OWB TACTICAL COMBAT

OWB: TACTICAL COMBAT

CREDITS

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WWII: Operation WhiteBox is a roleplaying game of WWII special forces action designed for compatibility with the *Swords & Wizardry WhiteBox* roleplaying game.

FOREWORD

The combat rules presented in the *WWII: Operation WhiteBox* core rulebook take place mainly in the "Theater of the Mind". This means that the *Referee* sets the scene and decides whether or not a character is capable of a certain maneuver, action, or attack.

The following Tactical Combat rules are designed for groups who prefer a more visual representation of combat, particularly those who play online. These rules supersede any conflicting rule found in the Personal Combat or Vehicle Combat section of the *WWII: Operation WhiteBox* core rulebook.

The Tactical Combat rules presented here are not meant to mimic the complexity of a true wargame. Instead, the focus is on small unit actions involving a squad of enemies and/or a handful of vehicles battling it out in a single playing area—the kind of combat most commonly encountered in *WWII: Operation WhiteBox*.

Here's how it works:

During noncombat encounters, the game plays out as a traditional OSR roleplaying game. The PCs interact with NPCs and the world, resolving conflicts with die rolls or good old-fashioned roleplaying. No visual aids are needed at this time as the action takes place mainly in the "Theater of the Mind".

When combat occurs, however, the *Referee* breaks out the grid map and seamlessly switches to the Tactical Combat rules. Character and vehicle Miniatures are placed on the map and Tactical Combat Rounds are utilized.

There are numerous resources to support tactical play. Miniatures can be repurposed from various wargame lines. Paper character, vehicle, and building miniatures can also be downloaded from companies on RPGNow. Erasable grid-based battlemats can be purchased online, as can actual buildings and terrain for more complex tabletop dioramas.

I want to reiterate that the rules present in *OWB: Tactical Combat* are entirely optional. They are designed to work within the structure of the existing OWB game rules. If you're happy running combat with the core rulebook, there's no need to change. If, however, you prefer the use of miniatures, give these rules a try.

The *Referee* is encouraged to alternate between Tactical Combat Rules and "Theater of the Mind" whenever necessary to speed up gameplay.

As always, I want to thank you for your continued support of *WWII: Operation WhiteBox*. Feel free to email me at smallnichegames -at- gmail -dot- com with any comments, questions, or concerns.

Thank you!

Peter C. Spahn
Small Niche Games

TACTICAL PERSONAL COMBAT

"Move fast and clear those mortar holes. I want to see plenty of beach between men!"

—Captain Miller, *Saving Private Ryan (1998)*

The Canadian rifleman storms the beaches of Normandy, the SAS Commando silently cuts the German sentry's throat in North Africa, while in South Pacific, the Marine Corps machinegunner opens fire with his .50 caliber "Ma Deuce" to stop the Japanese Banzai charge. This is combat on the bloody battlefields of WWII.

Tactical Personal Combat is defined as any battle between two or more characters (player and/or non-player) that takes place using Melee or Missile Attacks.

DEFINITIONS

The following new terms are introduced for Tactical Personal Combat.

GRID

Tactical Personal Combat takes place on a grid map. This grid is comprised of squares that are equal to 1" (25 mm) in diameter. Each square roughly equates to 5' in the game. A grid measuring at least 36" x 36" is recommended to get the most out of Tactical Personal Combat.

RULER

If you do not have a grid, you may use a ruler to track Movement. 1" of Movement on the table is equal to 1 square on the grid.

MINIATURES (MINIS)

Tactical Personal Combat relies on the use of Miniatures. These Miniatures can be highly-detailed lead figures, homemade paper miniatures, or simple poker chips used to represent the placement of characters on the grid. Miniatures that represent characters are commonly referred to as a character Mini (sin.) or character Minis (pl.) in the text.

SCALE

A character Mini occupies one (1) square.

TIME

Tactical Personal Combat occurs in *rounds*. These *rounds* are abstract measurements that last only a few seconds. This makes them much shorter than the standard one (1) minute combat *rounds* described in the *WWII: Operation WhiteBox* core rulebook. A character Mini may move and attack OR take action each *round*.

MOVE: A character Mini may move a number of squares equal to 1/3 his Movement in each *round* and still Attack or take an Action.

ATTACK: A character may make one (1) Attack per *round*. Attacks include things like firing a vehicle weapon, starting suppressive fire with a medium machinegun (MG34), or stabbing a Japanese soldier with a bayonet. This Attack can be initiated on the character's turn (as determined by Initiative). Only one (1) Attack per *round* can be made and the character cannot take an Action in the same *round*.

ACTION: A character may take one (1) Action per *round*. Actions include things like using a Class Ability, setting a demolitions charge, or rendering First Aid to an injured comrade. This Action can be initiated on the character's turn (as determined by Initiative). Only one (1) Action per *round* can be made and the character cannot make an Attack in the same *round*.

TACTICAL COMBAT ROUND

When a character meets with potential enemies, it's possible that a fight may break out. To allow everyone to act and see what happens, do the following:

1. Determine if either group is Surprised. If one group achieves Surprise, each member of that group may move and attack OR take action before the other group has a chance to react. If neither group is Surprised or if both groups are Surprised, proceed to Step 2

2. Determine Initiative.

3. The group (individual or group, determined by the *Referee*) with the highest Initiative acts first (moving, attacking, using items, etc.) and the results occur.

4. The group with the next highest Initiative acts, and their results take effect.

5. Continue like this until all groups in an encounter have acted.

6. The *round* ends. If the battle has not been resolved, start at Step 2 again.

DETERMINING SURPRISE

During play, sometimes one character or group of characters gains Surprise over another character or group. Usually the *Referee* determines this, but often

uses the result of 1 on a roll of 1d6 to indicate if a character or group is Surprised. The character or group that achieved Surprise may move and attack OR take action before the other group has a chance to react. Once movement, attacks, and actions for the group are resolved, both groups determine Initiative normally.

DETERMINING INITIATIVE

At the beginning of each Tactical Combat Round, each group involved rolls 1d6. The highest roll wins. The winning group acts first, moving, attacking, and taking other actions. The other groups take damage and casualties, then take their turns, in descending order of results.

Initiative rolls may result in a tie. When this happens, both sides are considered to be acting simultaneously. The *Referee* may handle this situation in any way he chooses—with one caveat: the damage inflicted by combatants during simultaneous Initiative is inflicted even if one of the combatants dies during the *round*. It is possible for two combatants to kill each other during a simultaneous Initiative *round*!

MOVEMENT

The following rules apply to the different kinds of Movement a character Mini can make across a grid.

FACING

A character Mini starts with a forward Facing. A character Mini may change its Facing at will during its turn with no penalty. There are eight (8) possible Facings in the game. These include each side as well as each corner (45-degrees) of a grid square. Because characters can change their Facing at will, Facing is usually more important with vehicle Minis.

NORMAL MOVEMENT

A character Mini can move up to a number of squares per *round* equal to 1/3 its total Movement. This means that by the end of the *round*, characters with Movement 12 can move up to four (4) squares.

CRAWLING MOVEMENT

A character Mini who chooses to literally crawl (perhaps to remain behind available cover or avoid detection) moves at 1/3 Normal Movement per *round* (round down, minimum of 1). This means that the average character Mini with Movement 12 can move up to four (4) squares with Normal Movement (see above) or one (1) square with Crawling Movement.

MOVEMENT MODIFIERS

The following features may modify the number of squares a character Mini can move in a *round*.

DIAGONAL MOVEMENT: When measuring diagonally on a grid, Diagonal Movement costs one (1) square per Movement.

Note: Allowing a 1:1 ratio for Diagonal Movement speeds up play for most groups. For those who are more math-minded, when measuring diagonally on a grid, the first Diagonal Movement costs one (1) square, the second costs (2), the third costs one (1), the fourth costs (2), etc. This alternate method does nothing to significantly alter any other game effects.

Pyotr moves two (2) squares Diagonally and two (2) squares forward, seeking shelter in the bombed streets of Stalingrad.

FRIENDLY: A character Mini can move through a square occupied by a friendly character Mini, but cannot end a *round* occupying the same square. This costs two (2) Movement.

ENEMY: A character Mini cannot move through a square occupied by an enemy character Mini, unless the enemy has been incapacitated. In this case, moving through the square counts as two (2) squares (see Obstacle, below).

EFFECTS OF TERRAIN ON MOVEMENT

Terrain may adversely affect Movement. There are three types of Terrain—Normal, Rough, and Impassable. Terrain may also be littered with Obstacles that the character Mini must overcome.

NORMAL: Normal terrain consists of well-traveled roads, bridges, and flat, mostly even terrain. Movement is unaffected by Normal terrain.

ROUGH: Rough terrain can hamper Movement. Rough terrain consists of hilly country, narrow city streets, bocage country, swift-flowing streams, muddy ground, forests, shifting sands, and other uneven terrain. Normal Movement through Rough terrain costs two (2) Movement.

IMPASSABLE: The terrain is impassable to characters. It usually represents a solid obstacle such as a tall wall, thick forest, flooded field, barbed wire fence, wide river, or cliff face. Impassable terrain can be navigated with time, the proper tools, and preparation (at the *Referee's* discretion).

OBSTACLES: Obstacles can hamper movement. If an Obstacle hampers movement, but does not completely block it, each obstructed square or Obstacle costs two (2) Movement. Obstacles can be low walls, trenches, dead bodies, narrow creeks, thick hedges, piles of rubble, fences, bomb craters.

Movement over two (2) squares of Normal Terrain and four (4) squares of Rough Terrain/Obstacles = 10 Movement. Pyotr has Movement 12, so can move four (4) squares per round (see Normal Movement, above). Unused Movement does not "carry over" into the next round, so Pyotr would only be able to move two (2) of the above squares each round.

THE ATTACK ROLL

To attack with a weapon, the player rolls 1d20 and adds any bonuses to the result. These *To-Hit* bonuses include the character's Base Hit Bonus (BHB), any applicable Strength Bonus for attacks with hand-held weapons, any applicable Dexterity Bonus for attacks with missile weapons, and any other bonus identified as a *To-Hit* bonus, such as from Class Abilities or specially designed weapons.

The Attack Roll is then compared to the target's Armor Class to see if the attack hits, according to whichever system the *Referee* has chosen to use. The standard system (where a lower AC is better) is resolved by comparing the Attack Roll to the number required on **TABLE 1: ATTACK "To-Hit" ROLLS** (see below). If the Attack Roll is equal to or higher than the number on the table, the attack hits. In the Ascending Armor Class system, if the Attack Roll is equal to or higher than the defender's Armor Class, the attack hits.

TABLE 1: ATTACK "To-Hit" ROLLS														
AC	9	8	7	6	5	4	3	2	1	0	-1	-2	-3	-4	-5
AAC	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ATTACK ROLL	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

OPTIONAL RULE: 20s AND 1s (PERSONAL COMBAT)

The *Referee* may decide that a "natural" roll of 20 is an automatic hit or inflicts double damage or strikes two German soldiers with one bullet, or that a "natural" roll of 1 is an automatic miss and may result in dropping a weapon, the weapon jamming until repaired, or the character tripping and falling. These are commonly called "critical hits" and "critical fumbles", respectively.

LINE OF SIGHT (LOS)

Line of Sight (LoS) is a rough indicator of what a character Mini can see and attack. A character Mini's Line of Sight extends 45-degrees to the left and right of its Facing. Remember that a character Mini can change its Facing at will.

MELEE ATTACK

A Melee Attack is an attack with hand-held weapons such as a bayonet or Luftwaffe pilot's sword. Two combatants in adjacent squares are considered to be engaged "in combat" with each other. A character's Strength bonus *To-Hit* may also be added to melee Attack Rolls and melee damage, if the *Referee* allows it.

MISSILE ATTACK

Missile Attacks are attacks with ranged weapons such as an M1 Garand (large rifle), hunting bow, or thrown knife. A character's Dexterity Bonus for missile attacks is added to the Attack Roll when using missile weapons.

Missile weapons have a ROF value. This indicates the Rate of Fire, or maximum number of attacks that can be made with this weapon each *round*. Some weapons allow you to attack more than once per *round* while others allow you to attack every other *round*. The *Referee* determines exactly how that happens.

Missile weapons also have a RANGE value, which indicates a distance that can be multiplied indicating the Short range (x1), Medium range (x2 Short), Long range (x3 Medium), and Extreme range (x4 Long) of the indicated weapon. The weapon cannot fire effectively beyond Extreme range. Beyond Short range, every additional multiple adds an incremental -2 *To-Hit* modifier to all Attack Rolls. For example, shooting at Extreme range would give a -6 *To-Hit* modifier.

WITHHOLDING AN ATTACK

A character who wins Initiative may choose to withhold his Attack. An Attack is usually withheld to meet a predetermined condition (such as waiting to fire until the SS officer raises his rifle or the Tiger tank tops the hill). However, the character may switch targets and/or Attack at any time during the *round*. A withheld Attack carries over into subsequent *rounds*, however, the character may still only make one attack per *round*.

AUTOFIRE

A large number of WWII weapons are capable of fully automatic fire. This type of attack can be extremely devastating, however, it rapidly depletes ammunition and can cause the gun to overheat. There are two types of autofire—burst fire and suppressive fire.

BURST FIRE

To increase accuracy and save ammunition, operatives are trained to fire automatic weapons in short bursts. This gives them about three attacks (bursts) with each magazine. Burst fire provides the attacker with a +2 bonus *To-Hit*.
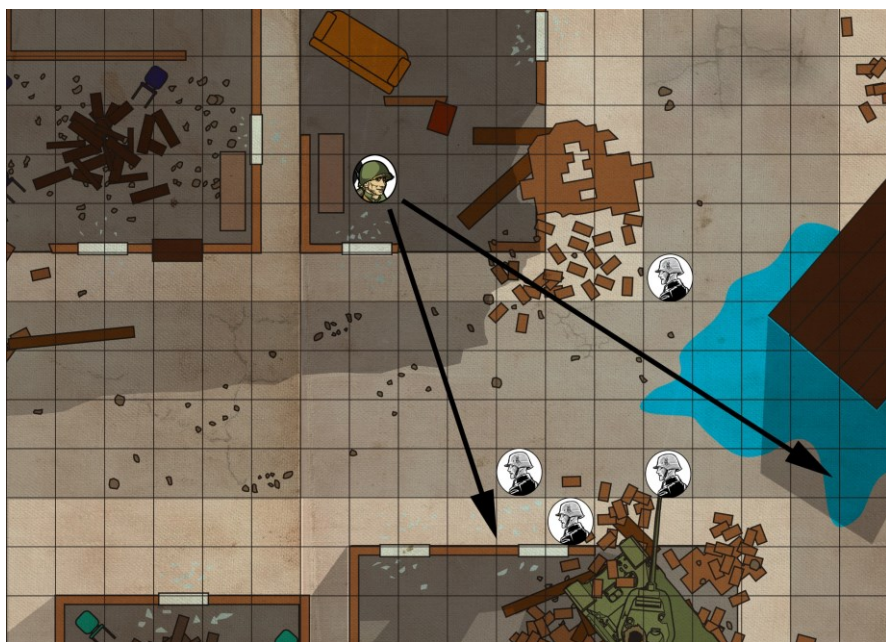
SUPPRESSIVE FIRE

In some cases, an attacker with a fully automatic weapon may spray a large area to pin down enemy troops or to cover the escape of his companions. The size of this area is determined by the *Referee*, but typically resembles a cone of fire about three (3) to five (5) squares wide, depending on the distance.

The first *round* of suppressive fire is treated as a burst fire attack (+2 *To-Hit*) against a single opponent as the gunner gets his bearings. On each successive *round* of suppressive fire, anyone caught in the line of fire (as determined by the *Referee*) is automatically struck by 0-3 bullets (Roll 1d6: 1 = 0 bullets; 2-3 = 1 bullet; 4-5 = 2 bullets; 6 = 3 bullets).

If a target takes cover (such as in a foxhole or behind a brick wall), the attacker must be prepared to continue suppressive fire on that area to receive the benefits of suppressive fire on subsequent *rounds*. (i.e. the attacker must keep his weapon trained on that area, ready to fire, even if no target presents itself). If the attacker is forced to change targets or target areas, the suppressive fire process must start over again.

Characters pinned down by this type of suppressive fire may need to find an alternate method of taking out their attacker (stealth, flanking maneuvers, grenades, armored vehicle, artillery strike, etc.).

NOTE: Weapons normally capable of suppressive fire are noted on **TABLE 4: MISSILE/RANGED WEAPONS** on pg. 15. However, the *Referee* may also rule that other weapons when used in great numbers are capable of suppressive fire, such as a line of fifty (50) Germans armed with bolt-action rifles.

Pyotr sees a group of German soldiers examining a wrecked T-34 tank. He decides to attack with suppressive fire from his submachinegun (PPSh-41). Pyotr can attack the three Germans closest to the tank because they are in his Line of Sight. He cannot attack the German closest to the water tower.

SUPPRESSIVE FIRE RELOADS

Ammunition is another consideration. In the case of a personal weapon such as a Thompson submachinegun or Sten gun, the magazine is expended after one (1) *round* of suppressive fire and must be replaced. The attacker automatically loses Initiative on the *round* he reloads, but may continue suppressive fire in that same *round*, after the reload.

MALFUNCTIONS

Suppressive fire can cause the weapon to overheat and malfunction. After three successive *rounds* of suppressive fire, there is a 1 in 6 chance each *round* that the weapon becomes unusable until repaired. A beltfed machinegun such as an MG42 or Vickers K, with someone on hand to change out and/or cool the barrels, can fire almost indefinitely.

SUPPRESSIVE FIRE AND MOVEMENT

A character using suppressive fire can only advance 1/3 his normal Movement rate per *round* (round down, minimum of 1). If the character moves more than that, the attack is treated as burst fire (+2 *To-Hit*) against a single opponent of the character's choice.

SUPPRESSIVE FIRE VS. SUPPRESSIVE FIRE

If more than one combatant is capable of suppressive fire, suppressive fire takes place in order of Initiative. If one weapon requires reloading and the other does not, the character performing the reload automatically loses Initiative on the following *round*.

SAVING THROWS VS. SUPPRESSIVE FIRE

The character may react to suppressive fire by "hitting the deck" or "diving for cover" to lessen or avoid damage. The character must make a Saving Throw (+/- his Dexterity bonus). If no cover is present, the character suffers 1/2 damage on a successful Saving Throw.

If cover is within one (1) square (fortified foxhole, side of a tank, brick wall, etc.), a successful Saving Throw means the character dives behind the cover, suffering no damage from the suppressive fire. Failure means the character suffers 1/2 damage. The cover may or may not be destroyed, depending on the type of attack.

COVER AND CONCEALMENT

COVER stops bullets. Sandbags, tanks, thick trees, brick walls, and boulders are all examples of cover. Characters hiding behind cover cannot be hit by bullets.

Characters attacking from behind cover (such as firing from behind a wall or through a gunport) are said to have partial cover. Partial cover provides the following advantages to the defender:

• A character attacking with single-shot ranged weapons suffers a -4 penalty *To-Hit* any target behind partial cover.

• A character attacking with burst fire suffers a -2 penalty *To-Hit* any target behind partial cover.

• A character behind partial cover who is attacked by suppressive fire takes 1/2 damage. If the character makes a successful Saving Throw, he is assumed to have ducked down behind cover and takes no damage from the attack.

CONCEALMENT hides you from attackers. Unarmored vehicles, wooden fences, plaster walls, clouds of smoke, darkness, and hedgerows are all examples of concealment. Concealment provides the following advantages to the defender:

• A character attacking with single-shot ranged weapons suffers a -2 penalty *To-Hit* any target behind concealment.

• A character attacking with burst fire does not receive any bonuses or penalties *To-Hit* a target behind concealment.

• Concealment has no effect on suppressive fire, as long as the attacker is laying down fire in the general area of the concealed character(s).

FIRE AND MANEUVER

Suppressive fire is particularly deadly when used from a fortified position such as a machinegun nest or concrete bunker. One method of dealing with this type of suppressive fire is to perform a tactic known as fire and maneuver.

Fire and maneuver involves splitting up into at least two groups and moving from cover point to cover point while advancing on the entrenched position. One group advances and fires, while the other group either hides behind full cover or hides behind partial cover and attacks with ranged weapons. The two groups then switch off each *round* between moving and taking cover.

The machinegunner may choose one of the following options:

• begin suppressive fire on the advancing group (+2 *To-Hit* one target, per burst fire rules).

• continue suppressive fire on the group behind partial cover (1/2 damage or no damage with successful Saving Throw, per Cover and Concealment, above).

• keep his weapon trained on the group hiding behind full cover and resume suppressive fire if they present themselves.

Fire and maneuver is typically performed until the characters can get into grenade-throwing range.

AMBUSH

Ambush is a type of surprise attack from cover or concealment. Ambushes can occur in villages, on lonely dirt roads, inside bombed-out cities, or in the wilderness. The ambusher gains one (1) free attack in the first *round* of combat. In addition, the ambusher automatically wins Initiative on the next combat *round*. Thereafter, Initiative is rolled normally.

The *Referee* may allow the characters a 1 in 6 chance to spot and/or react to a potential ambush when they specifically state they are looking for one (similar to a search for Hidden Things). Other factors may modify this chance to spot an ambush, at the *Referee's* discretion. The character cannot move more than half (1/2) his normal Movement rate while searching for an ambush. Characters searching for ambushes may roll Initiative normally after the initial free attack, if the ambush was not detected.

KEEPING TRACK OF AMMO

Ammunition was a valuable resource during WWII and often determined whether or not a unit could achieve its objective. Carrying extra ammo means carrying extra weight, which can cut down the mobility of a special forces operative or unit. The *Referee* is free to count every round (bullets or shells) if that suits the needs of his game. Otherwise, the *Referee* can have each character roll 1d6 after every three to five firefights. On a roll of one (1), the character is out of ammo.

RELOADS

If individual rounds (bullets or shells) are being counted, a weapon will eventually run out of ammo and need to be reloaded. This may require a little bit of extra research into weapon types and magazine capacity, or the *Referee* can just assume a reload is needed after every 6, 10, or 20 rounds fired. If counting rounds, the character who reloads automatically loses Initiative on the next combat *round*. Otherwise, the *Referee* can assume that reloads are handled abstractly over the course of the combat *round*.

EXPLOSIVES

Explosives deal damage in an area of effect. This area of effect begins at a central square and usually extends for three (3) squares in every direction (a 7x7 square). If the target does not occupy the central square, but is still caught in the area of effect, it receives a +2 bonus to the Saving Throw vs. Explosives (see below). Explosions do not normally affect anything behind Cover.

There are three main types of explosives—Impact, Timed, and Static.

IMPACT EXPLOSIVES

Impact Explosives include things like pipe bombs, Molotov cocktails, and any other type of explosive device that explodes on contact.

Impact Explosives do not require precision to be effective. If the target is stationary and in the open, their Armor Class is considered to be 9 [10].

If the character is aiming for a specific target (such as an open door, approaching soldier, balcony, underside of a vehicle, or trench line) or if the character cannot see the target (such as when hurling a pipe bomb at a machinegun nest after taking cover), the target area should be treated as AC 5 [14].

If the character "misses" the target (because of range modifiers or other penalties), but the Attack Roll is 14 or higher, roll 1d10 and consult **TABLE 2: GRENADE MISS TABLE** to determine where the grenade lands. It is possible that the target may still be affected by the blast. If the character "misses" with an Attack Roll that is less than 14, the explosive is ruled ineffective (failed to detonate, rolled under a tank, was absorbed by cover, etc.).

Impact Explosives typically deliver 1d6+2 Hit Points of damage in a 5x5 square.

MORTARS

Mortars are a special kind of Impact Explosive that hurls explosive shells from a mounted tube. Because the tube is mounted, slight corrections can be made to improve the mortar's accuracy.

A stationary target that can be seen by the gunner (or a forward observer) is always AC 5 [14]. However, the mortar operator receives a cumulative +1 *To-Hit* for every attack, as long as the target does not move. A moving target is always AC 0 [19]. Typical mortar shells do 2d6+2 damage within a 7x7 square.

If the character "misses" the target (because of range modifiers or other penalties), but the Attack Roll is 14 or higher, roll 1d10 and consult **TABLE 2: GRENADE MISS TABLE** to determine where the mortar lands. It is possible that the target may still be affected by the blast.

Mortars are best used when "zeroed" in on a fixed location, in which case they automatically hit.

TIMED EXPLOSIVES

Timed Explosives include things like grenades, sticks of dynamite, "sticky" bombs, and any other type of explosive device equipped with a short fuse and/or a timed delay.

As with Impact Explosives, they do not require precision to be effective—a stationary target in the open is considered to be AC 9 [10]. Otherwise, the target area is treated as AC 5 [14]. If the character "misses" the target (because of range modifiers or other penalties), but the Attack Roll is 14 or higher, roll 1d10 and consult **TABLE 2: GRENADE MISS TABLE** to determine where the grenade lands.

Timed Explosives explode at the very end of the current *round*, after all other movement, reloads, actions, and attacks have taken place. The target of a Timed Explosive may make a Saving Throw. Success means he picks up the explosive and hurls it back at his attacker. Failure means he suffers full damage from the explosive (no Saving Throw allowed).

To avoid this, the attacker may let a Timed Explosive "cook" by waiting until the end of the *round* to throw it. Unlike Withholding an Attack, the attacker must declare at the beginning of his turn that he has activated the explosive and is letting it "cook". This means that if the attacker is injured before the end of the *round*, he must make a Saving Throw. Failure means he drops the explosive, and everyone within its area of effect suffers normal damage.

Timed Explosives typically deliver 2d6+2 Hit Points of damage in a 7x7 square.

STATIC EXPLOSIVES

Static Explosives include common WWII plastic explosives such as gelignite (blasting gelatin), Nobel 808, and C-2.

Static Explosives are safe to handle, easy to mold, and do not explode without a detonator (triggered by an internal clock, match-lit fuse, or hard-wired to a plunger or electrical charge). A well-placed charge can destroy just about any type of structure or vehicle.

Static Explosives do not do a set amount of damage. The *Referee* is free to decide the area of effect and how much damage the explosion does to characters or vehicles unlucky enough to be caught in the blast (usually 2d6+2).

GRENADE MISS TABLE

When an explosive is thrown and a "miss" occurs (because of range modifiers or other penalties), but the Attack Roll is 14 or higher, roll 1d10 on the table below to see where the grenade lands. If the explosive does not detonate on the square the character Mini occupies, but the Mini is caught in the explosive's area of effect, it receives a +2 bonus to its Saving Throw vs. Explosives (see below).

ROLL	# OF SQUARES*	DIRECTION FROM TARGET	DISTANCE
1	1d3	Right Diagonal	Short
2	1d3	Left Diagonal	Short
3	1d3	Straight	Short
4	1d3+1	Straight	Right
5	1d3+1	Straight	Left
6	1d3+1	Right Diagonal	Long
7	1d3+1	Left Diagonal	Long
8-10	1d6+2	Straight	Long

*The # of Squares is double for Mortar attacks

TABLE 2: GRENADE MISS TABLE
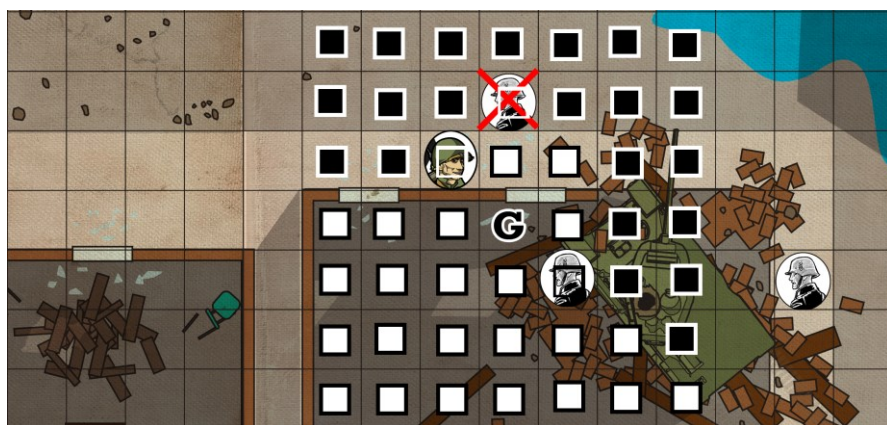
Pyotr blindly tosses a grenade (G) into the building and "misses" the German with a 15. He rolls 1d10 and gets a 3 (1d3 Squares, Straight, Short). He rolls 1d3 and gets a 1. This means the grenade lands 1 square short of the target, in a straight line from Pyotr's position (roughly). White squares denote affected areas; Black squares denote unaffected areas. The lone German caught in the blast receives a +2 Saving Throw bonus and may attempt to dive for cover.

DEFAULT EXPLOSIVES DAMAGE

In WWII, explosive devices are capable of causing massive amounts of destruction over a large area, wiping out platoons, destroying armored vehicles, and leveling entire city blocks. Although direct hits from tank guns, aerial bombardment, mines, artillery shells, and other explosive devices would easily kill any character, the *Referee* is instead encouraged to assume that any PC caught in the blast radius suffers 2d6+2 damage.

SAVING THROWS VS. EXPLOSIVES

If a character has time to react to an explosive device, the *Referee* should allow a Saving Throw (+/- his Constitution or Dexterity bonus). If no cover is present, the character suffers 1/2 damage on a successful Saving Throw.

If cover is within one (1) square (fortified foxhole, side of a tank, brick wall, etc.), a successful Saving Throw means the character dives behind the cover, suffering no damage from the blast. Failure means the character suffers 1/2 damage. The cover may or may not be destroyed, depending on the type of attack.

If the explosive does not detonate on the square the character Mini occupies, the character receives a +2 to this Saving Throw.

MELEE WEAPONS

BATTLE AXE: This large, double-bladed axe requires two hands to wield effectively.

BAYONET: A bayonet is a long knife designed to fit on the end of a rifle. If used in this manner, treat the weapon as a spear.

CLUB: Whether a crowbar, nightstick, rifle butt, tree branch, hammer, or baseball bat, a club is a simple blunt force instrument that does damage.

HATCHET: A hatchet is a small utility axe used mainly for cutting wood and clearing land.

IMPROVISED: Improvised weapons include beer bottles, suitcases, rocks, helmets, a fistful of keys, or anything else the character can pick up and reasonably use as a weapon.

KNIFE: A common weapon carried by most soldiers and many civilians.

SPEAR: A six-foot pole with a sharpened head or metal point. Spears are one of the oldest weapons in existence.

STRIKE: Striking involves fists, open hands, forearms, elbows, knees, feet, and even head butts.

SWORD: Swords may be passed down as family heirlooms or issued as part of a ceremonial uniform.

WEAPON	DAMAGE	WEIGHT (in lbs.)
Battle Axe	1d6+1	7
Bayonet	1d6-1	1
Club	1d6	2
Hatchet	1d6-1	3
Improvised	1d6-2	varies
Knife	1d3	1/2
Spear	1d6	5
Strike	1d2	-
Sword	1d6	10

TABLE 3: MELEE WEAPONS

MISSILE/RANGED WEAPONS

ARCHAIC WEAPON	DAMAGE	ROF	RANGE	WEIGHT (in lbs.)
Bow	1d6	1	9	5
Crossbow	1d6	1/2	6	10
Hatchet	1d6-1	1	1	3
Knife	1d3	1	1	1
Spear	1d6	1	3	5
SMALL ARMS	**DAMAGE**	**ROF**	**RANGE**	**WEIGHT (in lbs.)**
Handgun (Small)	1d6-2	2	9	1
Handgun (Medium)	1d6-1	1	15	2
Handgun (Large)	1d6	1	15	3
Rifle (Small)	1d6	1	30	7
Rifle (Large)	1d6+1	1*	30	10
Rifle (Anti-tank)	2d6	1	30	35
Shotgun	1d6+2	1 or 2	3	8
Submachinegun (SMG)	1d6	1**	15	10

MACHINEGUN	DAMAGE	ROF	RANGE	WEIGHT (in lbs.)
Machinegun (Light)	1d6+1	1**	30	20
Machinegun (Medium)	1d6+2	1**	30	25
Machinegun (Heavy)	2d6	1**	30	30
HEAVY WEAPON	DAMAGE	ROF	RANGE	WEIGHT (in lbs.)
Grenade	2d6+2	1	1	1
Mortar	2d6+2	1/2	100***	45
Flamethrower	1d6+1***	1	1	70
RPG (Light)	6d6***	1/2	15	20
RPG (Medium)	8d6 ***	1/2	15	20
RPG (Heavy)	10d6***	1/2	15	20

*The M1 Garand is capable of simulating Burst Fire

**These weapons are capable of Burst Fire and Suppressive Fire

***See weapon description

TABLE 4: MISSILE/RANGED WEAPONS

ARCHAIC WEAPON

BOW: These weapons fire arrows. They are commonly used by civilians to hunt game.

CROSSBOW: Bulky, two-handed, and slow to load, crossbows did not see much use during WWII.

HATCHET: A hatchet may be used as a missile weapon or a melee weapon.

KNIFE: A knife may be used as a missile weapon or a melee weapon.

SPEAR: A spear may be used as a missile weapon or a melee weapon.

SMALL ARMS

HANDGUN (SMALL): This includes all small caliber handguns such as derringers and .22 pistols.

HANDGUN (MEDIUM): This includes all medium caliber handguns such as the .38 British Enfield Mk. II and the 9 mm Luger P 08.

HANDGUN (LARGE): This includes all large caliber handguns such as the .45 Colt M1911.

RIFLE (SMALL): This includes most civilian hunting rifles and military carbines such as the M1 carbine.

RIFLE (LARGE): This includes most military rifles including the British bolt-action Lee-Enfield Mk. III, the American semiautomatic M1 Garand, and the German bolt-action *Karabiner-98k*.

RIFLE (ANTI-TANK): Anti-tank rifles are bipod and tripod mounted rifles designed to penetrate armored vehicles. In Vehicle Combat, the anti-tank rounds do full damage against unarmored vehicles and 1/2 damage against vehicles with the Reinforced Hull (x1) Modification, but are ineffective against more heavily armored vehicles. Examples include the British Boys, the Polish Wz.35, and the German *Panzerbüchse*.

SHOTGUN: Shotguns can be double-barreled streetsweepers or pump-action shotguns. Shotguns fire slugs or buckshot shells which grant the attacker a +2 *To-Hit* at Short range, but have no Extreme range. If both barrels of a double-barreled shotgun are fired at once, the attack does double damage at Short range only. Shotguns were more prevalent in the Pacific Theater.

SUBMACHINEGUN: Submachineguns are light weapons capable of automatic fire. They include the German MP40, the British Sten gun, and the American Thompson SMG.

MACHINEGUN

MACHINEGUN (LIGHT): These portable machineguns are normally mounted on bipods or tripods. They include the British Bren, the American M1918 Browning (BAR), and the German MG26. If fired without being mounted, a light machinegun is only capable of burst fire.

MACHINEGUN (MEDIUM): These machineguns must be mounted on bipods, tripods, or vehicles. They include the British Vickers gun, the American M1919 Browning, and the German MG34 and MG42.

MACHINEGUN (HEAVY): Heavy machineguns are large caliber machineguns that must be mounted on vehicles or trailers. They include the American M2 Browning, the British Vickers K, and the German MG81.

HEAVY WEAPON

GRENADE: Grenades do 2d6+2 damage within a 7x7 square. Grenades are on a timed fuse and do not explode until the end of the *round*, so characters may have time to dive for cover to avoid (or lessen) the blast, at the *Referee's* discretion (see Explosives, pg. 11). Grenades include the British Mills Bomb the American Mk II "pineapple" grenade, and the German "potato masher" *stielhandgranate*.

MORTAR: A mortar is an indirect-fire weapon used to support infantry operations. It fires an explosive shell at an arcing angle into the air, so is ineffective indoors and less effective in thick forests. The shells are muzzle-loaded and drop-fired. Mortars have a minimum range of 300 ft. and cannot normally be fired at targets closer than that. Mortars are mounted on bipods or tripods and require a crew of at least two to operate effectively. If only the

gunner is present, double the Rate of Fire. Examples include the British Ordnance SBML, American M1, and the German *Granatwerfer* 42.

FLAMETHROWER: Flamethrowers are backpack-mounted weapons that produce a cone of flame approximately three (3) squares wide. Anyone caught within this cone suffers 1d6 damage (no Attack Roll needed). In addition, the target must make a Saving Throw or else catch fire, suffering 1d6 damage each *round* for the next 1d6 *rounds* or until the flames are extinguished.

If the flamethrower operator takes damage, there is a 1 in 3 chance the tanks rupture and explode, causing 2d6+2 damage to everyone within a 7x7 square radius. The operator takes full damage from this explosion, but anyone else in the area of effect may make Saving Throws to lessen or avoid damage (see Saving Throws vs. Explosives, pg. 14).

Flamethrowers are typically good for 1d6 blasts before needing to be refueled. Examples include the British Portable No.2 "lifebuoy", the American M2, and the German *Flammenwerfer* 35.

ROCKET-PROPELLED GRENADE (LIGHT): Light rocket-propelled grenades (RPGs) include British PIATs and other light, anti-tank weapons. A direct hit from a rocket would kill any character. Therefore, the *Referee* can treat a successful rocket launcher attack as a grenade (2d6+2 damage in a 7x7 square).

The rockets contain a "shaped charge" that is specifically designed to be used against vehicles, enabling them to do full damage against vehicles with the Reinforced Hull (x1) Modification in Vehicle Combat (pg. 43). When used against armored vehicles such as tanks, soldiers should aim for the less armored rear of the vehicle whenever possible. This is why most tanks are equipped with machineguns and usually supported by infantry.

ROCKET-PROPELLED GRENADE (MEDIUM): Medium rocket-propelled grenades (RPGs) include American bazookas and other medium-sized, anti-tank weapons. A direct hit from a rocket would kill any character. Therefore, the *Referee* can treat a successful rocket launcher attack as a grenade (2d6+2 damage in a 7x7 square).

The rockets contain a "shaped charge" that is specifically designed to be used against vehicles, enabling them to do full damage against vehicles with the Reinforced Hull (x1) or Reinforced Hull (x2) Modification in Vehicle Combat (pg. 43). When used against armored vehicles such as tanks, soldiers should aim for the less armored rear of the vehicle whenever possible. This is why most tanks are equipped with machineguns and usually supported by infantry.

ROCKET-PROPELLED GRENADE (HEAVY): Heavy rocket-propelled grenades (RPGs) include German *panzerschrecks* and other heavy, anti-tank weapons. A direct hit from a rocket would kill any character. Therefore, the *Referee* can treat a successful rocket launcher attack as a grenade (2d6+2 damage in a 7x7 square).

The rockets contain a "shaped charge" that is specifically designed to be used against vehicles, enabling them to do full damage against vehicles with the

Reinforced Hull (x1), Reinforced Hull (x2), or Reinforced Hull (x3) Modification in Vehicle Combat (pg. 43). When used against armored vehicles such as tanks, soldiers should aim for the less armored rear of the vehicle whenever possible. This is why most tanks are equipped with machineguns and usually supported by infantry.

ARMOR

Armor available to the characters during WWII is only effective against archaic weapons such as swords, clubs, and arrows. Armor designed to stop bullets was far too cumbersome to be used by soldiers, let alone operatives who had to rely on stealth and mobility to survive behind enemy lines.

BDU/HEAVY CLOTHES: This includes thick clothes worn by civilians during winter months as well as durable "battle dress" uniforms worn by soldiers in the field.

LEATHER ARMOR: Armor made of hard, boiled leather.

CHAIN MAIL: An armored tunic made of interlocking links of chain.

PLATE MAIL: An iconic suit of armor as worn by ancient knights.

SHIELD: The typical shield is effective only against melee weapons and archaic missile weapons (arrows, spears, etc.), but does provide a +1 bonus to a character's Saving Throw vs. explosions such as from a grenade. In order to offer -1 [+1] protection from bullets, the shield must be made of solid steel and weigh at least 100 lbs.

HELMET: A helmet provides a +1 bonus to a character's Saving Throw vs. explosions such as from a grenade.

ARMOR	EFFECT ON AC [AAC]	WEIGHT (LB.)
BDU/Heavy Clothes	-1 [+1]	10
Leather Armor	-2 [+2]*	25
Chain Mail	-4 [+4]*	50
Plate Mail	-6 [+6]*	75
Shield	-1 [+1]**	10
Helmet	**	3

*Affords only -1 [+1] protection vs. bullets and explosives

**see description

TABLE 5: ARMOR

OPTIONAL RULE: AC VS. AAC

The *Referee* decides whether the game uses the standard Armor Class (AC) system where a lower AC is harder to hit, or the Ascending Armor Class (AAC) system where a higher AC is harder to hit.

Numbers for the AAC system are set off in brackets when listed, as you see in **TABLE 5: ARMOR**, to distinguish the two systems when the numbers appear side by side.

The author would like to note that during playtests, the AAC system seemed to speed up combat and was easier for new players to grasp than descending Armor Class.

CALCULATING ARMOR CLASS

In the standard descending Armor Class system (AC), an unarmored man has an AC of 9. Any armor worn subtracts from this total, making him more difficult to hit. For example, an Italian farmer (base AC 9) wearing winter clothes (-1) has an effective AC of 8 (9 - 1).

Using the Ascending Armor Class system (AAC), an unarmored man has an AAC of 10. Armor worn is added, making him more difficult to hit. Therefore, a German soldier (base AAC 10) wearing the standard battle dress uniform [+1] has an effective AAC of 11 (10 + 1).

CONVERTING ARMOR CLASS SYSTEMS

The *Referee* is encouraged to mine other Old School products for NPCs, animals, and other more exotic creatures. To translate between descending and ascending Armor Class systems, the Armor Class (AC) and Ascending Armor Class (AAC) values should add up to 19 when added together. For example, AC 7 is the same as AAC 12, or 19 - 7 = 12.

ARMOR CLASS FOR SPECIAL FORCES OPERATIVES

The PCs are special forces operatives who are trained to use superior tactics, shoot while moving, and stay cool under fire. All of this means that an unarmored operative has a natural AC of 7 [12] instead of 9 [10]. Operatives are also trained to attack from ambush, using cover and concealment techniques whenever possible for added protection. (See Cover and Concealment, pg. 9.)

TACTICAL VEHICLE COMBAT

"Anti-tank, H.E.! Traverse left! Traverse left!"

—Wardaddy, *Fury (2014)*

Whether it's a desert Commando raid from the back of a Jeep, German halftracks chasing POWs through Poland, or skirmish lines of tanks blasting each other on the plains of Kursk, vehicular combat is a staple of WWII imagery.

Tactical Vehicle Combat is defined as two or more ground vehicles attempting to attack one another, presumably with the intent to destroy one another. In most cases, it functions exactly as Tactical Personal Combat.

DEFINITIONS

The following new terms are introduced for Tactical Vehicle Combat.

GRID

Tactical Vehicle Combat takes place on a grid map. This grid is comprised of squares that are equal to 1" (25 mm) in diameter. Each square roughly equates to 5' in the game. A grid measuring at least 36" x 36" is recommended to get the most out of Tactical Vehicle Combat.

RULER

If you do not have a grid, you may use a ruler to track Movement. 1" of Movement on the table is equal to 1 square on the grid.

MINIATURES (MINIS)

Tactical Vehicle Combat relies on the use of Miniatures. These Miniatures can be highly-detailed lead figures, homemade paper miniatures, or simple poker chips used to represent the placement of vehicles on the grid. All that is necessary is that one side of the Miniature be identifiable as the "front" of the vehicle for purposes of determining the vehicle's Facing (see below).

Miniatures that represent vehicles are commonly referred to as a vehicle Mini (sing.) or vehicle Minis (pl.) in the text.

SCALE

A vehicle Mini occupies one (1) or more squares on a grid. The Scale of each vehicle in squares is listed next to its Movement as Length (L) x Width (W).

TIME

Tactical Vehicle Combat occurs in *rounds*. These *rounds* are abstract measurements that last only a few seconds. This makes them much shorter than the standard one (1) minute combat *rounds* described in the *WWII: Operation WhiteBox* core rulebook. A vehicle Mini may move and attack OR take action each *round*.

MOVEMENT: A vehicle Mini may move a number of squares equal to its Movement each *round* and still Attack or take an Action.

ATTACK: A character (whether operating or crewing a vehicle) may make one (1) Attack per *round*. The vehicle operator may fire any weapon designated as [operator-linked]. Crewmen may fire any weapons. Attacks include things like firing a tank gun (88 mm), starting suppressive fire with a pintle-mounted machinegun (MG34), or shooting a rifle (M1 Garand) through a firing port. This Attack can be initiated on the character's turn (as determined by Initiative). Only one (1) Attack per *round* can be made and the character cannot take an Action in the same *round*. If the vehicle is moving, all attacks from the vehicle are made at a penalty *To-Hit* (see Movement).

ACTION: A character (whether operating or crewing a vehicle) may take one (1) Action per *round*. Actions include things like making a Driving Check, using a Class Ability, or rendering First Aid to an injured comrade. This Action can be initiated on the character's turn (as determined by Initiative). Only one (1) Action per *round* can be made and the character cannot make an Attack in the same *round*.

TACTICAL COMBAT ROUND

When a PC vehicle meets with potential enemy vehicles, it's possible that a fight may break out. To allow everyone to act and see what happens, do the following:

1. Determine if either group is Surprised. If one group achieves Surprise, each member of that group may move and attack OR take action before the other group has a chance to react. If neither group is Surprised or if both groups are Surprised, proceed to Step 2.
2. Determine Initiative.
3. The group (individual or group, determined by the *Referee*) with the highest Initiative acts first (moving, attacking, using items, etc.) and the results occur.
4. The group with the next highest Initiative acts, and their results take effect.
5. Continue like this until all groups in an encounter have acted.
6. The *round* ends. If the battle has not been resolved, start at Step 2 again.

DETERMINING SURPRISE

During play, sometimes one vehicle or group gains Surprise over another vehicle or group. Usually the *Referee* determines this, but often uses the result of 1 on a roll of 1d6 to indicate if a group is Surprised. The group that achieved Surprise may move and attack OR take action before the other group has a chance to react. Once movement, attacks, and actions for the group are resolved, both groups determine Initiative normally.

DETERMINING INITIATIVE

At the beginning of each Tactical Combat Round, each group involved rolls 1d6 (Wheelmen add their Initiative bonus of +2). The highest roll wins. The winning group acts first, moving, attacking, and taking other actions. The other groups take damage and casualties, then take their turns, in descending order of results.

Initiative rolls may result in a tie. When this happens, both sides are considered to be acting simultaneously. The *Referee* may handle this situation in any way he chooses—with one caveat: the damage inflicted by combatants during simultaneous Initiative is inflicted even if one of the combatants dies during the *round*. It is possible for two combatants to kill each other during a simultaneous Initiative *round*!

MOVEMENT

FACING

A vehicle Mini starts with a forward Facing. A vehicle Mini may change its Facing by making Turns. There are eight (8) possible Facings in the game. These include each side (90-degrees) and corner (45-degrees) of a grid square. Facing is most important when considering a vehicle's Reinforced Hull rating and the Firing Arcs of its weapons.
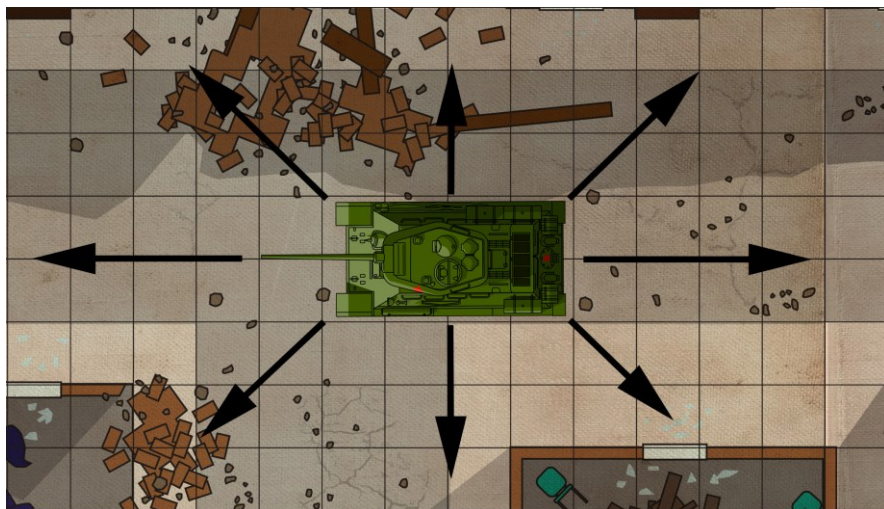
NORMAL MOVEMENT

A vehicle Mini can move up to a number of squares per *round* equal to its total Movement. All attacks made from the vehicle suffer -4 *To-Hit*.

CRAWLING MOVEMENT

A vehicle Mini that chooses to Crawl moves at 1/3 Movement per *round* (round down, minimum of 1). Attacks made from a vehicle moving at Crawling speed suffer no penalty *To-Hit*.

REVERSE MOVEMENT

A vehicle may move in Reverse at 1/3 its Movement per *round* (minimum of 1). Attacks made from a vehicle moving in Reverse suffer no penalty *To-Hit*.

MOVEMENT MODIFIERS

The following features may modify the number of squares a vehicle Mini can move in a *round*.

DIAGONAL MOVEMENT: Diagonal Movement requires the vehicle to make a 45-Degree Turn (see below). Diagonal Movement costs one (1) Movement for every one (1) square traveled diagonally. The vehicle Mini's Facing remains at a 45-degree angle during Diagonal Movement. The vehicle must initiate another 45-Degree Turn (in any direction) to return to the grid.

Note: Allowing a 1:1 ratio for Diagonal Movement speeds up play for most groups. For those who are more math-minded, when measuring diagonally on a grid, the first Diagonal Movement costs one (1) square, the second costs (2), the third costs one (1), the fourth costs (2), etc. This alternate method does nothing to significantly alter any other game effects.

FRIENDLY: If a vehicle Mini moves into a square occupied by a character Mini or another vehicle Mini, a Collision occurs (see below).

ENEMY: If a vehicle Mini moves into a square occupied by a character Mini or another vehicle Mini, a Collision occurs (see below).
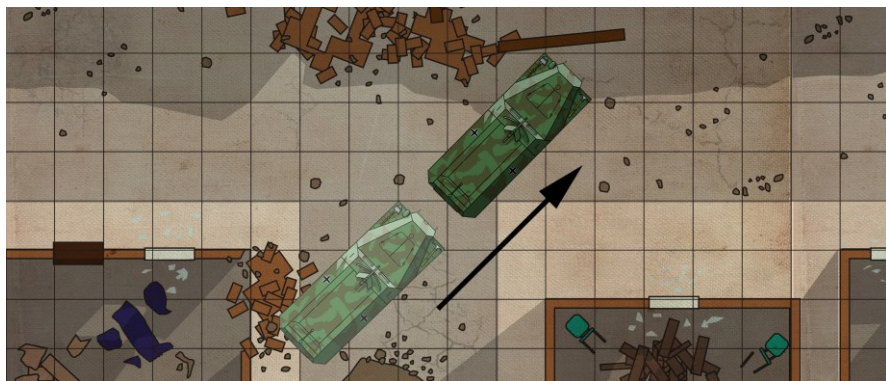
German Sd. Kfz. 251 traveling three (3) squares of Diagonal Movement.

EFFECTS OF TERRAIN ON MOVEMENT

Terrain may adversely affect Movement. There are three types of Terrain—Normal, Rough, and Impassable. Terrain may also be littered with Obstacles that the Mini must overcome.

NORMAL: Normal terrain consists of well-traveled roads, bridges, and flat, mostly even terrain. Movement is unaffected by Normal terrain.

ROUGH: Rough terrain can hamper Movement. Rough terrain consists of hilly country, narrow city streets, bocage country, swift-flowing streams, muddy ground, forests, shifting sands, and other uneven terrain. Movement through Rough terrain costs two (2) Movement. This applies if any part of the vehicle is negotiating Rough terrain.

IMPASSABLE: The terrain is impassable to vehicles. It usually represents a solid barrier such as a tall wall, thick forest, flooded field, barbed wire fence, wide river, or cliff face. Impassable terrain can be navigated with time, the proper tools, and preparation (at the *Referee*'s discretion).

OBSTACLES: Obstacles can hamper Movement. If an Obstacle hampers Movement, but does not completely block it, each obstructed square or Obstacle counts as two (2) Movement. This applies if any part of the vehicle is negotiating an Obstacle. Obstacles can be things like low walls, trenches, dead bodies, narrow creeks, thick hedges, herds of cows, piles of rubble, fences, bomb craters, etc.

Note: Movement costs for Rough Terrain and Obstacles are in addition to Movement costs for Vehicle Maneuvers (see below).
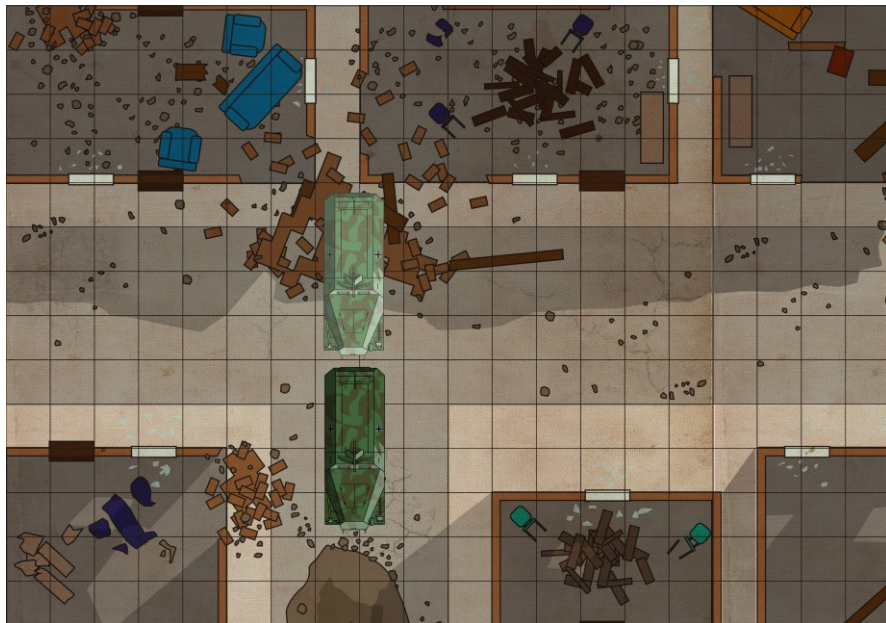
German Sd. Kfz. 251 with Movement 12 traveling two (2) squares over Rough Terrain (4 Movement) and two (2) squares over Normal Terrain (2 Movement) for a total of 6 Movement before coming to an Impassable bomb crater.

VEHICLE MANEUVERS

A vehicle operator may perform different types of Maneuvers (see below) when operating a vehicle. More complex Maneuvers require a Driving Check. A vehicle operator may also be required to make a Saving Throw to avoid an adverse effect directed against his vehicle. Driving Checks and Saving Throws are explained below.

DRIVING CHECK (DC)

A difficult vehicle Maneuver requires the vehicle operator to make a Driving Check. A Driving Check is considered an Action, so only one (1) Driving Check can be attempted per *round*. If a second Driving Check is required, it automatically fails.

The chances for success are outlined below:

NPC: Roll 1d20. On a roll of "1", the Driving Check succeeds.

PC (other than Wheelman): Roll 1d6. If the number is equal to or less than the character's Experience Level, the Driving Check succeeds.

WHEELMAN: A Wheelman automatically succeeds on a number of Driving Checks each *round* equal to his Experience Level. One additional Driving Check may be made in the same *round*, but the Wheelman must roll against his Experience Level, as above.

FAILING A DRIVING CHECK

If a vehicle operator fails a Driving Check, he must consult the appropriate **VEHICLE MISHAP TABLE** (see below) to determine the result.

SAVING THROW (ST)

A vehicle operator may be required to make a Saving Throw for his vehicle. Wheelmen may add their +2 bonus to this Saving Throw. Saving Throws are not considered an Action.

FAILING A SAVING THROW

If a vehicle operator fails a Saving Throw, consult the appropriate **VEHICLE MISHAP TABLE** (see below) to determine the result.

COMMON VEHICLE MANEUVERS

The following Vehicle Maneuvers are commonly attempted. Movement costs for Vehicle Maneuvers are in addition to Movement costs for Rough Terrain and Obstacles (see above).

DEFENSIVE DRIVING (DC): A vehicle operator who makes a Driving Check may choose to drive defensively in order to make their vehicle harder to hit in combat. This involves minor zigzagging and taking angles in anticipation of an attack. Defensive Driving costs two (2) Movement. It grants the vehicle Mini a +2 Armor Class bonus for that *round*.

JUMP (DC): The vehicle may jump a number of squares equal to 2/3 its current Movement. The *Referee* decides if a vehicle is capable of making a Jump and whether or not conditions are possible for a Jump. Jump requires a Driving Check, with the effects of a failed check taking place after the Jump is completed.

Note: A vehicle with the Reinforced Hull (x2) or Tracked Modification may never attempt a Jump.

GETTING UNSTUCK: The *Referee* may rule that there is a 1 in 6 chance a vehicle bogs down and gets stuck when passing over Rough Terrain or certain Obstacles. If this happens, the vehicle comes to a complete stop. The vehicle operator may attempt a Driving Check each *round* to free the vehicle. The vehicle may also be freed manually in 1d3 *turns*, without the need for a Driving Check.

LANE CHANGE: A moving vehicle may "change lanes" on the grid while moving, moving one (1) square horizontally and one (1) square vertically at the cost of two (2) Movement. Its Facing remains unchanged.

QUICK LANE CHANGE (DC): A moving vehicle may quickly "change lanes" horizontally on the grid while moving in the same direction at the cost of two (2) Movement. The vehicle operator must make a Driving Check. If successful, the vehicle Mini moves vertically one (1) square and horizontally a number of squares equal to its Width.

TURNS

In order to make a Turn, a vehicle must be moving. If the vehicle does not have enough Movement left to make a Turn, the Turn cannot be attempted that *round*. The *Referee* should treat Turns as "pick up and place" situations, where the Mini is picked up and placed at the desired location.

45-DEGREE TURN: A 45-degree turn is considered Diagonal Movement. The vehicle Mini is placed with its front inside corner one (1) square forward and one (1) square left or right of its Facing, at a 45-degree angle. The Maneuver costs two (2) Movement.

T-34 tank making a 45-Degree Turn to the right

90-DEGREE TURN: A 90-Degree Turn is considered two (2) consecutive 45-degree turns. A vehicle may safely turn up to 90-degrees at a cost of four (4) Movement. The vehicle Mini is placed with its front inside corner two (2) squares left or right of its Facing at a 90-degree angle.

TIGHT TURN (DC): A vehicle traveling at Normal Movement may make a Tight Turn of up to 90 degrees, reducing the cost to two (2) Movement. The vehicle Mini is placed with its front inside corner two squares left or right of its Facing at a 90-degree angle. Tight Turns occur in spectacular fashion, with the vehicle's wheels kicking up mud or screeching across the pavement.

Note: Tracked vehicles are unable to make a Tight Turn unless they have the Advanced Steering Modification. If the Driving Check is successful, the vehicle operator must also make a Saving Throw.

CRAWLING TURN: A Crawling Turn is similar to a Tight Turn, but made at Crawling speed. No Driving Check is required and the maneuver costs two (2) Movement. Crawling Turns are often made on city streets and in dense hedgerows where space is limited. Any ground vehicle (wheeled or tracked) is capable of making a Crawling Turn.
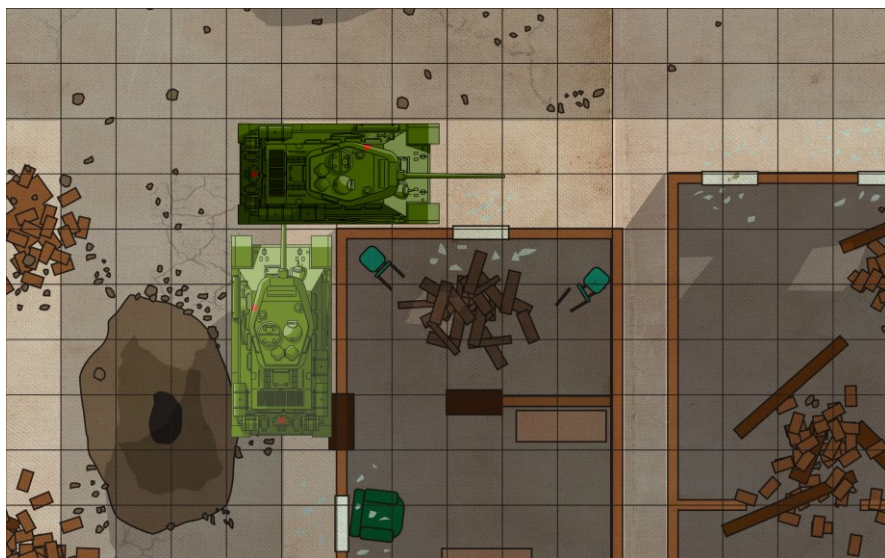
T-34 tank executing a 90-Degree Turn, Tight Turn, or Crawling Turn

BOOTLEG TURN (DC): A Bootleg Turn quickly whips a moving vehicle around up to 180-degrees. The Maneuver costs three (3) Movement. If successful, the vehicle comes to a complete stop, but may resume normal Movement on the following *round*.

Note: Tracked vehicles are unable to make a Bootleg Turn unless they have the Advanced Steering Modification. If the Driving Check is successful, the vehicle operator must also make a Saving Throw.

COLLISION

If a vehicle Mini strikes an object (such as a wall) or another vehicle, both sustain damage. The vehicle initiating the Collision is referred to as the "attacking vehicle", even if the Collision is the result of a **VEHICLE MISHAP**. The second vehicle (if any) is referred to as the "defending vehicle".

Damage relies on the Movement of all vehicles involved. These vehicles use their current Movement or the Movement traveled in the previous *round* (whichever is higher).

The Reinforced Hull (x1) Modification doubles damage delivered and reduces damage taken by 1/2. The Reinforced Hull (x2) Modification triples damage delivered and reduces damage taken by 1/3. The Reinforced Hull (x3) Modification quadruples damage delivered and reduces damage taken by 1/4.

All occupants of a vehicle suffer 1/2 damage from the Collision (Saving Throw for 1/4 damage). Character Minis outside of a vehicle take full damage from a Collision, but may make a Saving Throw for 1/2 damage.

HEAD-ON: In a head-on Collision, both vehicles take damage equal to 1d6+(Movement of both vehicles).

T-BONE: In a T-bone Collision, both vehicles take damage equal to 1d6+(Movement) of the attacking vehicle.

REAR-END: In a rear-end Collision, subtract the Movement of the defending (front) vehicle from the Movement of the attacking (rear) vehicle. Add this number to 1d6 for damage.

RAMMING (DC/ST): Ramming is accomplished by intentionally driving a vehicle Mini into a character Mini or vehicle Mini. This attack requires a Driving Check. If successful, the defending character or vehicle must make a Saving Throw. It delivers the same damage as the appropriate type of Collision.

SIDESWIPE (DC/ST): A vehicle can sideswipe another vehicle in order to cause damage and/or cause the other vehicle to lose control. Both vehicles must be traveling in the same direction, and the attacking vehicle must move to an adjacent square before the attack. The attacking vehicle makes a Driving Check. If successful, the defending vehicle makes a Saving Throw. Each vehicle suffers 1d6 damage.

VEHICLE MISHAP (WHEELED)

Wheeled vehicles include motorcycles, cars, and trucks.

1   ROLLOVER

The vehicle suffers a Spinout and Stall as below, which turns into a rollover crash. Roll 1d6: On a roll of 1-3, the vehicle lands upside down; on a roll of 4, the vehicle lands on its left side; on a roll of 5, the vehicle lands on its right side; on a roll of 6, the vehicle lands right side up. The vehicle and its occupants suffer 2d6 damage from the impact.

2   SPINOUT AND STALL

The vehicle suffers a Spinout, as below, and comes to a complete stop. The vehicle stalls and cannot be restarted for one (1) *turn*. A Wheelman with the proper tools or a Combat Engineer using Jury-Rig can get the vehicle running in 1d3 *rounds*. The vehicle suffers 1d6+1 damage from the strain. All occupants suffer 1d2 damage.

3   SPINOUT

The vehicle spins completely out of control, traveling 1/3 its current Movement in the direction it was traveling (minimum of 1). Roll 1d6+4 to determine how many Facing movements the vehicle makes as it spins out. The vehicle comes to a complete stop at the new Facing. The vehicle suffers 1d6 damage from the strain. All occupants suffer 1d2 damage (Saving Throw for 0).

4-6   SKID

The vehicle fishtails from side-to-side, traveling 1/3 its current Movement (minimum of 1). The direction the vehicle travels depends on the roll: (1) 45-degrees left of Facing; (2) forward; (3) 45-degrees right of Facing. The vehicle operator regains control on the following *round*, but is unable to Attack or take an Action for the remainder of the current *round*. The vehicle suffers 1d3 damage from the strain.

TABLE 6: VEHICLE MISHAP (WHEELED)

VEHICLE MISHAP (TRACKED)

Tracked vehicles include halftracks, tank destroyers, and tanks.

1   SLIPPED TRACK

The vehicle slips a track, leaving it unable to move without major repairs. The vehicle also suffers 1d6 damage from the strain.

2   OVERHEATED ENGINE

The vehicle's engine overheats. It suffers a Locked Drive, as below, and must stop immediately or risk permanent damage to the engine. The vehicle suffers 1d6+1 damage from the strain and must be shut down and allowed to cool for one (1) hour. Otherwise, there is a 1 in 6 chance each *round* of operation that the engine seizes up and the vehicle becomes inoperable, requiring major repairs.

3   LOCKED DRIVE

The vehicle suffers a transmission strain, as below, and the drive locks, causing the treads to only move forward or backward in a straight line for one (1) *turn*. A Wheelman with the proper tools or a Combat Engineer using Jury-Rig can unlock the drive from inside the vehicle in 1d3 *rounds*. The vehicle suffers 1d6 damage from the strain.

4-6 TRANSMISSION STRAIN

The strain to the vehicle's transmission reduces its Movement by 1/3 for the next 1d3 *rounds*. The vehicle suffers 1d3 damage from the strain.

TABLE 7: VEHICLE MISHAP (TRACKED)

T-34 tank ambushed by Germans, sustains a Locked Drive causing a Collision.

THE ATTACK ROLL

To attack with a vehicle weapon, the character must have access to it, operating it from a vehicle's cockpit or turret, depending on the vehicle they are in. The character rolls 1d20 and adds any bonuses to the result. This includes the character's Base Hit Bonus (BHB) and Dexterity Bonus.

TABLE 1: ATTACK "To-Hit" ROLLS on pg. 6 is used for both Tactical Personal Combat and Tactical Vehicle Combat.

The Attack Roll is then compared to the targeted vehicle's Armor Class to see if the attack hits, according to whichever system the *Referee* has chosen to use. The standard system (where a lower AC is better) is resolved by comparing the Attack Roll to the number required on the standard *To-Hit* table. If the Attack Roll is equal to or higher than the number on the table, the attack hits. In the Ascending Armor Class system, if the Attack Roll is equal to or higher than the vehicle's Armor Class, the attack hits.

MISSILE ATTACK

A vehicle operator may attack once per *round* with any weapon that is designated as [operator-linked]. A vehicle Mini may attack once per *round* with any other vehicle weapon manned by a gunner.

All attacks in Tactical Vehicle Combat are considered missile attacks. A character's Dexterity Bonus for missile attacks is added to the *To-Hit* roll when the character is using the vehicle's weapons.

A vehicle operator or gunner whose vehicle is traveling at more than Crawling speed (1/3 Normal Movement) suffers -4 *To-Hit*.

FIRING ARC

A vehicle weapon's Firing Arc determines which targets the vehicle can engage.

FIXED FIRING ARC

A number of vehicle weapons occupy a fixed position on the vehicle. This gives the weapon a firing arc resembling a roughly 45-degree cone.

A weapon's fixed firing arc is noted in its description using one of the following abbreviations:

- (F) Forward: The vehicle Mini can fire at anything in front of it.
- (R) Right: The vehicle Mini can fire at anything to the right.
- (L) Left: The vehicle Mini can fire at anything to the left.
- (A) Aft/Rear: The vehicle Mini can fire at anything behind it.

Example:

A Sherman tank has two .30 caliber machineguns mounted in opposite sides of its front. Both machineguns would have a Firing Arc of Forward (F).

A German halftrack has three MG34s mounted on swivel mounts in its bed. One MG34 is mounted in the rear of the bed with a Firing Arc of Aft (A), while the other two MG34s are mounted on the sides, having Firing Arcs of Left (L) and Right (R).

360-Degree Firing Arc

Vehicle weapons mounted on a pintle or turret have a 360-degree Firing Arc. These weapons have a Facing that is independent of the vehicle Mini's Facing. Unless otherwise noted, vehicle weapons with a 360-degree firing arc are assumed to be mounted near the center of the vehicle.

A Pintle mount (PIN) is used to mount personal weapons such as machineguns. They can be rotated 360-degrees at will. Some pintle mounts are equipped with shields that provide the gunner with partial cover (-4 *To-Hit*).

A Turret (TR) is rotated by hand, electric motor, or hydraulic system. Turrets are rated from one (x1) to three (x3), depending on their rate of traverse (turning).

- The first level (TR1) can change the turret's Facing (traverse) by up to 45-degrees every *round*.

- The second level (TR2) can change the turret's Facing (traverse) by up to 90-degrees every *round*.

- The third level (TR3) can change the turret's Facing (traverse) by up to 180-degrees every *round*.

A Coaxial Mount (CXL) indicates a secondary weapon mounted to a turret. It traverses with the turret.

Withholding an Attack

A character who wins Initiative may choose to withhold his Attack. An Attack is usually withheld to meet a predetermined condition (such as when the *Kübelwagen* rounds the corner or the Tiger tank tops the hill). However, the character may switch targets and/or Attack at any time during the *round*. A withheld attack carries over into subsequent *rounds*, however, the character may still only make one attack per *round*.

The T-34 tank withholds its attack until the German halftrack comes into view.

VEHICLE WEAPONS

All vehicle weapons have different ranges as shown below. These ranges are measured in squares (inches). They work the same as ranges in Tactical Personal Combat which means that most Tactical Vehicle Combat engagements will be conducted at short range.

VEHICLE WEAPON	DAMAGE	RANGE
Autocannon	2d6	60
Cannon	7d6	60
Tank Gun (Light)	8d6	60
Tank Gun (Medium)	9d6	90
Tank Gun (Heavy)	10d6	120

TABLE 8: VEHICLE WEAPONS

AUTOCANNON: Autocannons are large, fully automatic cannons that fire explosive shells instead of bullets. They can be mounted on vehicles or trailers. Autocannons are capable of burst fire and suppressive fire when used against vehicles. A direct hit from an autocannon shell would kill any character. However, characters are difficult to target with autocannons. Therefore, the *Referee* can treat an autocannon attack as an explosive (2d6+2 damage in a 7x7 square). The German FlaK 38 which fired 20 mm rounds is an example of an autocannon.

CANNON: Cannons are large guns that fire explosive shells. They can be mounted on vehicles or trailers. A direct hit from a cannon shell would kill any character. However, characters are difficult to target with cannons. Therefore, the *Referee* can treat a cannon attack as an explosive (2d6+2 damage in a 7x7 square). The 37 mm gun mounted on the American M3 Stuart light tank is an example of a cannon.

TANK GUN (LIGHT): Light tank guns are the primary armament of light tanks, although they can also be fitted on tank destroyers. A direct hit from a light tank gun would kill any character. However, characters are difficult to target with a tank gun. Therefore, the *Referee* can treat a tank gun attack as an explosive (2d6+2 damage in a 7x7 square). The American 75 mm medium-velocity gun mounted on early models of the M4 Sherman tank is an example of a light tank gun.

TANK GUN (MEDIUM): Medium tank guns are the primary armament of medium tanks, although they can also be fitted on light tanks and tank destroyers. A direct hit from a medium tank gun would kill any character. However, characters are difficult to target with a tank gun. Therefore, the *Referee* can treat a tank gun attack as an explosive (2d6+2 damage in a 7x7 square). The German high-velocity 7.5 cm KwK 42 L/70 mounted on the Panther tank is an example of a medium tank gun.

TANK GUN (HEAVY): Heavy tank guns are the primary armament of heavy tanks, although they can also be fitted on medium tanks and tank destroyers. A direct hit from a heavy tank gun would kill any character. However, characters are difficult to target with a tank gun. Therefore, the *Referee* can treat a tank gun attack as an

explosive (2d6+2 damage in a 7x7 square). The German 8.8 cm KwK 36 L/56 mounted on the dreaded Tiger tank is an example of a heavy tank gun.

VEHICLE WEAPON MISS TABLE

If a vehicle weapon misses its target, but the Attack Roll is 14 or higher, roll 1d6 on the Vehicle Weapon Miss Table to see where it impacts. This "miss" causes 2d6+2 explosives damage in a 7x7 square. If the round does not detonate on the square the Mini occupies, but a Mini is caught in the weapon's area of effect, the Mini receives a +2 bonus to their Saving Throw vs. Explosives.

ROLL 1D6	RESULT
1	1d6+1 squares in front of the target
2	1d6+1 squares to the right of the target
3	1d6+1 squares to the left of the target
4-6	clean miss/ricochet

TABLE 9: VEHICLE WEAPON MISS TABLE

OPTIONAL RULE: TANK GUN AMMUNITION

Tank Guns are capable of firing different kinds of ammunition. A brief description of some ammunition and its effects is listed below.

HIGH-EXPLOSIVE (HE): This is the default ammunition for tank guns. It is extremely effective against characters, dealing 2d6+2 explosives damage in a 7x7 square.

ARMOR PIERCING (AP): Armor piercing rounds are much, much rarer than high-explosive rounds. They effectively upgrade a tank gun's ability to penetrate armored vehicles, enabling the gun to act as if the vehicle's Reinforced Hull Modification is one (x1) level lower. The weapon's damage remains unchanged. Against characters, the armor piercing round does 2d6+2 explosives damage in a 3x3 square.

SMOKE: Smoke obscures vision in a 7 x 7 square around the target. Smoke lasts for 1d3 *rounds* before dissipating. The smoke conveys the benefit of Concealment to the target and to any opponents the target wishes to attack.

COVER AND CONCEALMENT

Cover and Concealment works for vehicles the same way it works for characters. Cover includes things like brick walls, brick buildings, wrecked tanks, and large trees. Concealment includes things like small trees, cottages, Dutch windmills, smoke, and thick hedgerows.

A vehicle attacking from behind cover receives the benefits of partial cover (-4 *To-Hit*). Partial cover assumes at least 1/2 or more of the vehicle is behind cover.

Full cover is usually turned to partial cover after being hit by a vehicle weapon. Partial cover is usually eliminated after being hit by a vehicle weapon. The *Referee* may use the **OPTIONAL RULE: HIT POINTS FOR INANIMATE OBJECTS** (see below) if he wishes to be more precise.

A vehicle's Firing Arcs and the placement of its weapons may limit its ability to attack. The *Referee* may have to make rulings "on the fly" to determine whether or not a vehicle can fire its weapons from behind partial cover.
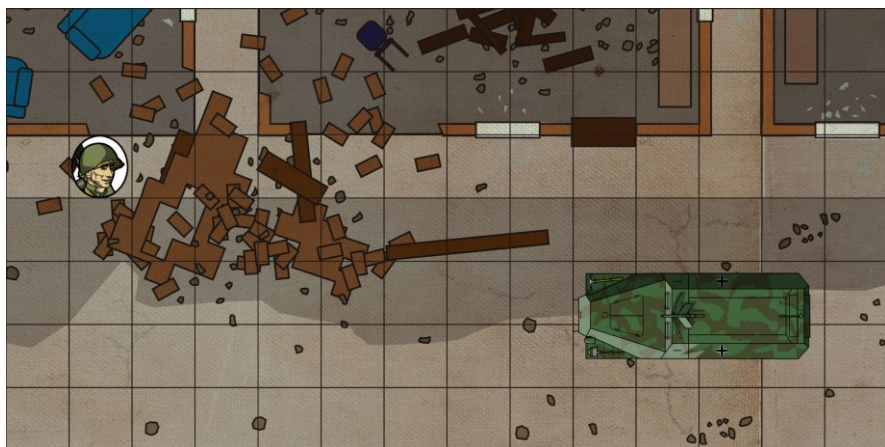
Pyotr sets up behind partial cover of fallen bricks to attack the German Sd. Kfz. 251 with a bazooka. If the German halftrack hits Pyotr with its autocannon, the partial cover will be destroyed.

DAMAGE AND DESTRUCTION

When a vehicle is hit, the amount of damage rolled based off the weapon used is deducted from its Hit Points. When the vehicle reaches zero (0) Hit Points, it becomes inoperable until repaired. This may be due to damaged engines, drive systems, damaged controls, etc. In addition, all occupants inside take 2d6+2 Hit Points of damage from shrapnel and internal explosions (Saving Throw for 1/2).

If reduced to -10 Hit Points, the vehicle explodes, killing everyone trapped inside. The *Referee* may allow a Saving Throw to see if the characters escape before the explosion.

20s AND 1s (VEHICLE COMBAT)

Vehicles can be severely damaged without being entirely destroyed. The *Referee* may decide that a "natural" *To-Hit* roll of 20 or 1 produces an adverse effect in addition to any damage taken. Roll 1d6 and consult the table below.

EFFECT
1. Armor Class
2. Modification
3. Movement
4. Operator
5. Visibility
6. Weapon

ARMOR CLASS: The vehicle's Armor Class is reduced by +1[-1].

MODIFICATION: One of the vehicle's Modifications is reduced by one (x1) or rendered unusable. The *Referee* must determine the effects. For example, a Tracked vehicle might be rendered immobile. An Aerial vehicle may be forced to land. A Cargo compartment may collapse or the cargo inside may be destroyed. A Waterborne vehicle may begin to sink. The vehicle does not regain the benefit of this Modification until repairs are made.

MOVEMENT: The vehicle's engine and/or tracks/tires/props are damaged. The vehicle is reduced to 1/3 its normal Movement. If this result is rolled again, the vehicle is rendered immobile.

OPERATOR: One of the vehicle's operators takes 1d6+1 Hit Points of damage from shrapnel (Saving Throw for 1/2).

VISIBILITY: The visibility of the vehicle's occupants is reduced (broken windows, damaged periscope, smoking engine, etc.), creating a -1 penalty *To-Hit* with all vehicle-mounted weapons. This result is cumulative.

WEAPON: One of the vehicle's weapons is rendered inoperable. The *Referee* may decide which weapon, or roll a weapon at random.

TABLE 10: 20s AND 1s (VEHICLE COMBAT)

REPAIRING VEHICLES

Vehicles do not heal like living beings and must be repaired. This takes time and resources. It takes one (1) day to repair 5 Hit Points to a vehicle, provided the correct parts are available.

OPTIONAL RULE: MASSIVE DAMAGE

Massive damage is defined as damage equal to 1/4 or more of the vehicle's total Hit Points. If the vehicle sustains massive damage from a single attack, the driver must make a Saving Throw. Failure means the vehicle operator rolls 1d6 on **TABLE 10: 20s AND 1s (VEHICLE COMBAT)**.

OPTIONAL RULE: HIT POINTS FOR INANIMATE OBJECTS

Inanimate objects such as furniture, walls, and buildings can have Hit Points just like characters and vehicles. These objects can take damage from weapons or Collisions.

The following Hit Points are for a 5' section of the material. If material that is part of a structure (such as a wall or building) suffers damage greater than three times (x3) its Hit Points, there is a 1 in 6 chance that all or part of the structure collapses. If the collapse is the result of a Collision, the vehicle is buried in rubble and becomes stuck (see Getting Unstuck). If the structure does not collapse, the *Referee* determines the extent of the damage.

The *Referee* is free to ignore these rules and decide what effects weapons have on inanimate objects, based on the needs of his game.

HIT POINTS	MATERIAL	MODIFICATION EQUIVALENT	PROTECTION
5	Wood or Plaster	-	Concealment
10	Logs or Sandbags	Reinforced Hull x1	Cover
15	Masonry	Reinforced Hull x2	Cover
20	Reinforced Concrete	Reinforced Hull x3	Cover

VEHICLE STATISTICS

The vehicles here are described in broad categories (car, medium tank, small aircraft, etc.). All vehicles have the following statistics: Armor Class, Hit Points, Movement, Attack, Modifications. The *Referee* should feel free to customize the statistics to better reflect superior or inferior versions within a particular category.

- **ARMOR CLASS:** A vehicle's Armor Class reflects how difficult it is to damage. This can be a reflection of its small size, high maneuverability, metallic hull, or any combination thereof. Armor Class is explained earlier in the rules for Personal Combat. If you're using the descending Armor Class (AC) system (where lower AC is better), disregard the numbers in brackets. If you're using the Ascending Armor Class (AAC) system (where high AC is better), disregard the number before the brackets.

- **HIT POINTS:** All vehicles have Hit Points, just like characters. The HD and average hit points for each type of vehicle are given below. When a vehicle reaches zero (0) Hit Points it is rendered inoperable until repaired. If reduced to -10 Hit Points, the vehicle explodes, killing everyone trapped inside. The *Referee* may allow a Saving Throw to see if the characters escape before the explosion. Remember that most personal weapons do only 1/2 damage against vehicles.

- **MOVEMENT:** This represents a vehicle's speed, just like a character's. Unlike character Movement, a vehicle's Movement is measured in squares (inches) per *round*. A vehicle must have an operator (pilot, driver, captain, etc.) to move, otherwise it sits immobile. Vehicles may move at a cautious rate (1/3 its Movement) or normal (its listed Movement) in a single combat *round*. The vehicle's Length (L) and Width (W) are noted in squares.

- **ATTACK:** This represents a vehicle's weapons and each weapon's Firing Arc. Some vehicles have more than one weapon and may engage in more than one attack per *round*. Each weapon requires a different gunner to operate. Unless otherwise noted, these gunners are common soldiers with a BHB of +0. The *Referee* may wish to grant a bonus of +1 to the Attack Roll if the crewmen are seasoned veterans.

- **MODIFICATIONS:** Many vehicles have extra features that grant them bonuses or modifiers in combat. Details on these modifiers are described in detail below, after descriptions of the vehicles themselves.

MOTORCYCLE	
ARMOR CLASS	8 [11]
HIT POINTS	4 (HD 1)
MOVEMENT	24 (L2 x W1)
ATTACK	-
MODIFICATIONS	-

This includes any type of military or civilian motorcycle. They can be equipped with a sidecar in order to transport another rider. The Germans used the BMW R75 while the Allies preferred the Harley-Davidson WLA.

CAR

ARMOR CLASS	8 [11]
HIT POINTS	8 (HD 2)
MOVEMENT	21 (L3 x W2)
ATTACK	-
MODIFICATIONS	-

This includes any type of military or civilian car such as Ford sedans, Volkswagen *Käfers* (beetles), and Rolls Royces.

TRUCK (SMALL)

ARMOR CLASS	8 [11]
HIT POINTS	12 (HD 3)
MOVEMENT	21 (L3 x W2)
ATTACK	-
MODIFICATIONS	Cargo

This includes any small military or civilian truck or utility vehicle such as pickups, Jeeps, and *Kübelwagens*.

TRUCK (LARGE)

ARMOR CLASS	8 [11]
HIT POINTS	16 (HD 4)
MOVEMENT	15 (L4 x W2)
ATTACK	-
MODIFICATIONS	Cargo

Large trucks include any type of large cargo transport, tractor trailer, or box truck such as the German Opel Blitz, the British Bedford OY, or the American GMC CCKW (a.k.a. Deuce and a Half).

ARMORED CAR

ARMOR CLASS	6 [13]
HIT POINTS	10 (HD 2)
MOVEMENT	18 (L3 x W2)

ATTACK	Autocannon or Cannon [TR2] and/or Medium Machinegun [PIN]
MODIFICATIONS	Firing Ports, Reinforced Hull (x1)

A standard car or truck that has been beefed up with armor. Examples include the German *Leichter Panzerspähwagen*, the British Daimler, and the American M8 Greyhound.

ARMORED PERSONNEL CARRIER

ARMOR CLASS	5 [14]
HIT POINTS	24 (HD 6)
MOVEMENT	12 (L4 x W2)
ATTACK	Autocannon or Cannon [TR2] and/or Heavy Machinegun [PIN]
MODIFICATIONS	Communications, Firing Ports, Reinforced Hull (x1), Tracked

Armored personnel carriers are light, armored fighting vehicles used to transport troops. Examples include the Allied M3 halftrack, the German SdKfz 251, and the British M7 Kangaroo.

TANK DESTROYER

ARMOR CLASS	5 [14]
HIT POINTS	24 (HD 6)
MOVEMENT	12 (L4 x W2)
ATTACK	Tank Gun [TR2], Medium Machinegun [F]
MODIFICATIONS	Communications, Reinforced Hull (x1), Tracked

A tank destroyer is basically a tank gun mounted on a turretless tank chassis. Tank destroyers were used primarily to ambush tanks. In Vehicle Combat against a mobile tank, a tank destroyer always loses Initiative. Examples include the British Archer and the German *Jagdpanzer*.

TANK (LIGHT)

ARMOR CLASS	5 [14]
HIT POINTS	32 (HD 8)
MOVEMENT	12 (L3 x W2)
ATTACK	Autocannon, Cannon, or Light Tank Gun [TR2], Medium Machinegun [F]
MODIFICATIONS	Communications, Firing Ports, Reinforced Hull (x2), Tracked

Light tanks are fast and maneuverable. They include British Tetrarchs, American M3 Stuarts, early German *panzers*, and Soviet T-50s.

TANK (MEDIUM)

ARMOR CLASS	4 [15]
HIT POINTS	36 (HD 9)
MOVEMENT	9 (L4 x W2)
ATTACK	Light or Medium Tank Gun [TR2], Medium Machinegun (x2) [F]
MODIFICATIONS	Communications, Firing Ports, Reinforced Hull (x1 or x2), Tracked

Medium tanks are a compromise between the mobility of a light tank and the armor and firepower of a heavy tank. They include British Cromwells, American M4 Shermans, German Panthers, and Soviet T-34s.

TANK (HEAVY)

ARMOR CLASS	3 [16]
HIT POINTS	50 (HD 10)
MOVEMENT	6 (L4 x W3)
ATTACK	Heavy Tank Gun [TR1], Medium Machinegun (x2) [F]
MODIFICATIONS	Communications, Firing Ports, Reinforced Hull (x3), Tracked

Heavy tanks are heavily armed and armored. They include the British Churchill, German Tiger, and Soviet IS.

MODIFICATIONS

Modifications grant vehicles certain abilities and advantages, both in and out of battle. The *Referee* must decide whether or not materials are on hand to add Modifications. Some Modifications may be added more than once, increasing their effectiveness. Listed below are a few of the more common Modifications that characters will encounter in WWII Europe.

ADVANCED STEERING: This modification enables a Tracked vehicle to pivot in place, changing its Facing by up to 90-degrees each *round*. The vehicle must be stopped and in neutral to safely use its advanced steering. If the vehicle is moving faster than its Crawling speed, the vehicle operator automatically rolls on **TABLE 7: VEHICLE MISHAP (TRACKED)**.

AERIAL: The vehicle is capable of flying through the air. Vehicles with this Modification cannot normally be attacked by characters or vehicles on the ground unless the pilot is making a Strafing Run.

AMPHIBIOUS: This modification enables a ground vehicle to travel for short distances on the surface of the water.

CARGO: The vehicle is specially designed to transport cargo. The type and amount of cargo each vehicle can carry is left to the *Referee*.

COMMUNICATIONS: The vehicle is equipped with a radio and is capable of communicating with nearby vehicles as well as command and control in the rear.

FIRING PORT: This modification can only be installed in a vehicle with a Reinforced Hull (see below). It creates up to six (6) ports from which characters may fire weapons from the safety of the vehicle. Attackers suffer a -4 penalty *To-Hit* characters inside the vehicle (per Partial Cover, pg. 9).

MAKESHIFT ARMOR: Makeshift Armor consists of logs, sandbags, tank tracks, and other material attached to the side of a vehicle for added protection. Makeshift Armor reduces a vehicle's Movement by 1. It provides a +1 Armor Class bonus to the vehicle and has a 1 in 6 chance of prematurely detonating a rocket-propelled grenade, autocannon, cannon, or tank gun round, reducing damage by 1/2. Once a round is detonated in this manner, the benefits of Makeshift Armor are eliminated until it is reapplied.

SUPERCHARGED ENGINE: This modification increases the vehicle's Movement by 3. It may be added up to three times (x3).

REINFORCED HULL: This modification adds reinforced plating to the vehicle's hull. It may be added up to three times (x3), but reduces the vehicle's Movement rate by half each time.

- The first level (x1) makes the vehicle immune to attacks from most personal weapons. The vehicle suffers only 1/2 damage from autocannons and cannons, and 1/4 damage from grenades.

- The second level (x2) makes the vehicle immune to attacks from most personal weapons, autocannons, cannons, and light tank guns. The plating is strongest in front. If the vehicle is attacked from the sides, rear, top, or bottom, its hull functions as first level (x1).

- The third level (x3) makes the vehicle immune to attacks from most personal weapons, autocannons, cannons, light tank guns, and medium tank guns. The plating is strongest in front. If the vehicle is attacked from the sides, rear, top, or bottom, its hull functions as second level (x2).

TRACKED: The vehicle is equipped with tracks (or half-tracks) instead of tires making it much more capable of traveling over rough terrain.

WATERBORNE: The vehicle is designed to be used on water.

COMBINING TPC AND TVC

The Tactical Personal Combat (TPC) rules and Tactical Vehicle Combat (TVC) rules are designed to work together, allowing teams of PCs to take on tanks and other armored vehicles in the chaotic battles of WWII. However, the *Referee* must keep in mind that *WWII: Operation WhiteBox* is still a roleplaying game at heart, so some rulings may have to be made "on the fly".

Does a tank gun fired at a building cause Explosives damage to characters inside? Can the Wheelman fix the damaged truck before the Stuka starts its bombing run? Does the smoke from the smoldering tank provide Concealment to soldiers nearby? These are decisions the *Referee* must make on a case-by-case basis.

When in doubt, always defer to Rule 0.

MOVEMENT

Terrain may present different problems for various character and vehicle Minis.

Rolling hills are considered Rough terrain for both. A low brick wall surrounding a French garden may be Impassable to a Jeep, but present only an Obstacle to a character who can hop over it or a tank that can drive through it. A Belgian field, partially flooded with waist-deep water may be Rough terrain for a wading character, but Impassable to a 2.5-ton truck. A Normandy hedgerow may be an Obstacle to characters who can find a gap in the vegetation, but be Impassable to a halftrack or (unmodified) tank.

The *Referee* should use his best judgement when determining how terrain affects Movement during Tactical Combat.

COMBAT

Vehicle weapons (autocannons, tank guns, etc.) typically do double damage when a "direct hit" is scored against characters. However, individual characters are difficult to target with vehicle weapons, so the *Referee* should read the weapon's description closely. Unless otherwise noted, personal weapons (swords, handguns, rifles, etc.) do half (1/2) damage when used against vehicles, however, damage may be reduced or eliminated by certain Vehicle Modifications.

OPTIONAL RULE:
COMBAT MODIFIERS

The *Referee* may decide to allow additional bonuses and penalties to Attack Rolls for groups who prefer crunchier rules. The following Combat Modifiers are cumulative and apply to character Minis and vehicle Minis, when appropriate. The rules for suppressive fire (see pg. 7) and for cover and concealment (see pg. 9) should supersede these Combat Modifiers.

As always, the Referee has the final say on what Modifiers are allowed.

CONDITION	MELEE	RANGED
Target Sitting or Kneeling	+1	-1
Target Prone	+4	-2
Target Climbing	+2	+2
Target Helpless or Unaware of Attack	*	+4
Target Engaged in Melee Combat	-	-4
Attacker on High Ground	+1**	+1
Attacker Kneeling	-1	+1
Attacker Prone	-4***	+2***
Attacker Climbing	-2	-2

*the Attack Roll automatically succeeds

**+19 if near lava and the Target is the Chosen One

***some weapons cannot be used if the Attacker is prone (at the *Referee's* discretion)

ADDITIONAL RULES

- A character Mini that chooses to change positions between Standing, Kneeling, or Prone automatically loses Initiative that round.

- A character Mini that "dives for cover" to avoid the effects of suppressive fire or explosives may be considered Kneeling or Prone, at the Referee's discretion (and depending on the type of cover nearby).

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STREET WITH OPEN MANHOLE

HOUSE 1

DANGER: SLIPPERY ROCKS

Ehlerrac
● City
● Town
⊗ Sunshard mining

.... Archway
.... Icerun
▲▲▲▲▲ Underground tunnle

||||||| Archway not completed

0   50 miles

HANGAR

JUST INSERT IMAGINATION

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