



Hex Command Mechanized r3.2 (d6 version)



Rules for War Gaming the Technology Battlefield

©2008 Terry Cabak and R. Jeffrey Cabak

Version 4/14/2011 6:45 PM

CONTENTS

1. INTRODUCTION	3	8.3 MELEE INFANTRY VS. VEHICLES, FIRING AT RIDING INFANTRY AND EXPLODING VEHICLES	14
2. CONCEPTS OVERVIEW	4	9. MOVEMENT	15
3. CLASSES AND WEIGHTS	5	9.1 CHANGE FACING.....	15
3.1 CLASSES	5	9.2 CARGO POINTS, LIMBERING/UNLIMBERING.....	15
3.2 VEHICLE CLASSES	5	9.2.1 Towing, Limber/Unlimber.....	15
3.2.1 Mixed Weight/Weapon Classes	5	9.3 REVERSE SPEED	15
3.2.2 Aircraft.....	5	9.4 RAIN AND MUD	15
3.2.3 Self-propelled Guns.....	5	9.5 FORESTS	15
3.3 OTHER TROOPS.....	6	9.5.1 Towed or pushed guns in forests.....	16
3.4 INFANTRY	6	9.6 PASS THROUGH.....	16
4. COMBAT OVERVIEW	6	9.7 FORGETTING COMMANDER PLACEMENT	16
4.1 TURN SEQUENCE, OPPORTUNITY FIRE, AND "PULSE" MOVEMENT.....	6	10. VEHICLE, WEAPONS AND AIRCRAFT CATEGORIES	16
4.2 RATE OF FIRE	6	11. REMINDER LIST	17
4.3 COMBAT RANGE "BANDS"	6	12. OTHER AND OPTIONAL RULES	18
4.4 ARC OF FIRE, HEX FACINGS AND REACTION ROLL.....	7	12.1 SUSTAINED FIRE BONUS	18
4.5 COVER.....	7	12.2 FORTIFICATIONS AND FIELD WORKS	18
4.6 INFANTRY VS. VEHICLES AND APC.....	7	12.3 MINEFIELDS	18
4.7 USING TURRETS	7	12.4 AIRCRAFT AND ANTI-AIRCRAFT	18
4.8 VEHICLE MACHINE GUNS AND MULTI-BARREL GUNS	7	12.4.1 Ground Attack Aircraft	18
4.9 DIRECT CANNON FIRE.....	8	12.4.2 Combat: Aircraft vs. Ground Targets.....	18
4.9.1 Direct Fire Procedure	8	12.4.3 Anti-Aircraft	19
4.10 APPLYING DAMAGE INDICATORS	8	12.5 SPOTTING	19
4.10.1 hit Indicators.....	8	12.6 RANGE OF SIGHT, HIDDEN PLACEMENT AND MOVEMENT	19
5. COMBAT VS. STRUCTURES	9	12.7 FINDING HIDDEN ARTILLERY BY "SOUND"	19
5.1 COMBAT EXAMPLE.....	9	12.8 ROCKETS.....	19
6. HIGH EXPLOSIVE DIRECT AND INDIRECT CANNON FIRE	10	12.9 ROSTER SYSTEM	20
6.1 DIE ROLL "PUSH"	10	13. ADDENDUMS	21
6.2 DIRECT HE FIRE	10	13.1 COMMANDS.....	21
6.3 INDIRECT HE: SHOT FALL PROCEDURE	10	13.2 TERRAIN ISSUES	21
6.4 MINIMUM INDIRECT RANGE: DEAD ZONE	10	13.2.1 Building Capacities and Combat with Buildings.....	21
6.5 STACKING.....	10	13.3 ISOLATED UNITS AND SILENCE DURING BATTLE.....	21
6.6 WHEN MORTARS AND INDIRECT HE CAN BE CALLED	10	13.3.1 Crew served weapons Faced with Enemy Presence	21
6.7 HE DAMAGE.....	11	13.4 INFANTRY RIDING VEHICLES.....	21
6.8 GROUP LIKE TARGET ITEMS.....	11	14. SEQUENCE OF PLAY	23
7. ZONE OF CONTROL (ZOC) AND LINE OF SIGHT (LOS)	11	15. HEX COMMAND MECHANIZED TABLES	24
7.1 OBSCURED FIRE	11		
7.2 FIRE OVER AND THROUGH FRIENDLY UNITS.....	12		
7.3 LINE OF SIGHT (LOS).....	12		
7.3.1 Suddenly Appearing Targets.....	12		
7.3.2 Target in Gap	12		
8. FIRING FROM CONCEALMENT, MELEE AND AMBUSH	13		
8.1 MELEE	13		
8.2 VEHICLES AND MELEE: OVER RUN AND RAMMING	14		
8.2.1 Damage Allocation for Ramming.....	14		

1. INTRODUCTION

What is the difference between Hex Command Mechanized and Other WWII rules?

"Short" Answer

The main difference between HCM and other rules is that HCM steps back from a level of granularity that makes mechanized-era games complex and involved. Hex Command is a game system that is free to own and provides excellent incentive via streamlined game play, to attract and keep players in the hobby of war games with miniatures. This is done in several key methods:

- a. Each stand of infantry is one squad, and the weapon that a figure is shown with does not have to indicate their abilities (though using figures individually mounted on bingo chips then having several mounted to a moving plate is a way of creating squad abilities by figure weapons). Generally, the mounting concept is that each squad has between three and four figures, with squad abilities noted on the back, bottom or anywhere convenient for the owner, or referred to with a letter or number symbol.
- b. Point Defense weapons such as heavy machine guns (.50 cal is Very Light Anti-tank ability) have the same range as infantry. These heavy weapons are generally mounted by themselves and when included in a hex do not affect the stacking rule (of no more than two items in a hex); meaning you can have two infantry squads PLUS a point defense weapon. .30 cal and other medium and light MGs are usually mounted with other infantry and increase squad firepower by +1 combat bonus but have no Very Light AT ability (pull the requirement band in by one level, e.g. once needing 4,5 to hit moves to 1-3 to hit). Due to their size HMGs can only be moved with a vehicle or be the type of model that has wheels. Point Defense weapons limber/unlimber just like other artillery pieces and get a TE hit when limbering/unlimbering.
- c. Vehicle classes are either unarmored, Very Light, Light, Medium, Heavy or Very Heavy.. and the same weight progression exists for cannons.
- d. Armor penetration doesn't exist. When a target is hit, roll to see the level of damage: You can affect Combat ability (red colored marker) Defense ability (white), or Movement ability (Green). On the third hit of any one item a vehicle is abandoned or destroyed; vehicles that progress from Light (L) or Very Light (VL) are destroyed on the 2 second armor hit.
- e. Infantry combat is nearly identical to Hex Command Gunpowder except that range bands are 2 hexes for small arms and 3 hexes for (most all) direct cannon and mortars- check the charts at the back of these rules. Indirect artillery range is usually unlimited.



We realize that gamers want to explore the many varieties of terrain, vehicles and tactics of the Second World War and thereafter- generally, the mechanized era of the 20th and 21st centuries- but we also know that in order to attract people into the hobby of war games with miniatures, rules can no longer have so many fundamental details. We just don't have time anymore to play games longer than 1 or 2 hours. HCM is best on a 6x4 or smaller table.

In HCM, you don't throw grenades or conduct reloads things of that nature (some Satchel charge throws up to 3 hexes are allowed). And generally you don't need to track ammunition either. Essentially, like our other rules, HCM is basically a board game with miniatures; it's not silly by being simple or mind-boggling with details. It's in the middle. Comfortably, because that's how we think it should be played. The following Concepts Overview provides additional explanation of the Hex Command Mechanized system:

2. CONCEPTS OVERVIEW

The following ideas and statements influenced the rules design:

<p>"A Stand is a Squad"</p>	<p>Each infantry stand of up to four figures is a squad. In the original Hex Command Mechanized, each figure was separately mounted and thus you could create squads of varying ability based on the figures temporarily mounted to a movement plate with sticky tac putty, for example.</p>
<p>With figures permanently mounted, differing abilities will have to be noted. Heavy weapons squads have AT ability and can be shown with weapons such as bazooka, flamethrower etc. A squad that is Heavy Infantry has AT ability PLUS the ability to cause fire; this way you don't have to show both weapons on the squad to have that ability in the squad. The presence of a mine detector or satchel charge figure represent engineers, and these would be heavy weapon squads additionally with construction and destruction abilities. <Light Machine Gun figures such as .30 caliber provide squads they are mounted with, with a +1 Combat Bonus. Whole squads of SMG figures are Elite in melee and squads entirely of SMG get a +1 bonus at the ranges shown on the combat range chart.</p>	
<p>"Terrain is.. or isn't." Cover is Cover What is "obscurity?"</p>	<p>This means individual trees simply look nice on the table and are not a move obstacle or vision modifier. The same is said for just about any other terrain; it either is big enough to cause modifiers or simply looks nice. Whether something is a wall a fence or a hedge, unless specifically called in the scenario, it is cover. A fence on a hill where the opponent is firing up at the position would enable the target to be in "double cover," and so on. A Trench is double-cover.</p>
<p>Obscurity means a low terrain item such as a fence or cornfield is at least one hex away from a target such that the target does not get cover bonus from the object, or (in the case of cornfields infantry are fully obscured if they are in the cornfield unless they fire and reveal themselves), in the case of cornfields the target is IN the object instead of being fully behind it (which would be fully obscured e.g. cannot be hit unless the vehicle is very tall e.g. is not a low-sil vehicle) . Obscurity provides a -1 combat penalty so in a sense it is almost as if something is in cover but no matter how much obscurity is in the way the penalty applies only once. HE indirect is not affected by obscurity (but spotting IS affected).</p>	
<p>"River scenarios are the worst games."</p>	<p>What this means is any scenario that has some kind of terrain division in any direction is a movement obstacle and potential drag on enjoyment of the game; modify the attacking forces accordingly to give them a chance of success.</p>
<p>If there IS water and bridges, we recommend they be very close to one end or side of the table; unless players CHOOSE to aggravate themselves with bridge crossing situations. Either that, or make crossing rivers easier such that the river becomes decoration anyway.</p>	
<p>"The HEX is the Target"</p>	<p>Because of the scale in HCM, you do NOT have to see a "whole hex" to fire at something in it. However, if any portion of your line of sight enters a hex where an obstacle or large vehicle exists, it may affect firing. Line-of-Sight (LOS) is the center of a firing hex to the center of target hex.</p>
<p>Generally, if one item exists in a hex, it is said to be in the middle of that hex. Another generally accepted rule is that if LOS from the center of a firing hex can see uninterrupted to the center of a target hex that target hex can be fired upon without penalty..</p>	
<p>Firing at Units on Hills</p>	<p>If a hill target hex is higher but not the front edge of the hill relative to a lower shooter, that target hex cannot be shot. This means anything on lower elevation cannot shoot something at higher elevation unless the target hex is the edge hex of the hill top. Conversely, items NOT on the edge of a hill top cannot shoot at hexes at the bottom of hills.</p>
<p>Moving Vehicles</p>	<p>All vehicles are said to be not moving when they fire and when fired at.</p>
<p>Terrain divides a Hex</p>	<p>Terrain such as wall or fence line can sometimes split or divide a hex. Items in a terrain-divided hex do not straddle the terrain; the owner of the pieces in the hex must declare when required which side game pieces exist.</p>
<p>Terrain Effects (TE) indicator: Does not apply to items that start at a terrain item, only when they encounter it and move beyond it in their move.</p>	<p>A fatigue element caused by terrain, represented by placement of a "TE" indicator. Vehicles do not get TE hits. All foot infantry and man-handling of weapons such as A.T. guns, encountering (not starting at or in) any terrain item e.g. a forest hex, crossing a fence/wall/hedge, encumbered terrain, fording river, moving through rubble, etc. causes a TE or "Terrain Effects" marker to be placed on the crew/squad. Any item that reaches 3 TE hits is "fatigued" (usually marked with a Tan marker chip). Fatigued units suffer loss of Zone of Control and suffer -1 Combat Penalty when they fire, and subsequent TE hits become Red casualty (combat) hits. All TEs are removed in the Rally Up phase.</p>

3. CLASSES AND WEIGHTS

3.1 Classes

1. The highly specific weapons of the mechanized era have been grouped into several classes from very light to very heavy. Infantry, either on foot or on horses, are either Class B or Class A.
2. Class B infantry are a mixed assortment of rifles and automatic rifles. Class A infantry can be referred to as Heavy infantry, and these squads have all the following functions: up to Medium anti-tank ability (all German infantry have up to Heavy anti-tank ability), demolitions, flame thrower, mine detector, laying mines, and fire with +1 combat bonus.
3. Entire squads of SMG infantry are Class B with a +1 combat AND melee bonus but -1 firing combat penalty at the last hex of the firing range.
4. Vehicles, cannon, mortars, buildings and bombs also have the same class progression from Very Light to Very Heavy.



3.2 Vehicle Classes

All vehicles and targets the size of Jeeps or smaller are classed Low Silhouette when fired upon with **direct cannon or rocket fire** (except when firing at close range.. see the LS rule). Some tanks are also known for their low profile and as such are harder to hit when fired at with antitank **beyond a certain range; when you are close enough to a LS vehicle the LS benefit is negated**. See the Vehicle and Weapons Categories and notes on special vehicles.

3.2.1 Mixed Weight/Weapon Classes

Cannon weight however may not follow vehicle weight, such as the British Matilda being a heavy tank but having only a light gun, or the Panzer III having a light gun (50mm) but mounted to a medium class chassis. The Crusader was technically a medium tank with a light cannon. The Cromwell was a medium tank with a light gun at first and then a 75mm or medium gun at the time of Normandy and beyond. Tanks like the M10 or M18 are exceptions, where they are technically LIGHT tanks but carry an improved gun which we refer to as a "Pak 40" bonus; that is, a superior gun without technically superior gun weight.

3.2.2 Aircraft

All aircraft are considered to have a 3 hex wide arc of fire on the ground, along their flight path, and extending out from their base hex for the weapon(s) they are carrying e.g. a craft with an HMG has a range like an infantry HMG, any cannon having the same range but with +1 CB, and rockets are equivalent to HEAT rounds (high explosive antitank) or +1CB to vehicles and ground targets.

3.2.3 Self-propelled Guns

All SP vehicles that have a low-silhouette cannot fire through friendly items in their front facing when their main gun is mounted low in the hull (vehicles with high gun mountings such as JagdTiger, Nashorn, Marder, Achilles etc. are exempt). See 4.4

Arc of Fire, Hex Facings and Reaction Roll below. **Heavy SP guns like the JagdTiger cannot perform any movement AND firing in the same turn.**

3.3 Other Troops

Partisans – These are infantry with guidance abilities and weapons or abilities as the scenario provides, e.g. they may have demolitions ability; they generally get +1 in movement.

Cavalry- Mounted infantry. Unlike the Gunpowder rules, dismounting and mounting incurs no penalty or fatigue. After dismounting players must determine how the horses are handled for the troops to remount again, that is, the horses are either placed always in the hex immediately behind the dismounted troops or marked as to their location.

Paratroops – Generally Paratroops are Elite infantry with weapons as the player or scenario designates. Each squad bailing out of a plane selects a central hex as the “target” or LZ and a die roll is made using 1d6 to determine, like indirect artillery, where the squad lands. No more than two squads can land into the same hex.

3.4 INFANTRY

This basic system has an organization where a stand of figures represents a squad, usually of four model infantry figures. Infantry squads of the same platoon should have some unifying mark and/or color on each figure’s disc and/or on the movement plate itself.

1. Units do not go disordered in these rules but they can become Fatigued by accumulating 3 Terrain Elements (TEs). Encountering each obstacle applies one TE unless units START at the obstacle e.g. starting at the neighboring hex of a hill does not incur a TE for moving onto that hill.
2. Infantry have no facing penalties for movement but they must designate a facing direction.
3. When there is more than one item in a hex, they may face different directions. Pay attention to stacking rules however.

4. COMBAT OVERVIEW

4.1 Turn Sequence, Opportunity Fire, and “Pulse” Movement

The Turn Sequence is found at the back of these rules and is similar to Hex Command Gunpowder. Opportunity Fire occurs to any item that wishes to fire during the opposite player’s movement of items, however, any item that uses Op Fire cannot move and fire in the turn again, unless: a light vehicle, light cannon or declared to the judge as in Ambush. In Op Fire, a firing item does NOT have to wait for a target to reach the end of its move before declaring fire. For this reason, the game style exists called the Pulse System for all moving items regardless which player is “phasing” or not (if the Phasing A/B system is used; the Pulse system can replace the A/B system wherein all game pieces move at the same time by all players, but only one hex per pulse). In the Pulse system, it will be necessary to mark all units that have moved and those that have fired. However, the game can be played as normal with players requesting that a turn be conducted in Pulse movement.

4.2 Rate of Fire

Only Very Light and Light cannons fire twice each time they fire. Heavy MGs fire only once per instance.

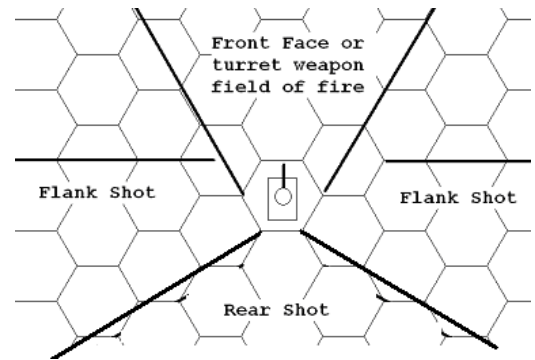
4.3 Combat Range “Bands”

Note that each range band matching a to-hit die roll, comprises TWO hexes for all small arms and infantry AT, and three hexes for all other direct cannon fire. For instance, infantry automatic hit range is from zero (the neighbor hex) to 2 hexes in the arc of fire, 1-3 is the next 2 hexes, 4-5 is the next two hexes, and 6 is the last two hexes.

4.4 Arc of Fire, Hex Facings and Reaction Roll

Note that the basic game considers the weight class of a vehicle, e.g. Heavy, to be entirely heavy all around it, that is, all hex side facings are equal. This keeps things simple, so no matter where you fire at a target the value is the same, but in truth and as an optional rule, reduce the value of the target for each facing other than front e.g., for a Heavy Tank: front=heavy, side= medium, rear= Light.

The image at right shows the firing arc for a turreted weapon; an SP gun's field of fire is the same but the difference between Turreted and SP guns (except heavy SP guns that cannot turn to react) is that Turreted vehicles that are fired upon outside their facing arc have a chance of spotting the fire and turning their turrets to return fire (using the spotting roll). If successfully passing the roll they can turn their turret and fire; failing means they turn their turret but cannot fire in that turn. SP guns if successfully passing the reaction roll turn but cannot fire; failing means they cannot turn in response to that incident of being fired upon. In addition, SP guns cannot hit any targets closer **than 0 to 3 hexes unless** the target is DIRECTLY in their front hex facing. Exception: Marder and Hetzer series.



4.5 Cover

For each level of cover a Combat Penalty of -1 applies. This penalty is applied as a push up to the next band required To-hit, e.g. from requiring 4,5 to score a hit to 6. Any item in a depression such as Fox Holes, trench or ground depression, or large hole from an explosion, or ditch or pond etc., receives a "Level 2" cover bonus (-2 to the firer), unless hit by indirect artillery fire or if enemy infantry is in the neighboring hex to conduct close assault. **When hit by direct HE**, terrain that is providing cover takes damage and eventually degrades as hits accumulate, turning the hex into rubble and offering no defense after that. Trees and forests however remain a visual obscurity. Generally you will only be concerned about recording damage to heavy terrain such as buildings and constructed works.

4.6 Infantry vs. Vehicles and APC

Infantry with Anti-tank ability auto-hit at 2 or less hexes but modifiers and penalties on the firing unit may apply that will push the requirement to the next band in order to score a hit, e.g. auto becomes 1-3, then 4-5, then 6. Troops inside open-topped fully armored vehicles can receive hits from small arms fire if the vehicle suffers it's last movement hit; roll 1-3 to cause a hit to troops inside.

4.7 Using Turrets

1. All turreted vehicles can turn and fire their guns at targets in their primary arc, which is the direction the TURRET gun is facing. Targets that present themselves outside a turret's arc can be hit by the turret turning to then fire, but the firing item incurs a -1 Combat Penalty.
2. Tanks with turreted guns and HULL guns, can fire each weapon independently.
3. Turning turrets can happen when a vehicle has ended it's move, and (optional) in special circumstances rolling for "Reaction" to be able to turn and return fire. Certain vehicles with turrets may NOT have a reaction ability due to their design so players should discuss this rule before the game.

4.8 Vehicle Machine Guns and Multi-Barrel Guns

Optional; players can elect not to use vehicle mounted MGs smaller than HMG. If vehicle MGs (not HMGS) are used, each vehicle has a small arms ability equivalent to a squad of normal infantry regardless of how many it actually carries; Multi-barrel AA vehicles roll once per gun tube. See Anti-Aircraft.

4.9 Direct Cannon Fire

1. Vehicle gun and artillery combat is fairly straight forward: Range is divided into "bands" (groups of hexes), ranging from the neighbor hex (or hexes as the case may be, known as the "zero" or Automatic hit range) to extreme range.
2. Note that certain SP artillery howitzers and towed howitzers cannot traverse their guns low enough to hit targets that are too close; they have a minimum range or "dead zone" ahead of them which is the first 3 hexes (zero-the neighbor hex-, then 1 then 2) depending on how the gun is mounted (Soviet 152mm for example, is a tracked gun mounted facing directly forward in it's hull, not on top the structure like many other SP artillery vehicles).

4.9.1 Direct Fire Procedure

The number of hits caused to a target depends on the comparison of "Gun Weight" versus target weight class: The numbers in the chart mean the quantity of d6s to roll to see what kind of damage is done. If no quantity of cubes is shown, it means the target can only be affected on a lucky hit: Roll 1-3 to score a lucky hit, then roll one cube to see what damage is caused: For instance, if a Light Gun fires at a Medium vehicle, the target is heavier in Armor Weight.

4.10 APPLYING DAMAGE INDICATORS

Whenever a vehicle has suffered the maximum hits it can take in Combat, Movement or Defense (usually four in each category unless the roster card concept is being used, wherein certain vehicles have greater or less tolerance limits as shown on the card), it is disabled and the crew has evacuated; the vehicle is essentially destroyed. See the [back page](#) for damage details (see optional rules especially the Roster system wherein few if any markers will be placed on the game table)

4.10.1 Hit Indicators

1. Items lose one point of Combat Value for each combat hit. Armored vehicles drop one in Defense weight class with each Armor hit, and with each Speed hit lose one hex of speed. Place markers on the table and moved these with the item.
2. For cannon and HE hits, the number of hit indicators applied to a target depends on the weight of the firing gun weight class vs the target weight class: for instance, firing Medium to Light applies one hit marker; Heavy vs. Light applies two, Very Heavy applies three etc.
3. Targets rout when they suffer their third hit marker; however, some units have different tolerances.
4. Routed units Rally Up when a commander is attached (or by scenario notes e.g. some units may be able to self-rally).

5. COMBAT VS. STRUCTURES

It doesn't matter where the openings such as doors, ports, slits or windows are shown on the model in this game system; the direction of attack against a building makes no difference in ability to succeed. Firers inside can fire any direction. See Terrain Issues: Building Capacities

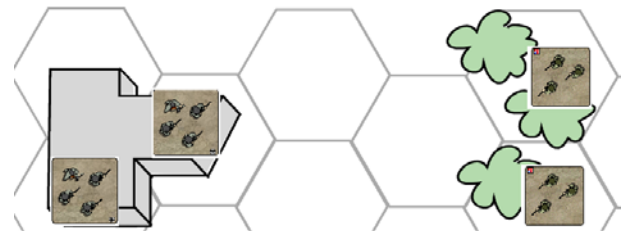
1. Structures are classed and suffer damage according to the Structure chart. See Section 11 **REMINDER LIST**, Structure Wt vs. Direct/Indirect HE, Bombs.
2. Hitting a structure **with direct fire** is automatic but hits inside depend on firer weapon weight and structure weight comparison; See Section 11 **REMINDER LIST**, Structure Wt vs. Direct/Indirect HE, Bombs.
3. Infantry conducting combat against a building simply consider the structure as various degrees of cover, e.g. combat penalty of 1, 2, 3 etc. For instance at automatic hit range, because it's cover roll 1-3 for level one buildings, 4-5 for level 2, 6 for level 3 etc, **Concrete bunkers and buildings must be damaged before any damage to their contents can be conducted. Damage to these kinds of buildings and fortifications can only be done by flamethrower and engineers who move up to the building, then away in the same turn, whereupon the charge explodes (except in the case of thrown satchel charges; range of 2 hexes: zero, one, two is how you count so it really means 3 hexes).** It is assumed the charge is enough to remove that wall of the structure and permit melee to occur; however, if the heavy structure is taller than one level, the contents are destroyed as the building has collapsed.
4. Use a dice or other hit markers to show the level of damage to the structure being hit.
5. All vehicles next to on in a building hex when it is finally destroyed are automatically immobile but can become free if rolling 4,5 at the beginning of the owner's movement unless the structure is taller than one level. Failing that roll the vehicle is abandoned.
6. **Hitting Infantry in Buildings Note:** The location of doors and windows on a model building has no bearing on the combat against it or from within it.

5.1 Combat Example

At the basic level of abilities, infantry even with Anti-tank ability will have little to no effect assaulting a prepared position such as a bunker. We'll assume they have no artillery or weapon than can affect the building. Engineers cannot get close enough to plant charges without being fired upon. So, the situation is:

Concrete Bunker Value: Heavy.

Approach: It doesn't matter if the attacking squads move around the building to attack from the sides because in this system, where the openings in the model are shown such as doors, ports, slits or windows etc. has no bearing on entry/exit or combat; defenders can fire in all directions that the building has a facing. The attack simply cannot succeed without the proper equipment; the attackers cannot cause any hits to the bunker or the contents as basic infantry. But through weapon enhancements they can:



a. Man-Portable Flame Thrower (as opposed to tank flamethrower which has twice the range and double the effect). For the flame thrower to have an effect the blue team must get close enough (no further than one hex between firer and target), but as soon as they step out from behind the trees the defender will declare "stop" and fire upon the moving squads. Once in range, the flame thrower hits the target automatically and no modifiers will be available. The target will begin to burn and do so until consumed whereupon the contents are destroyed, so any defending squads must vacate or perish.

b. High-explosive Artillery. Based on weight class, each hit will begin to erode building integrity (each four inch size hex area of building) until that hex portion or building fails. Unless fired direct, the shots must use the shot-fall procedure. A Heavy concrete bunker can only be affected by Heavy or better artillery; anything lighter than the weight class has no chance of affecting the structure (at least not in the short term).

c. Satchel charge. Automatically assumed to be heavy enough to create a hole in the structure (each four inch size hex area of building).

6. HIGH EXPLOSIVE DIRECT AND INDIRECT CANNON FIRE

Indirect cannon fire has an unlimited range in almost any game on a 10x6 foot average size table but mortars have a limited range. Any hit by HE results in red hit (casualty) markers and possible damage to other items in a target hex, such as vehicles. All HE hits cause a set amount of hit indicators based on gun weight: one hit for light to medium HE, two for heavy HE, three for very heavy etc. In addition, some HE may affect more than one hex.

NOTE: Firing HE artillery to a hex comprising only one squad or single small vehicle is allowed but roll 1-3 to see if any damage is caused because the target is too small (unless firing weight is VH or greater)

6.1 Die Roll "Push"

Modifiers to-hit do not exist for ANY HE fire, either direct or indirect, but they DO exist to determine how many casualties and hits might be caused. If a target is in or behind various degrees of cover from the explosive effect (indirect HE is exempt from this), modifiers are each a push of 1 from the automatic hit; meaning, if infantry are hit by direct HE and they are behind a wall, automatic band goes to 1-3; in double-cover the push would be from Automatic to 1-3 then **4,5**, and in triple cover, from automatic all the way up to **6**.

6.2 Direct HE Fire

Direct HE cannon fire automatically hits the target hex as long as no obscurity exists (if any obscurity does exist, simply roll 1-3 to score a hit. If the shot is missed players can choose to ignore it or roll randomly into the hex immediately passed the target hex). Hits are spread evenly to all items in the hex of the same type and if other types exist in the hex roll to see which type of target was hit (see below).

6.3 Indirect HE: Shot Fall Procedure

Indirect HE is a high arc of fire enough to fire over cover such as fences/walls, cornfields, etc. **Indirect Fire negates the cover bonus that items normally get from direct fire, when the targets are on the same level as the firing item. On higher levels items hit by indirect fire STILL get a cover bonus from being in that cover.** To fire indirect, the gun crew or another available item on the players side, agreed to by players as able to spot targets, is required to be able to see the declared target hex. In some cases, players may choose only to allow certain items to conduct spotting, such as officers. Indirect HE uses the Shot Fall procedure:

1. Declare the target hex

2. Roll 1d6 to see which hex around that hex the shot falls into. 1 is the hex in front of the target facing and then count clockwise around it. 1d8 can be used for more accurate Indirect fire, where 7,8 is a hit in the target hex. Using a 1d6, the named hex will NEVER be hit. This is by design; you can only hit AROUND the target hex so name the target hex anticipating this nuance.

6.4 Minimum Indirect Range: Dead Zone

Unless otherwise stipulated, all cannons have a range band of hexes that they cannot fire indirect in to, due to gun mounting. Indirect fire cannot be fired into any hex that is **½ or less the maximum range of the firing piece**. Mortars are exempt from this and can fire indirect into any hex in their range.

6.5 Stacking

If there is more than one item in a target hex hit by indirect fire, randomly roll to see where each hit gets assigned.

6.6 When Mortars and Indirect HE can be called

Indirect artillery fire is technically "called for" one turn before the shells are fired.

When opposing forces are in cover but visible to the players, they still cannot technically be seen until they fire, or are spotted by a friendly unit within 1 hex range from the target or less. For example, at the beginning of a game when forces may be visible because players don't wish to use hidden units, they cannot have fire directed at them until they reveal themselves by firing or as described above being almost bumped into.

6.7 HE Damage

1. Gun/Shell weight class determines the quantity of hits.
2. Whether Direct or Indirect HE, spread the hits evenly to all items in a hex but see Grouping below.
3. When vehicles are in a hex hit by HE, roll a d6:
 - a) If shot weight is less than target armor, damage is not possible.
 - b) If equal shot weight to target weight class, roll one cube and roll one cube for each weight class step higher than target armor.
 - c) At 4 classes higher, destroy all items in a hex except concrete structures.

6.8 Group Like Target Items

1. Group like items when there is more than three items in a hex and two of them are the same item, for instance, two infantry squads in a hex with an APC, count the two squads as one item.
2. To determine which item gets a hit when more than one is available, an item is hit on 1-3 BUT also include in the roll –and at the most- one building that is the neighbor of a target hex, (maximum count is one wall) should there be a building next to a target hex. The reason for this is we don't want to get into debates about how BIG a building is. If there is a building, assume the building is always as BIG as the hex and therefore one wall is touching the target hex.
3. For each item hit, that item get one of the available hits for the weapon firing, e.g. heavy causes two hits. The firer of the gun can decide in any manner which item they wish to roll for first, second, third etc.

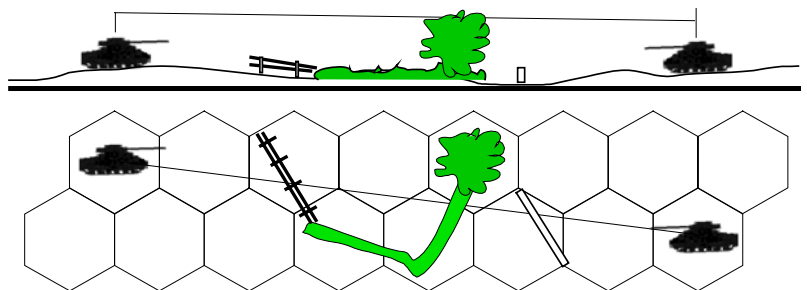
7. ZONE OF CONTROL (ZOC) AND LINE OF SIGHT (LOS)

The function of Zone of Control, for units that have suffered no hit markers, is that the immediate hexes of a unit's arc prevent an enemy from moving through those hexes; once entering a unit's ZOC enemy units must stop. ZOC does not extend across rivers and streams and other movement obstacles. On a following turn an item is not prevented from moving out of a ZOC hex, but cannot do it if entering another ZOC hex of either that same enemy or another enemy unit.

7.1 Obscured Fire

In all cases, the judge or impartial third party may have to decide certain trajectory cases but for the most part, any firing trajectory that passes through any part of a terrain hex such as cornfield, small outbuilding (chicken coop, hen house for example) or a hex with a vehicle in it, incurs the obscurity firing penalty of -1. In checking the line of trajectory from firer to target, measure from center of firing hex to center of target hex.

- a. Partial Obscurity; Turreted vehicles or top mounted weapons can fire over tall corn to a target but that target must be at least ONE hex further away from the hex of corn- if located in the neighbor hex of a corn hex the target is fully obscured (depending on angle entering the hex of course), a smaller class vehicle than firer, a burning item is in a hex that the shot is passing next to, etc.
- b. Even a river hex might be considered a type of natural trench causing a firing penalty obscurity depending on how a shot or angle of fire is entering the hex.
- c. Bridges that arch over a creek or river will obscure any item in the hex immediately on either entering side of the bridge, unless fired at from the front left or front right.



The thickest line in the image above represents the game table; in reality the ground is far from flat. Is there an obscurity? If you said no, you're wrong. Look closely: the center to center line passes through a Tree hex.

7.2 Fire over and through friendly units

1. Friendly units block line of sight except as stated below.
2. Units on higher ground can fire over friendly units on lower elevation, or fire to a target higher than a friendly unit, as long as the target is not in a neighboring hex of a friendly unit.
3. Self-propelled "Tank Hunter" vehicles with HULL MOUNTED cannons cannot fire through friendly items in LOS to a target unless their guns are NOT mounted on their hull (e.g. Priest/Sexton, Marder series, SU-76, Achilles, Elephant, Nashorn etc.).
4. Cannons on vehicles are allowed to fire through a hex containing friendly forces on the same elevation. However, a hex that is being fired through cannot be closer to the enemy than the firing item's hex.

7.3 Line of Sight (LOS)

1. A firing item must be able to trace a direct line of sight from the center of its hex to the center of the target hex; in HCM seeing the entire hex is not required to hit.
2. If this line passes through any portion of an intervening hex with potentially blocking terrain such as Hill, Structure, Forest, or bridge, vehicle or other such obstacle on the same or higher elevation than the firer, the target cannot be fired at unless the target is in a neighboring hex of the firer.
3. See the graphics in the "Suddenly Appearing Targets" section for more examples. Treat all bridges in the line of sight as an obscuring.

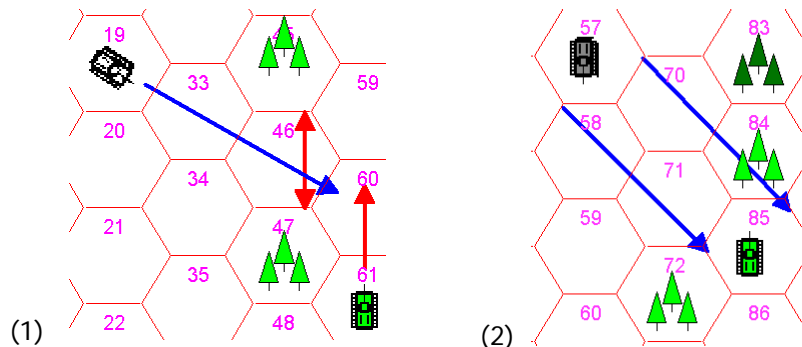
7.3.1 Suddenly Appearing Targets

When a firing unit is presented with a target that has appeared from behind something else or was otherwise at the start of the turn not visible to that firer, the limitation to being able to shoot it is: the distance from the firer to the target cannot be greater than half-range for the firing weapon.

7.3.2 Target in Gap

How to target something that has suddenly appeared in a gap between two obstacles or objects: It is only because of the system of movement employed that an enemy item appears to stop between two objects when in fact the target may be actually still moving.

Use the following formula: "The size of the gap between two objects cannot be greater than half the range from the intended firer, in order for it to be fired at."



In the graphic shown above at left (1), the tank at hex 19 fires into hex 60. The distance between the two forest hexes is only 1 hex size, therefore in order for the tank at 19 to shoot the tank at 60 it cannot be further than 2 hexes away; it is three hexes therefore it cannot fire even if it is pointing at the gap because the amount of time is too short. What if the tank at 60 decides in the next turn not to move and instead shoot at tank 19? If tank 19 is still there and it WINS activation, tank 60 is player B and will get Op Fire during tank 19's movement. Tank 19 gets "ripped off" from being able to fire first. Because of this reason, we DIE roll these situations when two items are looking at each other and neither one chooses to move. Example (2) demonstrates two obscuring concepts.

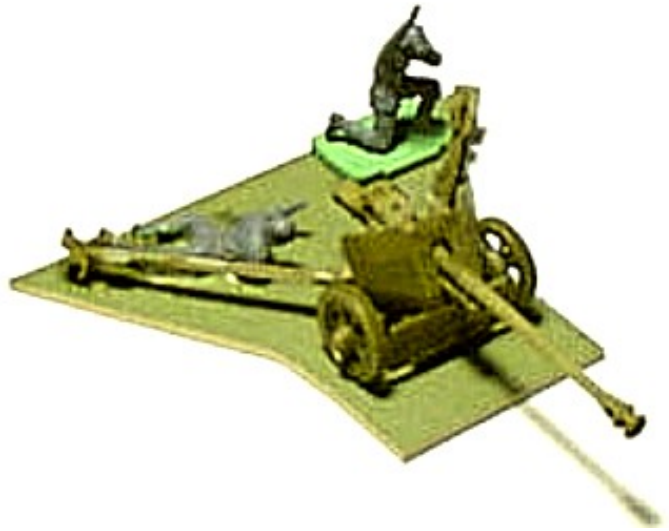
- a) Whole Hex Concept: at least two sides of the firing hex must clearly see two sides of the target hex; the "whole hex" of Hex 85 cannot be seen by hex 57 without the line passing through terrain and
- b) Center to Center Concept: an invisible line from firer center to target center cannot pass through any part of a hex that has terrain.

8. FIRING FROM CONCEALMENT, MELEE AND AMBUSH

See the rules for **Spotting** and Over Run as well.

If hidden movement is used, the game can be somewhat more complicated. But it can still be done effectively. Hidden items may not be seen until they fire because they have the design and intention on firing then running away a certain distance. Hex Command Mechanized cannot totally ignore this reality so here's how we do it:

This concept brings into question the reality of having to allow non-phasing items to fire THEN move, during the phasing player's movement. Therefore, as the phasing player is moving, the non-phasing player declares a hidden item is firing, stops the target's move, conducts combat calculation, then the target can continue moving a minimum of one space further. Once concluded, mark the non-phasing item fired unit as if it fired in the usual non-activated firing player's phase. The non-phasing player is allowed to move the "ambushing" item a maximum of one space, whereupon the phasing player's move continues.



The big benefit of the German PaK-40 Antitank Gun aside from its punch.. very low silhouette

8.1 Melee

1. To engage in melee the activated player moves into the target hex. If an item does not have the movement speed to enter a hex they cannot initiate a melee with the target of the intended melee and must remain in the neighbor hex (whereupon firing at point-blank would likely proceed as usual). This is also true for over run.
2. Melee combat results in the surrender, not rout, of a losing force except if the scenario designated otherwise, however if the losing force cannot be escorted away it is routed as usual again, unless the scenario designates otherwise (paratroop actions where it may not be possible to take prisoners and they are released or tied up and abandoned).
3. There is no "pursuit" or "advance after melee" as in HCA and HCG conducted by the victors or any friendly items in neighboring hexes.
4. Units in melee cannot be fired at or fire out of the hex while involved in melee.
5. Activated items can initiate only one melee per turn.
6. Units must designate a facing when engaged in melee unless it is not possible to do so (house fighting). Units melee'd in flank/rear cannot change facing until melee is completed.
7. Infantry melee is computed by adding a unit's value with modifiers to determine a weaker and stronger force. Roll a d6 and apply hits and damage as usual.
8. Melees with more than one activated item are conducted individually and no values or points are combined.
9. A single unit meleeing multiple opponent units rolls a die against each one, but for every melee it computes against an enemy unit it receives a TE Hit.
10. Each unit involved in melee each phase, receives a TE hit. Once units receive three TE hits they are fatigued (-1 in combat) and for each subsequent TE hit they receive a hit.
11. Any defender bonus from terrain remains until after the first round of melee with all involved units.

8.2 Vehicles and Melee: Over Run and Ramming

1. **Opposing vehicles who move into an enemy hex** perform Over Run procedure; essentially a charge into a hex with the intention of causing damage in that hex (even if they lack the speed to get at least one hex beyond to get through the enemy hex). This may include the intent to ram an enemy vehicle in the hex, and/or cause damage to equipment there.
2. **The result of over run by vehicles** is damage to enemy items in the hex, and as such may cause them to rout instead of surrender which happens with infantry involved in melee. Accompanying infantry with over-running vehicles however will cause anything in a target hex to surrender. If artillery/guns are in the hex, roll a d6 to see what damage is done to the gun/crew/limber team. Smaller point defense weapons are destroyed.
3. If there is **no** opposing vehicle, weapon or equipment to make contact with, **each** vehicle of the attacking force causes an automatic hit to the hex;
4. One ramming vehicle can only damage one target item.
5. **If vehicles have movement remaining** once they enter a hex, the owner of the vehicle can elect to continue the movement after any calculations are completed for that hex combat.
6. No other ramming can occur to an item in a hex if a ramming vehicle has stopped in that hex.
7. **Vs. Heavier Vehicles/Structures:** stop the lighter vehicle's movement in the target hex.
8. **Trench:** Overrun by heavy vehicles in addition to any hits, causes a trench to become leveled (unless winter). Medium or light vehicles simply pass over the trench without leveling it.
9. **Fully Wheeled vehicles** cannot damage fully armored tracked vehicles of the same or greater weight.
10. **Damaged Vehicles that Ram:** Vehicles that have defense/armor damage indicators do not suffer a reduced weight class when performing a ram.
11. **Vehicles that fire after being rammed** must determine damage by the ram before they calculate firing.
12. **Wheeled vehicles** can ram the rear of armored tracked vehicles, especially when the optional rule of facings is used in the game. Hitting armored tracked vehicles in the side/rear roll 1-3 to see if a movement hit is caused. Damage to the vehicles conducting the ram suffer either a movement hit unless the vehicle is built to ram (i.e. Hedge cutters or other).

8.2.1 Damage Allocation for Ramming

- One movement hit if the same weight.
- Two movement hits if the target is one class lower.
- Three movement hits if the target vehicle is two classes lower.

8.3 Melee Infantry vs. Vehicles, Firing at Riding Infantry and Exploding Vehicles

Vehicles can be vulnerable to infantry, especially as they can swarm around it wreaking havoc on just about anything they can bend, break, jam or burn. For this reason, infantry that "launch" themselves into the hex of a vehicle automatically cause one movement damage to a vehicle unless it is heavier than Light each turn, as long as they remain in contact with the vehicle. Unarmored vehicles are either captured or destroyed on contact with infantry (infantry's choice).

Open-topped armored vehicles are either captured or destroyed based on the attacking infantry's choice. If there is no friendly infantry of the vehicle in the hex being attacked, friendly forces can fire into the hex with small arms fire only.

9. MOVEMENT

1. Movement speeds should be considered "combat" not maneuvering, speeds.
2. (C)ombat, (D)efense and (M)ovement values are found in the reference charts at the end of these rules.
3. All speeds are shown as Cross Country and when using roads, each axle provides two hex additional movement for wheeled vehicles. All tracked or half-tracked vehicles gain one hex. Note that in some games, cross-country movement can be almost as fast as road due to dry conditions.

9.1 Change Facing

1. All units must face the direction of movement.
2. Items moving along roads ignore face change penalties.
3. All units can pivot in place as much as they like, once each turn, except where otherwise stipulated (usually anything heavier than Light cannot do this)
4. All vehicles heavier than Light can only face change one hex facing per movement forward, or pivot in place two hex facings per turn.

9.2 Cargo Points, Limbering/Unlimbering

1. Each halftrack can carry 6 points of cargo. One squad equals 3 points, and each individual item when not attached to a squad (mortar, other weapons etc.) counts as one point.
2. Trucks can carry up to 12 points.
3. Bren carriers and similar small vehicles can carry up to 4 points of cargo.
4. All halftracks -unless otherwise noted- even when carrying no troops, have a combat value equivalent to one stand of infantry. SOME halftracks were armed with AT guns facing forward. All Artillery mounted trucks or halftracks have NO infantry combat ability.
5. Halftracks have an arc of fire like Self-propelled vehicles- e.g. front arc only.
6. It is assumed that all trucks and halftracks have perpetual drivers.

9.2.1 Towing, Limber/Unlimber

1. When any foot-soldier item embarks/disembarks from vehicles it suffers 1 TE.
2. When the vehicle and gun stop to unlimber, the vehicle can be placed in the same hex or in any neighboring hex behind the unlimbered object. Moving the vehicle to and from the hex to limber/unlimber does not cost extra, but limbering/unlimbering does incur 1 fatigue on the crew.
3. When vehicles are towing something and are hit by any combat, the damage is recorded on the vehicle only. If the towing vehicle is destroyed, the towed object is also destroyed.

9.3 Reverse Speed

All vehicles back-up half speed, rounded down. Some advanced vehicles move just as fast backward as forward.

9.4 Rain and Mud

If rain/mud is simulated any such hex entered causes wheeled vehicles to be bogged on a 6 die roll of Red, half tracked (and medium to VH tracked) on a roll of 4,5, and 6 for all other fully tracked vehicles.

9.5 Forests

The following stipulations may change based on scenario. Unless entering a forest hex via road or path or unless designated by the scenario before the game begins, all vehicles that attempt to enter a forest hex must first see if it allows them to enter: For anything lighter than Heavy vehicles a 1-3 allows them to enter; Heavy and Very Heavy vehicles must roll a 6. Some kind of marker should be provided so that passable forests are marked on the table (a green-painted bingo chip works fine). Vehicles can only move into one forest hex per turn; otherwise all other items do not pay a penalty for moving into forest hexes. Vehicles cannot move into forest hexes that are also other terrain hexes (forested hill hex). In this game, cavalry can enter forests while mounted but at one hex per turn.

9.5.1 Towed or pushed guns in forests

These can be placed in woods but fire out only the side the moved into, and cannot move from forest hex to forest hex. These weapons cannot be moved into combination terrain (forested hills), and cross water only at bridges and fords.

9.6 Pass Through

Hexes with vehicles or LIMBERED guns can be passed through by other items as long as the stacking limit is not exceeding when doing so. Unlimbered guns cannot have vehicles pass through their hex.

Exactly where a vehicle is located in a hex is not to be stressed in these rules; this is why if an item wishes to move through or into a hex already occupied by a vehicle, players are free to position the items as they like as it makes no difference as long as the items facing is maintained during the manipulation. Only in cases of a destroyed vehicle or damage in the hex does the hex become an obstacle to movement or firing through it.

9.7 Forgetting Commander Placement

If after a players movement commanders are not placed and combat calculation has started, immediately postpone play and roll random location amongst friendly units for his location. If however this location puts the commander in a hopeless situation the owner can decide not to place him at all this turn.

10. VEHICLE, WEAPONS AND AIRCRAFT CATEGORIES

This table is provided to give players who may not know, some idea on how the vehicles and weapons are considered in these rules. This list should be considered only a basic guide. (check website for living updated pages)

Item/Class	List	Notes
Small Arms and Mortars		
Light	7.62, .30 Caliber, up to 79mm mortar	
Heavy	81mm or heavier mortar	.50 cal MG is unique and considered a very light antitank weapon.
Cannons		
Very Light	14mm-19mm, US .50	Shoot twice each time they fire.
Light Cannon	20-60mm	No HE rounds. Shoot twice each time they fire (except in Quad-20 configuration: 1 die per gun tube) .
Medium	75mm	Sherman, Lee (also had Light gun; the Lee/Grant series have SP restricted main gun), Churchill Mk7, Cromwell, (Chaffee 75mm fires twice each time it fires). Hetzer.
Medium "PAK-40" bonus	to 76mm, 85mm, 88 L56, 17 pounder,	75mm Pak-40, PzIV's, Tiger I, T34, Sherman M4A1+, Comet, Firefly, Archer, Panthers, SU-76,85, KVI, KV85
Heavy	88 L71 to 105mm	Tiger II, JagdPanther, SU 100, JSII, KVII, Nashorn, Wespe, PanzerFaust (+1 damage die), Panzerschreck.
Very Heavy	106mm +	JagdTiger, JSIII, SU 122-152, Hummel
Armor and Weights (all aircraft are treated as very light)		
Very Light	All armored cars, bren carriers, Half tracks, Tankettes ()	
Light	Stuarts, Vickers, Italian tanks, Russian tankettes, all SP guns (except Russian SU series), Pz II, Czech 35 and 38Ts, Crusader, Covanter, Chaffee, M10, M18, all Japanese armor.	
Medium	T34 and all other US armor, Comet, French Char B, Somua, etc.	
Heavy	Matilda and Churchill series, KV series, Tiger series, Panther series, JSI-III series, Patton, Pershing, Sherman Jumbo	

11. REMINDER LIST

1. Off Board Artillery	Roll 1d6 clockwise with one being the hex in front of the target units front facing. Spotter/officer must be able to see the target hex; note the target hex may have no enemy in it; it's just a reference point. Note that you cannot hit the named target hex; you can only hit AROUND it. This reduces the undue influence of indirect artillery in the game.										
2. Depression, Fox Hole, Trench	Items in this cover suffer potential hits only if hit by Indirect Fire or neighboring hex enemy.										
3. Artillery, Howitzers, Field Guns	Cannot fire into the hexes immediately in front of the gun in its arc, up to 3 hexes for medium to heavy field guns and 5 hexes for heavier guns. Exceptions are some Soviet artillery based on how they are mounted (motorized 152mm) Mortars have no minimum.										
4. Non-armored vehicle	Hit by any direct cannon fire, MMG or HMG are destroyed. Hit by small arms causes 1 movement damage indicator for each hit.										
5. Appliqué Armor	All armored vehicles can be up-armored one level in class but this is never done on the rear facing. This reduces speed by 1 hex.										
6. Structure Wt vs. Direct/Indirect HE, Bombs	<p>Compare the Firer vs. Target weight as in the vs. vehicle process, e.g. a Hvy gun. vs. a Hvy structure is equal therefore, one hit of damage. Another example: VH to L is 3 steps therefore 3 hits of damage. Whenever the shot weight is less than the structure, roll 1-3 to see if one hit is caused to the contents of the building. Whenever a building is shot a 5,6 or 4,5 causes a fire that consumes the building immediately.</p> <table border="0"> <tr> <td>Structure weight</td> <td>To reduce the hex to rubble</td> </tr> <tr> <td>L, Fox Hole, Trench</td> <td>on 3rd hit (wood structure, 1 story tall)</td> </tr> <tr> <td>M</td> <td>5th hit (wood/stone up to 2 stories tall)</td> </tr> <tr> <td>H</td> <td>7th hit (stone/brick up to 3 stories tall) *</td> </tr> <tr> <td>VH</td> <td>9th (concrete bunker/fortification) *</td> </tr> </table> <p>* no vehicles allowed in hexes around it after the building is destroyed.</p>	Structure weight	To reduce the hex to rubble	L, Fox Hole, Trench	on 3rd hit (wood structure, 1 story tall)	M	5th hit (wood/stone up to 2 stories tall)	H	7th hit (stone/brick up to 3 stories tall) *	VH	9th (concrete bunker/fortification) *
Structure weight	To reduce the hex to rubble										
L, Fox Hole, Trench	on 3rd hit (wood structure, 1 story tall)										
M	5th hit (wood/stone up to 2 stories tall)										
H	7th hit (stone/brick up to 3 stories tall) *										
VH	9th (concrete bunker/fortification) *										
7. Movement Notes	<table border="0"> <tr> <td>Reverse</td> <td>1/2 speed rounded down.</td> </tr> <tr> <td>Cross creek</td> <td>Unless otherwise stipulated, to find a crossing at unknown crossing spot (also: vehicle or cavalry enter a forest hex without infantry leading): Roll: 4,5 to enter.</td> </tr> <tr> <td>Road</td> <td>+1/2 *dbled for wheeled, rounded up. Ignore face change limits while on road.</td> </tr> <tr> <td>Wagon</td> <td>Moves at infantry speed and can only face change once per turn.</td> </tr> <tr> <td>Push</td> <td>Wheeled guns less than heavy can push 1 hex per turn in open terrain or prepared defensive position (e.g. placed at the start in a forest)</td> </tr> </table>	Reverse	1/2 speed rounded down.	Cross creek	Unless otherwise stipulated, to find a crossing at unknown crossing spot (also: vehicle or cavalry enter a forest hex without infantry leading): Roll: 4,5 to enter.	Road	+1/2 *dbled for wheeled, rounded up. Ignore face change limits while on road.	Wagon	Moves at infantry speed and can only face change once per turn.	Push	Wheeled guns less than heavy can push 1 hex per turn in open terrain or prepared defensive position (e.g. placed at the start in a forest)
Reverse	1/2 speed rounded down.										
Cross creek	Unless otherwise stipulated, to find a crossing at unknown crossing spot (also: vehicle or cavalry enter a forest hex without infantry leading): Roll: 4,5 to enter.										
Road	+1/2 *dbled for wheeled, rounded up. Ignore face change limits while on road.										
Wagon	Moves at infantry speed and can only face change once per turn.										
Push	Wheeled guns less than heavy can push 1 hex per turn in open terrain or prepared defensive position (e.g. placed at the start in a forest)										
8. Halftrack	Arc of fire is as the weapon mounting, usually 60 degrees total (30 left and 30 right off axis)										
9. Load / Unload	+1 TE										
10. Dig In	Takes one turn, +1 cover (foxhole), +1 fatigue										
11. Stacking	Max. 2 items per hex except where noted (point defense weapons)										
12. Flamethrowers	Flamethrowers cause any target +1 casualty hit as long as inf/crew remain in burning hex, vehicles on fire (unless heavy tank or larger) burn at +1 damage die per turn until consumed/destroyed. Forest hex/building hex become charred smoky ruin after 3 turns.										

12. OTHER AND OPTIONAL RULES

12.1 Sustained Fire Bonus

Be diligent here: Sustained fire bonus requires the use of a marker to know who unit has fired at who; use markers on the table identified for each item in the game. A maximum of +1 CP (benefit) to a firer is available when firing on a consecutive basis at a target that has not moved from the hex it is in when first fired upon, and where the firer has also not moved. Sustained fire is not used for melee and overrun combat situations.

12.2 Fortifications and Field Works

- Light, Medium or Heavy works are classes dedicated to protection, slowing or hindering movement of enemy vehicles.
- Moving into these hexes causes all items vehicles lighter than Light tanks (except infantry) to stop for the turn unless the works are reduced to rubble. Items heavier than that suffer a movement reduction of one for each of the class levels.
- These works are reduced and destroyed as shown in the Combat Notes.
- Special engineer infantry units or engineers take the amount of turns to build and remove 1 hex of works (or bridge) as the level indicates. During this construction no firing by the workers can take place.

12.3 Minefields

Minefields are intended to hinder movement of vehicles and infantry. Any items moving into a mine hex (mine hexes must be announced by the judge or opposing player), cannot move any further unless equipped with anti-mine capability, either in engineer troops leading the way or as flail tank or other mine clearing vehicles leading.

- If the item entering the mine hex is not equipped with anti-mine capability roll a d6 for damage for each vehicle and for infantry apply a hit marker to each infantry stand in the hex. Mines are laid or removed by infantry or engineers at 1 hex per stand per turn (of no combat for the stands performing the mine operation).
- For the sake of argument, mine field hexes are perpetual until defeated by items with anti-mine capability.

12.4 Aircraft and Anti-Aircraft

12.4.1 Ground Attack Aircraft

For their weight, planes move a maximum of double the listed vehicle speed for the class, and can make one hex **side** facing change AFTER each 5 hexes of forward movement, or each 3 if Superior aircraft (P51 etc). Pre-Korean War Jets and Me 262 however can only make a face change once every 8 hexes (they move 12 per turn).

Aircraft conduct their activation and combat BEFORE all other Phasing Player Movement.

12.4.2 Combat: Aircraft vs. Ground Targets

1. Plane arc of fire is a cone three hexes wide and directly in their flight trajectory for a range of 6 hexes. For each weapon firing, an item in that cone is eligible for a hit. Which items take hits is random and **no item can suffer more than one hit except unless if a bomb has also been dropped in the hex.**
2. Aircraft roll 1-3 on a d6 to hit, per weapon mounted on the plane in the arc. Planes with extra weaponry such as cannons simply add a d6 for each such weapon.
3. A plane strafing can drop bombs but the fall is random.
4. **Any friendly units in the strafing path of the aircraft will be equally eligible to be hit.**
5. Planes **DO** get a flank/rear modifier on targets.

12.4.3 Anti-Aircraft

Anti-aircraft vehicles are considered light even when fully armored; there are no Medium or Heavy AA **vehicles**. If not armored but tracked or half-tracked they are considered Soft skinned targets, e.g. normal truck.

All AA guns have a 3 hex wide arc of fire in their facing but track a flying aircraft they select to shoot at. As the aircraft moves, so does the AA gun pointing at it. When a vehicle is declared by the owner to be tracking, any targeted planes get a -1 Combat Penalty when those planes are firing.

1. All aircraft and AA guns roll a d6 ONCE per gun tube when they fire, and unless heavier than 35mm are considered Light gun weight.
2. Rockets and AT Guns mounted on planes will be considered MEDIUM guns because of their superior trajectory.
3. A hex that is the target of a bomb is hit if the owning player rolls **4,5** after the plane has flown over the target hex in the 3-hex wide arc. If the hex is missed, just like artillery roll 1d6 and count around the target hex to see which one received the bomb. Stuka dive bombs however automatically hit the intended hex.
4. Planes are shot down when they **receive their second movement hit. They fall 5 hexes from the hex in which the hit was received, straight ahead of their facing.**
5. Optional: For planes to remain in combat being only 1 hit away from being shot down, pass CVS Aggressiveness on the overall commanders ability before they move in the turn. **If they pass the roll the plane automatically escapes further combat and retires- remove the plane from the game.**

12.5 Spotting

All spotting occurs before any movement. An alternative to placing markers or using software for hidden units is to place all game pieces, and in order for something to be fired at that has started the game in place from the start or is declared as concealed by the owning player, a Spotting roll must be passed by each item wishing to fire at it from their front arc. This can be easy or difficult based on the modifiers like being in cover (higher, in a hex of or next to a bridge which is "obscured", in or behind a fence, wall, bush etc.). Players must declare all items wishing to spot before die rolls are made. All items in cover or declared concealed by the owning player must be spotted before being fired upon. To successfully spot, refer to the range for the weapon to be fired and score that roll to succeed. Modifiers are just as if firing to the item.

12.6 Range of Sight, Hidden Placement and Movement

Game Mapper software facilitates hidden units; they can be marked on the map in their starting positions and once hidden units move **or fire**, they are visible to any opponent's **front arc**. Range of sight is the size of the gaming surface on normal weather days but generally this is 15 to 18 hexes (4 inch). Where maps are not used, markers should be placed on the table with some of those being fake. Spotting hidden vehicles is automatic at 2 hexes or less, and **infantry/AT guns and such are** found only when an opponent enters the neighbor hex.

12.7 Finding hidden artillery by "sound"

If no units are able to see artillery when it fires, perhaps it is in the middle of a forest, the only way to deduce where the artillery is located is by "sound." The exact location of the firing piece(s) can remain secret but the opposing player who may be looking for the artillery, is notified of the general region by the owning player showing a group of 10 connected hexes, one of which is the real hex the firing piece is located in. This group of hexes can be a round shape, box shape, or straight line of hexes, not bizarre, goofy patterns. Mortars cannot be heard when firing unless the opponent is within 2 hexes of them.

12.8 Rockets

Use the Shot Fall procedure as with other indirect artillery fire. The only difference between rockets and other HE is that rockets were self-contained and didn't require a crew to fire. Up until the modern era rockets were still relatively inaccurate.

13. ADDENDUMS

See the website for more updated addendums.

13.1 Commands

See Hex Command Gunpowder for the use of commanders and the Command Valuation System. Commands can have either an attached to a hex concept or the proximity "sphere of influence" concept if players desire, and that range should be all the hexes around his location.

13.2 Terrain Issues

13.2.1 Building Capacities and Combat with Buildings

1. [See Section 9: Combat vs. Structures](#)
2. HCM is designed for one stand to represent one squad, therefore using figures individually is not performed, even in house-to-house situations.
3. It is anticipated that each level of a building, per hex it occupies, will accommodate one squad.
4. When a squad is in a building there is no concern about which level the squad is at, but players are free to agree on concepts for how to determine what level each squad is located; otherwise we assume damage to the squad can occur when damage to the building is possible. All occupants of a building are available for becoming casualties and it is not necessary to declare firing to any specific level of a building.
5. For the sake of argument the quantity and type of openings in building walls e.g. doors and windows, is not a factor in combat. Items in buildings can fire any direction the building has a facing. As long as a building can be damaged, combat with buildings is simply a matter of defenders being in various degrees of cover.

13.3 Isolated Units and Silence During Battle

During the course of a battle, items in a players force may find themselves unable to move or fire without showing themselves to the enemy, and who cannot trace a connected series of non-enemy hexes to a friendly unit hex or entering side of the game surface. Such items are considered isolated; that is, the connected hexes must be traced from where the unit is located in the direction of the players entering side of the table as declared by scenario or judge. The connected hexes cannot be forward of their facing (e.g. their arc of fire) unless that takes them in the direction of their owning players entering side or HQ. If they cannot trace this uninterrupted line, officer symbols cannot be placed on the unit.

Determining what an owning player can DO with such units is difficult to determine. We can only assume the squad can do limited things until a pathway of hexes is found to connect them to friendly troops or they are contacted by partisans.

When an owning player wants isolated troops to do something each turn OTHER than remain in place and defend, roll a d6: on 1-3 they can do what they wish that turn.

13.3.1 Crew served weapons Faced with Enemy Presence

When isolated troops such as crews have a non-routed enemy in their neighboring hexes they automatically surrender if no friendly units are able to help defend them via melee combat with the enemy.

13.4 Infantry Riding Vehicles

This does not include cargo or APC vehicles. Each vehicle can accommodate one squad of infantry. Infantry can move onto a vehicle, ride the vehicle and unload from it in one turn causing a TE to be applied to the squad but if they were already riding the vehicle and dismount they do not suffer a TE.

This page intentionally left blank.

14. SEQUENCE OF PLAY

1. Arrivals

- Adjust Turn indicator and remove all Fired markers.
- Arriving troops and other forces move onto surface.
- Check spotting/reveal unit markers if needed.
- Check for Loyalties and other pre-turn or pre-game operations such as training, hunger, etc.

2. Command Control

- Check Force Integrity (when all commanders are killed or a player force is at 30% or less, or at the agreed checking level of losses).
- Remove commanders (if using Commander Placement method).

3. Initiative/Activation

- Roll to see who wins Initiative (if A/B system is used and unless one side is already designated as winner; winner becomes A or Phasing player; B player is Non-Phasing; if using Pulse system roll for initiative and note who has won it for other reasons).
- Write/mark Orders and send couriers if needed, or make Order Change attempts, radio communication etc.

4. Phasing Movement

- Move Routed Units their full rout speed (routed units do not pulse). Do not move units involved in melee.
- If Pulse concept used both players move all items in pulses and repeat until all moving items are finished.
- Items that do not move at all in the turn can declare moving targets stop and be fired upon. In the case of non-moving units firing at each other roll to see who gets to fire first (if initiative is not used).
- Mark items that fire. Some items can still move after firing (player agreement and/or except WWII).
- Mark all units that have moved.
- Place/Move/Attach Commanders/Couriers. Read Written Orders if couriers are used.

5. Post-Move Firing

- For Pulse concept fire only those items that have not already fired; roll to see who fires first (if initiative is not used)..
- Normal rule: Non-phasing items fire first automatically in their frontal arc. Apply Casualties/Hits.
- Mark fired units.

6. Phasing Firing

- If not using Pulse concept, Phasing Player units fire now; apply casualties/hits.
- Mark fired units.

7. Melee Combat

- Conduct Melee combat and record hits.
- Routed units are moved now.
- Check for Looting where necessary upon melee successes.

8. Rally

- Routed units with attached Commanders are now rallied; turn to face desired direction and remove all routed/TE hit markers. Optional: Rally from routed status fully, but apply one TE hit. Optional: Rally all units in command sphere.
- Non-Phasing player becomes Phasing, repeat process if not using Pulse concept.
- Turn ends.

Optional: When not using pulse concept, while still rolling for Initiative to see who the A- Phasing Player is and who the B- Non-Phasing player is, another method thereafter is that the phasing player moves designated groups of units. The non-phasing player then does the same. Repeat this until all units have moved THEN conduct all firing by having Player A conduct all combat followed by Player B. Player A and B then resolve all melee combat.

15. HEX COMMAND MECHANIZED TABLES

MOVEMENT	Hexes (off road)
Infantry (Hvy and Eng. Move 2)	3
Tracked VL,L / M / H,VH Face change: one hex side/per turn; VL/L: 2	4 / 3 / 2
Wheeled VL,L / M / H,VH Face change: two hex side/per turn; VL/L: 3	3 / 2 / 2
Cavalry (Cmd, Courier etc.)	5

Constructions and Other Notes			
Item	Turns	Item	Cost
Pontoon Bridge	5	un/limber	1 TE
Redoubt (cover2)	6	Gun Push (1 hex; except Hvy. No uphill)	1 TE
Quick works (cover1), dig-in	3	Road (wheeled: double)	+1/2
Wagon	2		

FIRING		Range/Class The following table shows d6		
Roll to Hit	Small Arms & Inf AT, MG, HMG Range	Cannon Range		
		A VH/Hvy	B Med	C L, VL
Auto	0-1	\$ 0-2	0-2	0-2
1-3	2-3 Q	3-5	3-5	3-5
4,5	4-5	6-8	6-8	6,7
6	6 *	9-15	9-11	8,9

Cmdr Kill: When a commander is attached he is hit on a 6; this also causes a hit on the attached unit.

Heavy Infantry and Point Defense Weapons (.50 cal, MG42) are +1 combat bonus (.50 is VL AT as well as one hit to infantry). **Indirect HE** has no maximum range except mortars. Hvy/Med Mortar is B class for range; smaller mortars C class for range only.

\$ Indirect fire weapons (except mortars) cannot hit into ranges at 5 hexes or less. Q- Whole SMG squads; range limit and Infantry AT Autohit.

MODIFIERS	CB - Combat Bonus CP - Combat Penalty
Each hit a firing unit has, firing unit is fully Fatigued, target in each degree of cover	1 CP
Firing at Flank/Rear (see vehicle notes)	+1 CB
"Pak-40" Bonus (17pdr up to 100mm)	+1 CB
ATG or SP (Steady Gun Platform bonus)	+1 CB
LS target (Low Silhouette) (see note below)	-1 CP
Commander (placed to rally troops only. Other commander rules are Special/Optional Rules)	
At least 1 friend (not routed) past enemy line (and visible within 0- 2 hexes).	+1 CB
LS and tiny targets: no LS benefit (-1 CP to firer) at range 6 or less. Includes bren carrier, jeep etc.	
AT guns that did not have HE ability (37-47mm) firing at Infantry and cavalry can only cause a fatigued indicator.	
Players can elect to add +1 firing at the side and +2 firing at the rear of all armored vehicles (Hex facing concept).	

MELEE		Basic Melee Value: Inf: 3 Cav: 4
Both Roll..	1-3	Weaker TE hit.
	4-6	Both units Hit.
If 4-6 rolled by:	Weaker	Stronger hit.
	Stronger	Weaker hit

Melee vs. flank/rear doubles the results on the unit being melee'd in flank/rear. Units melee'd in flank/rear cannot change facing until contact is discontinued. They can change facing as a result of Pursuit INSTEAD of moving to pursue.

Melee Losers Surrender; there are no routs from melee except for **Mounted Cavalry routing**.

* **SMG Units** are elite in melee (+1)

Light and Very Light Cannons fire twice each time they fire.

AT Damage Table					
Firer/Class	Target Weight				
	VL	L	M	H	VH
VL/C	1	*	-	-	-
L/B	1	1	*	-	-
M/A	2	2	1	*	-
H/A	3	2	1	1	*
VH/A	4	3	2	1	1

Numbers mean qty of d6 dice to roll when the target is hit. Where * is shown in the table above, roll 1-3 to see if a lucky hit was caused then roll for damage:

Damage Results

1-3 Movement Hit. Move reduced by -1

4-5 Defense hit; weight drops -1 per hit.

6 = Combat Hit: -1 Combat Penalty

Whenever a vehicle has suffered 3 hits of anything that item is no longer functional. Firing at A.T. guns and other crew-served weapons causes a red hit. PanzerFaust/Schreck cause +1 damage die.