and the

BattleField Ops! Game System

Rules Update 1.1

6mm Cold War Era Miniatures War Game
Battlefield Ops! System

Rules Update Version 1.1 Credits

Authored by: Vito J. Pandolfo

Update Consultants:

Scott Caldwell (Creator, Combined Ops)
David Hart (Play tester)
Joseph Johnson (Play tester)
Lt. Colonel Anthony Mancari (US Army)
Sgt. Matthew Mediatore (US Army, retired)

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In addition, we cannot thank the men and women of the armed forces, who continue to put their own personal interests aside in service of what could be the protection of their fellow citizen.
3.0. CLARIFICATION - Firing from within terrain

3.0. EXPANSION - Target Speed to Hit Modifier

3.2.1. EXPANSION - Deploying Smoke During Weapon Priority

3.4. EXPANSION - Automatic Grenade Launchers Burst Fire

4.1. CLARIFICATION - Length of Unit Suppression

4.1.2. CLARIFICATION - High-Explosives - Grenades vs. Tanks

4.2 CLARIFICATION - Tracks and Tires Armor Value

5.1. CLARIFICATION - Multiple Fire Rates

5.3 REVISION - Details about preparing defenses
Camouflage, Sandbags, Foxholes/Ditches, Trenches, Barbed wire, Razor wire, Fencing, Oil Slicks, Minefields

6.1.3. REVISION - Rough Ground and Bog Checks, Shallow Waters – Fording

6.1.3. EXPANSION - Effects of Environmental Conditions
Severe Rains: Flood lands, Deep Snow, Iced Roads, Night Scenarios, Night Vision and Illumination Flares

8.2. CLARIFICATION - Mortar and Artillery Maximum Number of Hits per Phase

8.2.2. REVISION (OPTION) - Mortar and Artillery Barrage Groupings

8.2.3 CLARIFICATION - Maximum reduction in die roll when Correcting Fire

9.3.2 CLARIFICATION - Confined Infantry vs. Unconfined Infantry

9.3.5. CORRECTION - Infantry Spotting Ability

9.3.5. CLARIFICATION - Suppressed Infantry are considered Defilade

9.3.5. REVISION - Hits to Infantry in the Open

9.4. CLARIFICATION - Infantry CQB vs. Armored Units

9.0. EXPANSION – Infantry, Sniper Teams

10.1. CORRECTION - Proper Bailout Check Number

10.3. EXPANSION - Unit Ratings and Superior Advantage - First Weapon Priority
11.0. REVISION – Moving Double-Time

11.0. EXPANSION – Command Cards
WARPAC and NATO Use of Command Cards, Creating the Basic Draw Deck

13.0. EXPANSION - Specialized Units
Reconnaissance, Supply, Medical and Battalion Aid, Recovery, Bridging, Combat Engineering Units

14.0. CLARIFICATION - Firing Over Obstructions

14.0. EXPANSION - Obstructions and Terrain as Cover

14.0. EXPANSION - Firing Through Cover and Obstructions

14.0 EXPANSION - Destroying Buildings and Structures

General’s Rules - Large Force Game Shortcuts

Recommended Existing Rules to Employ or Omit

Command Card Levels

Command Card Draw

Infantry Take Priority

Spot Only on First Line of Sight

Reducing the Number of Modifiers to Spot and to Hit

Optional Strategic Limit - Direct Fire Weapons and the Horizon Line
What to Know about Box Battles: Cold War Evolution and the Battlefield Ops! Game System

Box Battles: Cold War Evolution is a product line which contains all the necessary game components to begin a collection of 6mm (1/285) scale miniatures, and uses that collection and rule set for a two-sided conflict set into the 1970s era Cold War. The basic game set contains miniatures, playing aids, unit cards, a rules set, and a fabric play surface, terrain and a number of buildings. Additional two-sided conflict modular sets, either called Battlematch™ or Alter-Force™ kits which have been sold as expansion packs.

However, Battlefield Ops! is the rule system which is introduced in the basic game, and it quickly became apparent that players who were already collectors of 6mm modern miniatures desired the rule set as well as unit cards in order to play a fairly accurate and detailed tactical game with their friends. As a result, we morphed our approach; the game components are being sold on an item-by-item basis, so players can customize what they need for their home games. All future releases will be directed towards the integration of individual Battlefield Ops! Game System components.

If You Own Only the Battlefield Ops! Game System Components

You may have been one of the people who already have a 6mm collection, and were introduced to our game system through someone at a convention, or a friend at home, or maybe one of our YouTube videos. No matter; assuming you already have a 6mm miniatures collection as well as your own terrain collection, here is what you will need to play the Battlefield Ops! System at your table:

• This FREE Battlefield Ops! Rules Update 1.1 PDF (of course, you are reading it now!).

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

• Dice: one 12-sided die and at least one 10-sided die, though the more of the latter you have the better.

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

• Unit Cards: These are our own Unit Cards that have information front and back for each combat unit you will need for NATO and Warsaw Pact (WARPAC) forces. These can be ordered individually from our site; you should review your desired combat units and order one card for each – you cannot play otherwise, as you will not have the combat data needed for each unit in the game.

• Recommended: We strongly recommend you acquire our Command Card/Playing Aids sets, 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 workable. You are free to 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 you read the Box Battles: Cold War Evolution rules, you will need to keep in mind that the rules were originally written with the boxed game set in mind. So, some examples or statements in the rules were made in this context. No matter, so long as you can translate this to the units you are using at your game table, the game rules still apply.

In the future, 5th Epoch will be releasing a complete stand-alone rule set. 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 1.1

Rule Update 1.1 contains updates which fall into four essential categories: Corrections, Clarifications, Revisions, and Expansions.

Corrections are items which note errors in the original rules. These are essential to review for game play.

Clarifications note items which required further explanation as they were not clear under certain play circumstances that could occur.

These two categories are the most important, so that players can make any adjustments to their game play regarding these items, as they could affect game balance, scaling and game sequence.

Revisions are items that have been changed to make game play smoother, or more inclusive of detail that players and collectors enjoy.

Expansions are items that do exactly that; expand a rule to include more features, situations or even unit types that will be seen at the play table.

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.

Large Force Game Rules

A section of optional “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. 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 is kept, in exchange for the ability to tackle large engagements over long distances. Players should feel free to use what they wish, and discard anything that does not feel suitable to their own style of play.

The Rules vs the Unit Card

In most cases, any data or description presented on individual Unit Cards should override anything presented in the rules. Most times, variations represent special features or abilities of the unit over what is generally used within the rules. This may not be true of a Unit Card precedes the Version 1.1 update, in which case the Update 1.1 should be used if applicable.

In cases when multiple versions of rules are owned by players, they should agree on the rule set to be used. Some time may be required to ensure both players are up to date regarding more recent releases of any rule, so they may agree prior to game play.
3.0. CLARIFICATION – Direct Fire Weapons
Firing from within terrain
Direct Fire weapons may fire out of a terrain line with no penalty, under the condition that the firing unit is situated 1” or less of the terrain line edge. Meeting this condition, 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 length is included. For example, if a unit is 1” within the terrain line, the unit does not have any modifiers applied to Spot and to Hit an enemy, but is afforded the benefit of the terrain. However, if the unit is 2” within the terrain line, the unit will have modifiers applied for the total 2” to Spot and to Hit based on the terrain type.

3.0. EXPANSION – Target Speed
Target Speed to Hit Modifier
Firing at moving targets is more difficult based on the target’s speed. A modifier should be applied to the firing unit based on the the target’s Movement.

<table>
<thead>
<tr>
<th>Target’s Movement that Phase</th>
<th>To Hit Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 4</td>
<td>No Modifier</td>
</tr>
<tr>
<td>5 to 8</td>
<td>-1 to Hit</td>
</tr>
<tr>
<td>9 to 13</td>
<td>-2 to Hit</td>
</tr>
<tr>
<td>14 to 19</td>
<td>-3 to Hit</td>
</tr>
</tbody>
</table>

3.2.1. EXPANSION - ATGM Countermeasures
Deploying Smoke During Weapon Priority
Any unit which has the capability to deploy smoke as an ATGM countermeasure, may do so also during its opportunity to fire within the Weapon Priority sequence. Note that the act of deploying smoke takes place in lieu of the weapon fire which would normally take place during that Weapon Priority, so the unit will forfeit its attack in exchange for the deployment of smoke.

Smoke requires the full Weapon Priority to deploy, so if during that Weapon Priority the deploying-unit is fired upon, the smoke will offer no penalty to the attacker.

If the Large Force Game Rules are being used (see Rule Update 1.1 – Infantry Take Priority)
Stationary Infantry deploying smoke are vulnerable to weapons fire from other Stationary Infantry firing simultaneously. Moving Infantry deploying smoke are vulnerable to weapons fire from Moving Infantry firing simultaneously.

3.4. EXPANSION - Automatic Grenade Launchers
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, but there are others. Weapon information presented on Unit Cards is intended for deploying grenades in single-shot uses. However, these weapons systems have the ability to fire bursts of grenades.

If a player elects to use automatic grenade launchers in burst mode, the player will roll to Hit using 3 dice, with an additional +1 to Hit (the +2/+3 HE suppression number raised the same, as well). However, players must track bursts and grenade fire from that point forward. Grenade launchers are allowed five (5) bursts, before they are required to
reload, if ammo is available; reloading requires 2 Move Phases. Most infantry-carried systems will have only one (1) reload, while vehicular systems may have as many as five (5) or more.

In order to avoid making game record-keeping a burden, it is strongly recommended that the player commit to one mode of fire (standard or burst), and maintain that for the entire game.

4.1. CLARIFICATION - Not Yet Disabled - Suppressing Targets

Length of Unit Suppression
A Suppressed element may not move or shoot, and it performs Spot checks at a –3 penalty as per the Spotting Table notes. It remains suppressed during its next Move Phase and its next opportunity to fire within the Weapon Priority sequence. After that opportunity passes, the player may then remove the “Get Down!” marker and the element may operate normally - it may be issued a command, or, if it was under a persistent command, it may resume action in fulfillment of that command.

If the Large Force Optional Rules are Used (see end of Rule Update 1.1)
In the event that Infantry become Suppressed, they remain so for their next Move Phase. Once their Weapon Priority come up, each Infantry Unit (Squad or Half Squad if that is what remains), is allowed a Unit Rating check. If the unit succeeds, it is no longer suppressed and may fire; if it fails, it remains Suppressed though its Weapon Priority, after which time it will no longer be suppressed as normal.

4.1.2. CLARIFICATION - High-Explosive Ammunition Suppression
Grenades vs. Tanks
Although grenades classify as High Explosive weapons, Tanks of any type are immune to suppressions (i.e. the +2 HE modifier) from grenade attacks.

4.2 CLARIFICATION - Immobilizing Tracked Vehicles
Tracks and Tires Armor Value
Tracks and tires may 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 and vehicle is immobilized. Any Penetration which is less than the armor value of the tracks/tires will simply have no effect on the vehicle.

5.1. CLARIFICATION - Fire Rate
Multiple Fire Rates
Some weapons will have more than one Fire Rate listed on the rear of the Unit Card. This specifically pertains to Field Guns and Howitzers which may be used in direct fire or artillery modes, but it may apply to other weapons based on their status as is described on the rear of the Unit Card. Players should pay attention to the Fire Rate which corresponds to the use of the weapon system in direct or indirect fire modes.

5.3 REVISION - Prepared Units
Details about preparing defenses
Prepared units are specific to a defended position. No units are able to make themselves Prepared during game play, except as is already noted within the Box Battles Rule book for Infantry, which require 4 consecutive Turns stationary and inactive to prepare grenades for CQB. In all other cases for units to be considered Prepared, players of both sides must agree that units in the defended positions have had a number of hours prior to the game scenario to ready themselves for an upcoming armed conflict.
Most times setting up a Prepared status is applicable in an Attack/Defend scenario. 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. However, there are scenarios which mimic real-world locations, in which a permanent defensible position is already prepared; these should be matched to the real-world location and situation for these defenses as players ready their play scenarios.

Following are guidelines for the time to prepare various defenses and their effects.

**Camouflage Netting**
Preparation allowance: One (1) inch square per Platoon of Infantry, or per three (3) vehicular Platoons. A two (2) inch square per Supply or Engineering unit (Recovery units are not counted). Camouflage should be marked with a terrain model of possible, but a terrain marker will suffice.

Camouflage netting allows the defender to be considered Defilade when being spotted, and applies a -3 to Hit. The -3 to Hit does not apply to any ground unit which is within Short Range of a weapon, however. Camouflage netting is easily removed or may be retained by any enemy in the event the position is overrun.

**Sandbags**
Preparation allowance: 1 sandbag emplacement per mortar or artillery unit. 1 sandbag emplacement per two (2) Infantry Platoons. Sandbags should be marked with a terrain model.

Sandbags present a Defilade target. If Cover value is required, the rulebook shows the Cover values for both 1-sandbag and 2-sandbags deep. These defenses may be destroyed as any other structure, as described within this Rules Update 1.1 booklet.

**Foxholes/Hull-down Ditches**
Preparation allowance: 1 foxhole per Infantry squad. 1 hull-down ditch per three (3) vehicles, or 1 ditch for each vehicle if it has attached the same number of Infantry Squads. Foxholes should be marked with a terrain marker, ditches should be marked with a terrain model.

Foxholes, ditches and Hull-down ditches all present a Defilade target. If Cover value is required, the rulebook shows the Cover values for each. These defenses may be destroyed as any other structure, as described within this Rules Update 1.1 booklet.

**Trenches**
Preparation allowance: One (1) inch per Infantry squad or per three (3) vehicles. Five (5) inches per Engineering Unit with earthmoving or entrenching capabilities, plus another one (1) inch per unit added for any infantry squad, truck, or dump truck which works with that vehicle as well. Trenches are merely ¼” wide and and should be marked with any type of terrain model. They may however, be laid end-to-end or side-by-side, creating a variety of possible configurations.

Trenches may be crossed by Infantry, but they will consume 2x the movement for that Move Phase. Trenches may not be crossed by jeeps or trucks of any type. Wheeled armored vehicles with 3 or 4 axels are afforded a Bog check at a -4. Light tanks, make a Bog check at a -3, tracked APCs at a -2 and tanks at a -1. Success means the trench is crossed, failure means the vehicle is bogged and needs a recovery vehicle to move again. Combat Units which are bogged will not be able to use any weapons except for turreted machine guns.

Trenches which are ½” wide are crossable only by Infantry and tanks, with the tanks Bog check at a -2. Only if the trench is bridged or filled can it be passed by any vehicular units.
Barbed wire, Razor wire, Fencing
Preparation allowance: Two (2) inches of wire per Infantry Squad. One (1) inch of wire per armored vehicle Platoon. One (1) inch of fencing per Infantry Squad and Supply vehicle only if a Command Center is set up. Wire or fence line should be marked with a terrain model.

Infantry
Infantry may pass through Barbed wire and Razor wire defenses, however, must move at their listed Swim speeds; they are considered Defilade when doing so. They are at a -3 to Spot and Hit enemy units when passing through either of these, only firing Rifles or Small Arms. Fencing stops Infantry entirely for three (3) Move Phases, after which they may pass through the fencing freely at that location; in game play some type of marker is required for the location, or the fencing must be removed at that location.

Wheeled Vehicles
Barbed wire, Razor wire and Fencing may Bog wheeled vehicles. For Barbed and Razor wire, units must move at half-Cruise speed to pass through. For Fencing, units must move at greater than Cruise speed. Bog checks for these obstructions are made at a –3 penalty for 2-axle vehicles, -2 penalty for 3-axle vehicles and -1 penalty for 4-axle vehicles.

Tracked Vehicles
Barbed wire, Razor wire and Fencing may Bog tracked vehicles. For Barbed and Razor wire, light tanks and APCs make Bog checks at a -1 penalty, tanks at no penalty. For Fencing, units must move at greater than Cruise speed; light tanks and APCs make Bog checks at a –2 penalty, tanks at no penalty.

Oil Slicks
Preparation allowance: Two (2) inches of slick per Infantry Squad or Supply unit, or per one (1) Platoon of an armored unit. Oils slicks are ½” wide and should be marked with any type of playing aid. They may however, be laid end-to-end or side-by-side, creating a variety of possible configurations.

Oil slicks have no effect on units passing through unless the slicks are ignited. Ignition requires an assigned unit be adjacent to the slick, and that is make a Unit Rating check each Weapon Priority. A successful check ignites the slick. An ignited slick will stop all Infantry and Soft Units from passing through, and do a Penetration 2 damage to wheels of any armored vehicles passing through; units which become immobile will pass the slick and stop adjacent after. Ignited slicks have no effect on any armored tracked vehicles which pass through. Oil slicks cannot be extinguished, and will burn for 4 Turns. Engaging enemy units through burning oil slicks is imposes a -3 to Spot and to Hit die rolls. Night vision equipment of the 1970s era is completely nullified when looking through an ignited slick.

Minefields
Preparation allowance: One (1) inch of minefield per Infantry Squad or Supply unit, or one (1) Platoon of armored units. Two (2) inches of minefield per each combat Engineering unit, but eight (8) inches per Minelayer unit. Minefields are 1” thick and should be marked by any type of terrain marker.

Minefields may be setup as Low Density, which is 1 layer of mines in the dimensions described above, or High Density, which is 2 layers of mines in the dimensions described above. Minefield dimensions described above 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.

Enemy units which approach minefields are initially considered blind to the minefield and will be under a compulsory movement rule. If they do not Spot the minefield, when under a command to advance toward the enemy, units within 10” of the minefield will be required to take the straightest direction toward the enemy, which may mean to cross the minefield. Players will not be allowed to issue a Deploy or Advance command to stop short within 3” of the minefield, except under the condition that a victory objective lies in that position. Deploy and Advance commands must be placed within the minefield. A successful Spot die roll must be made; this is based on a Unit Rating check at a -3 penalty, number of Spots allowed normally. Combat Engineer units may spot minefields at a normal Unit Rating.
check. Failure maintains these compulsory movement rules are in force. Success means the player controlling advancing forces has freedom of unit movement and commands and may alert friendly units to the location of the minefield with the use of any Command Card. Those Units are Placed On Alert when Spotting the minefield.

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

Anti-personnel mines will apply a Penetration of 1-Hit to all units within 1” distance from the location of the unit which set it off. For example, an anti-personnel mine which explodes will apply 1-Hit to an Infantry Squad, and 1-Hit to any other Squad or Soft Unit which is within 1” distance.

Anti-armor mines will apply a Penetration of 8 to the bottom of the unit which sets it off; this will apply to the unit’s Bottom Armor as well as any tires or tracks. For example, a T-62A would be 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; it will also be tracked in position, having lost its track which has an armor of 4.

Any unit passing through a minefield has a chance of setting off mines, based on a die roll. This is dependent on the type of minefield. For Low Density fields, a die roll of 4 or less is required for the mines to explode; this is rolled for every inch of minefield that is passed. For High Density fields, a die roll of 7 or less is required for the mines to explode; this is rolled for every inch of minefield that is passed as well. Each mine area will detonate only one (1) time, after which it is considered cleared.

Any unit which is a moving ‘front’ - that is, the first 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 within ½” of each other to effectively execute this move tactic.

6.1.3. REVISION - Ground

Rough Ground and Bog Checks

As mentioned in the Box Battles rule book, Ground refers to the composition of the land which vehicles pass over. When vehicles pass over Rough Ground at LESS than Cruise each Move Phase, movement must be rounded downwards to the whole inch. Certain Rough Ground can have particularly severe effects, reducing each Unit’s Bog Check number. This section is useful for scenarios set in jungle lands, arctic settings or other more extreme environments. See the guide below for the types of Ground and their effects:

<table>
<thead>
<tr>
<th>Ground Type</th>
<th>Description</th>
<th>Bog Check Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rough Ground (Revised from per rule book)</td>
<td>Shallow Marshlands, Broken Ground and Rockies, Muds, Dense Crops, Dense Foliage</td>
<td>• None moving less than Cruise&lt;br&gt;• At Cruise -1 to Bog Check&lt;br&gt;• Faster than Cruise -2 to Bog Check</td>
</tr>
<tr>
<td>Extreme Ground (Expansion)</td>
<td>Deep Marshlands, Deep Muds</td>
<td>• Always required, at -1 Bog Check&lt;br&gt;• At Cruise -2 to Bog Check&lt;br&gt;• Faster than Cruise -3 to Bog Check&lt;br&gt;• Infantry disallowed ‘To Run speed.</td>
</tr>
</tbody>
</table>

Shallow Waters – Fording

Units may Ford shallow water which is only equal to or less than what is noted on the front side of the Unit Card. When Fording, the maximum speed a unit may move is its Cross-Country Cruise speed. Waters which are considered shallow must be noted by their exact depth.
6.1.3. EXPANSION - Effects of Environmental Conditions

**Severe Rains: Flood lands**
Flooding will increase the difficulty of most terrain. Normal Cross Country may be treated as the Rough Ground category above. Shallow Marshlands, Muds, and Dense Crops will all be treated as the Extreme Ground category above. Extreme Ground is made no more severe.

**Deep Snow**
Deep snow will increase the difficulty of all terrain. Normal Cross Country may be treated as the Rough Ground category above. Rough Ground is treated as the Extreme Ground category above. The Extreme Ground category receives an additional -2 applied to all Bog Checks that are already Illustrated.

**Iced Roads**
Iced roads limit all movement to less than Cruise speed per Move Phase, rounded down to the nearest inch. Infantry are limited to ½ of ‘To Fight’ speed. For vehicles, if Cruise speed is reached, a Bog Check is required with a -3 applied; failure indicates the vehicle is Bogged; if the vehicle fails its second Bog Check to free itself – a mandatory die roll – the vehicle is considered Disabled.

**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 to no moonlight is available. Spotting and Firing during night scenarios is modified based each.

- **Low Light** conditions imposes a -4 modifier to all Spot Checks.
- **Pitch Dark** conditions imposes a -8 modifier to all Spot Checks.

This modifier is in addition to any notes listed on the target unit’s Unit Card.

**Night Vision**
Night Vision (NV) equipment is initially comprised of light intensification, infra-red and later advances into thermal imaging. It reaches its 2nd generation of development in the 1970s (*now called Gen 1, actually*). 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.

<table>
<thead>
<tr>
<th>Night Vision Equipment</th>
<th>NATO Equipment</th>
<th>WARPAC Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen 0 (c. 1940s+)</td>
<td>+1 offset to modifiers (before and after NATO or WARPAC form)</td>
<td></td>
</tr>
<tr>
<td>Gen 1 (c. 1965+)</td>
<td>+2 offset to modifiers</td>
<td>+3 offset to modifiers</td>
</tr>
<tr>
<td>Gen 2 (c. 1978+ NATO, 1981+ WARPAC)</td>
<td>+4 offset to modifiers</td>
<td>+4 offset to modifiers</td>
</tr>
<tr>
<td>Gen 3 (c. 1985+ NATO, 1988+ WARPAC, Includes thermal imaging equipment)</td>
<td>+6 offset to modifiers Smoke/barrage smoke does not hamper Spotting and To Hit</td>
<td>+6 offset to modifiers Smoke/barrage smoke does not hamper Spotting and To Hit</td>
</tr>
</tbody>
</table>

NATO equipment is generally equivalent across nations with some exceptions. During the 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 however in wide use for most Soviet Infantry in the 1970s, more prevalently 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.

**Illumination Flares**
Illumination flares – 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. When they arrive,
they will hover over the location at an altitude. Each star shell will light an area around it to the level of normal daylight, removing any modifiers from night conditions.

Mortars and artillery up to 100mm in size will illuminate everything within a 2” radius, and those over 100mm will illuminate everything within a 3” radius. Typically using more than one unit to illuminate is recommended. The duration of illumination is for the remainder of the Weapon Priority sequence and for the next two (2) in entirety.

8.2. CLARIFICATION - Effects of Mortar Barrages

Mortar and Artillery Maximum Number of Hits per Phase

As the number of successful Hits to an enemy are scored from the barrage within a Weapon Priority, the total can never exceed a maximum number of shells based on the weapon’s Fire Rate. On the rear of each Unit Card this reads as "maximum X Hits per unit per phase". In the event that this is not listed on the Unit Card, refer to the weapon’s Fire Rate below, and use the Maximum Hits listed to the right of each:

- Fire Rate 4 = 1 Hit
- Fire Rate 6-8 = 2 Hits
- Fire Rate 10-12 = 3 Hits
- Fire Rate 14-16 = 4 Hits
- Fire Rate 18-20 = 5 Hits
- Fire Rate 22-24 = 6 Hits
- Fire Rate 26-28 = 7 Hits
- Fire Rate 30-34 = 8 Hits

Note that these maximums are per unit within the element. For example, if the element is a Section comprised of 2 units with a Fire Rate of 12, the maximums of the 2 units are added together, for the maximum total of 3+3, 6 Hits within that Weapon Priority sequence.

8.2.2. REVISION (OPTION) - Overlapping Barrages

Mortar and Artillery Barrage Groupings

To summarize, in the event that the advantages of Full Batteries are used at the play table – meaning that Batteries include Headquarters Units (Rule 8.5), it may be advantageous to drop barrages as individual units when forming a barrage line, or exercising the Headquarters Unit’s ability to Correct fire based on the position of one barrage.

However, in order to expedite game play, mortar and artillery barrages could be targeted and deviated as sections or Platoons, rather than individual units from their initial deployment. In other words, one target marker may be used for all the barrages within the element. In these cases, no Headquarters Unit is required; the Headquarters Unit allows only for an optional line formation of the barrage, as well as improved flexibility for Corrected fire.

If this option is exercised, the barrages of an element drops as a single barrage only when a unit is somehow detached from the others, according to the Terrain (Rule 6.1.1).

8.2.3 CLARIFICATION - First Round Fire vs. Corrected Fire

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.

9.3.2 CLARIFICATION - Confined Infantry

Confined Infantry vs. Unconfined Infantry

Confined Infantry is when the equivalent of 1 squad is on the same elevation of a vehicle, enclosure or localized space which is less than 1” long by 1” wide (1 square inch). Infantry are considered Unconfined when the ratio of
Infantry is less than 1 squad on the same elevation per an enclosure of 1” x 1”. To attack these Infantry, they must first be Spotted as normal, with all normally applied 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 (Small Target, Defilade, and then Hunkered Down if applicable). Once the die is cast, a hit is a hit, a miss is a miss. It is possible to fire at Infantry through cover, at a -4 to Hit. (see Firing Through Obstructions – Rule Update 1.1).

9.3.5. CORRECTION - Infantry in Combat

Infantry Spotting Ability
Unlike vehicular units, Infantry are afforded one Spot check per squad (lots of eyes open 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 – Rule Update 1.1).

9.3.5. CLARIFICATION - Infantry in Combat

Suppressed Infantry are considered Defilade
When infantry become Suppressed due to incoming Hits, they are considered Defilade if they were not already. In this case, when Infantry caught in the open away from any terrain which would offer them the Defilade benefit become Suppressed, they are automatically Defilade. If any Infantry are already benefiting from Defilade, no new benefit is afforded them.

9.3.5. REVISION - Infantry in Combat

Hits to Infantry in the Open
The Box Battles rulebook states, “....Infantry are Soft Units, so when they take a Penetration hit of 1 or more, 1 Hit is scored directly to them; this is done regardless of the Pen of the attacking weapon.”

Cannon, Mortar and Artillery shells will inflict variable damages to Infantry in the open based on ammunition type and shell size. See the tables below.

### Cannon Size and Hits Against Infantry

<table>
<thead>
<tr>
<th>Cannon Shell Size</th>
<th>AP Ammo Hits Inflicted</th>
<th>HEAT Ammo Hits Inflicted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 82mm</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>85mm to 115mm</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>120mm to 135mm</td>
<td>2 + 1 Hit to any squad within ¼”</td>
<td></td>
</tr>
<tr>
<td>140mm to 155mm</td>
<td>2 + 1 Hit to any squad within ½”</td>
<td></td>
</tr>
<tr>
<td>Greater than 155mm</td>
<td>2 + 1 Hit to any squad within ¾”</td>
<td></td>
</tr>
</tbody>
</table>

Example: A WARPAC Infantry Squad is hit by a direct-fire 120mm cannon, HE ammunition. The WARPAC Squad suffers 2 Hits, disabling the entire Squad. In addition, if there is a nearby Squad within ¼” distance, that Squad will suffer 1 Hit, making it a Half Strength Squad.

### Mortars and Artillery Size and Hits Against Infantry (Assumes HE Ammunition)

<table>
<thead>
<tr>
<th>Shell Size</th>
<th>Mortars - Hits Inflicted</th>
<th>Artillery – Hits Inflicted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 82mm</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>85mm to 115mm</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>120mm to 135mm</td>
<td>2 + 1 Hit to any squad within ¼”</td>
<td></td>
</tr>
<tr>
<td>140mm to 155mm</td>
<td>3* + 1 Hit to any squad within ½”</td>
<td></td>
</tr>
<tr>
<td>Greater than 155mm</td>
<td>3* + 1 Hit to any squad within ¾”</td>
<td></td>
</tr>
</tbody>
</table>

*Some Infantry are 3-Hit Squads, and so will be completely disabled by these particular ordinances. If an Infantry Squad is hit and there are no other Infantry nearby, any excessive hits inflicted are simply dissipated.
Examples: A NATO Infantry Squad is hit by a 122mm Artillery barrage, which is of course HE ammunition. When the successful Hit occurs, the NATO Squad suffers 2 Hits, with +1 applied to any infantry within ¼”, the balance of the Squad, disabling the entire Squad. If the Squad were WARPAC Infantry struck by a 130mm Artillery, the Squad would suffer 2 Hits which would completely disable it, and the 3rd Hit would simply be lost. However, if there is a second WARPAC Infantry Squad within ¼” of the one which was Disabled, that Squad would take 1 Hit as well, making it a Half Strength Squad.

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.”

What is described above is to determine if the Infantry will qualify for the CQB against the Armored unit. When Infantry CQB against Armored Units they do so by rolling dice against their Unit Rating, same as other CQB attacks. Each roll equal to the rating or less indicates 1 Hit against the armored unit; if the Infantry has Prepared grenades, one of it’s die rolls will apply 2 Hits. The Squad rolls the number of dice equal to its size (2-Hit Squad, 3-Hit Squad). 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.

9.0. EXPANSION – Infantry Capabilities

Infantry, Sniper Teams

Infantry Sniper Teams are an excellent addition to small scenarios or those which focus on Infantry tactics.

Infantry often contain a Sniper Team within their Platoon, as is described on the Unit Card. A Sniper Team is a specialist which will only attack other Infantry units, or crews from crew-served mortars, artillery or field guns.

If the player’s Unit Card allows for it and the player exercises the Sniper Team option, the Infantry is reduced in firepower as described on that Unit Card. The Unit Card will also note the weapon that the Sniper Team uses. The player must mark this particular Infantry unit on the play surface, as well as designate the position of the Sniper Team as it moves and positions itself on the play surface. The Sniper Team moves and fights just like any other Infantry in open combat, and it is considered a 1-Hit Fire Team.

The Sniper Team is in most respects treated like other Infantry with only a few differences, noted here:

• When the Sniper Team makes a successful Hit on other Infantry, if the attacked Infantry are not yet engaged in combat, the successful Hit will suppress the entire Platoon/Section for that first successful Hit only. Once target Infantry are already engaged in combat, this Platoon-level Suppression no longer applies.

• If the Sniper Team is attacking while it is stationary, it is allowed a +3 to Hit while firing.
• Stationary Sniper Teams are treated as being *Defilade*, and *Hunkered Down* even when they are firing, for the purposes of being Spotted. However, if an enemy Sniper Team or Forward Observer is attempting to Spot them, the latter Hunker Down modifier does not apply.

10.1. CORRECTION - Bailout Checks

**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 - Unit Ratings and Superior Advantage

**First Weapon Priority**

Higher Unit Ratings do not only present the advantage of making various checks, but they also represent certain advantages when performing specific functions.

For 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; first Weapon Priority may be applied if there is a difference of 2 in Unit Ratings.

Note that this does not currently apply to CQB engagements.

In most cases, 2nd line units are of a Unit Rating 5, except when performing their specialist functions, in which cases they may be a Unit Rating 6 or even 7: *an example is Combat Engineering units*. However, in certain military branches, *for example the US Marines*, units are considered combat units first, so many 2nd line units will maintain a Unit Rating of 6 or 7 when engaged in front line combat. Players may use their discretion to come to mutual agreement based on each scenario.

11.0. REVISION – Commands

**Moving Double-Time**

When an element is already under a command which is persistent from a previous Turn, that element is entitled to move at ‘double-time’. This means the element’s movement per phase is doubled - the element is taking the entire time to move expeditiously and minimizing time to assess surroundings. Units are obligated to move at their full movement rates in order to exercise this option. Elements which do exercise moving at double-time suffer a -3 penalty to Spot other elements while moving in this fashion.

11.0. EXPANSION – Command Cards

**The Differences between WARPAC and NATO Use of Command Cards**

The Warsaw Pact and NATO forces hold two very 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, 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 if such detail 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 Regimental command vehicle adds 1 Regimental Command Card; WARPAC and NATO will each add 2 Regimental 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 in the deck.

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

Certain Specialized units (for example, Signals units), may add commands or subtract commands from the enemy; these will be specified in Rules Updates.

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 a several WARPAC or NATO mortar or artillery Platoons are used with a Headquarters vehicle, they form a Full Battery. When WARPAC units are operating as a Full Battery, the Headquarters Company Command card is used 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 used within the Draw deck, and one (1) Platoon Command card is used within the deck, the remaining ones are excluded from the deck.

Full Batteries - Use of Command Cards
This pertains to mortar and artillery indirect fire. Full Batteries 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, not other Command Cards are needed. Once fire is checked, in order to start again, another Command set is required as described below.

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.
However, in order for WARPAC to call indirect fire from any artillery Full Battery, another card of the same command level must be expended. So for example, to call in a Full Battery of Regimental-level 100mm Field Gun Artillery, or SAU-122 122mm self propelled Artillery, WARPAC must expend one Battalion-level Command card as well as one Regimental-level Command card.

Commands Across Military Branches
When forces operate with more than allied one military branch within the scenario (examples, US Army and US Marines, US Army and German Special Forces, Czech Army and Soviet Army, etc). It must be declared which force has the Supreme Commander of that side.

When NATO issues commands for a force other than that of the Supreme Commander, two of the same Command Cards are required in order to issue the command.

When WARPAC issues commands for a force other than that of the Supreme Commander, only the one Command Card is required in order to issue the command, just as is normally used at the play table.

13.0. EXPANSION - Specialized Units

Reconnaissance Units
Recon units may enter the battlefield freely, without the use of a Command Card. They do not require a Command Card to move during any scenario, but may be issued one if they are to be used as any other combat unit.

Recon units will work in Platoons as they are deployed. They will move about the battlefield, and attempt to use the landscape as cover in order to Spot enemy units. Unlike other units, Recon units are allowed 1 die roll per unit; for example, a Platoon of three (3) PT-76 Light Tanks on a Recon mission will be allowed 3 die rolls to Spot an enemy. Any side may designate Recon units as they see fit during play, by declaring this to the opponent player; they must however, expend a command card if they are detaching that element from a larger element.

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 by other units. Recon units do not require a command card to alert friendly units.

Recon units will never engage an enemy first, and may only return fire, looking to retreat from enemy engagements. In the event that a player desires the Recon element to engage the enemy first, an appropriate level Command Card must be expended to give the order to fire weapons at first opportunity; the Recon unit is used as any other combat unit for that engagement.

A Recon element may be made into a Recon-In-Force element. A Recon-In-Force element is an element which has additional combat units attached to the Recon element, and may be nearly any size. However, this unit is considered to be under a compulsory Move to Contact command unless otherwise issued a new command. It otherwise retains the Spotting benefits of any Recon unit.

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. 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
Medical Units may be used to recover Infantry as described in the Box Battles Rule, rule 13.2. Players may use any medical units which may be on the battlefield. If a Battalion Aid Station is set up (Battalion level, large tent), then units may recover Infantry and transport them to the location. Jeeps recover a 1-Hit Fire Team, Trucks and Armored transports recover 1 Squad or more based on their capacity. Once they reach the Battalion Aid station, the same Unit
Rating check and time interval is required; however, a successful check means the full unit is restored to play. This accounts for wounded and second line reserves assembling and filling the ranks.

**Recovery Units**
Recovery Units may be used to recover vehicles as described in the Box Battles Rule, rule 13.2. The condition that must be met is that generally, each type of vehicle requires use of a Recovery Vehicle based on the same chassis be used. Trucks, require tow trucks, APCs and Tanks each require ARVs that are specific variants based on their own chassis. Of course, any ARV may recover a vehicle that is lighter than it is rated for.

**Bridging Units**
Bridging units may enter the battlefield freely, without the use of a Command Card. They do not require a Command Card to move during any scenario. 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. These units can vary in capability, but listed here are general rules for the use of bridging units on the game table.

Generally, truck-mounted bridges are mounted on the largest of trucks for both WARPAC and NATO, and have the same movement rates as listed on the equivalent combat unit cards. Truck-mounted bridges are rated to transport approximately 15 tons, so only vehicles up to that weight may utilize the bridge for mobilization. Truck-mounted bridges require 2 Move Phases to deploy or lift once the truck is positioned at the edge of the land obstacle.

Generally, AVLBs are mounted on the comparable tank chassis for both WARPAC and NATO; both sides tend to use older-generation tanks which were repurposed. AVLBs are slow; they use same movement rates as listed on the equivalent combat unit cards, but may move only up to the Cruise speed. WARPAC AVLBs are rated to transport approximately 50 tons, while NATO AVLBs are rated to approximately 70 tons – again, so vehicles under the corresponding weight may utilize the bridge for mobilization. Deployment time varies; 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 quite vulnerable and are considered Soft Units. AVLBs are more vulnerable than their tank counterparts, but retain some armor protection. For play purposes, 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.

**Combat Engineering Units**
Combat Engineering units may enter the battlefield freely, without the use of a Command Card. They do not require a Command Card to move during any scenario. 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. Below are several functions which may be performed by specific units during game play. 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 winches. In most cases, so long as the vehicle may mount the equipment specified under each section, the unit may perform the function.

**Clearing Wire or Fencing**
Razor and Barbed Wire and Fencing defenses may be cleared by vehicles which have either towing or earthmoving capability. Other vehicular units may be used as well, but they will clear wire and fencing at a slower pace. Towing and earthmoving units must have enough movement to move into the area of the wire/fencing and either passed that area or back out of it. Once this movement is done, a 1” section is cleared. Other units – 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 a 1” section.
Breaching Walls
Breaching walls may be done by Engineering units which have a main cannon meant for breaching; this can be done by following the rules for destroying structures, using HE ammunition (see Rules Update 1.1 earlier in the document). Other Engineering units can breach walls with the use of demolitions. Demolitions can be set by Infantry, jeep or truck crews. The strength of demolition and time to set varies based on the following table:

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Level 1 charge</th>
<th>Level 2 charge</th>
<th>Level 3 charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire-team sized (half squad, jeep or truck crew only)</td>
<td>2 Move Phases</td>
<td>4 Move Phases</td>
<td>6 Move Phases</td>
</tr>
<tr>
<td>Squad sized (infantry squad, or transported squad)</td>
<td>1 Move Phase</td>
<td>2 Move Phases</td>
<td>3 Move Phases</td>
</tr>
</tbody>
</table>

Leg Mobile Engineering Infantry Squads and Engineering Jeep units each have 3 charge levels with them. Medium sized Engineering truck units each have 10 charge levels with them. Each charge level will be added to get to the desired charge level (example, a Level 3 charge uses all 3 charge levels from an entire Infantry Squad).

A Level 1 demolition charge will apply a HE Pen 40 to a target. A Level 2 charge will apply a HE Pen 70 to a target, and a Level 3 charge will apply a HE Pen 90 to a target. The unit must move adjacent to the target, and stay for the time displayed above. After that, they make a Unit Rating check, with a +1 Bonus (total = 7). Success means that a 1” section of wall has been cleared, failure means it is not; on a die roll of ‘10’ (or ‘0’), the demolitions detonates, the Unit makes another Unit Rating check, and if it fails, the unit is fully disabled by the event.

A wall successfully breached (2) times clears a 1” inch length of wall, enough for a column of vehicles to pass through.

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 or similar hardware. Any vehicular unit with earthmoving capability may fill ½” of a ditch/trench per Move Phase, so long as the vehicle can move to and from the area of the ditch/trench clearly within the Move Phase.

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

• EOD units will move adjacent to the minefield, and remain for 2 Move Phases. After that, they make a Unit Rating check, with a +2 Bonus (total = 8). Success means that a 1” square section of mines has been cleared, failure means they are not; on a die roll of ‘10’ (or ‘0’), the Unit must make another Unit Rating check – if it fails, the minefield detonates and the unit is fully disabled by the event.

• Mine clearing device units 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 with a +1 Bonus (total = 7). Success means a 1” square of mines has been safely detonated (and therefore cleared); a failure indicates the Unit passes through without detonating the mines, and a die roll of ‘10’ (or ‘0’) means the mines detonate and take their normal effect on the Unit.

• Demolitions units must move adjacent to the minefield and take 2 Move Phases to prepare. Once they do, they make a Unit Rating check with a +1 Bonus (total = 7). Success means that a 1” square section of mines has been cleared, failure means they are not; on a die roll of ‘10’ (or ‘0’), the Unit must make another Unit Rating check – if it fails, the minefield detonates and the unit is fully disabled by the event.
14.0. CLARIFICATION

**Firing Over Obstructions**

Generally, a unit may fire over a similar unit assuming it is within \(\frac{1}{4}\)" of that unit (an example might be an M113 APV firing over another active or disabled M113 APC). When doing so, it receives the benefit of being Defilade when enemy units are returning fire. However, if a unit is further than \(\frac{1}{4}\)" of a similar unit, then the unit which was to be used for this Defilade cover is now considered an Obstruction, and must be treated that way. In many cases, fire in both directions with an Obstruction in between would mean that both targets are Defilade to each other.

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 – with the same limitations described above. 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 \(\frac{1}{4}\)" behind a M60A1 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 M60 tank, they could not fire over the wall. Either unit 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 \(\frac{1}{4}\)’ 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), but if the player rolls a ‘10’ (or a ‘0’), the friendly cover unit will be struck by the unit’s weapons fire.

Firing over friendly units can be risky business.

14.0. EXPANSION - Buildings and Cover Value

**Obstructions and Terrain as Cover**

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 \(\frac{1}{4}\)” of the obstruction.”

14.0. EXPANSION

**Firing Through Cover and Obstructions**

It is possible that at times units may fire through the Cover afforded an enemy unit. This can only be done by AP ammunition. As per the rule book, units taking cover behind such obstructions must be within \(\frac{1}{4}\)” of it. In these cases, the Armor or Cover values of any solids the ammunition must pass through are added together – For example, firing through an M113 APC from front to rear would mean adding the Front armor of 4 to the Rear armor of 2, totaling 6. By the same logic, to fire through a stone building would mean adding the first wall Cover of 4 to the second wall Cover of 4, totaling 8.

But it is also possible to fire through an obstruction to a target which is some distance behind it. If the firing unit has Spotted the target this is possible, for example, a side shot by a tank against a row of enemy APCs, or an enemy tank partially behind a building. The condition assumes that the firing unit can draw a straight line from its position through the obstruction and to target. If this is the case, any advantage from Defilade may be removed from applied
modifiers, but a new final modifier of -4 to Hit is applied.

To use this at the play table, use the following procedure:

1. Calculate normal chances to Hit, ignoring any Defilade modifier. Apply a -4 to Hit. If the Hit is successful,
2. Total the sides of the Armor or Cover value which is being fired through.
3. Subtract the Armor or Cover totals from the Pen of the ammunition; note the remainder.
4. Divide the remainder by 3 (round to nearest); the divided number is the effective Pen.
5. If the target is struck, the effective Pen is applied to the next target.

Example and Illustration:

In the illustration above, a stationary M60A3 has the opportunity to fire at a BMP-1 which has ducked completely behind the cover of a stone building. With AP ammunition, there is the possibility of the ammunition passing through the building and striking the second. This is confirmed by drawing a straight line from the tank to the targeted vehicles; the line can connect to the target, through the obstruction. Assuming the tank is at a Medium range, the Pen is 30. Chances to Hit the BMP are 7-1 for low profile=6; if the BMP-1 were Defilade, this would become 3, however, since it is behind the building the 6 is applied a -4, becoming 2. Assuming the tank is successful, the two sides of the stone building total 8, and (30-8=22); 22 is then divided by 3, the result is Pen 7. So, the player has struck the BMP-1, which is at risk of a Pen 7 against its Side Armor of 3, requiring a die roll of 4 or less to disable it.

In the event that the target remains completely out of line of sight, the shooter will not get a second opportunity to fire on the target again, as the shooter will have lost track of the target’s location.

Note that if the obstruction were also a target unit, so long as the shooter could see both, it may choose which unit it is targeting. Sometimes it is possible to strike two units with one shot in this manner. It is also possible that if the first target visible is fired upon, the AP ammunition may strike the target directly behind.

In the example if the building were another BMP-1, and the tank succeeds with the to Hit roll to that one successfully, it will unquestionably disable the first BMP-1 with a Side Armor of 3 (total 6 for 2 sides). We then check to see how that AP shot passes through the first BMP-1 and to the second. But to the number that was determined to Hit the first BMP-1, a -4 is then applied to Hit the second.

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

Destroying Buildings and Structures

Buildings and structures may be destroyed only by the use of HE ammunition. Target structures are destroyed if the the Pen of any shot first exceeds the structure’s Cover value, and if so the total amount of Pen applied to the structure is equal to ten (10) times its Cover Value. The structure will collapse into rubble once this total is achieved. If Infantry are within the structure, they will be entitled to make Bailout checks, but with a -3 penalty applied.

It is possible to bombard a structure with multiple shells in consecutive fire opportunities until a cumulative total is Pen is achieved. Foxholes, hull-ditches, buildings, bunkers, and even vehicular debris are destroyable in this manner. In all cases, the weapon used must first be able to penetrate the structure’s Cover value. 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 6mm miniatures war games with large scenarios, using table of 6 or 8 feet in length, even much longer. But running games this large using the Battlefield Ops! rules set can be a bit cumbersome. 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 set of battle results very similar to playing smaller force games.

Recommended Existing Rules to Employ or Omit

<table>
<thead>
<tr>
<th>Recommended Optional Rule Use</th>
<th>Recommended Standard Rule Omissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3 Mass Targets</td>
<td>3.1.3 Muzzle Blast Danger</td>
</tr>
<tr>
<td>8.2.2. Revision 1.1 – Barrage Groupings</td>
<td>7.4 Spot checks and Friendly Fire</td>
</tr>
<tr>
<td>8.5 Mortar and Artillery Full Batteries (only)</td>
<td>9.0. Revision 1.1 – Infantry Sniper Teams</td>
</tr>
<tr>
<td>11.0. Revision 1.1 – Moving Double-Time</td>
<td>9.2 Exposed Crew Conditions</td>
</tr>
</tbody>
</table>

In addition, below are a series of alterations to game play which may be implemented for play convenience.

Command Card Levels

In large battles, the draw deck can become quite large, and in addition, many Platoon cards generally means small forces will be engaging in relation to the game size. This can make for a slow-moving game. As an alternate method: Remove any Platoon Command cards which are part of an entire Company, using only Company Commands and above for these elements. Leave Platoon Command cards in as they pertain to any mortar, artillery or other attached elements which are not part of the regular organization of a Company. Use the appropriate amount of Fog of War cards for the draw deck, one for every 20 cards.

Command Card Draw

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. It is helpful to take an alternate approach to pull cards from the draw deck: 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 to issue alternatively. The side that holds more cards will decide if he wishes to issue commands first, or wait for his opponent to do so.

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 alternate:
Before Weapon Priority 1, Infantry will have the first opportunity to fire. Stationary Infantry fire first and apply all Hits, then Moving Infantry fire next and apply all Hits. After these two steps, Weapon Priority sequence is followed normally, however no Infantry shall be counted again; in other words, all Infantry will have one (1) opportunity to fire, before all vehicular units. As a result, a new Weapon Priority table is provided at the end of this PDF.

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 Alternate:

We recommend Spot 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.

Reducing the Number of Modifiers to Spot and to Hit
The Box Battles basic game rules provide detailed combat, but in larger games adding and subtracting modifiers for each opportunity to Spot and Hit can begin to take up a lot of time, and sometimes fatigue players. As an alternate:
Players should mutually agree on which modifiers for Spot and Hit may be omitted, universally for both sides. We recommend omitting the following modifiers:

To Spot:  
- Spotter is Moving Faster than a Cruise -3, Facing Another direction -3, is Suppressed -3:
  - *** Suppressed units will NOT be allowed Spot rolls.
- Target is Moving +2, Behind Light Terrain -2 per inch, is Two Platoons or more in Line of Sight +1

To Hit:  
- Shooter has established a Base of Fire +2
- Target is Front Facing -1, is a Large Target +2 (all treated as Mass Target +3)

Players may feel free to mutually agree to ignore more or less than what is recommended, so long as it is universally applied to the game.

Optional Strategic Limit - Direct Fire Weapons

Horizon Line
Main cannons and anti-tank guided missiles can reach long distances at the game table. Despite the distances noted on the Unit Cards, there is a limitation direct fire weapons face, which is the horizon line imposed by mother nature’s curvature of the Earth.

In the strictest of terms, most units which are sitting on level ground at about a man’s height will be limited to a line of sight of 96 inches, regardless of how far a weapon system may be able to fire. Note that this typically includes most Soviet tank guns and ATGMs due to their low profile configuration. Units which sit closer to 3 meters from the ground will have a line of sight limitation of 120 inches; many western tank cannons and ATGM platforms fire from near this height. However, players should be keen to learn about their units and pay attention to their weapon heights if this rule is exercised.

In either case, these limits are easily remedied by elevating one’s position. At a 1” vertical elevation, the line of sight limitation is approximately 380 inches, and at a 2” vertical elevation as far as 710 inches. In the end, in practical terms, most units which sit on small hills or atop buildings will be able to see beyond the play table. However, this rule is useful to catch units tactically off-guard and out of position in certain engagements, or in situations which may be at longer distances and at ground-level.
Large Force Game Tables

<table>
<thead>
<tr>
<th>Target’s Movement that Phase</th>
<th>To Hit Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 4</td>
<td>No Modifier</td>
</tr>
<tr>
<td>5 to 8</td>
<td>-1 to Hit</td>
</tr>
<tr>
<td>9 to 13</td>
<td>-2 to Hit</td>
</tr>
<tr>
<td>14 to 19</td>
<td>-3 to Hit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ground Type</th>
<th>Description</th>
<th>Bog Check Effects</th>
</tr>
</thead>
</table>
| Rough Ground (Revised from per rule book) | Shallow Marshlands, Broken Ground and Rockies, Muds, Dense Crops, Dense Foliage | • None moving less than Cruise  
• At Cruise -1 to Bog Check  
• Faster than Cruise -2 to Bog Check |

| Extreme Ground (Expansion) | Deep Marshlands, Deep Muds | • Always required, at -1 Bog Check  
• At Cruise -2 to Bog Check  
• Faster than Cruise -3 to Bog Check  
• Infantry disallowed ‘To Run speed. |

<table>
<thead>
<tr>
<th>Cannon Size and Hits Against Infantry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannon Shell Size</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Up to 82mm</td>
</tr>
<tr>
<td>85mm to 115mm</td>
</tr>
<tr>
<td>120mm to 135mm</td>
</tr>
<tr>
<td>140mm to 155mm</td>
</tr>
<tr>
<td>Greater than 155mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mortars and Artillery Size and Hits Against Infantry (Assumes HE Ammunition)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell Size</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Up to 82mm</td>
</tr>
<tr>
<td>85mm to 115mm</td>
</tr>
<tr>
<td>120mm to 135mm</td>
</tr>
<tr>
<td>140mm to 155mm</td>
</tr>
<tr>
<td>Greater than 155mm</td>
</tr>
</tbody>
</table>

*Spare Hits are simply dissipated*
# Large Force Alternate Game Tables

<table>
<thead>
<tr>
<th>Spotting Table</th>
<th>Die Roll Required to Spot in each Range Category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Silhouette</strong></td>
<td><strong>10 or less</strong></td>
</tr>
<tr>
<td>Tank</td>
<td>To 20”</td>
</tr>
<tr>
<td>APC, IFV</td>
<td>To 16”</td>
</tr>
<tr>
<td>Truck, Field Gun</td>
<td>To 12”</td>
</tr>
<tr>
<td>Jeep, Infantry, Mortar</td>
<td>To 4”</td>
</tr>
</tbody>
</table>

If Spotter is:

- **Forward Observers:** first half the range; add a +1 to Spot if range category is not changed.
- **Placed On Alert:** +2
- **Deployed-In-Position:** +3
- **Suppressed Units may NOT Spot**

If Target is:

- **Firing:** +3
- **Behind Dense Terrain:** -3 per inch thickness
- **Behind Cover/Camouflage:** Half the result after Spot modifiers
- **Forward Facing modifiers are ignored.**

## Weapon Priority

<table>
<thead>
<tr>
<th>Pre-Priority 1&lt;sup&gt;st&lt;/sup&gt;</th>
<th>Pre-Priority 2&lt;sup&gt;nd&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary Infantry</td>
<td>Stationary Machine Guns (1&lt;sup&gt;st&lt;/sup&gt; shot)</td>
</tr>
<tr>
<td>Moving Infantry</td>
<td>Mortars and Artillery, <strong>Fire Rate 14+</strong>, shells in the air</td>
</tr>
</tbody>
</table>

1. **Cannons, Fire Rate 12 and 10 (1<sup>st</sup> shot)**

2. **Mortars and Artillery, Fire Rate 2-12, shells in the air**
- **Vehicular Anti-Tank Guided Missiles** (only shot)
- **Cannons, Fire Rate 8 and 6 (1<sup>st</sup> shot)**

3. **Mortars and Artillery, Fire Rate 14+, shell barrages land**
- **Moving Machine Guns (2<sup>nd</sup> shot)**
- **Cannons, Fire Rate 12 and 10 (2<sup>nd</sup> shot)**

4. **Mortars and Artillery, Fire Rate 2-12, shell barrages land**
- **Cannons, Fire Rate 8 and 6 (2<sup>nd</sup> shot)**
- **Cannons, Fire Rate 4 (only shot)**

## To Hit – Direct Fire

<table>
<thead>
<tr>
<th>Weapon</th>
<th>P-Blank</th>
<th>Short</th>
<th>Medium</th>
<th>Long</th>
<th>V-Long</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GUNs:</strong></td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>ROCKETS:</strong></td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>ATGMs:</strong></td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

If Shooter is:  
- **Deployed-In-Position:** +1  
- **Firing through Light Terrain:** -1 per 1”/-2 for Rocket, ATGM  
- **Dense Terrain:** -2 per 1”/-4 for Rocket, ATGM  
- **Firing through Smoke/Barrages/Camouflage:** -3  

If Target is:  
- **A Small target (as per Unit Card)**  
- **A Mass/ Massive target (3 platoons, building)** +3  
- **Unit Card Attack / Defense Notes apply too!**  

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