoot throughout its next Weapon Priority and next Move Phase, but not necessarily in that order. It may be the case that an opportunity to fire arises first, followed by the Move Phase, or vice-versa. After both opportunities pass, the controlling player may then remove the "Get Down!" marker and the element may operate normally - if it was under a persistent command, it may resume action in fulfillment of that command normally, or is free to receive another Command.

4.1.2. CLARIFICATION - Grenade Effects vs. Tanks
Although grenades classify as High Explosive weapons, medium- and main battle tanks produced from the Cold War period onward are immune to suppression effects (i.e. the +2 HE modifier) from grenade attacks.

4.2 CLARIFICATION - Tracks and Tires Armor Value
Tracks and tires have an armor value listed on a combat vehicle's Unit Card. A weapon must achieve a Penetration

equal to this number to damage the tracks or tires. Once this number is attained, the tracks/tires are damaged enough so the vehicle is immobilized. Penetration which is less than the value for tracks/tires will not affect the vehicle.

5.3 REVISION - Details about Preparing Defenses

Prepared units are specific to a defended position. Most times setting up a Prepared status is applicable in an Attack/Defend scenario. No units are able to make themselves Prepared during game play, with the exception of Infantry preparing grenades for CQB against armored units, requiring 1 Move Phase and 1 Weapon Priority. In all other cases for units to be considered Prepared, players of both sides must agree that the scenario set up assumes that units in the defended positions have had a number of hours to ready themselves for an upcoming attack.

Every unit on defense should be given the opportunity to Prepare using one of the tactics described below; the controlling player may mix and match tactics as is seen fit. These factors are considered for appropriate forces used within these scenarios, which generally utilize a 3:1 or greater ratio from attacking to defending units.

However, there are scenarios which mimic real-world events, in which Prepared defenses are more elaborate. These should be matched to the real-world location and situation for these defenses before the scenarios are played. In some cases, it is feasible that by comparison to the rule guidelines below, a disproportionate amount of a particulars defense is in place; excessive oil slicks or trenches, concentrations of razor wire, or small stockpiles of disposable weapons such as LAWs or ammunition for RPGs or other weapons, will exist somewhere within the defended area.

Sandbags

Preparation allowance: 1 sandbag emplacement per mortar or artillery unit. 1 emplacement per Infantry Platoon. Sandbags may be made 2-deep, using 2 emplacements. Sandbags should be marked with a terrain model.

Targets which fit within an emplacement are treated as Defilade. They may also serve as obstacles which stop wheeled vehicles, and impose a -1 to Bog checks for 3- and 4- control axel and tracked vehicles to cross over. Cover Value is 3 for common emplacements, and 5 for those which are 2 emplacements deep. If the Cover Value can be exceeded by the Penetration of larger weapons, emplacements may be destroyed just as any other structure.

Hardened Buildings

Preparation allowance: One floor of a 1” x 2” building or structure per Infantry Squad, plus the same for each supply or engineering unit. Hardening a building strengthens its ability to provide cover to Infantry within it. It will add a +2 to the Cover Value of the building or structure (see the table of Cover Values for structures).

Barbed and Razor Wire, Fencing

Preparation allowance: One 2” length of wire or fencing per Infantry Squad or armored vehicle Platoon. Two 2” lengths per Supply unit or Engineering Unit (Recovery units are not counted). If there is an operational Command Center, add a 2” length of wire or fencing per attached Infantry Squad as well as any available Supply Unit. Terrain markers used should be approximately ¼” thick on the play table in relation to other terrain.

Effects on Infantry

Wire: Infantry pass through one ¼” depth of wire in one Move Phase, consuming 2” of their Movement. While moving in this manner they are disallowed Double-Time movement but are treated as Defilade. They are imposed a -3 to Spot and Hit enemy units and may fire only rifles or small arms. As an alternative, one Squad of Infantry may clear wire; they may not move or fire for two Move and Weapon sequences, after which a 1” wide area is cleared.

Fencing: Infantry pass over fencing in one Move Phase, consuming 2” of their Movement. While moving in this manner they are disallowed Double-Time movement and are treated as Exposed. As an alternative, one Squad of Infantry may clear the fencing; they may not move or fire for one Move and Weapon sequence, after which a 1” wide the area is cleared.

Wire and Fencing of this type (chain link), do not afford Infantry any Defilade terrain benefit they usually gain.

Effects on Vehicles

Barbed wire, razor wire and fencing may Bog wheeled vehicles. For barbed and razor wire, units must move less than Cruise speed to pass through freely. For fencing, units must move greater than Cruise speed. Bog checks for any of these obstructions are made at a -2 penalty for 2-axel vehicles, -1 penalty for 3- and 4-axel vehicles. Barbed wire, razor wire and fencing may be traversed by tracked vehicles, requiring a normally successful Bog check.

Camouflage Netting

Preparation allowance: A 2”x 2” square per Infantry or vehicular Platoon. A 2”x 2” square per Supply or Engineering unit (Recovery units are not counted), or per Anti-Air unit. Camouflage should be marked with a terrain model or terrain marker.

Targets under camouflage netting are treated as being within 1” of Dense Terrain to Spot and to Hit, but with no Cover Value. However, this benefit does not apply to any attacking unit which is less than 6” distance. For AA units to fire, the camouflage must be removed. Camouflage netting may be retained by the enemy if the position is overrun.

Foxholes or Hull-down Ditches

Preparation allowance: 1 foxhole cluster per Infantry squad. 1 hull-down ditch per three (3) vehicles, or 1 ditch for each vehicle which has attached an Infantry squads. Foxholes and ditches should be indicated with a terrain marker or a terrain model.

Targets which lie within foxholes or hull-down ditches are treated as Defilade to Spot and to Hit. These defenses may be penetrated as any other structure. They typically have a Cover Value 10 for sand and soft ground, Cover Value 20 for common dirt and natural ground.

Trenches

Preparation allowance: One 1” length per Infantry squad or per three (3) vehicles. Five (5) inches per Engineering Unit with earthmoving or entrenching capabilities, plus another one 1” per unit for any Infantry squad, supply truck, or dump truck working in tandem with that unit. Trenches are ¼” thick and should be marked with a terrain model or marker. They may be laid end-to-end, staggered, or made side-by-side (making them ½” thick), creating a variety of possible configurations.

Trenches may be used by Infantry for cover as if they are ditches (see above). They may be crossed by Infantry, in one Move Phase, consuming 2” of movement. Wheeled vehicles cannot cross trenches, and 3- or 4- control axel vehicles make Bog checks at a -2 modifier. Tracked APCs and light tanks Bog check at a -1 modifier and medium tanks Bog check normally. Trenches which happen to be ½” thick may only be crossed by Infantry, and medium tanks with a Bog check at a -2; only if these trenches are bridged or filled can they be passed by other vehicular units. Bogged vehicles which are combat units will not be able to use any weapons except for turreted machine guns.

Logging and Natural Obstructions

Preparation allowance: One (1) obstruction per Infantry squad or Supply unit, or per three (3) vehicles. Three (3) obstructions per any Engineering Unit with earthmoving capability (dozer blade, backhoe, crane, winch, etc.), plus another one (1) obstruction added for any Infantry squad, supply truck, or dump truck working in tandem with that unit. Obstructions are made of logged trees and other natural materials used to block roadways and should be marked with a terrain model, or marker. Obstructions are considered 1” wide, and can be placed end to tend for wider roadways if the preparation allowance is sufficient. Obstructions will entirely stop the road movement for vehicles and are not passable unless cleared; they have a Cover Value of 20. They do not hamper Infantry movement.

Minefields

Preparation allowance: One (1) minefield deployment per Supply unit, one (1) minefield deployment per platoon of Infantry or armored units. Two (2) minefield deployments per each combat Engineering unit, or eight (8) deployments per Minelayer unit. Minefields are 1x1” deep and should be marked by a terrain marker.

Minefields may be setup as Low Density, which is 1 deployment of mines as described above, or High Density, which is 2 deployments of mines as described above. Minefield deployments may be laid end-to-end in a line, or side-to-side in a column, or offset, creating a wide variety of configurations for the prepared defender. Note that Minelayer unit eight-inch deployments are always High Density minefields.

Any unit touching a minefield has a chance of setting off mines, dependent on the density of the minefield. For Low Density fields, a die roll of 4 or less detonates the mines, and for High Density fields, a die roll of 8 or less detonates the mines. This roll is made for every unit and every inch of minefield that is passed as well. Each mine area will detonate 1 time, after which each area is considered cleared.

Any unit which is a moving 'front' - that is, the first unit to cover the ground of a minefield, is at risk of setting off mines. However, units which are immediately behind the first in a column are safe to pass over the same ground as the first, if the first successfully passes through. Units must be in a column formation, within ½" directly behind each other to effectively execute this move tactic. If a first unit is Disabled, it may force the units directly behind to move around it, causing a new moving front and column.

Use of Minefields during Game Play

Markers are used by the player laying minefields for the opponent to readily see their locations. An equal amount of markers should be used for 'decoy' minefields; the top side of each marker designates the field and the underside notes if it is real or a decoy. The controlling player will place the mine markers at various locations for the opposing player to see, with the 'real' or 'decoy' sides placed face down.

Mines influence movement of the enemy. Enemy units which pass within 4" of any minefield markers are required to move in the shortest direct path from their location toward the location of the command they are given; this precludes any ground which could bog the units, unless this is the only movement option. Once units come within 1" of the marker location, they are given the opportunity to Spot the minefield.

Spotting mines is executed during the Move Phase as is necessary. Spotting is performed by each platoon rolling a die at a ½ Unit Rating check; Infantry roll 1 die per Squad. Combat Engineer and Explosive Ordinance units may spot minefields with a normal Unit Rating check (8 as Specialists), 1 die roll per unit.

If spotting is successful, the marker is turned over to reveal whether real or decoy; decoys are immediately removed. If real, the advancing player may respond - the unit may stop or change direction as to avoid the field. If the roll is unsuccessful, the advancing player must continue his movement toward the mine marker at a minimum of 1", touching it. The advancing player will not be allowed to issue a Reserve Command to that unit simply as a result of the marker, but may do so if engaged by other enemy units or other situational changes.

Successful spot checks allow friendly units to be Placed-On-Alert with the use of any Command Card. Other units which attempt to Spot the minefield, do so at a +2 bonus (Half Unit Rating or Specialist, with a +2).

Mine Types and their Effect on Units

There are two types of mines, anti-personnel and anti-armor. Both are fairly effective against vehicles which are Soft Units. If detonated:

Anti-personnel mines apply 2-Hits to the unit which set it off, plus 1-Hit to all Infantry units within 1" distance from the location of that unit. *Thusly, 2-Hit Squads which detonate mines may be Disabled, while 3-Hit Squads will be made Half Squads, and further damage may be done to nearby units.* Jeeps and Trucks which detonate mines will be Disabled, while any within 1" of the detonation which are soft-topped similarly affected; armored trucks are not affected this way. Regardless of where the 'detonating' unit sits within the 1"x 1" of minefield, anti-personnel mines may still affect other units within 1" distant.

Tracked armored vehicles may set off anti-personnel mines and remain unaffected, while wheeled armored vehicles will make a Bog check with a -1 penalty; a failed Bog check means the vehicle is immobilized.

Anti-armor mines will be set off by vehicles passing over them, but not Infantry. They will apply a Penetration of 8 to the bottom of the unit which detonates them, to the unit's Bottom Armor as well as any tires or tracks. *For example, a T-62A will be immobilized in position, having damaged tracks from the Penetration; it would be also subject to a Penetration 8, minus its Bottom Armor of 3, resulting in a required die roll of 5 or less to disable the tank.*

EXPANSION - (Veteran's Rules) Improvised Explosive Devices (IEDs)
Preparation allowance: One IED per Infantry Squad or Supply unit. For game purposes, an IED threatens an area 1x1" deep and should be marked by any type of terrain marker.

Improvised Explosive Devices, or IEDs, are treated similarly to minefields; the type must be designated as described.. Anti-personnel IEDs will apply 2 Hits to the unit which set it off, plus 1 Hit to any Infantry units within 1" distance from the location of the unit which set it off. These devices will also do Penetration 3 to tires, tracks and Bottom Armor of armored vehicles.

Anti-armor IEDs will be set off by vehicles passing over them, but not Infantry. They will apply a Penetration 12 to the Bottom Armor and tires or tracks of the unit which detonates them.

Vehicular IEDs are those in which a common vehicle has been made explosive. The unit will destroy itself upon detonation, which is executed with a successful Unit Rating check. Detonations will apply a Penetration to anything at their location, and 1/3 of their Penetration to any units within a distance of their location:
• Jeeps and Cars = Penetration 36, and Penetration 12 to any unit within ½ " of the location.
• Vans and common trucks = Penetration 60, and Penetration 20 to any unit within 1" of the location.
• Commercial trucks, transport trucks = Penetration 90, and Penetration 30 to any unit within 1" of the location.

Units may be Disabled by any normal combat, but will detonate if struck by any weapon other than small arms, rifles, machine guns or vulcanized guns of 30mm or less.

EXPANSION - (Veteran's Rules) Oil Slicks
Preparation allowance: Three (3) inches of slick per Supply unit, or 1" per Infantry Squad or Armored vehicle Platoon. Oil slicks are ½" thick and should be marked with any type of playing aid. They may however, be laid end-to-end, staggered or side-by-side (making them 1" thick), creating a variety of possible configurations.

Oil slicks have no game effect on units passing through unless the slicks are ignited. Ignition requires that an assigned unit be adjacent to the slick, and Weapon Priority 1 a die roll is made – any roll except a 10 ignites the slick. An ignited slick will stop all Infantry and Soft Units from passing through. It does 2-Hits to Infantry and wheels of any vehicles passing through; units which become immobile will pass the slick and stop adjacent to it after their move. Ignited slicks have no effect on armored vehicles which pass through, however these units cannot remain within the ignited slick - if they do so, they will take Penetration 3 to the Bottom Armor and wheels/tracks; on the second Move Phase they remain, this is doubled cumulatively for each Move Phase they remain (*3, 6, 12, etc…)*.

Oil slicks cannot be extinguished during game play, and will burn for 5 Turns once ignited. Firing at enemy units through burning oil slicks is imposes a -4 to Spot and to Hit die rolls. Night vision equipment of the 1970s era and earlier is completely nullified when looking through an ignited slick, but next generation gear is effective normally.

6.0. CORRECTION - Moving in Reverse
Unless otherwise noted on the Unit Card, moving in reverse requires 3" to convert to 1" of movement, not 2 to 1 as the rulebook originally states. Infantry move freely in any direction, and do not observe this limitation.

6.0. CLARIFICATION – Tactically pausing movement while under any command
When moving under a command, units which engage in combat may change speed and direction as is tactically suitable. While the movement under a command is compulsory, once enemy contact is made via Spotting or being

fired upon the unit may change movement (based on Command type). So, a unit may *for example, move one phase, stop phase two to fire an ATGM, move again phase three, and then move more slowly phase four to gain a better chance to hit.* The unit will tactically operate to ensure its survival, continuing on to follow the compulsory command once any particular engagement is ended.

It is as feasible that several elements under a similar command my stagger their movement. *For example, if three platoons are under the same Company Command to Advance, one platoon may stop for a number of move phases in order to provide fire support for the other moving platoons*. This same method may be applied for individual units with any given platoon, making multiple variations of this situation possible. Keep in mind, that if elements under a same command are separated far enough based on terrain type, they may be considered two different units if a new command for those elements is desired.

6.0. CORRECTION (Also 11.0) - Double-Time Movement under Advance Command
Double-Time Movement may be executed when the Advance Command is issued. Units may move up to 2x their Full move each phase; the unit is not moving twice as fast, but rather moving without precaution, placing priority on the destination. Units may change speed move by move. Whenever a move faster than Full is executed, the unit is at a -3 to Spot and to Hit enemy units. Infantry may move at Double-Time in lieu of their 'To Run' listed on Unit Cards, and Move 2,2,2,2. At Double-Time, Infantry do not gain any automatic Defilade bonus they normally receive while within 1" of any terrain or obstructions.

Note that speed may impose a penalty to the shooter (see target speed modifiers in Update 1.2 Direct Fire Weapons To Hit table). The speed used should be whatever movement was executed for the immediately previous Move Phase.

6.0. EXPANSION (Veteran's Rule) – Vehicular Close Quarter Battle - Running Over and Ramming Targets
Vehicular Close Quarter Battle (VCQB) occurs when a vehicle is used to run over or ram into another vehicle, infantry, crew or other unit. For VCQB to take place, the attacking player must openly declare his intent to VCQB which takes place during other CQB; (1) the attacking vehicle must be within reach of the target unit via its movement inches for that Move Phase, and (2) the target must be in the open, or reachable by the attacker successfully circumventing an obstruction. And (3) both the attacker and target Move, the positions of units must end by the models/bases touching; if they do not touch, there is no VCQB – the defender moves first. Note that a number of Prepared defenses can thwart VCQB effectively by causing a Bog (see Prepared Defenses).

VCQB occurs during Weapon Priority 3 when other CQB occurs, therefore it is possible that weapons which fire during Weapon Priority 1 or 2 will Disable or Suppress the incoming attacker. If the attacker is not stopped and VCQB occurs, use the following procedure:

• The target unit has the option of making a ½ Unit Rating check, success indicating the attack was evaded and there is no effect; regardless of the outcome the unit forfeits any remaining attacks during Weapon Priority 3 and 4. Infantry will make checks in Half Squads to disburse (e.g., one half may succeed and the other does not).

• If the attack is successful, units mutually inflict Hits upon each other, based on each unit type:

Infantry = None	Heavy wheeled vehicles (*armored cars, APCs, heavy Transports, similar*)	= 6 Hits
Jeeps = 1 Hit	Light armored vehicles (*IFVs, APCs, light tanks and ARVs and similar*)	= 8 Hits
Trucks = 3 Hits	Heavy armored vehicles (*Main tanks, ARVs, Engineering Units*)	= 16 Hits

• Hits are applied to the facing Armor first, with the remainder rolled or less Disabling the unit, just as weapons fire. Soft targets are applied the Hits automatically with no die roll; Infantry units (squads) which take Hits, will take no more than 2 Hits in any given attack, regardless of the attacker or Squad type.

When units ram into buildings and structures, apply the Hits to the obstruction, with excess meaning the unit has punctured a large hole obstruction. The obstruction is then partially damaged (see Destroying Structures in this Update 1.2). Obstructions will apply Hits equal to their Cover Value to the ramming unit. Units with dozer blades and plows will negate the first 8 Hits applied to their front Armor.

Regardless of the outcome, once an obstruction or truck-sized vehicle or larger is rammed, the attacking unit will need to make a Bog check; failure indicates it is immobilized.

6.1.1. REVISION - Terrain Effects, Spotting and Shooting – "Law of Cascading Doubles"
Terrain concealment and Cover effects now double per inch of thickness. All weapons have practical limitations as to how they may be employed through terrain. Rockets and ATGMs are limited to reaching the 1st inch of both Dense and Light Terrain, while all Guns are limited to the 3rd or 4th inch of these terrains respectively. Infantry will gain their Defilade bonus normally when near any of the terrain types below, which lists the Spot, Hit and Cover Values for each terrain for all other unit types:

- Brush Lines: -1 to Spot, no other modifiers
- Tree Lines: -1 to Spot, no other modifiers, Cover Value = 1
- Light Terrain, per inch: To Spot and Hit -2 / -4 / -8 / -16, Cover Value = 2 / 4 / 8 / 16 (maximum)
- Dense Terrain, per inch: To Spot and Hit -4 / -8 / -16, Cover Value = 4 / 8 / 16 (maximum)

6.1.3. REVISION - Rough Ground, Extreme Ground, Fording Waters and Climbing Cliffs
Vehicles may avoid Bog checks by passing Rough Ground or Fording waters at less than Cross Country Cruise speed; movement per phase must be rounded downwards to the whole inch. This Cruise speed itself is the maximum movement allowed to cross rough ground, requiring a Bog check. More extreme ground or environmental effects will modify this number downwards. See the guide below for the types of Ground and their effects.

Shallow Waters – Fording
Units may ford shallow water which is equal to or less than what is noted on the front side of the Unit Card. which are considered shallow must have their depth noted between players prior to game play.

Ground Type	Description	Bog Check Effects
Shallow Waters, narrow	Any moving water body up to 1" in width, within vehicle's Ford depth ability	• At Cross Country Cruise, normal Bog check • Infantry limited to 'To Fight' speed
Shallow Waters, Wide	Any moving water body more than 1" in width, within vehicle's Ford depth ability	• At Cross Country Cruise, Bog check at -1 penalty • Infantry limited to 'To Fight' speed
Rough Ground	Marshlands, Shallow Mud, Crops, Hills or Steep Slopes, Dense Foliage/Hedges	• At Cross Country Cruise, Bog check at -2 penalty • Infantry limited to 'To Fight' speed
Extreme Ground (Expansion)	Flooded Marshlands, Deep Muds, Broken Ground	• At Cross Country Cruise, Bog check at -3 penalty • Infantry limited to 'To Fight' speed

Climbing Cliffs
Cliffs may be climbed by Infantry using To Run speed and consuming 3" of movement for each 1" climbed. When infantry are climbing cliffs, they may not fire weapons, and gain no Defilade bonus from terrain.

6.1.3. EXPANSION (Veteran's rule) - Effects of Environmental Conditions
Deep Snow
Deep snow will increase the difficulty of all terrain by one row, with Normal Cross Country treated as Rough Ground. Extreme Ground layered with deep snow applies an additional -2 penalty to all Bog Checks noted. Some vehicles and snow Infantry will have Move bonuses which offset these effects, noted on each specific Unit Card.

Iced Roads
For vehicles Iced Roads are treated as Extreme Ground. Infantry are limited to 'To Fight' speed.

Night Scenarios and Illumination Equipment
Night Scenarios fall into two categories, Low Light and Pitch Dark. Low Light scenarios categorize as scenarios during dusk or dawn, or under harsh clouds/weather. Pitch Dark scenarios represent a peak of night where little

moonlight is available. Spotting and Firing during night scenarios are modified based each.

Low Light conditions imposes a -4 penalty to all Spot Checks, Firing.
Pitch Dark conditions imposes a -8 penalty to all Spot Checks, Firing.

Night Vision Equipment

Night Vision (NV) equipment is initially comprised of light intensification, and advances over time to infra-red and later into thermal imaging. Not all units have NV, as it is noted on each Unit Card. The effects and uses of NV equipment did vary based on the technical developments of WARPAC and NATO, as well as with each country and deployment. In general, use the following table as a guide when NV equipment is required.

Night Vision Equipment	NATO Equipment	WARPAC Equipment
Gen 0 (c. 1940s+)	+1 offset to penalties (before and after NATO or WARPAC form)	
Gen 1 (c. 1965+)	+2 offset to penalties	+3 offset to penalties
Gen 2 (c. 1978+ NATO, 1981+ WARPAC)	+4 offset to penalties	+4 offset to penalties
Gen 3 (c. 1985+ NATO, 1988+ WARPAC, Includes thermal imaging equipment)	+6 offset to penalties Smoke does not hamper Spotting and To Hit chances	+6 offset to penalties Smoke does not hamper Spotting and To Hit chances

NATO equipment is generally equivalent across nations with some exceptions. During the early 1970s, the Soviet Union was the leader in NV advancements for the WARPAC, however, many member nations of the USSR and Soviet client states did not have the best choices of NV equipment. NV was in wider use for most Soviet Infantry during this time than for NATO nations, and was for part of the period more advanced. Further detail for using this equipment may be researched by players if needed, and should be agreed upon for each scenario.

Illumination Flares

Illumination flares, or "star shells", may be deployed by mortars and artillery units. Any unit which uses star shells fires during its normal Weapon Priority sequence. Star shells deviate just as any other mortar or artillery. Each star shell will light an area around it to the level of normal daylight, removing any modifiers from night conditions.

When the star shell deviation and barrage is indicated on the play table, they will hover over the location at altitude; the area is that which is illuminated. Mortars and artillery units up to 100mm in size will illuminate everything within a 2" radius (4" wide circle), and those over 100mm will illuminate everything within a 3" radius (6" wide circle). Typically using more than one unit to illuminate is recommended. When a group is used, these may be configured in a line adjacent to each other, or may clustered together in a circular pattern. For line configurations, each illumination will overlap with another by the length of the radius. *For example, a 100mm illumination is a 4" circle, and the next unit in the element adds only 2" of width to the line, as will the next unit in the element and so on. So that in effect, if the element were a battery of 6 units, the line would be 4" deep, plus 5 additional units x 2" width added, for a total of 14" wide.* For circular configurations, the illuminated circle created is equal to one unit's diameter, plus 1" in diameter for each additional unit in the element/battery. *This same element above could create a cluster that is an illuminated circle of 4" diameter plus 5 added units x 1" diameter, for a circle which is 9" wide in diameter; where as a similar battery of 122mm would create a circle of 6" diameter plus 5 units x 1", for one 11" wide in diameter.*

The duration of illumination is 1 full Turn starting from the Weapon Priority sequence when they were fired.

7.0. and 7.1 CLARIFICATION - When Spot Checks Are Made

Spotting should only be conducted after the Move Phase at the beginning of each Weapon Priority Sequence. There is no spotting during the Weapon Priority Sequence once weapon fire has started.

7.1 Spot Checks REVISION – Number of Targets Spotted

When a unit is making Spot checks to see the enemy, it may do so until the first enemy unit is spotted. The player may make as many failed attempts at multiple enemy units as desired, however upon the first successful Spot check, no further checks are made for that Move Phase/Weapon Priority.

7.0. and 9.2 CLARIFICATION / REVISION – Spotting with Unbuttoned Units
To reiterate, armored units which are unbuttoned are treated as Exposed, meaning that they will be Suppressed as soft units (+3 modifier). While unbuttoned, each unit will get an opportunity to roll a die, not one for each platoon as is done normally. In addition, unbuttoned units are considered facing toward the enemy regardless of target direction.

7.0. CORRECTION - Conditions for Spotting Targets Automatically
There are a number of instances when the game table presents situations that do not require die rolls for units to spot each other – targets are spotted automatically under many circumstances. The following guidelines are used to quickly examine the table and make this determination; they assume that the spotter and the target have a line of sight between them, and that standard issue magnification equipment is used by the spotting unit (i.e., the unit is not restrained).

Automatic spotting applies to targets which are in the open as well as targets within 1" of terrain concealment and are firing. The ranges of automatic spotting are determined by the status of Spotting Unit.

Automatic Spotting Conditions

Target Unit Silhouette	Spotter Deployed	Spotter Moving
Tank, APC, IFV, Heavy Truck, Medium Aircraft, Medium Watercraft	within 80"	within 40"
Field Gun, Truck, Small Aircraft and Small Boats	within 40"	within 20"
Jeep, Infantry, Mortar	within 20"	within 10"

The 'Spotter is Moving' column represents conditions that limit best use of magnification or use bare eyesight only.

For clarification, automatic spotting is negated for any of the reasons below; in these cases, Spot calculations must be made and dice rolled.

- Target is not within the Facing of the Spotter, considered Facing Another Direction.
- Scattered terrain or obstructions exist between the Spotter and half of the target.
- The Spotter is moving at double-time movement permitted under an Advance command.
- Infantry Spotting when Hunkered Down, therefore imposed a -4 to their Spotting ability.

Note: Some units are always considered facing towards the target when spotting: Forward Observers, Reconnaissance Units, Infantry Squads, and Deployed units which are unbuttoned.

8.0. REVISION - NEW Procedure and Unit Cards for Firing Mortars and Artillery
A new approach to mortar and artillery barrage resolution is presented for more efficient game play. This accommodates two situations: (1) any mortar and artillery Unit Card versions 1.2, which already have the rule corrections integrated on them, and (2) when players possess mortar and artillery unit card versions 1.0 and 1.1, in which case modification rules are presented. This section addresses adjustment for the latter situation, though the procedure for the new Unit Cards is similar.

Note that new Unit Card rear 'overlays' are included in the Update Version 1.2 Unit Card Overlays document, these may be attached temporarily to existing Unit Cards to present the most updated information.

Mortar and Artillery Procedure

Step 1. Choose the Range category, and roll Deviation for First Round or Corrected Fire.
Range is determined normally, by finding which category of range the target lies within. Determine the barrage location normally, by rolling a d10 for deviation distance and then a d12 for direction. Note any modifiers for correction or if a Forward Observer is calling in the target.

Step 2. Refer to the Barrage Radius on Version 1.2 Unit Cards. For Version 1.0 and 1.1 cards, choose the Bombardment Radius (middle radius category) noted on the card.
Determine the number of target units within the barrage radius by looking at the battlefield. If armored units are within reach, take note of the side of the unit that is facing the barrage landing location.

Step 3. Determine Barrage Effects on Target Units, both Soft and Armored

Mortar and Artillery Fire Concentration Table Description
Use the table following to determine fire concentration. Cross reference the number of units firing within the element/battery (*section of 2 or 3, battery of 6 or 8, etc*) with the weapon's Fire Rate listed on the Unit Card. The number listed within the table is the resulting chance (roll the number or less with a D10) to Hit each target within the barrage radius. A separate roll is made for each target.

Apply Effects to Soft Units
• Suppression: All soft units within the barrage radius are automatically suppressed, prior to any die rolls being made. Mark each element (unit, squad, platoon, etc. based on the organization) with a 'Get Down!' marker. Reminder: each suppressed Infantry Unit is treated as Defilade.
• Direct hits: Chances to Hit each unit directly are listed in the Mortar and Artillery Fire Concentration Table following. If a direct Hit is indicated to Infantry, each squad takes 1 Hit. Hits on Jeeps and trucks Disable the unit.

Apply Effects to Armored Units
• Direct Hits and Suppression: Chances to Hit each unit directly are listed in the Mortar and Artillery Fire Concentration Table. Normal HE Suppression effects do not apply; a unit is suppressed only if it is Hit. If a direct Hit is indicated, the Penetration of the Artillery will be applied to the Armor facing the barrage location, with special die rolls indicated to direct a Hit to Top Armor only when noted, applying Penetration normally. For Hits to the Side Armor, refer to the defense notes on each target Unit Card. Penetration applies first to skirts, then tracks or tires (Bogging the unit), then Side Armor, making deductions until the total Penetration is expended. Excess Penetration is treated as any weapons fire, with die rolls of that number or less indicating if the unit is Disabled.

Suppression Variance - Escaping Barrage Areas
Each Suppressed element (unit, squad, platoon, etc. based on the organization) is entitled a Unit Rating check at the beginning of the next Move Phase. If successful, the element may move as a reaction to leave the barrage radius. If units move out of the barrage they will be safe from it unless the barrage is corrected to their position, but if movement is not sufficient, they may be Suppressed again during the next time in the Weapon Priority when barrages land.

Mortar and Artillery Fire Concentration Table

Number of Units Firing within the element or battery	The Weapon Fire Rate, chances to Hit each target within barrage			
	4 to 6	8 to 12	14 to 18	20 to 26
1	**1, then 5**	1	2	2
2	1	2	3	3
3	2	2	3	4
4	2	3	3	5
5	2	3	4	5
6	2	3	4	**5 (Top on a 1)**
7	3	4	5	**5 (Top on a 1)**
8	3	4	**5 (Top on a 1)**	**6 (Top on a 2)**

A Hit indicates a Suppression to armored units, applying weapon Penetration to the facing armor. Side Hits strike skirts, tracks/tires and then Side Armor, deducting along the way. Excess is the number or less on a die roll to Disable the unit.
X, then Y = Suppression effects against armored targets are ignored entirely. Upon a successful Hit, another die is rolled, with the 2nd number or less rolled indicating an actual Hit. If the 2nd number or less is not rolled, the unit is missed entirely.
(Top on a X) = When dice are rolled, if the number indicated was rolled, hit is applied to Top armor.

Barrage Hit Examples:
• *A single Unit element of mortars/artillery which has a fire rate of 6 will hit targets within its barrage radius on a 1, but only if a 5 or less is subsequently rolled. There is no chance afforded to Suppress an armored unit.*
• *A 4-unit element of mortars/artillery that have a fire rate of 12 will hit targets within their barrage radius on a 3 or less. Regardless of the effect, armored units will be Suppressed if hit.*
• *An 8-unit element of mortars/artillery which have a fire rate of 16 will hit targets within their barrage radius on a 5 or less; if upon the die roll a 1 is indicated, the Penetration is applied to Top armor. Regardless of the effect, armored units will be Suppressed if hit.*
• *An 8-unit element of mortars/artillery which have a fire rate of 24 will hit targets within their barrage radius on a 6 or less; if upon the die roll a 2 or less is indicated, the Penetration is applied to Top armor. Regardless of the effect, armored units will be Suppressed if hit.*

8.2.3 CLARIFICATION - Maximum reduction in die roll when Correcting Fire
The maximum reduction to the die roll for Corrected Fire is -4. Note that this includes a -2 for the correction itself, plus another -2 if the unit correcting fire has Forward Observer capability. In cases where any adjustment is noted on a specific Unit Card, the maximum reduction to the Corrected Fire die roll remains at -4. Once a Corrected Fire barrage is established, players do not need to roll again to maintain that barrage.

9.0 REVISION – Standard Infantry Weapons for Strategic Play
During games which are at multi-company scope and larger with use of combined operations, some differences between Infantry squads do not have a substantial enough effect on game play to warrant individual attention. As a result, a Standardized Infantry Weapons table is provided. This change enables players to use large amounts of Infantry from 'top of mind', reducing the amount of look up at the game table.

Infantry squads will generally be standardized, with distinctions in (1) Squad size (2) anti-tank and anti-air weapons used, and (3) special abilities, in the case of specialists or elite forces. There are three sizes of Infantry Squads. Typically, Large Squads are 10-13 troops, Standard Squads are 6-9 troops, and Small Squads from 3-4 troops. Small Squads deployed naturally in this size (*an example is Soviet Airborne troops which dismount from the compact BMD series armored vehicles*) retain higher firepower than *Half Squads*, the name for a larger squad reduced by Hits.

These squads will differ primarily in the number of Hits the squad can withstand before being disabled, and in the number of dice rolled for their weapons when attacking. Below are standardized infantry squads:

Squad Type	Number of Hits	Rifles*	Squad Support Weapons*
Large (3-Hit Squad)	2 to make a Half Squad, 3 to Disable	3	1
Standard (2-Hit Squad)	1 to make a Half Squad, 2 to Disable	2	1
Small or Half (1-Hit Squad)	1 to Disable	1	1

*Number of weapons. Squad Support Weapons (LMG, GPMG), roll 2 dice moving, 3 dice stationary.
When firing on Large Squads, as noted, 2 Hits are required to reduce them to Half Squads. In the event that only 1 Hit is applied, the hit itself is lost, thought Suppression effects will still apply.

Squad Support and Anti-Tank Weapon Use
Most main force squads will have one (1) Squad Support Weapon employed, regardless of size (rolling 2 dice or 3 when stationary). In addition, most will have 1 type of hand-held anti-tank weapon, though there may be several reloads. While the specifics are noted on the Standard Infantry Weapons table, the standard rule is: if under immediate threat by other Infantry and soft units, the Squad Support Weapon will be chosen; if under immediate threat by armored units, the anti-tank weapon will be chosen. It is possible that when recombined as Infantry will do, weapons become redundant – however, at the game table, it is easiest and best to simply revert to a standard squad, regardless of the weapons that were chosen for Half Squads upon the previous losses. Players may wish to keep more detailed records as an option. This may also require the use of marker counters.

Grenade Use
Squads which are from both NATO and WARPAC will usually have standard issue offensive grenades. All squads are entitled smoke grenades, which they will use one time only; smoke is 1” x 1” in size and is positioned anywhere up to 1/2” from the squad. In all other ways it functions as other smoke. Smoke grenades may be used once, then will need to be supplied.

Offensive grenades which are thrown are used for Close Quarter Combat, and are already considered within that rule subset. For CQB against vehicles, grenades are considered to have a Penetration of 4 to see if they may be used against the vehicle. Squads which commonly carry a grenade launcher (*such as the US M203 or USSR AGS-30*), may deploy this weapon according the Standard Infantry Weapons table, usually done once enemy units are at an 8” range or less. In game terms, this simply adds additional dice using the To Hit row for Rockets (1 die per grenade launcher, with a +2/+3 HE suppression effect, tanks specifically ignore grenade suppression). Grenades may fire over certain obstructions, thereby ignoring their cover value. Note that these weapons may also use burst fire, if that Veteran’s Rule is being used.

In future revisions, detailed supplements will be released for Company-sized and smaller tactical play opportunities.

9.3.1 CLARIFICATION – Infantry Riding, Mounting and Dismounting
Infantry may mount/dismount any vehicle so long as either unit has movement remaining for that Move Phase, and Infantry may reach the vehicle at their ‘To Fight’ speed. If the vehicle or Infantry use all maximum movement for that Move Phase, infantry may not mount/dismount until the next Move Phase.

9.3.1 CLARIFICATION – Riding Infantry Reaction When Their Vehicle is Hit
When a vehicular element is transporting infantry, and a unit is struck, that element must stop immediately for the Infantry to dismount. ‘Element’ in this case is defined as the Platoon (or Section) which the unit is part of; if the unit is traveling as part of a Company, the unit’s Platoon will detach from the Company and stop as described, however the remainder of the Company has the option of continuing on normally.

Infantry will be considered dismounted at the end of that Weapon Priority, and are considered to use 1” of movement to dismount; this is deducted from the movement they will be allowed on the Move Phase immediately following.

9.3.2 CORRECTION - Confined Infantry vs. Unconfined Infantry
This rule applies to trucks, transports, buildings and similar enclosures. Confined Infantry is a situation when 1 squad is on the same elevation of an enclosed space which is up to ½” long by ½” wide. Infantry are considered Unconfined when 1 squad of Infantry is on the same elevation of an enclosure larger than ½” x ½”.

To attack Infantry within enclosures, the Infantry must first be Spotted as normal, with all standard modifiers (*Small Target, Defilade, and then Hunkered Down if applicable*). Assuming the Infantry is Spotted, they must be fired upon with all normally applied modifiers as well (also *Small Target, Defilade, and then Hunkered Down if applicable*). Confined Infantry take Hits to the entire Squad, not individual 'counts' against the Squad size, regardless of how large it is. *Thusly, a Hit to a Confined WARPAC 2-Hit squad makes it fully Disabled, as does one to a NATO 3-Hit squad. Against 1-Hit Squads, when two are within the same ½" x ½" space, they will both be Disabled.*

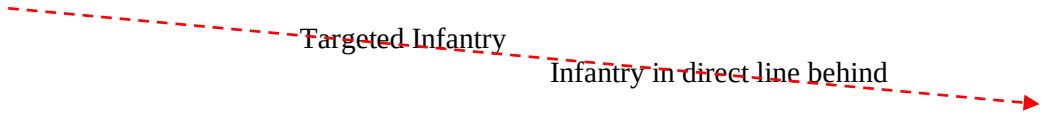
Armored vehicles are designed to maximize protection for the Infantry within, enabling Infantry to make a Bailout check. This may apply to bunkers or hardened structures based on the individual design, as agreed upon by players prior to a game scenario. Note that once Infantry are Spotted within an enclosure, it may be possible to fire through the Cover, if the weapon system is powerful enough (see **Firing Through Obstructions**, later in this Update 1.2).

9.3.5. CORRECTION - Infantry Spotting Ability
Unlike vehicular units, Infantry are afforded one Spot check per squad (lots of eyes looking as compared to their vehicular counterparts). When Infantry are moving at the To Run speed, the Spot check is modified with a –3 Penalty; this is consistent with a Spotter moving at 'faster than Cruise' speed. Infantry Recon Units are afforded a +1 to Spot on all die rolls. (see Specialized Units).

9.3.5. CLARIFICATION - Suppressed Infantry are considered Defilade
When Infantry become Suppressed, they are then considered Defilade if they were not already. In this case, when Infantry caught in the open away from any terrain become Suppressed, they gain a Defilade bonus as if they were near terrain. If any Infantry are already benefiting from Defilade, no new benefit is afforded them.

9.3.5. CORRECTION - Hits to Infantry based on Shell Size
This item was added in the previous Update 1.1, but is removed. The original rulebook notes stand.

9.3.5. REVISION - Infantry vulnerability to Machine Gun Fire - Raking
This applies to volume fire by a machine gun (xMG weapon) or autocannon which has +2/+3 Suppression capability. If multiple Infantry units are caught in a direct line behind other Infantry, the dice rolled by the MG player at the target are rolled again for any units behind. These situations must look similar to the illustration below; sometimes multiple Range categories may occur. If a direct line does not cross the base of multiple Infantry units, this vulnerability will not be exploited.



9.4. CLARIFICATION - Infantry CQB vs. Armored Units
The Box Battles rulebook states,
"When Infantry wish to engage in CQB with an armored unit, the infantry's weapons must first be compared to the lowest armor rating of the unit, excluding its Bottom armor. The infantry…must have a weapon system which has a Penetration number greater than this number. If the infantry weapons systems meet this condition, CQB may take place. If any weapon system does not meet this condition, the infantry cannot engage the unit in CQB…When CQB is engaged, the successful Penetration hits must be added together until they exceed the lowest armor value of enemy unit as noted above."

The first part of the statement above is used to determine if the Infantry will qualify for the CQB against the Armored unit. Infantry in CQB against Armored Units roll dice against their Unit Rating, same as other CQB attacks. The Squad rolls the number of dice equal to its size (1-Hit, 2-Hit Squad, 3-Hit Squad). Each successful roll indicates 1 Hit against the armored unit; if the Infantry has Prepared grenades, one of its die rolls will apply 2 Hits. As noted above, each successful die rolls adds to the total required to exceed the lowest armor value of the target unit.

It is sometimes easier for Infantry to CQB against an Armored Unit and target its tracks or tires specifically due to its weaker armor; this is a fair and valid target, and is declared by the attacking player.

9.4. EXPANSION (Veteran's Rule) – Infantry Clearing Buildings
Infantry which enter buildings and structures may be required to find enemy infantry or units within. This assumes the building is segmented by rooms, hallways and contents within, which accounts for most building types. Open buildings such as stadiums, hangers, or empty storage buildings are simply treated as opponents firing open-ranged at each other, unless they move close enough for CQB engagements. Infantry may gain Defilade bonuses based on the actual building type.

In cases where buildings are large enough, clearing is necessary for CQB to occur. Generally, one Squad or Half Squad may effectively search a building on the same level of elevation which is up to in 2"x 2" (or 1" x 4") in size within the Move Phase. Clearing a building does not require die rolls unless contested, simply time for the squad to move through the area. If opposing Infantry are already Deployed and intend to remain concealed from or entrap searching Infantry which are clearing the building, this becomes a contest of die rolls.

Both opposing units will roll a Unit Rating check (per squad). If the Deployed Infantry are Confined, a -2 is applied to their Unit Rating. If both units succeed or both fail, the dice are rerolled, until 1 succeeds and 1 fails. If the searching Infantry win, the Deployed infantry are found, and CQB may ensue. If the Deployed infantry win, by player choice they are either (1) not found and the searching infantry must move on (in some cases, exit the building even if they wanted to stay within), or (2) the Deployed have a CQB advantage. A CQB advantage means they roll one sequence to first place Hits on searching infantry; after observing Hits, the searching infantry will roll in return. Once this is done one time, all CQB is simultaneous as is normally executed.

10.0 CLARIFICATION – Unit Rating Details
Unit Ratings will vary according to the unit type and how it may function in relation to combat. The unit Ratings described in the rulebook stand, with the following additional notes:
• Specialized Units perform their specialist function adding +2 to their standard Unit Rating (*example, engineering units laying demolitions, recovery units making a vehicle recovery, medical units recovering troops, etc.*).
• For some Elite Units, 2nd line and Rear Echelon units add +1 to the Unit Rating that is listed as standard for others when engaged in direct fire combat (*example, 2nd line units might normally be Unit Rating 5, however US Marines, or Soviet Naval Infantry would add +1, becoming Unit Rating 6*).
Players need to make mutual determinations about the Unit Ratings of units prior to each game scenario.

10.1. CORRECTION - Proper Bailout Check Number
In the rulebook, when describing bailout checks the paragraph incorrectly states,

"...The squad which is hit, and therefore potentially disabled, must make a Bailout Check, to see if the Squad is able to escape the enclosure. This is equal to the Infantry Unit Rating (see rules later on, for now know that Infantry have Unit Rating 6, so the die roll needed is 3)…"

The die roll needed should correctly be stated as 6 or less. All other points of the paragraph are correct.

10.3. EXPANSION (Veteran's Rule) - Superior Unit Rating First-to-Fire
For normal combat engagements, when two units are firing simultaneously during the Weapon Priority sequence, the one of a higher Unit Rating will be allowed to fire and apply their Hits before any unit of a lesser Rating. This sequence should be followed if multiple Unit Ratings are engaged with each other. If facing defenses that are already Deployed-In-Position, a difference of 1 in Unit Ratings is negated; however, the first-to-fire rule may be applied if there is a difference of 2 in Unit Ratings.

Note that this does not apply to CQB engagements.

11.0. EXPANSION – The differences between WARPAC and NATO Use of Command Cards
The Warsaw Pact and NATO forces hold two different Command-in-Control doctrines regarding both strategic and tactical decision-making on the battle field. For expanded game play and larger scenarios, these doctrines will be demonstrated by the guidelines each player must follow when using Command Cards.

Creating the Basic Draw Deck

1 Platoon Command Card per Vehicular Combat Platoon; A single vehicle from the Platoon satisfies this requirement, *e.g., a Platoon and a vehicle from another Platoon adds 2 Platoon Command cards*; the deck is always allowed 1 Platoon card minimum, assuming only 1 combat vehicle is in play. Specialized units do not add cards to the deck (Forward Observers, Reconnaissance, Supply, Maintenance, Signals, Engineering, Recovery and Medical).

Each Company command vehicle adds 1 Company Command Card; WARPAC will add 1 Company Command card and NATO will add 2 (one for the Company commander and one for the Executive Officer). Certain NATO member countries did not have the doctrine of using both officers for time periods; for them use only 1 Company Command card. Players can research this detail as it is scenario-dependent.

Each Battalion command vehicle adds 1 Battalion Command Card; WARPAC and NATO will each add 2 Battalion Command cards. If WARPAC sets up a Command Observation Post (COP), it gets +1 Battalion card in the deck. If NATO sets up a Tactical Operations Center (TOC), it gets +2 Battalion Command cards in the deck.

Each Regiment/Brigade command vehicle adds 1 Regiment/Brigade Command Card; WARPAC and NATO will each add 2 Regiment/Brigade Command cards. If WARPAC sets up a Regimental Command Tent, it gets +1 Regimental card in the deck. If NATO sets up a Brigade Command Tent, it gets +2 Brigade Command cards.

A Unit Card which notes a pair of vehicles as a Section does not add a Platoon Card, however if it is the only remaining unit on the force, then 1 Platoon Card is always retained. When a Company-level Command Center is set up, it provides the benefit of an additional Company Command immediately if a same side Command Card is drawn from the deck.

Signals Units are Specialized units; they require 1 Move Phase and Weapon Priority to set up. If they are stationary and unengaged, they will either (1) add 1 Battalion Command to the friendly deck, or (2) add 1 Company Command to the friendly deck and negate the first Command Card drawn by the player of the opposing deck. The Signals Unit player must declare this at each card draw. If opposing Signals Units are active on the game table, each player may choose to have the unit counter the opposing unit, removing all the effects listed.

Cross-attaching Units
Units from both WARPAC and NATO may cross-attach as described in the rule book.

Full Batteries - Retention of Command Cards
This pertains to mortar and artillery indirect fire.

When several WARPAC or NATO mortar or artillery Platoons are used with a Headquarters vehicle, they form a Full Battery. WARPAC and NATO sections (2 or 3 units) will each add a Platoon Command card within the deck. When WARPAC units are operating as a Full Battery, the Headquarters Company Command card is added within the Draw deck, but all other Platoon Command cards are excluded from the deck. When NATO units are operating as a Full Battery, the Headquarters Company Command card is added within the Draw deck, and one (1) Platoon Command card remains within the deck, with the other excluded from the deck.

Full Batteries - Use of Command Cards
Full Batteries of indirect fire may be called in based on the level of organization to which they are assigned. In both cases, use of cards described below is needed only once so long as indirect fire is continuous; no other Command

Cards are needed. Once fire is checked (stopped), in order to start again, another Command set is required as described below. If any off-board artillery support is to be used during game play, a Command Card of the required type must be added into the play deck.

NATO

NATO Battalion-level Full Batteries may be called in with the use of a single Company Command card. NATO Brigade-level Full Batteries may be called in with the use of a single Battalion Command card.

WARPAC

WARPAC Battalion-level Full Batteries may be called in with the use of a single Company Command card only if they are mortar systems. WARPAC Regimental-level Full Batteries may be called in with the use of a single Battalion Command card only if they are mortar systems.

For WARPAC to call indirect fire from a Regimental Artillery Battery, a Regimental Command card must be used.

13.0. EXPANSION (Veteran's Rule) – Using Specialized Units

Reconnaissance Units and Recon-In-Force Units

When operating alone, Recon units may enter the battlefield freely, without using a Command Card. Recon units will work in Sections, Platoons or as singular units. As they move about, they will attempt to use the landscape as cover in order to Spot enemy units. Recon units are allowed 1 Spot die roll per unit; *for example, a Platoon of three (3) PT-76 Light Tanks on Recon will be allowed 3 die rolls to Spot*. Infantry Recon Units already have a 1 Spot die roll per squad, so are afforded a +1 to Spot on each die roll when placed on Recon.

Once Recon units spot an enemy, that player's entire force is considered Placed On Alert (Rule 7.2), allowed a +2 to spot that same enemy. Recon units will not engage an enemy first, and may only return fire after being fired upon first, looking to evade enemy engagements. If a player desires the Recon element to engage the enemy first, or be used as any other combat unit, an appropriate level Command Card must be expended to give an order. Any side may spontaneously designate Recon units as they see fit during game play, by declaring this to the opposing player; they must expend a Command Card if that element is detaching from a larger element. If a Recon unit is integrated into a larger element and operates with it, the Recon unit still affords its own Spotting roll.

A Recon-In-Force element has additional combat units attached to the Recon element, and may be of any size. This unit is considered to be under a compulsory Move to Contact command unless otherwise issued a new command.

Supply Units

Supply Units may be used to carry ammunition for either side as described in the Box Battles Rules, rule 13.1. Players may match the equivalent size vehicles to those described; Jeep and Medium Truck. Generally, a Heavy Truck would carry two times the quantity of the Medium Truck. Additional rules for supply will be released at a later date.

Medical Units and Battalion Aid Stations

REVISION: Medical Units may be used to recover Infantry (see Box Battles Rule, rule 13.2.). There are two changes to this rule: (1) no die roll is needed and recovery is considered automatic, (2) only 1 Turn stationary is required to reverse wound status on Infantry (*i.e., Disabled to Half Strength, or Half to Full*),

Battalion Aid Stations are set up by placing a large tent on the game table at the scenario set up. Units may recover Infantry by transporting them to that location; Units pick up Infantry by expending 1 Move Phase stationary at the location of the wounded. Jeeps recover a 1-Hit Fire Team, trucks and armored transports recover 1 Squad, heavy trucks 2 Squads. Once they reach the Battalion Aid station, after 1 Turn, the unit is restored to play, accounting for wounded and second line reserves assembling and filling the ranks into the unit.

Recovery Units

Recovery Units may be used to repair vehicles as described in the Box Battles Rule, rule 13.2. Generally, each type of vehicle to be recovered requires the use of a Recovery Vehicle with a chassis of similar strength and mass. *For example, trucks, require tow trucks, APCs and Tanks each require ARVs that are specific variants based on their own chassis*. Of course, any Recovery Unit may recover a vehicle that is lighter than its own chassis.

Bridging Units

Bridging units may enter the battlefield and act freely, without the use of a Command Card. Bridging Units can come in a variety of forms, but these are generally truck-mounted, and Armored Vehicle-Launched Bridges (AVLB). These units can be used for placing mobile bridges across rivers or streams which are not fordable, or trenches too wide to be traversed. Once deployed, vehicles may cross them at a maximum of their Cross Country Cruise speed, except Jeeps which like Infantry, may cross freely.

Generally, truck-mounted bridges are deployed from the larger trucks of both WARPAC and NATO forces, and have the same movement rates as listed on the equivalent combat unit cards. Truck-mounted bridges are generally rated to transport approximately 25 tons, so only vehicles up to that weight may utilize the bridge for mobilization. Most truck-mounted bridges require 2 Move Phases to deploy or lift once the truck is positioned at the edge of the land obstacle; some older varieties (about 1960 or earlier) may require one full Turn.

Generally, AVLBs are mounted on the comparable tank chassis for both WARPAC and NATO; both sides tend to use previous-generation tanks which were repurposed. AVLBs are slow; they use same movement rates as listed on the equivalent combat Unit Cards, but are limited to Cruise speed. WARPAC AVLBs are typically rated to transport 50 tons (some are 60), while NATO AVLBs are typically rated to 70 tons. Again, vehicles within or under the corresponding weight may cross. Deployment time varies; generally. WARPAC bridges require 2 Move Phases to deploy or lift once in position, while NATO bridges require 1 full Turn.

In combat, truck-mounted bridges are considered Soft Units. AVLBs are generally more vulnerable than their tank counterparts; for game play, the side, rear, bottom and top armor values should be retained, and the front armor should be halved. Many AVLBs are armed with a frontal arc machine gun of some type. Players may research further and include these details as they wish to tailor their game scenarios.

Signals Units

Signals Units may enter the battlefield freely, and move accordingly without the use of a Command Card. Signals units will move and perform similar to whatever basic chassis they are using. They have a variety of functions on the battlefield, but in practical game terms, these units are described in the previous section 11.0. EXPANSION… Use of Command Cards. Players may further research their own effects to use as they wish to add more detail to their game scenarios.

Combat Engineering Units

Combat Engineering units may enter the battlefield freely, and move accordingly without the use of a Command Card. Combat Engineering units may be part of nearly any branch of a military, as they perform some key functions which can affect the battlefield, and the strategy and tactics thereof. Engineering units may be infantry, jeeps, trucks, tractors, light armored vehicles, wheeled armored vehicles, dump trucks, and all manner of tanks. In some cases, they may even include Recovery Vehicles, which can have some of the required equipment, such as dozer blades or winches. In most cases, so long as the vehicle may mount the equipment specified under each section, the unit may perform the function. Players will need to ensure that their miniatures are designated as these types of units. Below are several functions which may be performed by units during game play.

Clearing Wire or Fencing

Razor and Barbed Wire and Fencing defenses may be crossed by most vehicles, but are best cleared by those which have either towing or earthmoving capability. Units must have enough movement to first move to the area of the wire/fencing and then either passed that area or back out of it by 1”. Once this movement is done, a 1” wide section

is cleared. Units without special equipment – trucks, dump trucks, or other, must move adjacent to the wire/fencing and prepare it for 2 Move phases. After this, the vehicle may move in reverse from the area, clearing 1" wide area.

Breaching Walls

Breaching walls may be done not only by engineers. but any units which have a main cannon; to do this follow the rules for destroying structures, using HE ammunition (see 14.0 in this Rules Update 1.2).

Engineering units can breach walls with the use of demolitions. Demolitions can be set by infantry or vehicle crews. The strength of demolition explosive is determined by the number of charge levels expended by the particular unit.

The unit moves adjacent to the target and remains stationary for 2 Move Phases/Weapon Priorities. After that, it makes a Unit Rating check, (Engineering Units are typically 8, or 7 for 2nd world and 6 for 3rd world forces). Success means detonation; if the Penetration is sufficient enough destroy the structure (again see 14.0 in this Rules Update), a 1" wide section of wall has been cleared. Failure means there is no effect, with the demolition charge expended.

Leg Mobile Engineering Infantry Squads and Engineering Jeep units each have 3 charge levels with them. Medium truck and armored units have 12 charge levels; Heavy trucks have 24. Each charge level will be added to get to the desired charge level set (*for example, a Level 3 charge would all 3 charge levels from an entire Infantry Squad*).

Demolition charges apply a HE Penetration based on their level:

A Level 1 charge applies HE Pen 40 to a target
A Level 2 charge applies HE Pen 70 to a target
A Level 3 charge applies HE Pen 90 to a target

These same charges may be used to destroy defenses, obstacles, buildings, obstructions, towers, bridges, or even enemy units, so long as the action is declared when the team sets the charge. Players will sometimes need to determine the Cover Value of a target. Note: some combat units may have engineering capabilities noted on the Unit Card.

Filling Ditches and Trenches

Ditches and trenches can be filled by any Engineering units which have earthmoving capability; trucks, tractors, light armored vehicles, tanks are all possibilities, usually fitted with dozer blades, back hoes or similar heavy equipment. Any vehicular unit with earthmoving capability may fill ½"x ½" of a ditch/trench per Move Phase (1"x1" in one Turn), so long as the vehicle can move freely within the area of the ditch/trench. If the unit is under fire, a Unit Rating check must be made to successfully perform this function.

Removing Logging and Natural Obstructions (Hedge Rows included)

Obstructions of 1" wide may be cleared by any tank, recovery unit, or engineering unit with earthmoving capabilities, usually fitted with dozer blades, back hoes or similar heavy equipment etc., requiring 1 Turn. Tanks may attempt to push through obstructions to clear them without such equipment, moving at 1", with a Bog check of -4. Logging obstructions have an effective Cover Value of 15, and may be destroyed like any other structure.

Clearing Minefields and IEDs

Minefields may be cleared by any specialized Explosive Ordinance Disposal (EOD) equipment, as well as any units which have mine clearing capability using mine flails, mine rollers and similar equipment. They may also be cleared by any unit which had the ability to lay demolitions.

• EOD units will move adjacent to the minefield/IED, and remain for 2 Move/Weapon Sequences. After that, they make a Unit Rating check (typically 8, or 7 for 2nd world and 6 for 3rd world forces). Success means that a 1"x1" section of mines has been cleared, failure means they are not.

• Mine clearing equipment such as flails, mine rollers and similar, must move through the minefield at a speed of 1" per Move Phase. The Unit must make a Unit Rating check; Engineering units so equipped gain a +1 bonus. Success

means a 1”x 1” section of mines has been safely detonated and cleared. Upon a failure, a second Unit Check is made; success indicates the mines have not detonated, a failure indicates the mines do detonate and the unit is Disabled.

• Demolitions units must move adjacent to the minefield and take 2 Move Phases to prepare 1 demolition charge level. Once they do, they make a Unit Rating check with a +1 bonus. Success means that a 1”x 1” section of mines has been safely detonated and cleared. Upon a failure, a second Unit Check is made; success indicates the mines have not detonated, a failure indicates the mines do detonate and the unit is Disabled.

Specialized Mine Clearing Units will often need assessment by players as to how they will be treated on a case-by-case basis. They will have armor and movement comparable to the chassis which they were designed upon.

14.0. CLARIFICATION - Firing Over Obstructions

Units may generally not fire over any Obstruction taller than its highest situated weapon system, however the firing unit can look to situate itself for partial cover – Defilade. Generally, a unit may fire over a similar unit assuming it is within 1” of that unit (*an example might be an M113 APV firing over another active or disabled M113 APC*). This is allowable so long as the target is at the same height level or somewhat higher than the shooter. When doing so, the shooter receives the benefit of being Defilade when enemy units are returning fire. This is a somewhat similar situation when tanks move to hull-down positions using obstructions, or cresting a hilltop.

However, if a firing unit is further than 1” of a similar unit which was disabled or part of a formation, then the units in between the potential shooter and target may be an Obstruction. This means that fire in both directions over an Obstruction in between would mean that both targets are Defilade to each other, or else the obstruction interferes with the seeing of any targets entirely. In general, just as stated in the rule book, if greater than 50% of the firing unit is exposed to line of sight (“wizzywig” it), the unit is not Defilade.

Some examples to help are: An M113 APC or NATO Infantry situating within 1” behind a M60A3 tank could use the tank as cover, gaining Defilade benefits, as the tank has an inconsistent shape which allows the weapons of the M113 and Infantry to fire over it in parts. However, if the M113 and Infantry are behind a wall of the same height as the tank (10+ feet), the APC could not fire over the wall. The M113 would need to move itself to a position at the corner of the wall, so that from some line of sight angles each is 50% behind the wall, and fire around it. Of course, if the enemy comes upon either unit from the unit’s side, the Defilade benefit from the wall will not be applicable.

It is possible to use friendly units as cover and should be practiced; *an example might be IFV or APC using a friendly tank as cover not to be exposed to enemy tank fire*. It is possible to fire over a friendly unit in this manner. However, if the friendly cover is greater than 1” distant, therefore creating a mutually Defilade situation between a firing unit and its target, the friendly unit providing the cover is at risk of being struck by friendly fire. The unit firing will fire on the enemy with as normal (enemy being Defilade), however, if a miss is indicated, the firing unit makes a Unit Check, with a failure indicating the fire striking the friendly unit from that direction.

14.0. REVISION (Veteran’s Rule) - Firing Through Cover and Obstructions

In summary, the Box Battles rule book states:
“Cover is the same as armor for purposes of protection from Penetration of weapons. It is treated the same, with cover value being subtracted from Penetration of any given weapon. If there is a remainder, the cover is penetrated to the target which was behind it…Obstructions provide cover value when another unit, such as Infantry or a Jeep wishes to hide behind (adjacent) to the (obstruction) for protection…For practical purposes, “adjacent” is defined as the target either being within an enclosed structure, or being within ¼” of the obstruction.”
See below for expansions to this rule.

Once a target which is either Defilade or ducks behind cover is Spotted, the shooter has the option to determine if his weapon system has a high enough Penetration to shoot through the Cover Value of the obstruction. This may not be a benefit with smaller weapons systems, but with larger weapons systems it is possible. If the Cover Value is high enough to stop the weapon Penetration, the shot must be taken with the target Defilade.

High Explosive vs. Standard Ammunitions

Shooting through the obstruction is possible only if the target is situated ½" or less from the obstruction. If the weapon Penetration is higher than the Cover Value of the obstruction, the shot may be taken without the target's Defilade modification. Then if a hit is scored successfully, the Cover Value is deducted from the Penetration, with the remaining Penetration applied to the target.

Examples of firing comparisons: Shooting at Infantry behind a thick sandbag barrier with a 40mm recoilless rifle (shot taken right through sandbag cover), as opposed to a 7.62mm machine gun (shot taken on a Defilade target). The same determination might be made if shooting at an APC behind a reinforced concrete wall with a 76mm tank gun (shot taken right through the wall cover), as opposed to a .50 caliber machine gun (shot taken on a Defilade target, as the .50 caliber could not penetrate both the cinderblock and then the side armor of the APC).

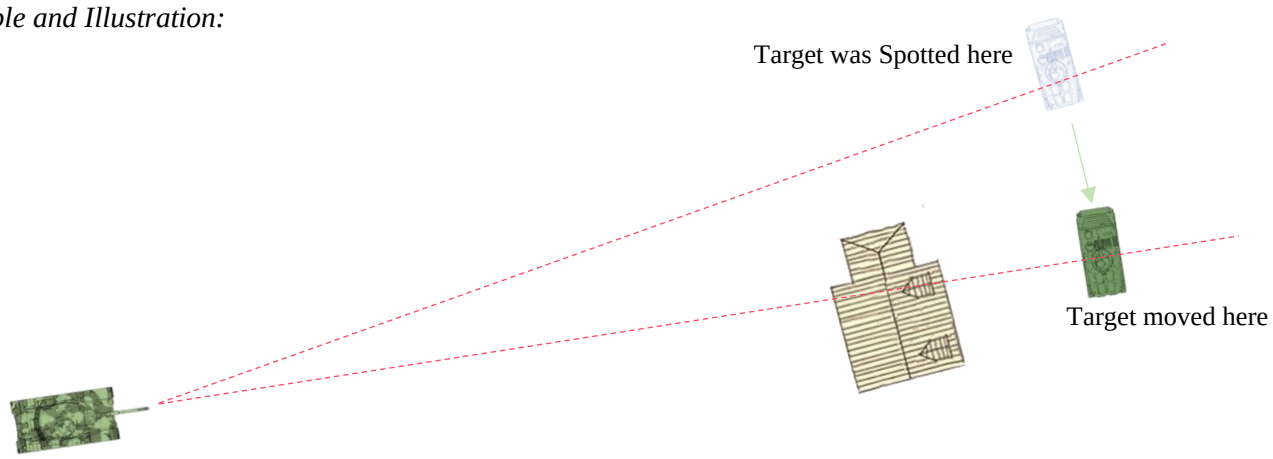
Armor Piercing Ammunitions

It is sometimes possible that units may fire through Cover of an obstruction at a target which lies greater than ½" distance behind it. Also in these cases, the Armor and/or Cover values of any solids the ammunition must pass through are added together if those solids are within 1" of each other.

For example, firing through an M113 APC from front to rear to strike another; add the Front armor of 4 to the Rear armor of 2, totaling 6 to deduct from the weapon Penetration. To fire through a small stone building; add the first wall Cover of 4 to the second wall Cover of 4, totaling 8, also deducted from weapon Penetration Value.

The ability to fire assumes that the firing unit has already Spotted the target the previous Weapon Priority sequence, and can draw a straight line from its position through the obstruction and to target. If this condition is met, the shooter may fire at the target, but applies a Defilade modifier:
First: Calculate normal chances to Hit, including the Defilade modifier.
Second: Total the sides of the Armor or solids of Cover Value within 1" of each other which are being fired through.
Third: Subtract the Armor or Cover totals from the Penetration of the ammunition; note the remainder.
Fourth: Halve the remainder (rounded down); the result is the effective Penetration which strikes the target.

Example and Illustration:



In the illustration above, a stationary M60A3 destroys one of two BMP-1s which were part of the same section element. The remaining BMP-1 then ducks several inches behind the cover of a stone building (a smart move). With AP ammunition, there is the possibility of the ammunition passing through the building and striking the BMP-1, since it was already Spotted. This is confirmed by drawing a straight line from the tank to the targeted vehicle; the line can connect to the target, through the obstruction. Assuming the tank is at a Medium range, the weapon Penetration is 30. Chances to Hit the BMP are 6, -1 for low profile target, halved since it is now considered Defilade, rounded up =3. Assuming the tank is successful, the two sides of the stone building total 8, and (30-8=22); 22 is then halved =

Penetration 11. So, the player has struck the BMP-1, which is at risk of a Penetration 11 against its Side Armor of 3, requiring a die roll of 8 or less to disable it. If the M60A3 misses, it will not get a second chance at this target.

Note that if the obstruction were also a target unit, it may be possible to strike two units with one shot in this manner.

If two solids are greater than 1" apart (widely spaced walls, or 2 separate obstructions), the solids are treated separately. The first solid will be deducted from the Penetration, but the Penetration would then be divided by 2 as illustrated above, before hitting the second solid; the same procedure is used to determine if the shot passes through.

Limits to Firing in this Manner

• When determining chances to Hit, no Burst on Target (formerly called 'Base of Fire') is applied.
• In the event that the target remains completely out of line of sight for more than 1 Weapon Priority, the shooter will not get a second opportunity to fire on the target, as the shooter will have lost sight of the target's location.
• AP ammunition may not strike a 2nd target which is further than 1/10th of its maximum range beyond the first. So, in the examples given, *since the maximum range of the M60A3's 105mm AP ammunition is 82", if the second BMP-1 were greater than 8" beyond the obstruction, it could not be targeted.*

It is strongly recommended that this rule be applied universally throughout any given scenario. This could result in the possibility of friendly units being struck in very close skirmish engagements. It is fair play for an opponent player to call out unit positions of friendlies if such tactical situations occur.

14.0 EXPANSION (Veteran's Rule)- Destroying Buildings and Structures

Buildings and structures may be destroyed if the Cover Value of the structure can be exceeded by weapon Penetration. *For example, foxholes, hull-ditches, buildings, bunkers, and even vehicular debris are destroyable in this manner*. The structure collapses once the total Penetration applied to the structure is equal to ten (10) times its Cover Value. It is possible to bombard a structure with multiple shells in consecutive fire opportunities until a cumulative total is Penetration is achieved. If Infantry are enclosed within the structure, they will make Bailout checks, but with a -3 penalty applied.

Players will be required to note these totals, so record keeping is required. A destroyed structure is still considered an obstruction.

General's Rules - Large Force Game Shortcuts

It is easy to desire playing small-scale miniatures war games with large scenarios, using table of 6 or 8 feet in length, with forces of multiple battalions, in combined arms situations. Running games this large using the Battle Field Ops! rules set can be a bit cumbersome, since the rules are at a scale fine enough to show tactical differences between units. And so, we have presented some options below which can move the game along a bit more quickly, and produce if not an exact result, a play experience very similar to playing smaller force games.

Command Card Draw and Move Phases
Waiting for players to make decisions as cards are drawn one at a time can sometimes be fun, but in large games, this can slow the game down a good deal. As an alternate approach: Draw and deal all Command Cards from the draw deck at once, pulling until you hit the Fog of War card normally. Then hand the pile of cards to each player side respectively. The side that holds more cards will decide if they wish to issue commands first, or wait for his opponent to do so. Once this is completed, to execute Move Phases the same method is applied for movement; the side with more cards may decide if they wish for the opponent to move forces first.

This method allows players to 'batch' Commands together, to mobilize its force in large groups. *For example, 3 Platoon Commands could be gathered to mobilize 1 Company - 3 platoons, attaching HQ and support units – if the amount of attached units is larger than the standard Platoon, a 4th Platoon Command will be needed.*

Infantry Take Priority
Infantry are an excellent asset on the battlefield, but they can take a lot of game time to resolve their effectiveness due to the amount of die rolls they require during a Weapon Priority sequence. As an alternative:

Before Weapon Priority 1, Infantry will have the first opportunity to fire. Deployed Infantry fire first with a +1 modifier, and apply all Hits when successful; Moving Infantry fire next and apply all Hits when successful. After these two steps, Weapon Priority sequence is followed normally, however no Infantry fire shall be observed again within the sequence with one exception – ATGMs. Infantry based ATGMs shall be fired on Weapon Priority 3.

Using this method, all Infantry will have one (1) opportunity to fire, before all vehicular units, and the Weapon Priority sequence itself will move along more quickly.

Spot Only on First Line of Sight
Spotting rolls can be key tactically, but if applied often in a large force game, they can be a time consumer, and sometimes feel tedious. As an alternative, we recommend Spot checks and die rolls only be required during a 1st encounter. After main forces engage, all Spots are automatic. A force will not need to roll any Spots for any units unless it remains out of the sight of an enemy for 1 full Turn, or was previously off of the battle field.

Standard Infantry
In future revised editions of Battle Field Ops! Infantry will be standardized, with small variances based on their type. The Infantry table following will assist with moving games along more rapidly in the interim.

Note that Infantry Moves are:
To Fight 1,1,1,1
To Run 1,2,1,2
Double-Time 2,2,2,2
To Swim 0,0,0,1

Standard Infantry Weapons Table

Single-man portable weapons are deployed by one soldier, occasionally a second will be used to assist with ammunition or reloading; all weapons within this section which are not guns or rifles are rockets. Crew-served weapons are those requiring two soldiers or more, and are deployed from several platforms, including tripods, jeeps and others; all weapons within this section which are not guns or rifles are missiles. Missiles fire once during Weapon Priority 3; those that reload will vary time.

Ranges and Penetrations of Weapons in Use during the 1970s														
Primary Maker	Single-man Portable Weapons		Point Blank		Short		Medium		Long		Very Long		Extreme	
		Ammo	Ran	Pen	Ran	Pen	Ran	Pen	Ran	Pen	Ran	Pen	Ran	Pen
Varies	Small Arms / Sub-MG	Standard	1”	1	2”	1	3”	1	4”	1	5”	1	6”	1
Varies	Assault Rifles	Standard	1”	2	2”	2	3”	1	5”	1	10”	1	15”	1
Varies	SSW: LMG / GPMG	Standard	1”	4	2”	3	4”	3	8”	3	13”	2	22”	1
Varies	Sniper Rifle	Standard	2”	4	4”	4	6”	3	10”	3	18”	2	30”	1
Varies	12.7mm AT Rifle	A.P.	2”	6	3”	6	6”	5	11”	5	18”	4	30”	3
Varies	Grenades, 30-40mm	H.E.	1”	4	2”	4	3”	4	4”	4	6”	4	8”	4
Germany	Armbrust LAW	H.E.	2”	28	4”	28	6”	28	10”	28	10”	28	30”	28
Germany	Panzerfaust 2 / PzF 44	H.E..	1”	32	2”	32	3”	32	4”	32	6”	32	8”	32
Germany	Panzerfaust 3	H.E.	2”	37	4”	37	8”	37	12”	37	15”	37	18”	37
Sweden	Carl Gustaf M2 Recoilless Rifle	H.E.	N/A		2”	17	4”	17	6”	17	10”	17	22”	17
		A.P.	N/A		2”	29	3”	28	4”	27	6”	26	14”	25
Switz’land	SSG36 20mm AT Rifle	A.P.	2”	8	6”	7	12”	6	18”	5	28”	5	46”	4
USA	M20 Super Bazooka	H.E.	1”	26	2”	26	3”	26	4”	26	5”	26	18”	26
USA	M72 LAW	H.E.	2”	28	3”	28	4”	28	5”	28	6”	28	20”	28
USSR	14.5mm AT Rifle	A.P.	2”	7	4”	7	8”	6	14”	5	24”	4	40”	4
USSR	20m Anti-Tank Rifle	A.P.	2”	8	4”	7	9”	6	15”	5	26”	5	44”	4
USSR+	RPG-7 or 75	H.E.	2”	28	3”	28	4”	28	6”	28	10”	28	18”	28
USSR	RPG-18 Mukha	H.E.	1”	27	2”	27	3”	27	4”	27	5”	27	6”	27
Primary Maker	Crew-served Weapons		Point Blank		Short		Medium		Long		Very Long		Extreme	
		Ammo	Ran	Pen	Ran	Pen	Ran	Pen	Ran	Pen	Ran	Pen	Ran	Pen
Varies	.50 cal /12.7mm HMG	Standard	2”	5	3”	5	6”	4	11”	4	18”	3	30”	2
FRANCE	MGM 21A, SS.10 ATM	H.E.	N/A: Minimum Range is 10”				12”	34	16”	34	24”	34	32”	34
FRANCE	MGM 32A, ENTAC ATM	H.E.	N/A: Minimum Range is 8”				12”	36	22”	36	30”	36	40”	36
FRANCE	Milan 1 ATM	H.E.	N/A		2-4”	34	12”	34	20”	34	30”	34	40”	34
USA	M67 90mm Recoilless Rifle	H.E.	2”	28	4”	28	6”	28	12”	28	24”	28	36”	28
		A.P.	2”	31	4”	30	8”	29	16”	28	32”	27	48”	25
USA	M40 106mm Recoilless Rifle	H.E.	2”	28	4”	28	6”	28	12”	28	24”	28	36”	28
		A.P.	3”	33	6”	32	10”	31	24”	29	38”	27	54”	25
USA	TOW Anti-Tank Missile	H.E.	2-4”	32	8”	32	20”	32	30”	32	45”	32	60”	32
USA	ITOW Anti-Tank Missile	H.E.	2-4”	36	12”	36	24”	36	40”	36	60”	36	75”	36
USA	M47 Dragon ATM	H.E.	N/A		2-4”	35	12”	35	18”	35	30”	35	40”	35
USSR	14.5mm HMG	Standard	2”	6	4”	6	8”	5	14”	4	24”	3	40”	3
USSR	SPG-9 73mm Recoilless Rifle	H.E.	2”	18	4”	18	8”	18	12”	18	18”	18	26”	18
		A.P.	2”	27	4”	26	8”	25	16”	24	22”	23	30”	22
USSR	Suitcase AT-3 Sagger	H.E.	N/A: Minimum Range is 10”				18”	29	30”	29	45”	29	60”	29

Weapon System Specific Notes

United States	Germany, Sweden, Switzerland	Soviet Union	France
M20 Super Bazooka: BB	Armbrust LAW: MR 29”, D	14.5, 20mm AT: FR 8	SS.10: MR 12”, D, -1
M72 LAW: D, BB	Panzerfaust 2: MR 28”	RPG-7, -75: none	ENTAC: MR 15”, D
M67 Recoilless: FR 4, BB	Panzerfaust 3: MR 16”, D	RPG-18: D, BB	Milan 1: MR 28”, TR
M40 Recoilless: FR 4, BB	Carl Gustaf M2: FR 6, BB	SPG-9: FR 6, BB	
TOW, I-TOW: MR 48”, BB, #next	SSG36 AT Rifle: FR 6, BB	AT-3 Sagger: MR 18”, D, -1	
M47 Dragon: MR 30”, TR			

Abbreviations and Notes Key

SSW: Squad support weapon / MG: Machine Gun, roll 2 dice or 3 dice when stationary, +2, +3 Suppression effect. Prefixes: Sub- sub, L- light, GP- general purpose, H- heavy / LAW: Light Anti-Tank Weapon / AT: Anti-Tank / ATM: Anti-Tank Missile / MR: minimum reaction range for countering / FR: Fire Rate / D: disposable weapon, fires once / BB: Back blast of ½ “ +, may not be fired when Confined / TR: full Turn to reload, s#: Weapon Priorities to reload / -1: Weapon is at -1 to Hit at all ranges.

Additional Playing Aid Markers

4 Gren Bursts	3 Gren Bursts	2 Gren Bursts	1 Gren Burst	4 Gren Bursts	3 Gren Bursts	2 Gren Bursts	1 Gren Burst

Oil Turn 1	Oil Turn 2	Oil Turn 3	Oil Turn 4	RECON	RECON	RECON

CQB Gren Prep1	CQB Gren Prep2	CQB Gren Prep1	CQB Gren Prep2	TASK 1	TASK 2	TASK 3	TASK 4

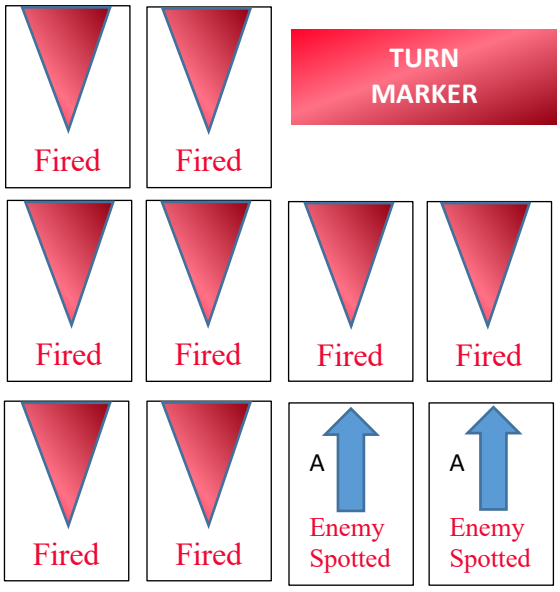
Smoke Move 1	Smoke Move 2	Smoke Move 1	Smoke Move 2	Smoke Move 1	Smoke Move 2	Smoke Move 1	Smoke Move 2

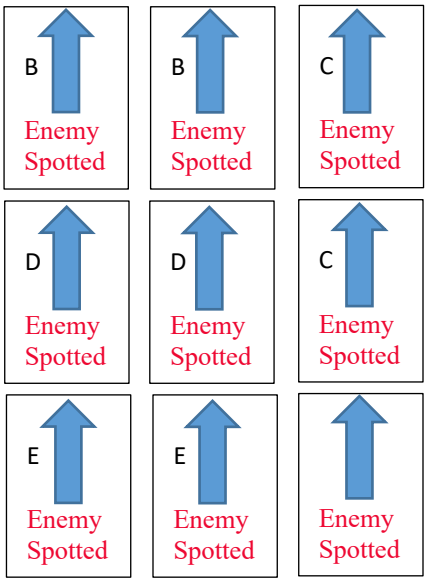
MINE FIELD	MINE FIELD	MINE FIELD	MINE FIELD
MINE FIELD	MINE FIELD	MINE FIELD	MINE FIELD

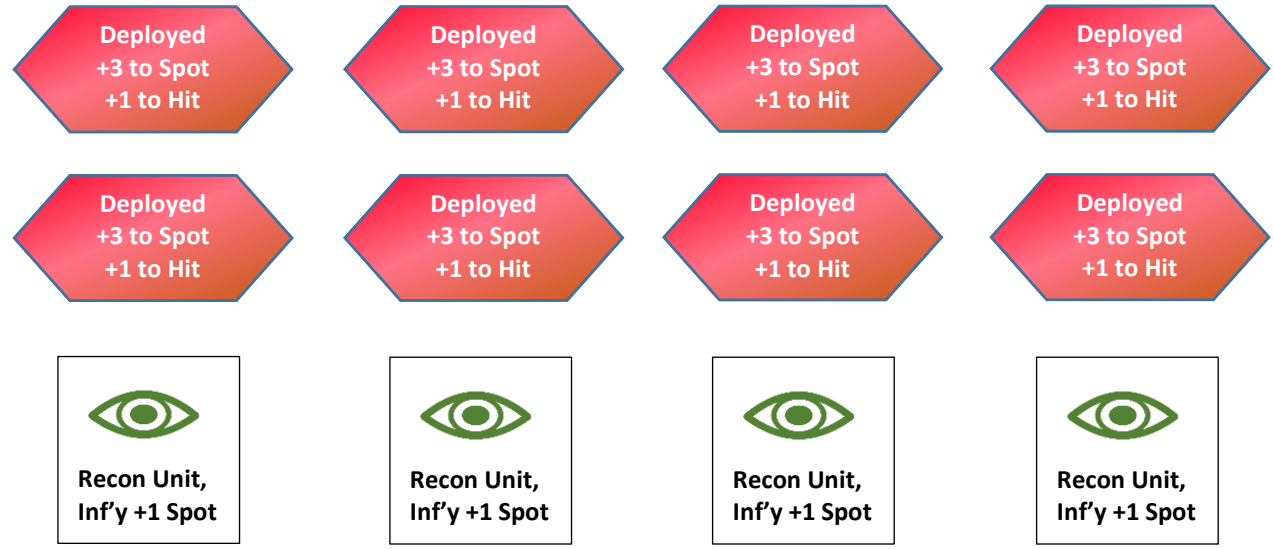
REAL BAM!	REAL BAM!	REAL BAM!	REAL BAM!	REAL BAM!	REAL BAM!	REAL BAM!	REAL BAM!
Decoy	Decoy	Decoy	Decoy	Decoy	Decoy	Decoy	Decoy
Low Density	Low Density	Low Density	Low Density	Low Density	High Density	High Density	High Density
Anti-Armor	Anti-Armor	Anti-Armor	Anti-Armor	Anti-Person	Anti-Person	Anti-Person	Anti-Person

Obstacle Clear	Obstacle Clear	Obstacle Clear
Trench Filled	Trench Filled	Trench Filled
Obstruction Breach	Obstruction Breach	Obstruction Breach

Un-button	Un-button	Un-button	Un-button	Un-button	Un-button







Burst on Target +2	Burst on Target +2	Burst on Target +2	Burst on Target +2	Burst on Target +2	Burst on Target +2
Burst on Target +1	Burst on Target +1	Burst on Target +1	Burst on Target +1	Burst on Target +1	Burst on Target +1

+1	+2	+3	+1	+2	+3	-1	-2	-3	-1	-2	-3

START OF TURN	
Draw Command Cards	Shuffle and draw from Command Deck, assign commands, use markers where necessary. When Fog of War card comes up, no further commands are issued.
Move Phase 1	Commanded units move the 1st of four times. Remember Specialized units, units already under a command, and Infantry. Lift Get Downs! if it is time.
Weapon Priority Sequence	Spot targets and fire weapons in the order of Weapon Priority 1, then 2, then 3, then 4. Apply Hits and effects as the weapon priorities occur. Lift Get Downs! if it is time.
Issue Reserve Commands	Issue any Reserve command cards held if desired. Lift any counter markers as they count down, tally time, or synchronize with game play.
Move Phase 2	Commanded units move the 2nd of four times. Remember Specialized units, units already under a command, and Infantry. Lift Get Downs! if it is time.
Weapon Priority Sequence	Spot targets and fire weapons in the order of Weapon Priority 1, then 2, then 3, then 4. Apply Hits and effects as the weapon priorities occur. Lift Get Downs! if it is time.
Issue Reserve Commands	Issue any Reserve command cards held if desired. Lift any counter markers as they count down, tally time, or synchronize with game play.
Move Phase 3	Commanded units move the 3rd of four times. Remember Specialized units, units already under a command, and Infantry. Lift Get Downs! if it is time.
Weapon Priority Sequence	Spot targets and fire weapons in the order of Weapon Priority 1, then 2, then 3, then 4. Apply Hits and effects as the weapon priorities occur. Lift Get Downs! if it is time.
Issue Reserve Commands	Issue any Reserve command cards held if desired. Lift any counter markers as they count down, tally time, or synchronize with game play.
Move Phase 4	Commanded units move the 4th time. Remember Specialized units, units already under a command, and Infantry. Lift Get Downs! if it is time.
Weapon Priority Sequence	Spot targets and fire weapons in the order of Weapon Priority 1, then 2, then 3, then 4. Apply Hits and effects as the weapon priorities occur. Lift Get Downs! if it is time.
Return Reserve Commands	Return remaining Reserve Command cards to the Draw Deck. Lift any counter markers as they count down, tally time, or synchronize with game play.
Morale Effects	Make all required Unit Rating checks for morale.
Reset Draw Deck	Reset the amount of Command Cards within the Draw Deck due to the addition of new units on the table, or removal of commanders due to losses.
END OF TURN	

Update 1.2-3 Tables and Reference Notes

Burst On Target Notes, Cannons only

• BoT modifier +2 for most manual loaders. BoT +1 for repositioning autoloaders, but no BoT if target moving 2” or more.
• No BoT for Recoilless Rifles or Infantry units.

Target’s Movement that Phase	To Hit Modifier	In-Game Top of Mind Reminder Note
Up to 4	No Modifier	Generally, most ground vehicles up to Cruise speed
5 +	-1 to Hit	Fast vehicles at Cruise, many at Full speed
11 +	-2 to Hit	Only fastest vehicles at Full speed, many air units
18 +	-3 to Hit	Air units

Suppressive Fire, Cannons only

• -2 to Hit, +2 to Suppress.
• Guns with Fire Rate 6 or less need to double-up on targets.

Range Limitations, Limited Elevation Cannons only

• Low profile platforms, 100” or maximum range, whichever is less.
• Common and high profile platforms, 120” or maximum range, whichever is less.
• Firing from Elevated position: Elevation of 1” adds 10% of the range limitation, max is +30%. The firing dead zone is increased in relation to the elevation (see Unit Card depression notes).
• Firing upwards at targets: maximum height is at the weapon’s Medium Range category, after which it drops again. For Long range = use Short range calculation, Very Long range = use Point Blank range calculation, remains this way into Extreme range.

Smoke Lines

• Smoke is 1” deep by 1” wide per unit firing. If units are 152mm or larger, smoke is 1.5” deep by 1.5” wide per unit firing.

Double-Time Movement under Advance Command

• Unit allowed to move 1” more than Full up to 2x Full. Unit is at -3 to Spot and Hit enemy units. Infantry Move 2,2,2,2.

Vehicular Close Quarter Battle (VCQB)

• Attacker must declare during Move Phase; both players move units to ensure the attacker can touch the target.
• Target is allowed a ½ Unit Rating check to evade (infantry per Half Squad). Evasion attempts forfeit next attacks. If not evaded, Hits applied to both targets. Hits also applied to buildings and structures in the same manner.
• If target is truck-sized or larger, attacker makes Bog check.

Bog Checks - voided by moving 1” less than Cruise Speed

Ground Type	Description	Bog Check Effects
Shallow Waters, narrow	Any moving water body 1” or less in width, within vehicle’s Ford depth ability	• At Cross Country Cruise, normal Bog check • Infantry limited to ‘To Fight’ speed
Shallow Waters, Wide	Any moving water body more than 1” in width, within vehicle’s Ford depth ability	• At Cross Country Cruise, Bog check at -1 penalty • Infantry limited to ‘To Fight’ speed
Rough Ground	Marshlands, Shallow Muds, Crops, Hills and Steep Slopes, Dense Foliage/Hedges	• At Cross Country Cruise, Bog check at -2 penalty • Infantry limited to ‘To Fight’ speed
Extreme Ground (Expansion)	Flooded Marshlands, Deep Muds, Broken Ground	• At Cross Country Cruise, Bog check at -3 penalty • Infantry limited to ‘To Fight’ speed

Infantry climbing Steep Slopes and Cliffs – Movement uses To Run speed, consumes 3” for 1” of movement.
Deep Snow - Find terrain on table, then slide down one row more difficult. Normal Cross Country treated as Rough Ground. Extreme Ground applies a -2 to Bog checks.
Iced roads – Vehicles treat this as Extreme Ground. Infantry are limited to To Fight Speed.
Low light – Applies a -4 to all To Spot and To Hit chances.
Pitch dark – Applies a -8 to all To Spot and To Hit chances.
Night Vision Generation 1 (1965+) – Applies a +2 to Spot and Hit for NATO, +3 to Spot and Hit for WARPAC.
Night Vision Generation 2 (1978+) – Applies a +4 to Spot and Hit for all modern nations.
Illumination Flares – See page 16, 17.

Mortars and Artillery

• Soft Units within barrage are automatically Suppressed. Soft and armored units must be checked for a direct hit per table below.
• Suppressed units may move/fire if they make a Unit Rating check.

Mortar and Artillery Fire Concentration Table

Number of Units Firing within the element or battery	The Weapon Fire Rate, chances to Hit each target within barrage			
	4 to 6	8 to 12	14 to 18	20 to 26
1	**1, then 5**	1	2	2
2	1	2	3	3
3	2	2	3	4
4	2	3	3	5
5	2	3	4	5
6	2	3	4	**5 (Top on a 1)**
7	3	4	5	**5 (Top on a 1)**
8	3	4	**5 (Top on a 1)**	**6 (Top on a 2)**

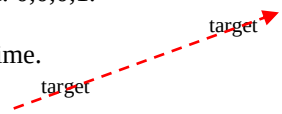
A Hit = Suppression to armored units, Penetration to the facing armor; Strike skirts, tracks/tires and then Side Armor, Excess is the number or less on a die roll to Disable the unit.
X, then Y = No Suppression to armored units. After a Hit, roll another die, the 2nd number or less actual Hit.
(Top on a X) = When dice are rolled, if the number indicated was rolled, hit is applied to Top armor.

Standard Infantry Squads

Squad Type	Number of Hits	Rifles*	Squad Support Weapons*
Large (3-Hit Squad)	2 to make a Half Squad, 3 to Disable	3	1
Standard (2-Hit Squad)	1 to make a Half Squad, 2 to Disable	2	1
Small or Half (1-Hit Squad)	1 to Disable	1	1

*Number of weapons. Squad Support Weapons (LMG, GPMG), roll 2 dice moving, 3 dice stationary.

• Against large squads, if only 1 Hit is applied, it is lost, though Suppression effects will still apply.
• Infantry make 1 Spot roll per unit within the element; Recon units get a +1 bonus to Spot.
• Infantry may always fire at any specific target, regardless of distance.
• Infantry Moving (modified) – Double-Time: 2,2,2,2 / To Run 1,2,1,2 / To Fight: 1,1,1,1 / To Swim: 0,0,0,1.
• Infantry are considered Small Targets, and apply a -1 to be Spotted and to be Hit.
• Infantry are considered Defilade if within 1” of any terrain or obstructions, except when Double-Time.
• Machine Guns target more than one Infantry unit if targets are in the same line of fire. See right: Chances to Hit based on range, and dice rolled for each target with the same shot.



• Half Squads choose SSW or AT weapon based on immediate threat. When combined, they revert to normal Squads.

Fire Through Obstructions

• Target must already be spotted. If out of sight for one Move Phase the shot is not permitted.
• For HE ammo, if target is up to ½” to obstruction, Defilade modifier may be ignored of Penetration high enough.
• For AP ammo, if target farther than ½” but up to 1/10 of weapon max range, calculate: Penetration – Cover Value (all objects within 1” of each other in line of fire) to get a subtotal, then half this subtotal and apply that Penetration to target.

Destroying Buildings and Structures

Building or structure collapses once it has been damaged with 10x the number of Hits as its Cover Value. Infantry within make Bailout checks based on Unit Rating with a -3 penalty. Hits must be tallied.

Auto-Spotting: For targets which are in the open or within 1” of terrain and firing

Target Unit Silhouette	Spotter Deployed	Spotter Moving
Tank, APC, IFV, Heavy Truck, Medium Aircraft, Medium Watercraft	Within 80”	Within 40”
Field Gun, Truck, Small Aircraft and Small Boats	Within 40”	Within 20”
Jeep, Infantry, Mortar	Within 20”	Within 10”

No Auto-Spot for: Spotter facing another direction, scattered terrain between Spotter and target, Spotter on Double-Time movement, Infantry which are Hunkered down.

Update 1.2-3 Revised Combat Tables

TARGET SPOTTING – Check Automatic Spot conditions; if not, check die roll required and modifiers					
Target silhouette, and die roll required at ranges:	**10 or less**	**8 or less**	**4 or less**	**2 or less**	**1**
Tank, APC, IFV, Heavy Truck, Medium Aircraft, Watercraft	up to 20”	21”+	31”+	41”+	61”+
Truck, Field Gun, Small Aircraft and Small Boats	up to 12”	13”+	20”+	27”+	41”+
Jeep, Infantry, Mortar	up to 4”	5”+	9”+	13”+	21”+

If Spotter is:	If Target is:
A Forward Observer: Use half the range, if range category remains same, add a +1 to Spot chances.	Moving (change in facing does not count): +2
Facing the target’s Side or Oblique: +1	Firing or a Mass Target (3 platoons, building, etc.): +3
Placed On Alert (by another unit): +2	Behind Smoke or Barrage: -10
Deployed-In-Position: +3	Behind a brush or tree line: -1
Moving faster than Cruise: -3	Behind Light Terrain: 1” = -2 2” = -4 3” = -8 4” = -16 (max)
Spotting in another direction (front/rear half): -3	Behind Dense Terrain: 1” = -4 2” = -8 3” = -16 (max)
	Under Camouflage netting: -4

If Target is Defilade/Partial Cover, half the final number; round up for equipment, down for Infantry.

Weapon Priority	Weapon System and Unit Readiness
1	**Deployed Infantry Guns, MGs,** and **Deployed Mounted Machine Guns** fire 1st shot
	Surface-to-Air Missiles and **Anti-Air Guns** fire
2	**Cannons,** Fire Rate **12, 10** fire 1st shot
	Mortars, Artillery shells are in the air, **Bombs** drop
3	**All Infantry Weapons, Mounted Machine Guns** fire, **CQB**
	Cannons, Fire Rate **8** and **6** fire
	All Mounted Missiles (Air-to-Air and **Anti-Tank)** and **Mounted Rockets** fire
4	**Cannons,** Fire Rate **4** fires, and **12** and **10** fire 2nd shot
	Mortars, Artillery and **Bomb** barrages land

Direct Fire To Hit	Range Category and Die Roll to Hit					
Weapon	**Point Blank**	**Short**	**Medium**	**Long**	**Very Long**	**Extreme**
CANNONs, GUNs	**8**	**7**	**5**	**3**	**1**	**1**
ROCKETs (add HE suppression +2/3)	**8**	**6**	**4**	**2**	**1**	**1**
ATGMs (add HE suppression +2/3)	**2**	**4**	**6**	**8**	**8**	**8**

If Shooter:	If Target is:
Burst on Target (Cannons/Guns): +2 or +1	A Small target (as noted on target’s Unit Card): -1
Is Deployed-In-Position (Guns and Rockets only): +1	Side or oblique facing (High Explosive ammo): +1
Is Firing through Terrain (Rockets/ATGMs limited to 1” deep):	A Massive target (3 platoons, building, etc.): +2
Light Terrain: 1” = -2 2” = -4 3” = -8 4” = -16 (maximum)	Moving at speed: 5” = -1 11” = -2 18” = -3
Dense Terrain: 1” = -4 2” = -8 3” = -16 (maximum)	Behind smoke, barrages, or camouflage 6” away: -3

***** Players: make sure the Unit Card Attack and Defense notes are applied to calculations. If target is Defilade and shooter is not ignoring Cover, half the final number; round up for equipment, down for Infantry.**

NOTE: Terrain Protection Values - Tree Lines provide Armor Value 1. Terrains provide Armor Values that are a positive number equal to the negative modifier To Hit: *for example, a -4 = Armor Value 4.*